

# **SYDNEY FOOTBALL STADIUM REDEVELOPMENT**

**STATE SIGNIFICANT DEVELOPMENT APPLICATION**

**Concept Proposal and Stage 1 Demolition**

**SSDA 9249**

**APPENDIX E:**

**Construction (Demolition) Management Plan (Stage 1 Works)**



# Allianz Stadium Construction Management Plan

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## 1. Background

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### 1.1. Introduction

This report supports a Concept State Significant Development (SSD) Development Application (DA) for the redevelopment of the Sydney Football Stadium (SFS) which is submitted to the Minister for Planning pursuant to Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). A staged approach to the planning applications is proposed which includes:

- Stage 1 - Concept Proposal for the stadium envelope and supporting retail and functional uses as well as development consent for the carrying out of Works, including demolition of the existing facility and associated structures down to slab level only.
- Stage 2 - detailed design, construction and operation of the stadium and supporting business, retail and functional uses.

This report relates to the Stage 1 Concept DA and detailed Early Works package. Infrastructure NSW is the Proponent for the Stage 1 planning application.

### 1.2. The Project

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

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

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

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

Following release of the NSW Stadia Strategy, the Sydney Cricket and Sports Ground Trust (SCSGT) undertook master planning culminating in the 2015 Preliminary SCG Master Plan. This master plan defines the context for future redevelopment of the SCG, SFS and related sports infrastructure to ensure that the precinct continues to meet the needs and expectations of visitors and tenants into the future.

In a competitive national landscape, the existing Allianz Stadium (SFS) is now facing serious commercial and operational challenges to remain relevant and competitive. The SFS was constructed many years ago and therefore it fails to meet certain criteria for modern Tier 1 stadiums. The stadium has aged poorly and fails to meet expectations with regards to patron experience, crowd management, safety/security,

accessibility, facilities for core tenants, operational efficiency, premium hospitality and food/beverage offerings and media requirements.

On 24 November 2017, the NSW Premier announced the SFS redevelopment. The redevelopment will include demolition of the existing facility and replacement with a modern, globally competitive stadium that achieves the requirements for a Tier 1 stadium to meet future requirements. Redevelopment of the SFS will assist in supporting the realisation of the Master Plan principles to:

- Create a flexible venue suitable for sports, e-sports and major events alike;
- Include technology for the future;
- Create a venue for the growth of men's and women's elite sport, as well as the ability to adapt to new sports and the rise of e-sports;
- Create a publicly accessible entertainment and recreational facility;
- Create a stadium integrated with its surrounds including Centennial and Moore Parks and the surrounding residential and business areas; and
- Create a sustainable future.

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

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

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

The locational context of the Site is shown in Figure 1 whilst the site boundaries and existing site features are shown in Figure 2. Further site boundary information including access information is shown in Figure 4.



Figure 1 - Regional Site Context

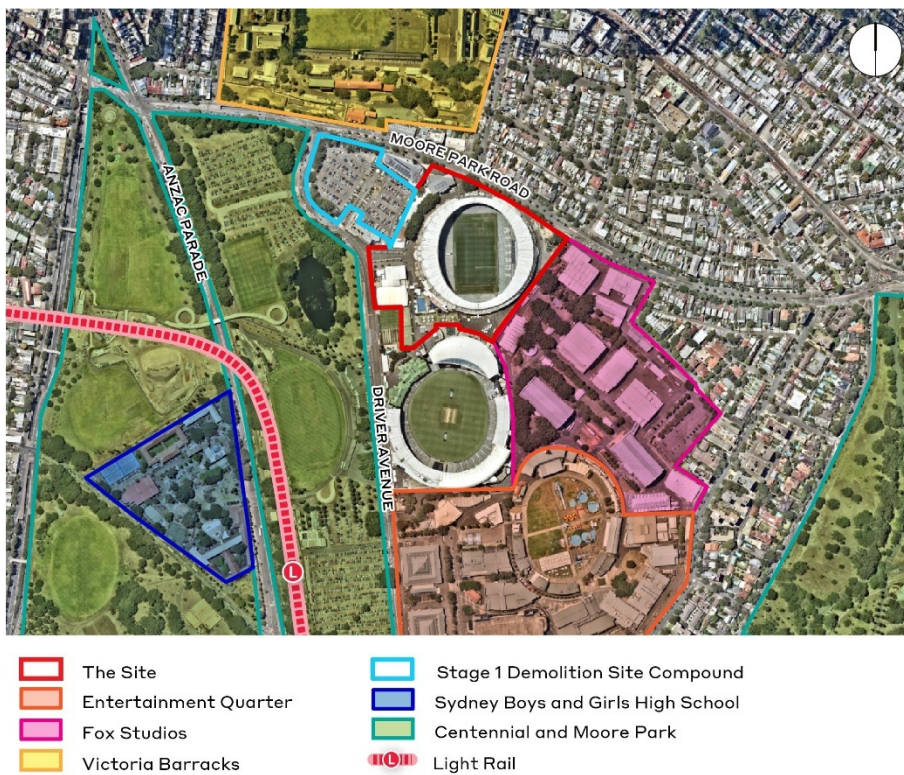


Figure 2 - Site Area and Local Context



### 1.3. Overview of Proposed Development

The SFS Redevelopment Stage 1 application includes a Concept Proposal and Early Works package. The Concept Proposal comprises:

- A new 45,000 seat stadium on the site of the existing stadium including:
  - New facilities for general admission
  - New playing pitch
  - Hospitality facilities
  - Ancillary food and beverage and entertainment facilities
- New basement with service vehicular access for servicing and bump-in/bump-out.
- New public domain Works surrounding the stadium, building on the venue's unique parkland setting.
- Urban Design and Public Domain Guidelines.
- Signage strategy.

Indicative concept building envelope plans outlining the extent of the proposed stadium building envelope and surrounding public domain to be included in the Stage 1 planning application are included within the Environmental Impact Statement for the project.

From a capacity, operational and mix of uses perspective, the new stadium will be consistent with the existing Allianz Stadium.

Stage 1 comprises:

- Site establishment, including erection of site protection fencing and temporary relocation of facilities;
- Decommissioning and demolition of the existing stadium and associated structures including the existing Sheridan, Roosters and Waratahs buildings and the administration building of Cricket NSW to ground level only and 'make safe' of the site.
- Onsite crushing of demolished concrete material to make suitable for beneficial re-use onsite
- Use of the existing Moore Park 1 (MP1) car park for construction staging.
- Make good of the site suitable for construction of the new stadium (subject to separate Stage 2 application).

The SFS Redevelopment will create a new stadium with 45,000 seats through a range of seating styles and corporate facilities. The stadium will include state of the art technology with digital screens throughout to improve the fan experience. Sightlines will be improved and facilities including catering, amenities and accessibility will be designed to service future needs, creating a world-class customer experience befitting a global city such as Sydney.

### 1.4. SEARs

The CMP addresses the following SEARs

#### 1.4.1. Concept Application:

**Staging:**

- Provide a detailed overall staging plan, including demolition, remediation, construction, public domain works and operation phases.

- Provide preliminary information as applicable to each stage of works as follows:
  - Detail regarding waste management: identification, quantification and classification of potential waste streams and measures to be implemented to manage, reuse, recycle and safely dispose of this waste.

#### 1.4.2. Early Works:

##### Stormwater, Sediment and Erosion Controls

- Detail the management of stormwater flows during Stage 1 works, including detail of stormwater and drainage infrastructure to mitigate impacts of flows to and from the site as well as rainwater harvesting and storage on-site for reuse during Stage 1.
- Detail measures and procedures to minimise and manage the generation and off-site transmission of sediment, dust and fine particles.

##### Waste, Recycling and Resource Recovery

- Identify, quantify and classify the likely waste streams to be generated during the Stage 1 works, including any hazardous materials, and describe the measures to be implemented to reduce, reuse, recycle, where possible and then manage and safely dispose of this waste. Identify useable spoil management initiatives.
- Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.

##### Construction Hours

Identify proposed hours for the Stage 1 works and provide details of the instances where it is expected that works will be required to be carried out outside the standard construction hours.

In addition, this report summarises requirements for construction traffic and construction noise and vibration management.

#### 1.5. Construction Management Plan

This Construction Management Plan (CMP) has been developed to guide activities during the demolition of the existing Sydney Football Stadium and associated buildings (Early Works). The CMP will be updated by the Contractor engaged for Early Works prior to Works commencing.

All tasks undertaken in relation to the project whether they be physical construction activities, office duties or procedural tasks are to be undertaken in accordance with the following:

1. Suppliers and contractors shall provide assurance of the quality of all goods, materials and services to be provided; and
2. All materials and works are to be undertaken to the manufacturer's specification or industry standards.

The Client has engaged various consultants to assist in the investigation planning and Development Application process. Those relevant to the CMP include:

- Biodiversity Development Assessment Report: Jacobs
- Transport Assessment Report: Arup
- Groundwater Assessment Report: Arup
- Urban Design Guidelines: SJB Architects

- Noise and Vibration Impact Assessment: Arup
- Infrastructure Management Plan: Aurecon
- Archaeological Assessment: Curio Projects
- Environmentally Sustainable Design Strategy: Aurecon
- Heritage Impact Statement: Curio Projects
- Stormwater and Flooding Assessment: Arup

The *Contractor* will adhere to the *Protection of the Environment Operations Act 1997* (POEO Act). The principles that underpin the POEO Act are:

- To protect, restore and enhance the quality of the environment in New South Wales, having regard for the need to maintain ecologically sustainable development;
- To provide increased opportunities for public involvement and participation in environment protection;
- To ensure that the community has access to relevant and meaningful information about pollution;
- Pollution prevention and cleaner production;
- Reduction to harmless levels of the discharge of substances likely to cause harm to the environment;
- Reduction in the use of materials and the re-use or recycling of materials;
- Making progressive improvements including the reduction of pollution;
- To rationalise, simplify and strengthen the regulatory framework for environment protection;
- To improve the efficiency of administration of the environment protection legislation; and
- To assist in the achievement of the objectives of the Waste Minimisation and Management Act 1995.

### 1.6. Early Works

The Early Works (Works) for the project include site preparation and establishment, services relocations or terminations, as well as the demolition down to existing ground level only. The Early Works shall be staged to allow for a condensed programme structure. The following structures shall be involved in the Early Works:

- Sydney Football Stadium (~12 months)
  - Sheridan Building, Roosters, Waratahs and Visitor Services building (~16 weeks)
  - Cricket NSW Headquarters and Indoor Cricket Centre (~8 weeks)

Whilst the Sydney Football Stadium is being demolished the concurrent demolition of the other associated buildings will occur. The Sheridan Building, Roosters, Waratahs and Visitor Services Building shall be demolished first followed by the Cricket NSW Headquarters and Indoor Cricket Centre.

The above buildings are illustrated in Figure 3. The Works will include demolition of these structures down to ground level. No piling or excavation works will be undertaken as part of the Works.



Figure 3 - Buildings to be demolished

## 2. Legislative Requirements

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The Works will be undertaken in accordance with the following legislative requirements:

- Protection of the Environment Operations Act 1997 and Regulations.
- Environmentally Hazardous Chemicals Act 1985.
- Protection of the Environment Administration Act and Regulations.
- Occupational Health and Safety Act 2000 and relevant codes of practice and Standards.
- Occupational Health and Safety Regulation 2001 and relevant codes of practice and Standards.
- Australian Standard 2601-2001: Demolition of Structures.
- Code of Practice for the Safe Removal of Asbestos (NOHSC:2002 1998).
- Guide to the Control of Asbestos Hazards in Buildings and Structures (NOHSC:3002 1998).
- Resource and Recovery Act 2001.
- Environmental Planning and Assessment Act 1979 and Regulations.
- Heritage Act 1997.
- Local Government Act 1993.
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy (State and Regional Development) 2011
- State Environmental Planning Policy No. 55 - Remediation of Land
- Draft State Environmental Planning Policy (Environment) 2017;
- State Environmental Planning Policy No. 64 - Advertising and Signage;
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005; and
- Sydney Local Environmental Plan 2012

The Works are also required to be consistent with the following legislation where relevant:

- Sydney Cricket and Sports Ground Act 1978
- Sporting Venues Authorities Act 2008
- Work Health and Safety Act 2011
- Roads Act 1993
- National Parks and Wildlife Act 1974
- Gaming and Liquor Administration Act 2007
- Liquor Act 2007

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### 3. Hours of Operation - General

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All work on site will only occur between

- 7am and 6pm Monday to Friday and
- 8am and 1pm Saturday
- unless otherwise approved in writing by Consent Authority due to extenuating circumstances.

No work will be undertaken on Sundays or public holidays.

No work will occur outside of the hours nominated unless approval has been given by the consent authority. An application may be lodged to extend these hours, however for the purposes of this Plan current approved working hours are as per the above.

When an event is programmed by the SCG Trust then Event Mode should be operational.

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### 4. Hours of Operation - Event Mode

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Event Mode to be enacted at the times nominated by the SCG Trust. This mode will provide the following:

- The Contractor will work with SCG Trust to maintain access to Paddington Lane from Moore Park Road for access into the basement of the Sydney Cricket Ground and ensure that all event ingress and egress provisions (including emergency and evacuation plans) are maintained.
- The Contractor is to ensure that no disruptive work or construction vehicle movements occur during an event.
- Sufficient time should be allowed by the Contractor to ensure all access and egress corridors are made safe and handed over to the SCG Trust prior the bump-in period for an event.
- Please refer to Section 9.4 Construction Traffic - Event Mode of this document for further information on Event Mode traffic and vehicle movements.

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### 5. Site Establishment

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Prior to commencement of Works on site (i.e. demolition), the site will be formally established. This includes addressing the following areas:

- Temporary site fencing to secure areas not already secured by Venue fencing
- On-site storage, compounds, site office etc.
- Connection to temporary services
- Site amenities
- Sediment & erosion control measures
- Identification and marking of trees to be retained and/or removed
- Protection of trees that are to be retained.
- Statutory and contact signage.

Site establishment will take approximately 3-4 weeks and be maintained for the duration of the Works.

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## 6. Public & Property Protection

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The site is adjoined by Fox Studios and the Entertainment Quarter. The nearest residences are located on the northern side of Moore Park Road next to the Victoria Barracks.

It is intended to make use of the existing Venue fencing supplemented by A-Class or chain wire fencing to secure the nominated Stage 1 Works Boundary.

Adequate protective perimeter signage will be maintained if already on site and installed if required. This signage will be required to identify construction works in progress and ensure no unauthorised entry to site.

Vehicular access/egress gates are proposed through existing access points off Moore Park Road into Paddington Lane and Driver Avenue. These gates will be manned by qualified traffic supervisors at the times of major vehicular access and egress to the Site.

These public and property protection measures will be reviewed at the time of commencing the Works to ensure alignment with proposed preferred methodologies and sequencing developments and to ensure that the safety of the general public is maintained at all times during the Works.

Refer to the Transport Assessment Report (Arup) which includes the access points and heavy vehicle routes nominated for the Early Works.

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## 7. Archeological

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### 7.1. Heritage

Curio Projects produced an Archeological Assessment for Infrastructure NSW which showed that the site has a rich historical history as part of the Sydney Common extending back to 1811 including the State Heritage Registered listed Busby's Bore. This bore was a convict built 3.6km long tunnel that served as Sydney's sole water source from 1839-1859 and it is known to be present within the subject site however the precise location is unclear.

Other archeological significance includes association with the Military and the Victoria Barracks, the Sydney Sports Ground, Engineers Depot. The site then functioned as the Sydney Speedway becoming a racetrack after WW2. These associations retain low to moderate archeological potential for a relating archeological resource.

As this CMP only addresses works down to Ground Slab level, It is recommended that further archeological investigation be undertaken in combination with the site demolition Works to assist with Stage 2 design including locations of significant ground impacts to avoid Busby's Bore and other assets.

### 7.2. Aboriginal Archeology

An Aboriginal Heritage Due Diligence Assessment was undertaken by Curio Projects for Infrastructure NSW in order to identify if Aboriginal objects are likely to be present at the site. It is noted that the site is likely to have potential for Aboriginal objects both intact and within disturbed contexts. The site does not contain any registered Aboriginal sites; however, this is only due to the potential for disturbance in previous construction and the minimal Aboriginal archaeological surveys and testing in the immediate area and not a reflection of lack of use of the site by Aboriginal people.

It is recommended that further investigation in the form of Aboriginal community consultation, preparation of an Aboriginal Cultural Heritage Assessment Report and Aboriginal Archaeological Technical Report and the development of a future program of Aboriginal archaeological test excavation, to be developed and undertaken in conjunction with proposed development ground impact locations once known.

## 8. Environmental

The following specific environmental management principles will be implemented on site with environmental performance to be monitored throughout the Works.

### 8.1. Noise and Vibration

As shown in Figure 2 the site is located in a built up residential zone, with residential areas located to the north and north-east in Paddington, east and south-east in Centennial Park, as well as west along South Dowling Street in Surry Hills and Redfern.

Acoustic issues relating to the Works are as follows:

- Noise intrusion from vehicle movements
- Concrete crushers
- Excavators
- Rock breakers

Noise from the Site shall be in accordance with the noise management levels outlined in Section 3 of the Noise and Vibration Impact Assessment (Arup). All work on site (including demolition and earthworks) would occur during the construction Works hours of 7am to 6pm Monday to Friday and 8am to 5pm Saturdays. No construction work will occur outside the normal working hours set unless approval has been given by the consent authority.

All construction Works would be carried out in accordance with the following legislative requirements:

- Clause 102 of State Environmental Planning Policy (Infrastructure) 2007
- Australian Standard 2436-1981 “Guide to Noise Control on Construction, Maintenance and Demolition Sites”.
- Interim Construction Noise Guideline (DECCW, 2009)

The noise and vibration from the use of any plant equipment and/or building services associated with the premises shall not give rise to an offensive noise as defined under the provisions of the Protection of the Environment Act 1997.

Monitoring to ensure environmental management/compliance shall be undertaken by the Contractor. Where and if required, specialist consultants will be engaged to help establish monitoring systems.

In addition to formal environmental monitoring the Contractor will ensure that regular environmental inspections are undertaken of all work activities being carried out at the project. Inspections will be carried out in conjunction with personnel responsible for a particular work area



## 8.2. Noise and vibration measures

The following noise and vibration mitigation measures would apply to the Works:

- The Contractor will prepare and implement a final Construction Noise and Vibration Management Plan in accordance with the requirements at Section 3 of the Noise and Vibration Impact Assessment (Arup)
- A Contractor staff member will be appointed as the Responsible Person with respect to noise and vibration.
- Regular training will be conducted with workers and contractors (such as at toolbox talks) in the use of equipment in ways to minimise noise.
- The Contractor will ensure good work practices are adopted to avoid issues such as noise from dropped items and noise from communication radios is kept as low as is practicable.
- The Contractor will avoid the use of radios or stereos outdoors.
- The Contractor will avoid shouting, and minimise talking loudly and slamming vehicle doors.
- The Contractor will check and rectify any defective exhaust systems in trucks and machinery used on site.
- 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.
- Turn off all vehicles, plant and equipment when not in use.
- The Contractor will ensure that the Responsible Person checks the conditions of the powered equipment used on site daily to ensure plant is properly maintained and that noise is kept as low as practicable.
- The Contractor will ensure that the Responsible Person controls the working hours on site to ensure that work is only done during the acceptable periods (7am to 6pm on weekdays and 8am to 1pm on Saturdays. No work on Sundays or public holidays).
- The Contractor will ensure that intrusive activities (as identified in Section 6.1.3 of the Noise and Vibration Impact Assessment) should be:
  - undertaken after 8am; and
  - only 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, 230 Moore Park Road, Paddington.
- The Contractor will ensure that the Responsible Person keeps 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.
- The Contractor will maintain appropriate records 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.
- The Contractor will be responsible for adhering to the vibration mitigation measures outlined at section 6.2 of the Noise and Vibration Impact Assessment.

### 8.3. Monitoring of noise and vibration

Vibration monitoring will be carried out at the nearest sensitive receiver on commencement of significant construction activities. Hand-held noise monitors may be utilised to gauge point source readings frequently by site staff whilst observing works.

Attended noise monitoring will be carried out to verify demolition noise levels and determine effectiveness of noise mitigation strategies.

Noise and vibration monitoring will be considered prior to the commencement of works and include:

- Proximity of the receiver to a worksite
- Sensitivity of the receiver to noise and vibration
- Background noise levels
- Expected duration of the impacts

### 8.4. Dust

Dust emissions will occur through the Works with the on-site concrete crushing the main cause of these emissions. Effective management will be put in place to mitigate dust emissions in order to maintain acceptable levels. These measures may include:

- Locating the crushing activities as far away from the ARDC and NRL buildings and the residents on Moore Park Road, SCG, Fox Studios and Entertainment Quarter as practicable.
- Implementation of water sprays to suppress dust emissions
- Ceasing or limiting crushing activities during times of adverse winds
- Ceasing or limiting crushing activities during Event Mode operating hours.

### 8.5. Dust control measures

Dust control measures for site preparation which will remain in place for the duration of the Works will include:

- Erection of site fencing to provide appropriate barriers at the site boundary
- Erection of effective screens and barriers around dusty activities. Cleaning of the screens and barriers should be completed as necessary.
- Communication with neighbouring properties prior to undertaking works in proximity to their premises.
- Establishment of a complaints management system to record details of any reason for air quality-based complaints.
- Avoidance of dry sweeping in large areas

Dust control measures for Stage 1 Works will include:

- Sheet and screen buildings with suitable material and where possible strip out internals before demolition begins.
- Use of effective water suppression where necessary
- Limit demolition activities that will create dust during times of adverse wind
- Dusty materials should be removed from site as soon as practicable
- Covering of stockpiles
- Trucks to have payload covered

- Wheel washing system for trucks if necessary

Should these measures be undertaken it is expected that dust impacts can be kept at acceptable levels throughout the Works.

#### 8.6. Monitoring of air quality

Monitoring of air quality can include daily and weekly visual surveillance of dust emissions, dust controls, plant emissions.

Weather and physical parameters such as wind speed, rain, temperature and humidity will be utilized to assist in programming works (impact of rain and wind conditions on site) and recorded or works will not be conducted during periods of rainfall where there is the potential to generate runoff, or where heavy rain is forecast.

Weather data (such as wind direction) will also be used where complaints are received in relation to dust or noise.

#### 8.7. Odour Control

In terms of proposed activity for the Site, odour problems will be minimal. All plant and machinery involved in the Works will be regularly serviced and checked for exhaust emissions.

#### 8.8. Storage of Dangerous Goods

The Works may involve the use of flammable fuels such as petrol, diesel, Oxy-acetylene, oils, etc.

If required, such items will be stored in a lockable compound, within an appropriately bunded area, and with sufficient ventilation in accordance with relevant codes of practice and Standards.

Material safety data sheets (MSDS) on all flammable and potentially harmful liquids will be provided to the Contractor undertaking the Works. Copies of MSDS will be kept in the site office and easily accessible to all construction personnel.

#### 8.9. Erosion and Sediment Control

During construction, there is a risk of site clearance, earthworks cut and fill operations as well as other site activities resulting in bare soil and existing fill materials exposed to the elements. In this scenario rainfall, and particularly heavy rainfall threatens to scour this material dislodging and transporting fill downstream.

To mitigate the risk of scouring and associated deposition and sedimentation of downstream areas and/or in-ground drainage systems, consideration of sediment and erosion control measures is required. Best practice principles and site management techniques are described in Landcom's Managing Urban Stormwater series, commonly referred to as the Blue Book.

Appendix 1 - Erosion and Sediment Control Details contains Arup's preliminary sediment and erosion control plan for the Sydney Football Stadium project site and the surrounding areas. It is noted this is at a preliminary stage and will need to be developed by the contractor prior to the commencement of works so as to be coordinated with the sequencing of works.

The proposed sediment and erosion control plan considers the risk of significant storm flows arriving onto the site from Moore Park Road. During construction, it is considered impractical to accommodate these flows through the site as they pose a very high scour risk as well as a risk to site staff, construction

equipment and materials on the site. For this reason, it is recommended that flows from Moore Park Road be temporarily excluded by means of barrier or bund constructed on the northern boundary of the site.

This approach shall be developed in further detail as part of a future Stage 2 SSDA. This is likely to involve consultation with City of Sydney Council who should be aware of the temporary modification and associated flood risk implications to Moore Park Road.

#### 8.10. Flora and Fauna Management

Tree 125 is to be protected throughout demolition and in accordance with AS4970 - 2009 Protection of Trees on Development Sites. Works near trees will be conducted as follows:

- A minimum 1.8m high chain-wire fence is to be erected at least three (3) metres from the base of each tree and kept in place prior to Works commencing to restrict the following occurring:
  - Stockpiling of materials within the root protection zone;
  - Placement of fill within the root protection zone;
  - Parking of vehicles within the root protection zone;
  - Compaction of soil within the root protection zone.
- All required tree protection measures are to be maintained in good condition for the duration of the construction period.
- All areas within the root protection zone are to be mulched with composted leaf mulch to a depth of not less than 100mm.
- A sign is to be erected indicating the trees to be protected.
- The installation of services within the root protection zone is not to be undertaken without prior consent from the Consent Authority.
- All personnel involved with the development are to ensure no excavation occurs within the Tree Root Zones of any tree to be retained.
- Driveways required for construction must be located sufficiently clear of street trees.

Refer to the Arborist Report prepared by Tree iQ regarding trees to be retained and protected during Works.

#### 8.11. Flood Mitigation

Flood damage and potential environment risks caused by flooding shall be minimised by:

- providing controlled access points across the site;
- provide water extraction methods (i.e. pumps) during heavy rains
- maintenance of all erosion control measures during the Works.

#### 8.12. Water Quality Management

Control and monitoring measure are to include but not be limited to:

- All run-on surface water will be diverted from site where possible and run-off from the worksite captured for treatment or disposal.
- Before pumping any water out an Approval to Discharge or Reuse Water will be obtained
- Quantities of sealants, solvents, oil, and fuels will be stored correctly and banded.

- All demolition zones/roads will be maintained and cleaned to prevent spoil entering into the stormwater drains/system.
- Temporary bund products such as Plant Nappies or similar product will be used to manage potential spills/leaks.
- Surface water generated in the sawing of concrete is to be vacuumed up and disposed of appropriately.
- Temporary check-dams or bunds around stormwater drainage paths near concrete sawing work areas as a secondary measure for capturing polluted water.
- A street sweeper will be in operation to manage sediment tracking onto road surfaces throughout demolition works.
- Maintenance and checking of controls, check machinery daily for any oil or fuel leaks.
- Any water from rainfall onto the work site/s will have to be managed appropriately prior to discharge.
- Located stockpiles of materials away from areas where it could potentially move to waterways or stormwater drains, otherwise surround stockpiles with sediment controls.
- All loads to be covered during demolition excavation removal process to prevent spillage of material and dust being swept into the air.
- All vehicles not to track debris onto public roadways.
- Install sediment controls on stormwater inlets such as sediment traps and barriers where required by the shifting location and the nature of the works.

The quality of surface water discharges from site will be monitored visually during and after rainfall events by the Site and/or Environmental Manager and if required Environmental Consultant to establish if further controls are necessary.

The monitoring frequency shall be determined on a case by case basis by the Environmental Consultant.

## 9. Traffic Management

A Construction Pedestrian and Traffic Management Plan (CPTMP) (Section 6 of the Transport Assessment Report prepared by Arup) has been prepared for the Works as required and covers site establishment and demolition Works. The CPTMP has been prepared based on the following principals which are described in more detail within the CPTMP.

- overall principles of construction traffic management
- staging schedule
- hours of operation
- construction traffic volumes
- truck routes
- pedestrian and cycle management
- traffic and parking effects
- Event traffic and pedestrian management

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### 9.1. Construction Vehicle Access / Egress Management

As detailed in the CPTMP and Figure 4 below, construction vehicles (both light and heavy) will be travelling to, from, and within the existing stadium boundary with access via Driver Avenue, the driveway at Gate 4 and at Paddington Lane. All three nominated access points are existing and are located off Moore Park Road.

No queuing / marshalling of construction vehicles is to occur in any public road including Moore Park Road.

Whilst Driver Avenue provides a main access point for demolition works, access is required at all times to the NRL Building on Driver Avenue. The building has two access points off Driver Avenue. The first is via a ramp from MP1 to the underground carpark and the second is the pedestrian access ramp and stairs off Driver Avenue (as shown in Figure 10 and Figure 11). Site fencing is to allow for these two access points.

Access to the Rugby Australia off Moore Park Road is required to be maintained (refer to Figure 12). Vehicles will enter off Moore Park Road and travel in front of the Sheridan Building (to be demolished) before entering the underground carpark of Rugby Australia. Vehicles will exit the building straight onto Moore Park Road.

Site fencing is to use existing fences where possible and maintain Class B hoarding (as shown in Figure 5). The main fence along Moore Park Road is to be upgraded to B Class hoarding. Additional B Class hoarding to be installed to surround the entire site this includes along Driver Avenue and the connecting Paddington Lane.



Figure 4 - Site Access Locations

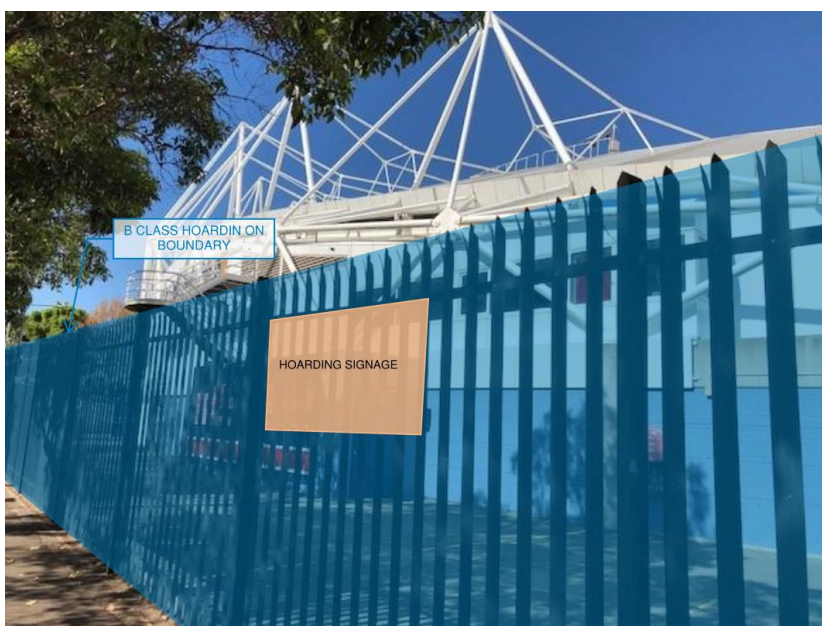


Figure 5 - Site Hoarding Example using existing Fencing

## 9.2. Construction Vehicle Transport Routes

As detailed in the CPTMP, construction vehicles are anticipated to utilise the Eastern Distributor and Cross City Tunnel to access the site. The likely inbound and outbound routes that have been identified for Stage 1 vehicles are as follows:

- Inbound Route (Figure 6 - Inbound Routes): Albion Street from the west, Oxford Street from the north, Anzac Parade from the south and Oxford Street into Moore Park Road from the east.
- Outbound Route (Figure 7): South Dowling Street into Cleveland Street to the West, Eastern Distributor to the North, Moore Park Road or South Dowling Street to Oxford Street to the East and Anzac Parade to the South.

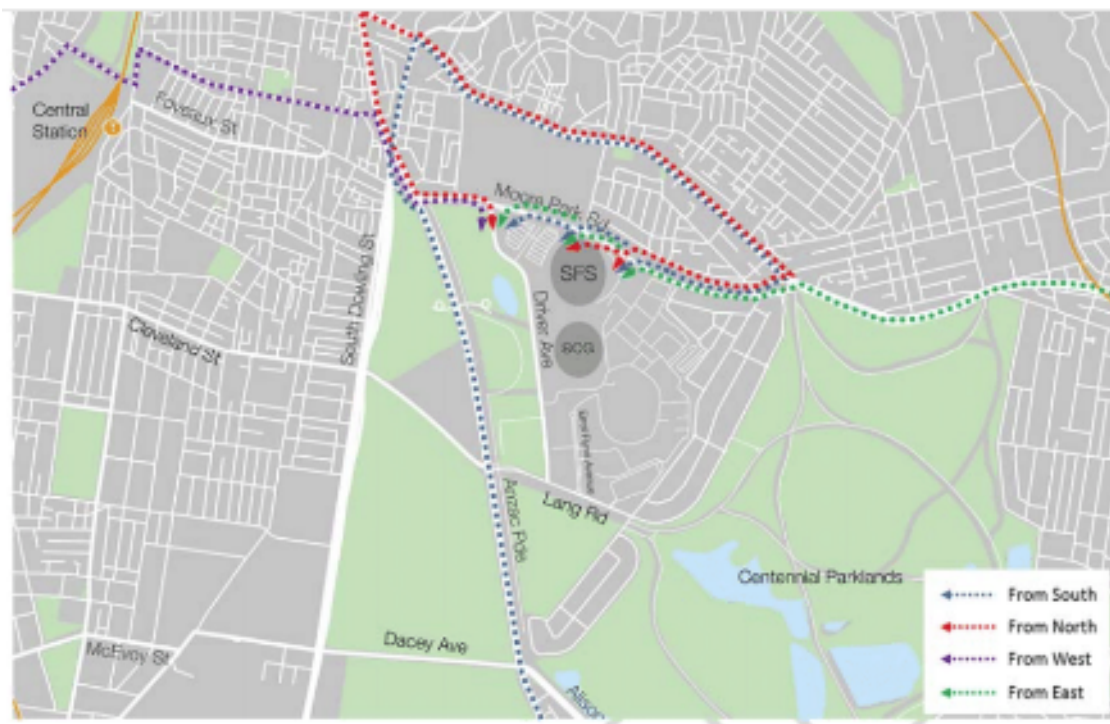


Figure 6 - Inbound Routes



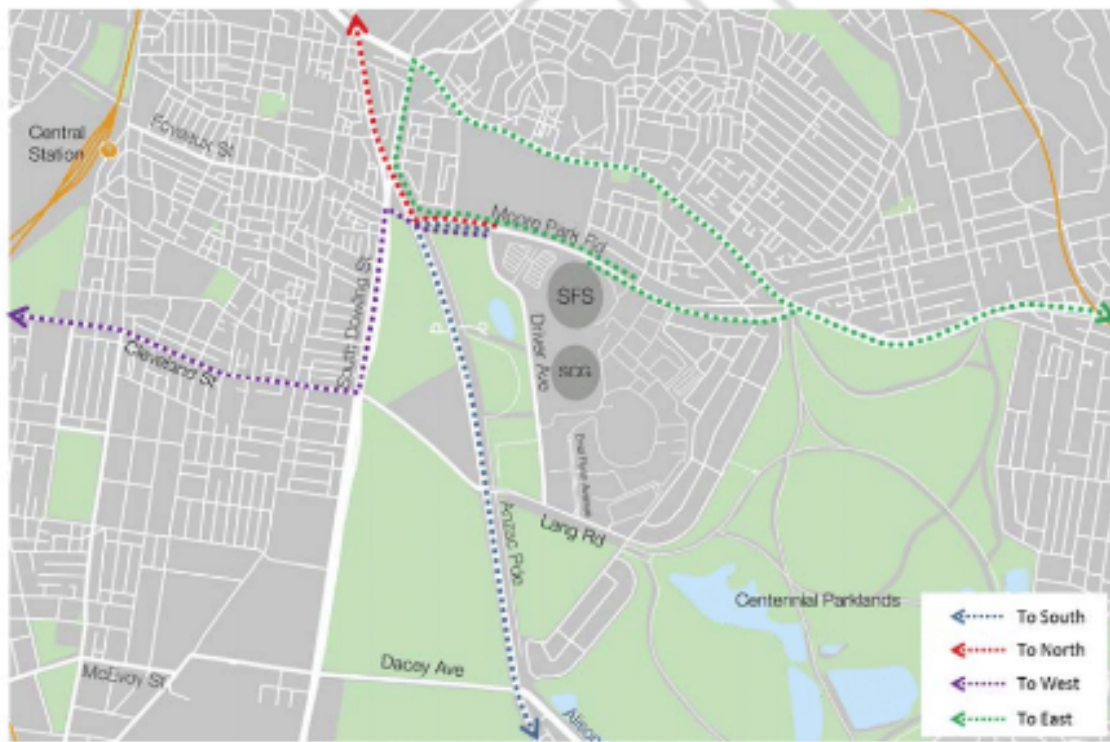


Figure 7 - Outbound Routes

### 9.3. Construction Traffic Generation

The following table provides a summary of the likely construction vehicle traffic generation of the proposed Works during these stages. Refer to the CPTMP for further details.

Stage	Duration	Total traffic generation	Average weekly traffic generation	Maximum hourly traffic generation
Procurement and Establishment	30 days	150 vehicles	30 vehicles	3 vehicles
Stage 1 - Demolition	240 days	7,200 - 9,600 vehicles	210 vehicles	6-7 vehicles

Table 1 - Construction Vehicle Movement by Stage

The number of daily construction vehicles accessing the site is forecast to vary from between 5 and 40 daily vehicles. The overall number of vehicle movements generated from the first two stages of construction is indicated in Table 1. As the project is in its preliminary stages, the following forecasts are approximate and may vary once a Contractor is appointed.

The expected number of vehicles generated by the construction Works (less than 10 per hour) is considered minimal in the context of the existing road network. Further, the volume of traffic in and out

of the stadium precinct would essentially be less than existing levels as MP1 car park would no longer be available for members parking on non-game days.

The following measures would also be adopted for the Works:

- 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.
- Hours of operation are Mondays to Friday 7:00am to 6:00pm and 8:00am to 1:00pm Saturday. No Works on Sundays and Public Holidays and 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 that will prevent the need for queuing outside the site

#### 9.4. Construction Traffic - Event Mode

Event mode will be enacted on the site throughout the Works during major events at the SCG to reduce noise associated with Works. All traffic management principles as stated above will apply during Event Mode.

The following measures may be adopted:

- Site fencing and hoarding may be altered during Event Mode to allow for general ingress and egress to the SCG via Paddington Lane from Moore Park Road.
- The Contractor is to coordinate any changes in site fencing in a timely and safe manner.
- Deliveries are to be planned by the Contractor to allow for changes in site access during events.
- Driver Ave will be closed for events held at the SCG.

## 10. Demolition Management

### 10.1. Scope of Works

The site currently contains an existing stadium, surrounding buildings and carpark down to ground slab only. Demolition will include the dismantling of the stadium roof which was erected with cladding panels prefabricated on the pitch and lifting into place between rafters. The methodology for the dismantling of the roof structure should be developed with a thorough understanding of the structural load paths and function.

The superstructure is primarily a reinforced concrete frame, with upper tiers constructed of precast concrete seating plats on steel rakers. A number of columns and struts to the rear of the upper tier and roof are concrete encased steel.

Stability is provided by a series of discrete shear walls within each structural zone between joints. The reinforced concrete walls of the lift shafts in the west stand are a stand-alone structure and do not stabilise the building. Additions and ancillary structures such as the upper tier seating cantilever extensions, northern upper seating tiers, southern corporate boxes, and electronic scoreboard framing are additions to the original construction.

The commercial buildings on the western and north-western side of the stadium can be demolished using conventional demolition techniques by experienced industry demolition contractors. The buildings are of reinforced concrete, post-tensioned concrete, and ancillary steelwork typical of low-rise commercial buildings in Sydney.

It is proposed that the new basement service level is integrated with the existing SCG loading dock. This will require partial demolition and modification of an existing reinforced concrete retaining wall for access.

Demolition staging (see Figure 8) as follows:

- Fully secure the site to allow for demolition of Allianz, Roosters, Sheridan, Cricket NSW Waratahs and merchandise store, plus the Stadium down to the existing hardstand.
- Cranes to be located at northern and southern extents of the new entry area and at suitable heights for overlapping use.
- Optionally install additional tower crane/s or crawler depending on demolition sequence and if intention is to carryout demolition of areas in parallel
- Sequentially move around the stadium demolishing each quadrant of the stadium.
- Install temporary ties where required to maintain stability of the remainder of the partially demolished roof during the staged demolition.
- For the bowl demolition could start at the north and south stands depending on staging and operations plan. Working inside and out removing lower bowl whilst piling is being carried out in other areas
- Demolition at the south boundary of the site is to consider the existing Noble Bradman Stand basement and level 1 suspended structure over at ground level.

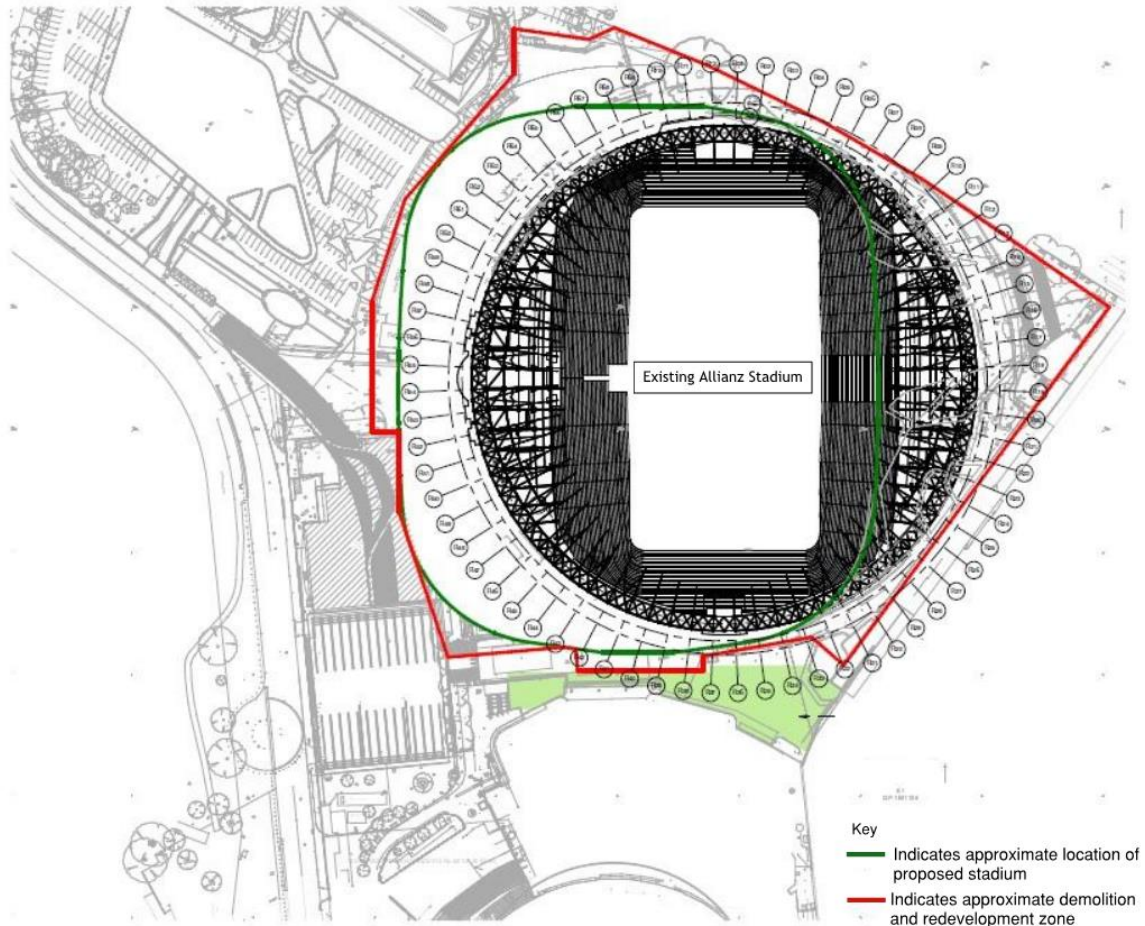


Figure 8 - Overall Staging Plan

All demolition access and waste removal are proposed to be via Moore Park Road (through Paddington Lane, the existing driveway adjacent Gate 4 and via Driver Avenue through the MP1 car park) to the north of the site. All demolition and construction vehicles will be contained wholly within the site.

Demolition of structures is scheduled to take approximately 10-12 months.

The demolition of structures on the site is to be carried out in accordance with the Work Health and Safety Act 2011. All vehicles transporting demolition materials from the site are to have covered loads and are not to track any soil or waste materials on the road.

### 10.2. Investigation

An investigation of the structures to be demolished and surrounding environment will be undertaken in accordance with the Australian Standards for Demolition of Structures, AS2601 - 2001. The observations from the investigation will be broken up into 3 sections and record:

1. Investigation of Site
2. Investigation of Structures and
3. Investigation of Services

Where practical, services relocations and disconnections will be carried out prior to commencing clearing works. The appropriate authorities will be consulted prior to the Works. In general terms the following principles will be adopted when disconnecting services:

- All Service authorities will be consulted prior to the Works commencing to ascertain lead times and correct termination locations.
- All termination works will be undertaken in accordance with design engineers' specifications and instructions.
- All termination works will be undertaken by suitably licensed contractors.
- Any termination works that impact on adjoining owners will be notified and will be undertaken out of hours to minimise impact.
- There will be a number of services (certain sewer and electrical connections) which will need to be maintained until new services are online, whereupon they can be disconnected and removed.
- Refer to the Infrastructure Management Plan prepared by Aurecon regarding services diversions and temporary servicing required during the Works.

### 10.3. Restricted Areas (exclusion zones)

- Outside of working hours (or when the site is otherwise unoccupied), B Class Hoarding or other measures are to be erected/ installed to restrict public access to the site and building Works, materials and equipment.
- Signs to be erected in clearly identifiable positions stating that unauthorised entry to the site is not permitted. The signs are to include an after-hours contact name and telephone number.
- All exclusion zones, as nominated by the Contractor will be properly demarcated throughout the Works.
- No unauthorised persons shall be permitted into the demolition and work area.
- All personnel and visitors will follow the Site Personnel and Visitor Registration Procedure.
- Both the NRL building and Rugby Australia building are to be operational throughout the demolition process. Access to these buildings is to remain clear. Site fencing shall delineate the stage one demolition zone around each building.
- Managed Access will also be made available for existing SCGT transport accessing the SCG underground loading dock for Moore Park Road through Paddington Lane.

### 10.4. Description of Structures

The SFS project site is located in the northern portion of Sydney Cricket and Sports Ground Trust land and includes the land currently occupied by Sydney Football Stadium, Sheridan Centre, Sydney Roosters Headquarters, Cricket NSW, Indoor Cricket Wickets and the MP1 Carpark. Buildings currently within the site will be demolished while carparking will be retained on MP1 after construction.

The NRL Building and UTS/Rugby Australia Building are to remain. The site fence shall allow access to both buildings throughout Stage 1.

### 10.5. Hazardous/Contaminated Materials

In the event that hazardous/contaminated materials are present, removal will be undertaken by an appropriately qualified contractor in all areas of site prior to demolition and excavation in those particular areas and in accordance with The Code of Practice for the Safe Removal of Asbestos and OHS Regs-2001.

The contractor is to prepare reports validating the appropriate removal, remediation and disposal of any identified hazardous materials. On completion of all 'Hazardous Materials Removal' Works, a clearance certificate is to be provided.

The following controls and safeguards are to be implemented for the Works:

- All demolition Works involving the removal and disposal of asbestos (of an area more than 10sqm) must only be undertaken by a licenced asbestos removalist who is licenced to carry out the work.
- Transporters of asbestos waste (of any load over 100kg of asbestos waste or 10 square metres or more of asbestos sheeting) must provide information to the NSW EPA regarding the movement of waste using their WasteLocate online reporting tool [www.wastelocate.epa.nsw.gov.au](http://www.wastelocate.epa.nsw.gov.au).
- Asbestos removal must be carried out in accordance with the WorkCover, Environment Protection Authority and Office of Environment and Heritage requirements.
- Asbestos to be disposed of must only be transported to waste facilities licenced to accept asbestos.
- No asbestos products are to be reused on the site.
- If unidentified asbestos is encountered during the Works, work will stop in that area immediately and the applicant must immediately notify the certifying authority and Council. A suitably qualified Contractor will seal the area and make safe as appropriate.
- If required, the necessary sampling and identification of the suspect material will take place and the appropriate method of removal implemented.

#### 10.6. Retained Elements

The SFS project site is located in the northern portion of Sydney Cricket and Sports Ground Trust land and includes the land currently occupied by Sydney Football Stadium, Sheridan Centre, Sydney Roosters Headquarters, Cricket NSW, Indoor Cricket Wickets and the MP1 Carpark. Buildings currently within the site will be demolished (as shown in Figure 9) while carparking will be retained on MP1 after construction.

The NRL Headquarters and outdoor cricket wickets on Driver Avenue and Rugby Australia House on Moore Park Road will be retained in the northern portion of the site and sit outside the project boundary.

Tree 125, a Moreton Bay Fig located on Driver Avenue will also be retained due to its very high landscape significance.

The vehicular and pedestrian access points to be retained are:

- Moore Park Road down Paddington Lane to the SCG Basement and Fox Studios (see Figure 9);
- To the NRL building off Driver Avenue (as shown in Figure 10 and Figure 11);
- Off Moore Park Road into the Rugby Australia building (as show in Figure 12).

The site features a 12-metre level difference between the eastern corner of the site along Moore Park Road and the existing Driver Avenue forecourt. The current interface between the external concourse with Moore Park Road features significant level differences to the east which reduce further west. The Fox Studios interface features a tall brick wall with limited permeability which will remain as part of the proposed Works. To the south, access to the SCG Bradman Noble Stand is to be retained.

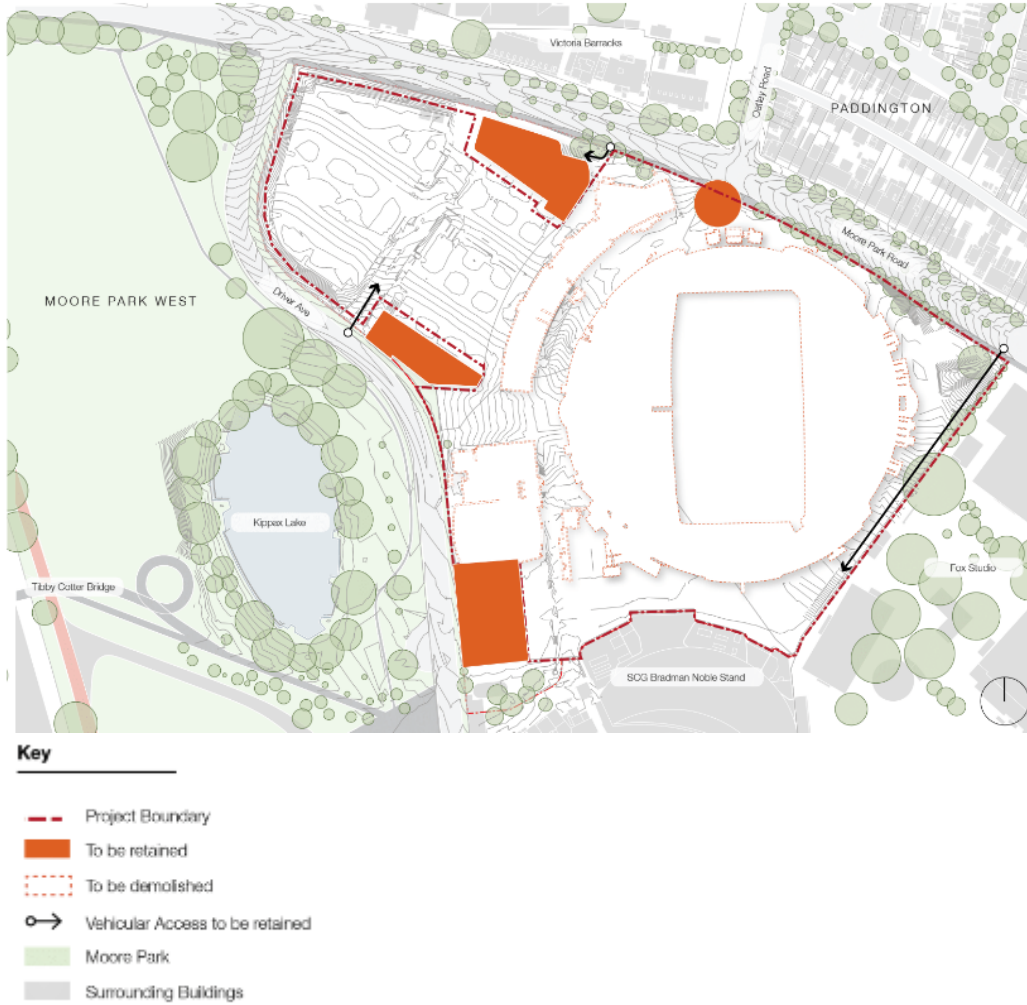


Figure 9 - Structures to be Retained and Demolished

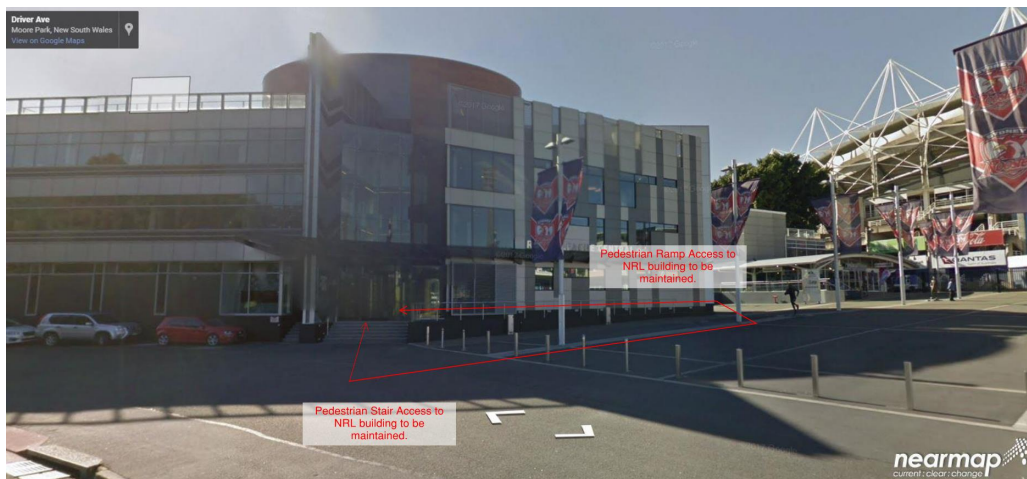


Figure 10 - NRL Building Pedestrian Access Points



Figure 11 - NRL Building Vehicle Access Points

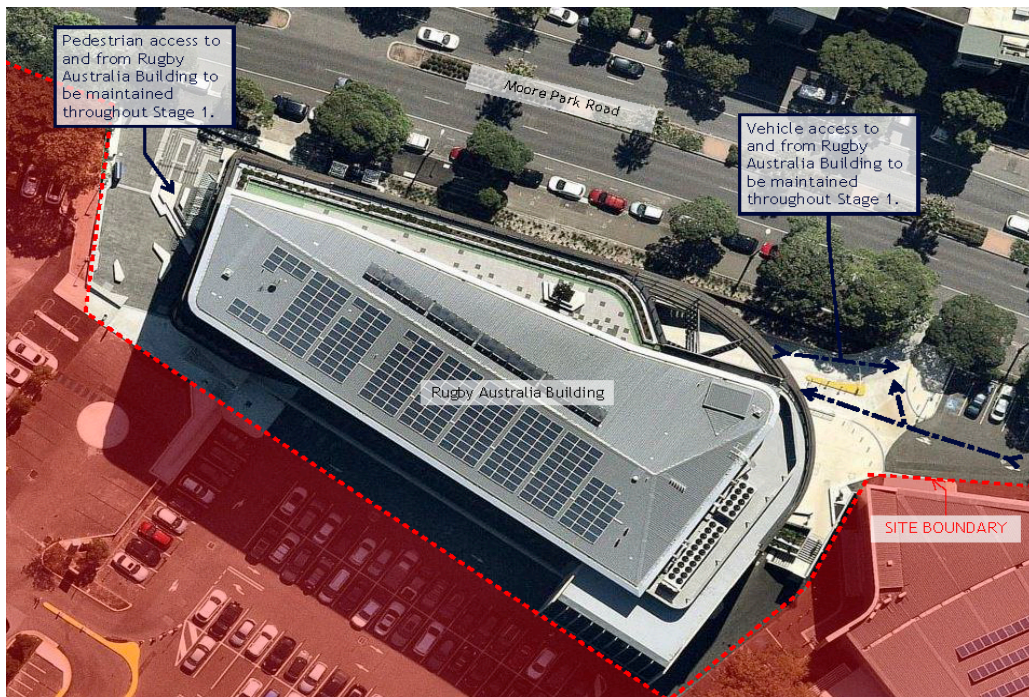


Figure 12 - Rugby Australia Building Access Points



### 10.7. Dumps of Noxious, Toxic or Hazardous Substances

No major dumps of noxious, toxic or hazardous substances have been identified.

### 10.8. Method of Demolition

#### 10.8.1. Demarcation of Site and Definition of Exclusion Zones

A temporary hoarding, fence or awning must be erected between the work site and adjoining public lands before starting work and must be kept in place until completion of the Works if there is a risk that the Works:

- Could cause danger, obstruction or inconvenience to pedestrian or vehicular traffic
- Could cause damage to adjoining lands.
- Involve the enclosure of a public place or part of a public place.

Council will be notified in writing prior to the erection of any structure or other obstruction on public land. Other areas of the site may be demarcated as hazard removal areas only if ACM is identified with the following:

1. Unauthorised Entry Prohibited.
2. Warning Demolition.
3. Warning Asbestos Removal (if required).
4. Contractors Details including Contacts.

#### 10.8.2. Install Environmental Controls

All drains will be covered in a geotech material, with geotech lined hay bales placed up stream of the flow to these drains as required.

#### 10.8.3. Soft Strip Structures

- The structures will be stripped-out by hand with appropriate hand-tools where required, prior to mechanical stripping.
- Windows and frames, external linings, roof tiles and timber frames will be removed by hand with hand tools and fall arrest equipment (if required).
- Bounded material such as non-load bearing walls, partitions, and doors that may not be removed by machines will be removed by a combination of hand, picks, crow bars, and other associated tools.

#### 10.8.4. Mechanical Demolition

- Mechanical Demolition will then take place by cranes at the northern and southern extents with the option of additional tower cranes or crawler depending on demolition sequence.
- Demolition will move sequentially around the stadium demolishing each quadrant.
- Installation of temporary ties where required to maintain stability of the remainder of the partially demolished roof during staged demolition.
- The bowl demolition could start at the north and south stands depending on staging and operations plan. Working inside and out removing larger bowl whilst piling is being carried out in other areas.
- Demolition at the south boundary of the site is to consider the existing Noble Bradman Stand basement and level 1 suspended structure over at ground level.
- An excavator will stockpile the rubbish at points around site for crushing.

- A watcher will work with plant and equipment operators at all times.
- Water will be maintained at the face of demolition for dust suppression where required.

#### 10.8.5. Removal of Demolished Materials

- Demolished material will be separated and stockpiled ready for crushing by an on-site construction waste crusher.
- Crushed materials to be re-used on site if possible.
- A combination of machinery, will load out any un-used crushed material into bins, semi-trailers, tippers and trucks for transport to an EPA approved tipping or recycling facility.
- Water will be maintained on stockpiles as required for dust suppression.
- Care shall be taken to watch for pedestrians when entering and leaving site.
- The approved CPTMP will be adhered to at all times. All trucks will follow the truck route and guidelines on entering and exiting site.

The final demolition method to be confirmed by the Contractor within an updated Construction Management Plan prior to Works commencing.

#### 10.9. Permits

All relevant permits will be sought and displayed on-site at all times. These permits include but are not limited to:

- WorkCover permit for demolition; and
- WorkCover permit for asbestos removal (if required).

## 11. Emergency and Crisis Management

The Emergency & Crisis Management section provides a framework for the appropriate risk management of serious incidents and issues that may disrupt the operations of the Contractor or cause harm to the environment.

Environmental incidents on the project shall be communicated to the appropriate internal personnel, formally recorded, and where appropriate, reported to regulatory authorities. Where incidents require investigation, any lessons learned for future prevention will be made available and distributed.

#### 11.1. Roles and Responsibilities

The Site Manager/s, are responsible for the establishment, operation and monitoring of the Contractor's Crisis and Emergency Management Plan.

#### 11.2. Processes and Documentation

A critical incident may be defined as any event which causes disruption to an organisation, creates significant danger or risk and which creates a situation where staff may feel unsafe, vulnerable and under stress or causes harm to the environment.

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A systematic approach to the management of incidents or issues that seriously affect or may affect the organisation's people, operations or reputation, public and private property and the environment should be adopted.

The approach should look to bring together, as a minimum, the following four key elements:

1. Emergency response
2. Emergency Management
3. Crisis Management
4. Recovery

### 11.3. Recognising a major emergency

A major emergency is any event continuity issue that significantly threatens construction operations or causes harm to the environment. Major emergencies will involve all or a substantial part of the Contractor organisation and have major actual or long-term consequences.

Major emergencies require a coordinated operational response that deals with the control of the emergency situation and the restoration of normal business operations.

A major emergency can be triggered by a physical event such as a bushfire, chemical spill, gas leak, major fire or explosion, even fatality or serious injury, although it is possible that it may develop over time from smaller and possibly unconnected events.

### 11.4. Recognising a crisis

A crisis may be triggered by a physical emergency such as polluted water leaving the site or a fatality however, most crises evolve gradually from less dramatic events. The crisis may be triggered by internal or external issues such as safety, health, mismanagement or controversial work practices.

Routine or seemingly harmless activities may develop into a crisis after attracting the attention of government, regulators, interest groups, the public or the media. In addition, a simple emergency or minor issue can be turned into a crisis by being insensitively or poorly managed.

### 11.5. The notification process

The effective management of incidents and issues requires their prompt communication to the appropriate level of management.

Where an immediate emergency response is required to an incident, the Contractor's Occupational Health & Safety Plan prescribes the notification arrangements. All incidents requiring an immediate emergency response are reported directly to the Site Manager.

Where an immediate response is not required, incidents and issues will be brought to the attention of the Project Manager through the normal management structure.

All major/critical issues or incidents must be advised to the relevant member of Senior Management.

### 11.6. Crisis / Emergency Management Team

Where an immediate emergency response to a health and safety risk is required, the arrangements in the Contractor’s Occupational Health & Safety Plan will apply.

Where no immediate response is required, or where an emergency has ongoing effects, activation of the Contractor’s Crisis and Emergency Management Plan is at the discretion of the Site Manager.

The Crisis/Emergency Management Team may direct the establishment of operational teams to provide support or handle aspects of the emergency or crisis.

### 11.7. Recovery

Recovery management is most effective when there is recognition of the complex, dynamic and sometimes protracted nature of recovery processes and the changing needs of affected individuals, groups within the community, work environments, legislation and stakeholder expectations.

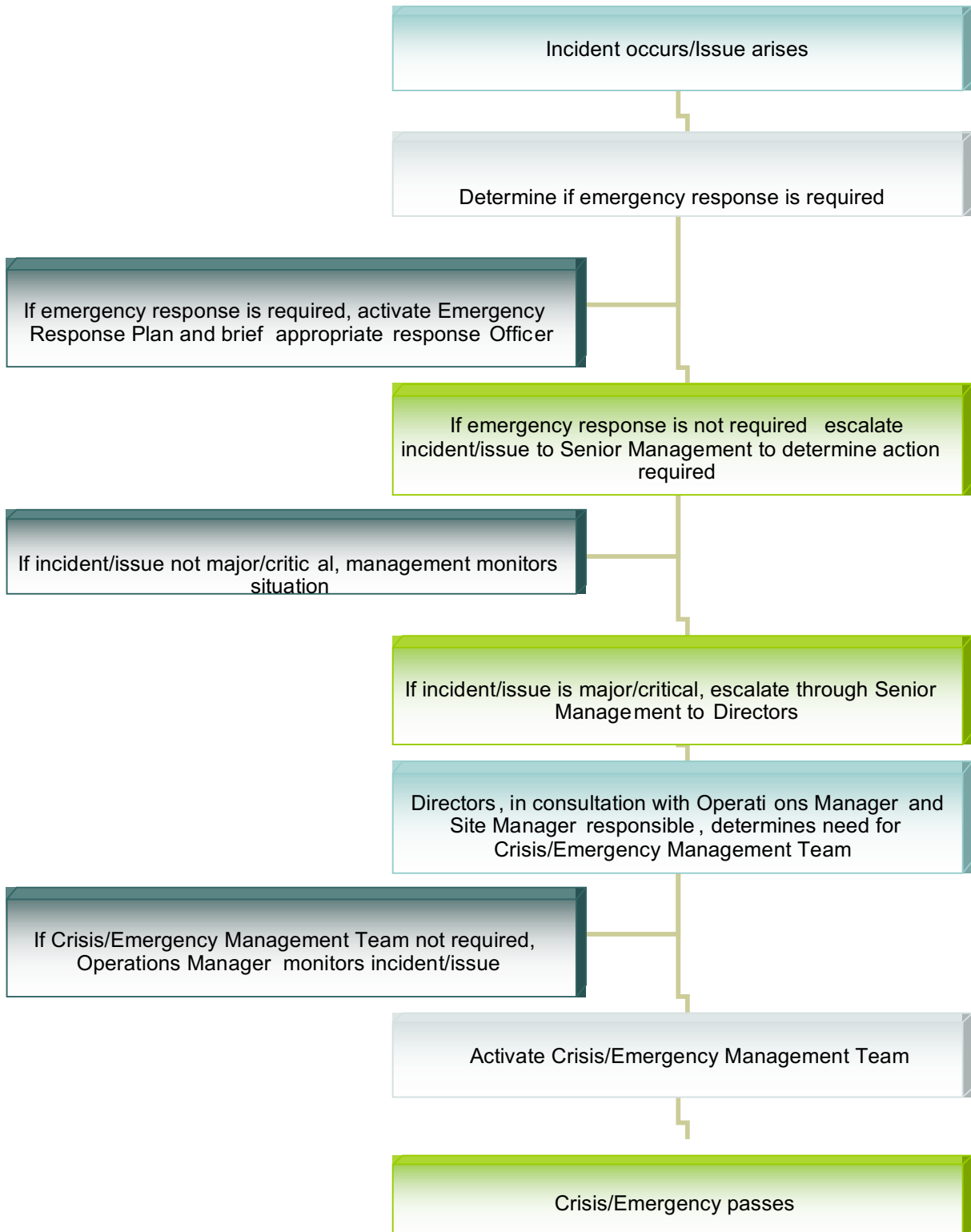
The monitoring of recovery processes facilitates the return to routine. Recovery will include reviewing the contractor’s policies and processes.

### 11.8. Activation & Notification Matrix

		Alert Crisis Management Team	Activate Crisis Management Team
	Alert Emergency Management Team	Activate Emergency Management Team	(Emergency Management Team)
Emergency Response Team / Operational Management			
Normal Business Operations	Alert Incident/Issue	Major Incident/Issue	Critical Incident/Issue
<ol style="list-style-type: none"> <li>1. Controlled situation on a work site</li> <li>2. Report to external agencies possible</li> <li>3. Contained operational effects</li> <li>4. Harm to third parties unlikely</li> <li>5. No reputation risk</li> </ol>	<ol style="list-style-type: none"> <li>1. Emergency response may be required</li> <li>2. Emergency Services possibly involved</li> <li>3. Contained operational effects</li> <li>4. Harm to third parties possible</li> <li>5. Limited</li> </ol>	<ol style="list-style-type: none"> <li>1. Emergency controllable by local Emergency Response Team</li> <li>2. External agencies involved or likely to be so</li> <li>3. Significant operational effects</li> <li>4. Major threat or injury to people</li> <li>5. Reputation risk apparent</li> </ol>	<ol style="list-style-type: none"> <li>1. Strategic management required</li> <li>2. Major external agency involvement</li> <li>3. Significant threat or injury to people</li> <li>5. Critical operations severely disrupted</li> <li>6. Reputation damage potentially significant</li> </ol>

Environment			
<ul style="list-style-type: none"> <li>• Single event that causes transient harm to flora/fauna/soil/ water</li> </ul>	<ul style="list-style-type: none"> <li>• Easily controlled incident, but could lead to public harm/damage</li> <li>• Repeated incidents that are likely to cause local harm</li> </ul>	<ul style="list-style-type: none"> <li>• Easily controlled incident with public harm/damage</li> <li>• On site event with long term but recoverable environmental harm</li> </ul>	<ul style="list-style-type: none"> <li>• Significant off-site environmental effects</li> <li>• Significant physical/social impact</li> <li>• Actual or probable long term off-site harm</li> </ul>
Community			
<ul style="list-style-type: none"> <li>• Privately voiced complaints that require resolution</li> <li>• Community complaint resolved normally</li> </ul>	<ul style="list-style-type: none"> <li>• Vocal or repeated community complaints that require resolution</li> </ul>	<ul style="list-style-type: none"> <li>• Significant community criticism of the Contractor's operations or activities</li> <li>• Loss of credibility with clients/community/partners</li> <li>• Disputes unresolved for over 3 months</li> <li>• Contractor action interferes with normal activities of community</li> </ul>	<ul style="list-style-type: none"> <li>• Legislative violations</li> <li>• Criminal or potentially criminal action affecting the community</li> <li>• Government intervention</li> <li>• Local community actions or protests</li> </ul>
Reputation			
<ul style="list-style-type: none"> <li>• Well known issue but no media exposure</li> </ul>	<ul style="list-style-type: none"> <li>• Adverse local media exposure</li> <li>• Speculation about an official enquiry into the Organisation or its operations</li> <li>• Controversy within the Organisation</li> </ul>	<ul style="list-style-type: none"> <li>• Adverse state-wide media coverage</li> <li>• Public statement required by the Organisation</li> <li>• Official enquiry threatened or underway</li> </ul>	<ul style="list-style-type: none"> <li>• Adverse national/ international media coverage</li> <li>• Threatened suspension or loss of Client support</li> <li>• Client or other public enquiry critical of the Organisation</li> </ul>
Health & Safety			
<ul style="list-style-type: none"> <li>• Lost time injury (hospitalization) or near miss</li> <li>• Health impact among several people</li> <li>• Unauthorised access to facilities/ information</li> </ul>	<ul style="list-style-type: none"> <li>• Ongoing long-term injury</li> <li>• Likelihood of long term health effects on staff, or the community</li> <li>• Third parties hospitalised by Site activities</li> <li>• Harassment and intimidation of staff</li> <li>• Pandemic or major health threat</li> <li>• External threats</li> </ul>	<ul style="list-style-type: none"> <li>• Single accidental fatality or permanent disability to staff or the community</li> <li>• Threat of criminal/ other violent action against staff or the community</li> <li>• Violent or potentially violent protest action on site</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple fatalities or disabilities to staff or the community</li> <li>• Negligent action by Organisational staff leads to a fatality or serious injury</li> <li>• Criminal or other violent action against staff or the community</li> </ul>

11.9. Notification and activation process



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## 12. Other Specific Management Plan Principles

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### 12.1. Work Occupational Health & Safety Management Principles

A site-specific Plan will be developed and will be tailored to meet the project requirements.

The Plan will look to cover induction and training, safe work method statements (SWMS), risk management, injury management, incident management, training, inspections, audits and performance reporting.

The OHS management system shall, as a minimum, demonstrate compliance with all duties of an employer specified in the *Occupational Health and Safety Act 2000*.

The site-specific Safety Management Plan shall consider and respond to the specific WHS hazards and issues relevant to the Works and shall document the systems and methods to be implemented for the term of the Contract.

### 12.2. Environmental Management Principles

The Plan will be developed and used to identify Environmental Aspects, Impacts and to control Environmental Risk and document the processes to manage those risks during the demolition and construction of the Project.

The general outcomes for the project are:

- That the construction work complies with all relevant legislation;
- That the Works be undertaken such that all environmental and construction objectives are achieved; and
- Compliance with the criteria and safeguards as specified in the various planning and approval documents; and
- The environmental parameters set in the Developments Conditions of Approval and regulatory agencies requirements are adhered to.

### 12.3. Quality Management Principles

The plan will be developed to focus not only on product/service quality, but also the means to which it is achieved.

Planning for quality management can reduce the risk of project failure attributable to inadequate project management processes that result in outputs failing to meet defined and agreed standards.

## 13. Waste

### 13.1. Waste Storage and Handling

The demolition Works are expected to take 10-12 months (including site establishment). The project will include a target of 90% of demolished materials by weight to be either recycled or reused on site. The key activities within the demolition period of Works are expected to generate waste including:

- Establishment of temporary facilities for demolition Works staff
- Demolition of existing stadium and associated infrastructure

Conservative estimates of the quantity and destination of major waste streams are detailed in Table 2 - Estimated Waste Generation and Destination Table 2 below.

MATERIALS ON-SITE		DESTINATION		
		Re-Use and Recycling		Disposal
Type of Materials	Estimated Approximate Quantity	ON-SITE Specify proposed Re-Use or On-Site Recycling	OFF-SITE Specify Contractor and Recycling Outlet	Specify Contractor and Landfill Site
Structural & Reinforcement Steel	10,000 tonnes (t)		Transported off site for recycling by licenced contractor.	Unlikely to be any Steel materials not recycled
Concrete	100,000 t	To be collected on site in internal tip trucks. Concrete to be crushed on site and re-used where possible.	Un-used concrete to be transported off site for sale/recycling by licenced contractor.	Minimal unrecyclable material to be sold/disposed of by licenced waste contractor.
Asphalt	1000 t		Transported off site for recycling by licenced contractor.	Minimal unrecyclable material to be disposed of by licenced waste contractor.
Glass	50 t		Transported off site for recycling by licenced contractor.	Unrecyclable material to be disposed of by licenced waste contractor.
Plastics (including stadium seats <sup>1</sup> )	60 t		Transported off site for recycling by licenced contractor.	Unrecyclable material to be disposed of by licenced waste contractor.
Cabling	60 t		Transported off site for recycling by licenced contractor.	Unrecyclable material to be disposed of by licenced waste contractor.
Fluorescent Light Tubes	1 t		Transported off site for recycling by licenced contractor.	Unrecyclable material to be disposed of by licenced waste contractor.

<sup>1</sup> The stadium seating is made of polypropylene material and recycling companies will provide collection services for this material. Recycling is generally used for the building industry. The seats may be unlikely to be reused as seats by other stadiums or councils due to the longevity and quality standards required for reuse.



General Municipal Waste - Food waste/residual	4 t		Transported off site for recycling by licenced contractor.	Unrecyclable material to be disposed of by licenced waste contractor.
Sewerage effluent	TBC	To be connected to existing sewerage infrastructure.		
Asbestos	0	No re-use to occur on site		Disposal to occur by licenced waste contractor.
Fitout Strip Out (including plasterboard, ceilings, services and joinery)	150 t		Transported off site for recycling by licenced contractor.	Unrecyclable material to be disposed of by licenced waste contractor.
Green Waste	4 t		Transported off site for recycling by licenced contractor.	

Table 2 - Estimated Waste Generation and Destination

The figures in the table above are estimates and are used as a guide for designing the waste management systems on site.

### 13.2. Waste Re-use

The appointed demolition contractor will identify waste re-use for demolition items. In order to allow maximum re-use waste shall be segregated into individual stockpiles where space is available as determined by the contractor. Currently there is opportunity for stockpiling of individual materials within the current MP1 boundaries.

Throughout the demolition phase re-use opportunities will be investigated as the first option.

### 13.3. Waste Recycling

Where practical waste would be collected on site and segregated into separate recyclable and non-recyclable stockpiles before being transferred to the appropriate locations as determined in Table 2 above.

The demolition contractor will be encouraged to re-use and recycle demolition materials. All dockets for removal of materials will be retained for confirmation of waste recycling.

### 13.4. Waste Disposal

The disposal of waste will be considered only after re-use and recycling are found to be unsuitable. When waste materials are being disposed, all items are to be handled in a manner than causes the least amount of harm to the environment.

General waste produced on site shall be handled as per council requirements. It is recommended that existing local waste management facilities are utilised.

The removal, transportation and disposal of all materials will be undertaken in accordance with the requirements of the relevant authorities. The contractor will supply transportation dockets, disposal points and other relevant documentation which verifies the type, quantity and disposal location of all materials removed from Site.

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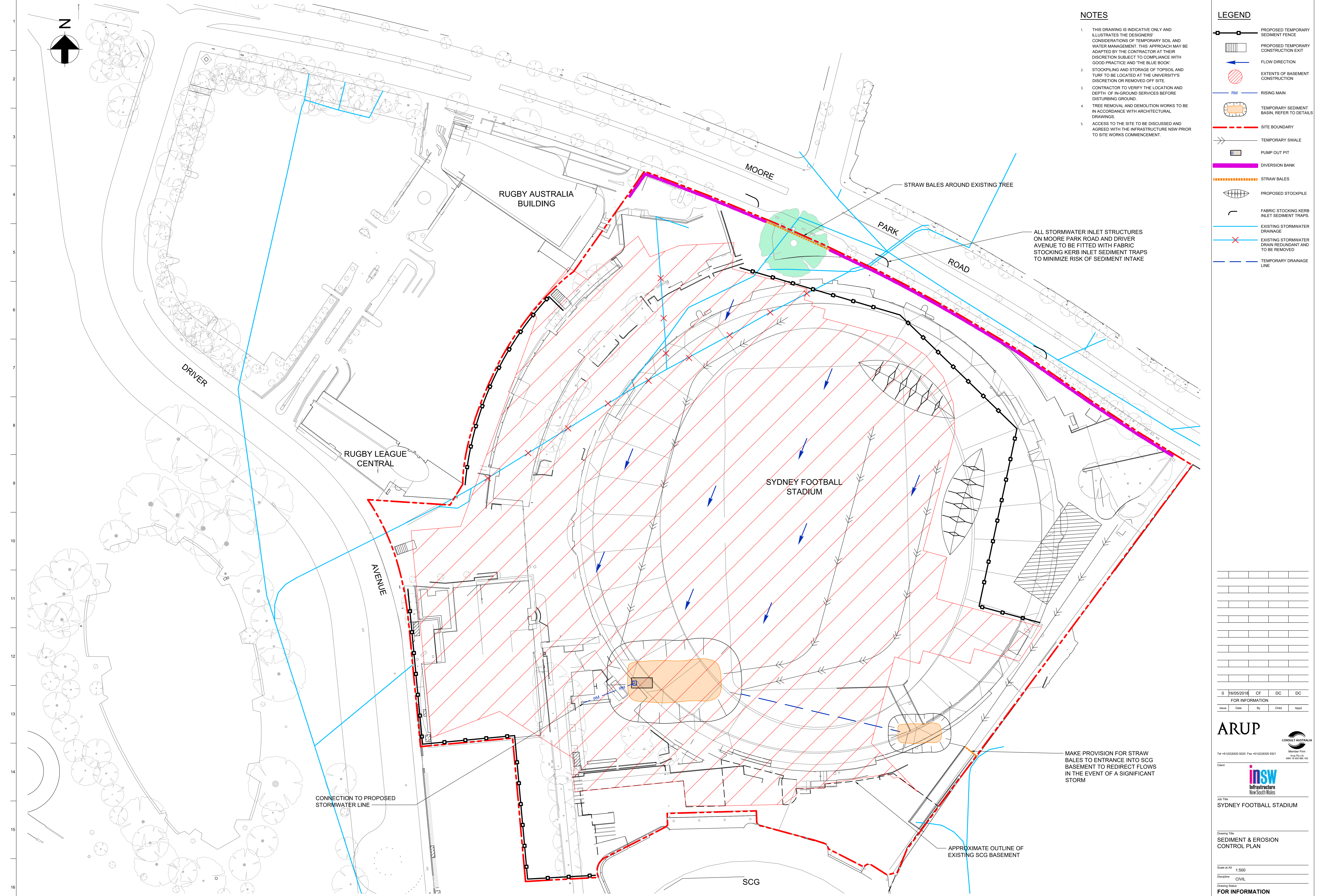
### 13.5. Waste Monitoring and Reporting

The contractor is to develop on site waste recording for all waste streams and volumes arising throughout the demolition phase. This information will be used to show the type, volume and rate of waste being generated, re-used and recycled.

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## 14. Appendix 1 - Preliminary Erosion and Sediment Control Plan

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**NOTES**

1. THIS DRAWING IS INDICATIVE ONLY AND ILLUSTRATES THE DESIGNERS' CONSIDERATIONS OF TEMPORARY SOIL AND WATER MANAGEMENT. THIS APPROACH MAY BE ADAPTED BY THE CONTRACTOR AT THEIR DISCRETION SUBJECT TO COMPLIANCE WITH GOOD PRACTICE AND THE BLUE BOOK.
2. STOCKPILING AND STORAGE OF TOPSOIL AND TURF TO BE LOCATED AT THE UNIVERSITY'S DISCRETION OR REMOVED OFF SITE.
3. CONTRACTOR TO VERIFY THE LOCATION AND DEPTH OF IN-GROUND SERVICES BEFORE DISTURBING GROUND.
4. TREE REMOVAL AND DEMOLITION WORKS TO BE IN ACCORDANCE WITH ARCHITECTURAL DRAWINGS.
5. ACCESS TO THE SITE TO BE DISCUSSED AND AGREED WITH THE INFRASTRUCTURE NSW PRIOR TO SITE WORKS COMMENCEMENT.

**LEGEND**

- PROPOSED TEMPORARY SEDIMENT FENCE
- ▨ PROPOSED TEMPORARY CONSTRUCTION EXIT
- FLOW DIRECTION
- ◉ EXTENTS OF BASEMENT CONSTRUCTION
- RM RISING MAIN
- ◉ TEMPORARY SEDIMENT BASIN, REFER TO DETAILS
- - - SITE BOUNDARY
- TEMPORARY SWALE
- ◻ PUMP OUT PIT
- DIVERSION BANK
- STRAW BALES
- ◉ PROPOSED STOCKPILE
- FABRIC STOCKING KERB INLET SEDIMENT TRAPS
- EXISTING STORMWATER DRAINAGE
- ✗ EXISTING STORMWATER DRAIN REDUNDANT AND TO BE REMOVED
- TEMPORARY DRAINAGE LINE

ALL STORMWATER INLET STRUCTURES ON MOORE PARK ROAD AND DRIVER AVENUE TO BE FITTED WITH FABRIC STOCKING KERB INLET SEDIMENT TRAPS TO MINIMIZE RISK OF SEDIMENT INTAKE

MAKE PROVISION FOR STRAW BALES TO ENTRANCE INTO SCG BASEMENT TO REDIRECT FLOWS IN THE EVENT OF A SIGNIFICANT STORM

APPROXIMATE OUTLINE OF EXISTING SCG BASEMENT

CONNECTION TO PROPOSED STORMWATER LINE


0	16/05/2018	CF	DC	DC
FOR INFORMATION				
Issue	Date	By	Chk	Appd

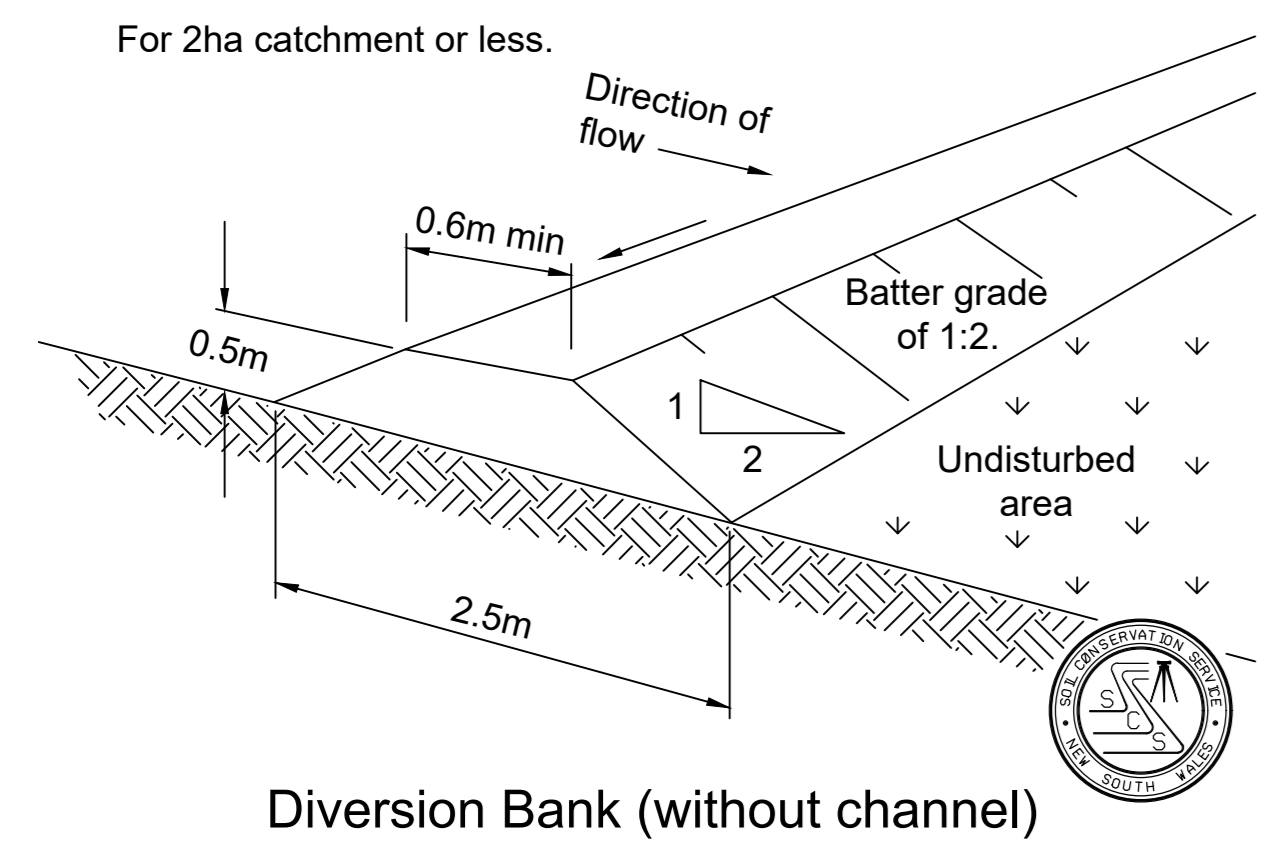
**ARUP**  
 CONSULT AUSTRALIA  
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 App Pty Ltd  
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 Infrastructure  
 New South Wales

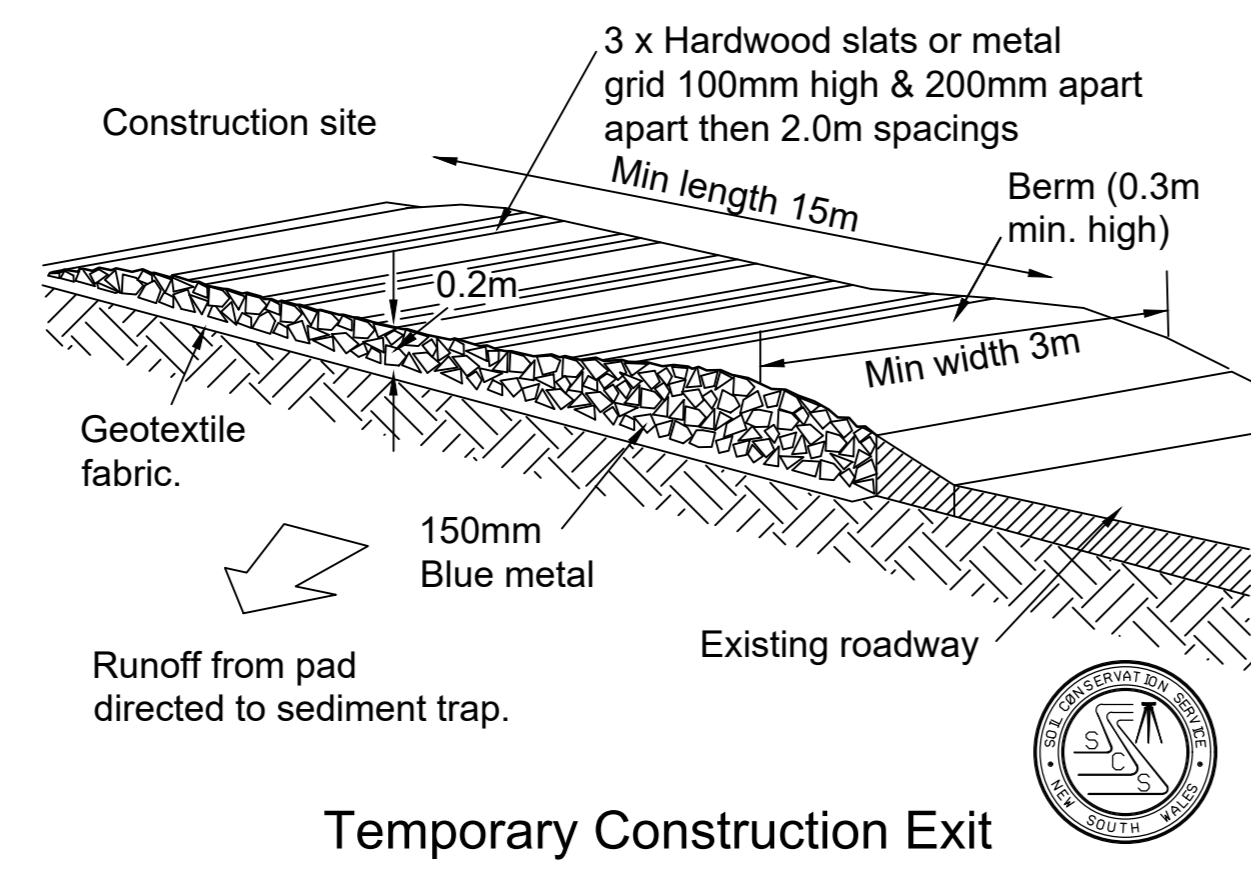
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**SEDIMENT & EROSION CONTROL PLAN**

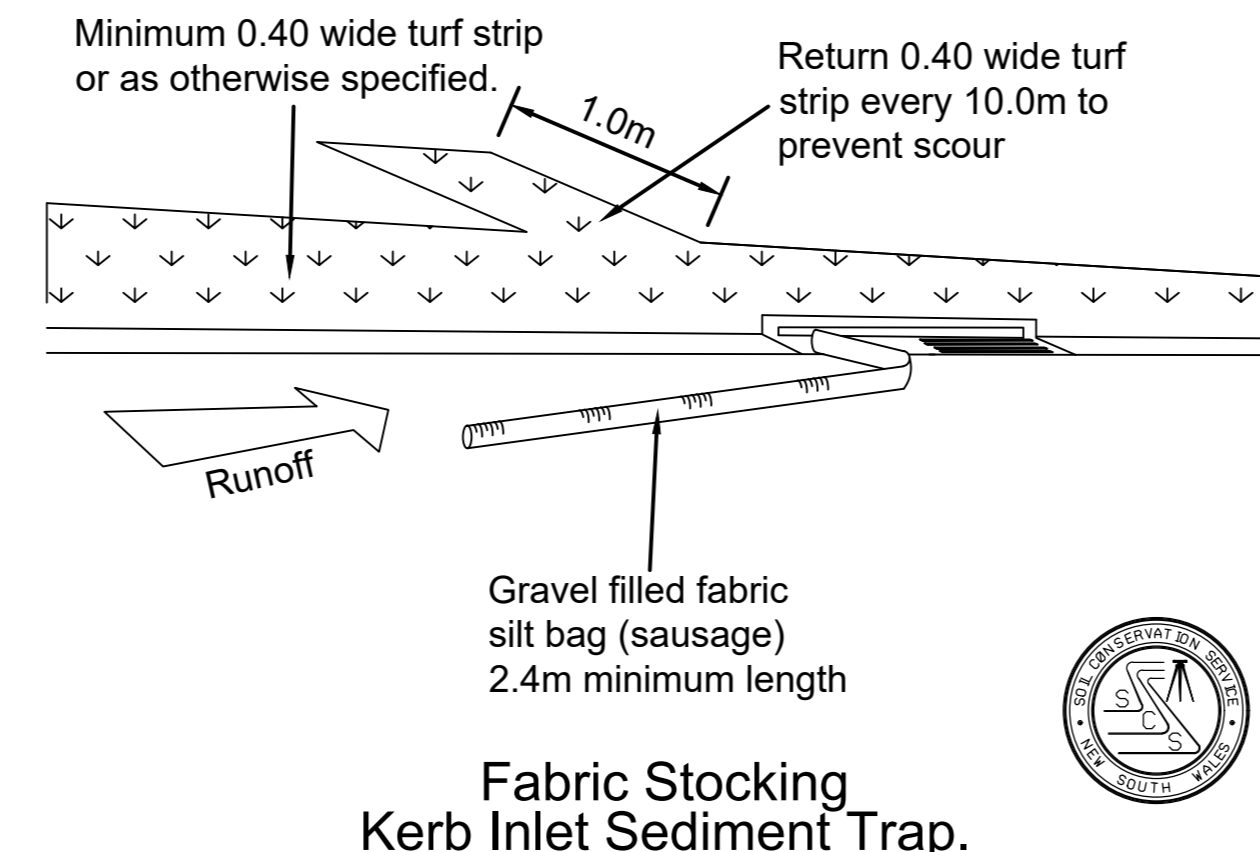
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Issue	0



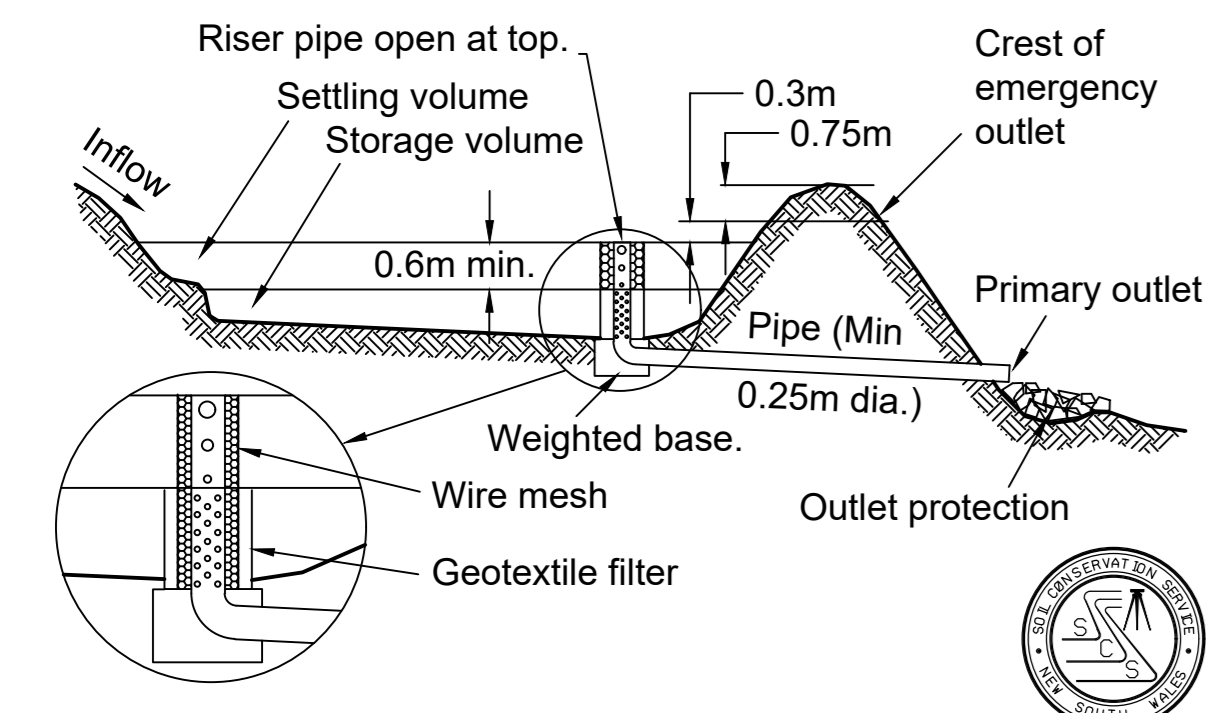
Diversion Bank (without channel)



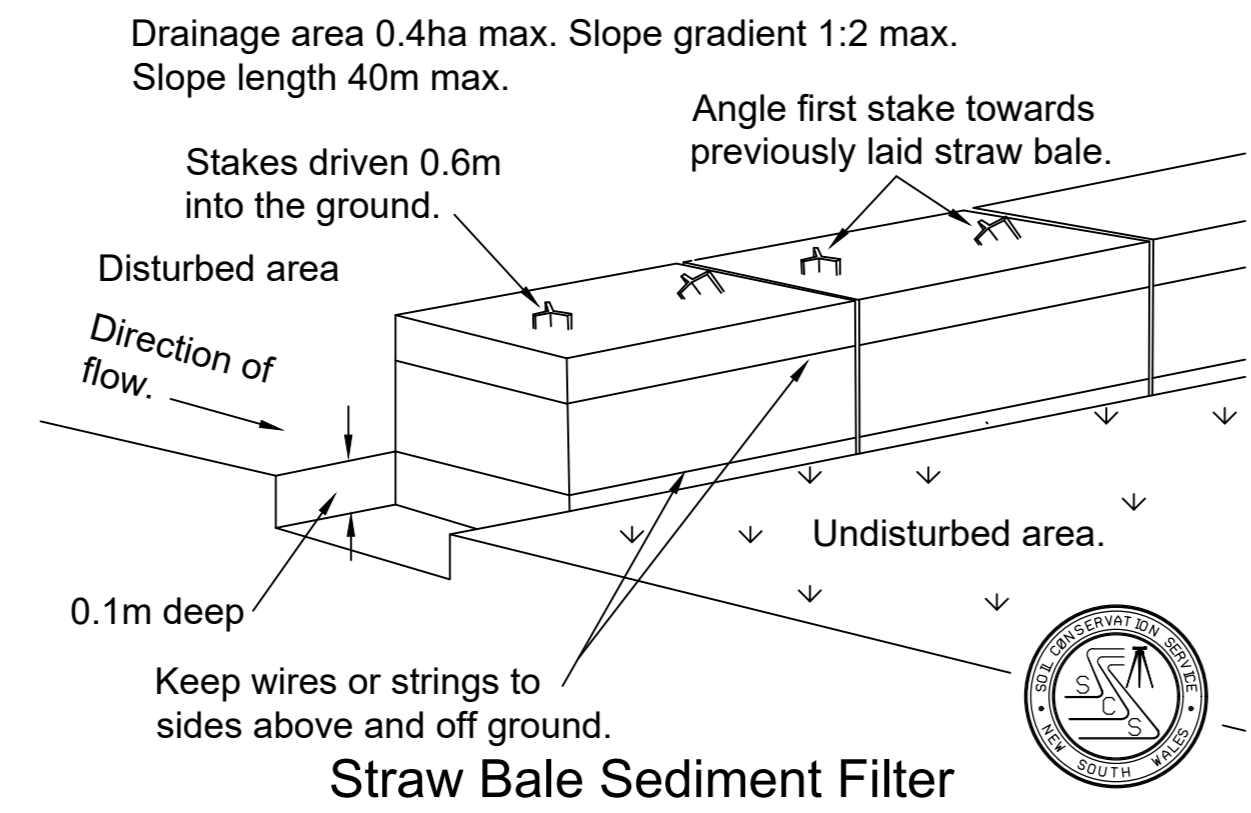
Temporary Construction Exit



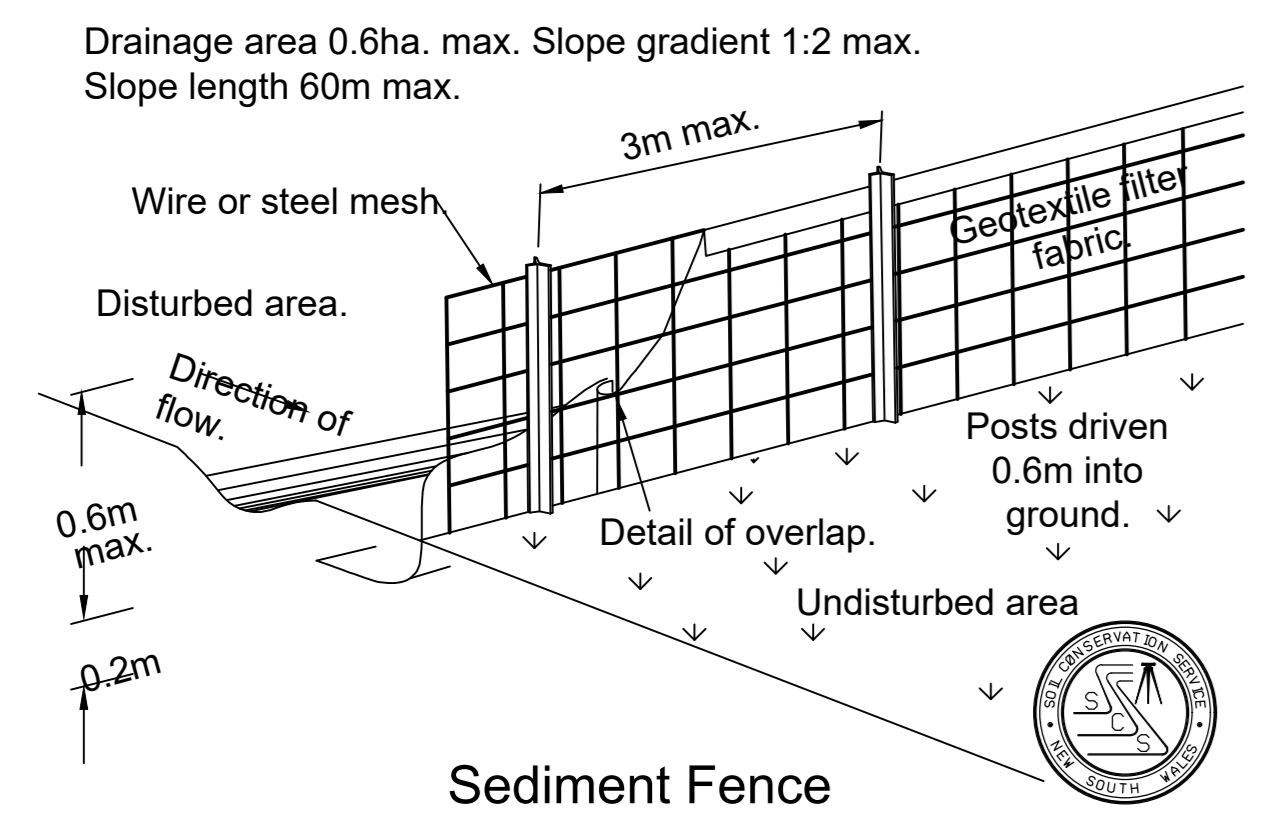
Fabric Stocking Kerb Inlet Sediment Trap.



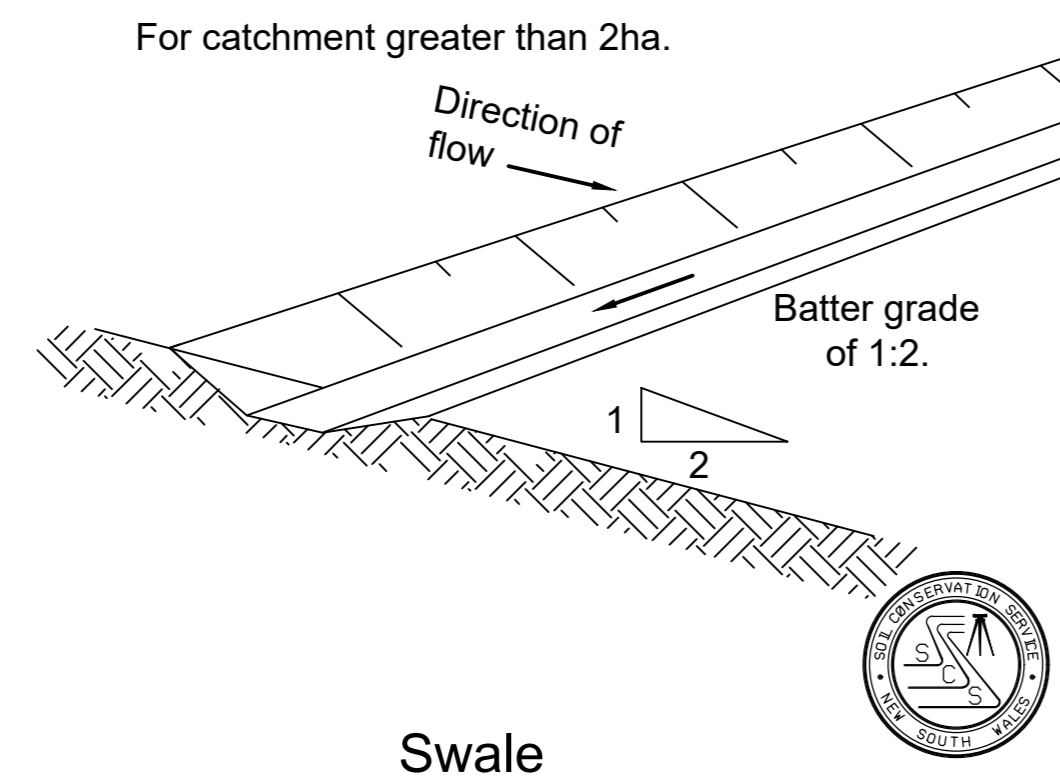
Cross Section of Typical Sediment Basin.



Straw Bale Sediment Filter



Sediment Fence



Swale

**NOTES**

- FOR SEDIMENT EROSION CONTROL PLAN REFER TO DWG CICW-DRG-0400


0	16/05/2016	CF	DC	DC
FOR INFORMATION				
Issue	Date	By	Chk	Appd

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 New South Wales

Job Title  
**SYDNEY FOOTBALL STADIUM**

Drawing Title  
**SEDIMENT & EROSION CONTROL DETAILS**

Scale of A0	NTS
Discipline	CIVIL
Drawing Status	FOR INFORMATION
Job No	2601159
Drawing No	CICW-DRG-0401
Issue	0