

# **Sydney Football Stadium Redevelopment Stage 2**

## **Noise Monitoring Report 1 (June 2021 - September 2021)**

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# 1 Introduction

## 1.1 Project Scope

The Sydney Football Stadium Redevelopment Stage 2 and the Stadium Fitness Facility (SFF) are an Infrastructure NSW initiative to build a new rectangular stadium. The Project is part of the SCSGT Precinct, adjacent to the SCSGT and part of the wider Moore Park sports and entertainment precinct.

Stage 2 works include Detailed design, construction and operation of a new stadium comprising:

- construction of the stadium, including:
  - 45,000 seats (additional 10,000 - person capacity in the playing field in concert mode) in four tiers including general admission areas, members seating and corporate / premium seating;
  - roof cover over all permanent seats and a rectangular playing pitch;
  - a mezzanine level with staff and operational areas;
  - internal pedestrian circulation zones, media facilities and other administration areas on the seating levels;
  - a basement level (at the level of the playing pitch) accommodating pedestrian and vehicular circulation zones, 50 car parking spaces, facilities for teams and officials, media and broadcasting areas, storage and internal loading areas;
  - food and drink kiosks, corporate and media facilities; and
  - four signage zones.
- construction and establishment of the public domain within the site, including:
  - hard and soft landscaping works;
  - publicly accessible event and operational areas;
  - public art; and
  - provision of pedestrian and cycling facilities.
- wayfinding signage and lighting design within the site;
- reinstatement of the existing Moore Park Carpark 1 (MP1) upon completion of construction works with 540 at-grade car parking spaces and vehicular connection to the new stadium basement level;
- operation and use of the new stadium and the public domain areas within the site for a range of
- sporting and entertainment events; and
- extension and augmentation of utilities and infrastructure.
- Construction and operation of integrated members facilities, including:
  - gymnasium, training area and three group fitness areas.
  - Two squash courts, sauna, spa and steam room as well as wet and dry change rooms.
  - day spa and treatment rooms.
  - café with indoor and outdoor seating.

- a 25 metre (m) and a 50m open-air swimming pool.
- function spaces on the rooftop, poolside and at the café for members and their guests.
- basement level plant and equipment, landscaping and associated services.

## 1.2 Reporting Requirements

Condition	Requirement	Reference
<b>C17</b>	The Applicant must undertake short term attended noise monitoring for all 'High Noise Impact Works' that predicted to exceed the NMLs, identified in the CNVMP (B28). and any other works that generate noise exceeding 75dB(A) LAeq (15mins) and a noise monitoring report must be produced and submitted to the Planning Secretary every three months following commencement of the construction to verify that	Section 2.2
<b>C17(a)</b>	construction noise levels do not exceed the recommended NMLs identified in the Stage 2 SSDA – Noise and Vibration Assessment prepared by ARUP dated 30 August 2019; and	Section 2.2 Section 3
<b>C17(b)</b>	Noise management and mitigation measures have been implemented where the NMLs are exceeded.	Section 3

## 1.3 Surrounding Land Use

Residential zones are 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. Non-residential premises also surround the site, with scattered child cares, places of worship, educational facilities and Paddington Town Hall located in Paddington and Centennial Park, high schools located across Anzac Parade and various recreation areas nearby, shown in Figure 1.



Figure 1 - Noise sensitive receiver locations and NCAs

## 1.4 Noise Monitoring Locations

In accordance with Section 6 of the Construction Noise and Vibration Management Plan, Short term attended noise monitoring (15 minutes) is to be conducted at four locations shown in Red in Figure 2 :

1. University of Technology Sport Sciences Faculty Building (UTS)
2. Fox Studios Australia Sound Stage 2
3. Kira Child Care, 230 Moore Park Road, Paddington
4. 252 Moore Park Road.



Real time monitors are located in the two locations as shown in Blue in Figure 2:

1. Kira Childcare Centre
2. Gatehouse, Moore Park Rd

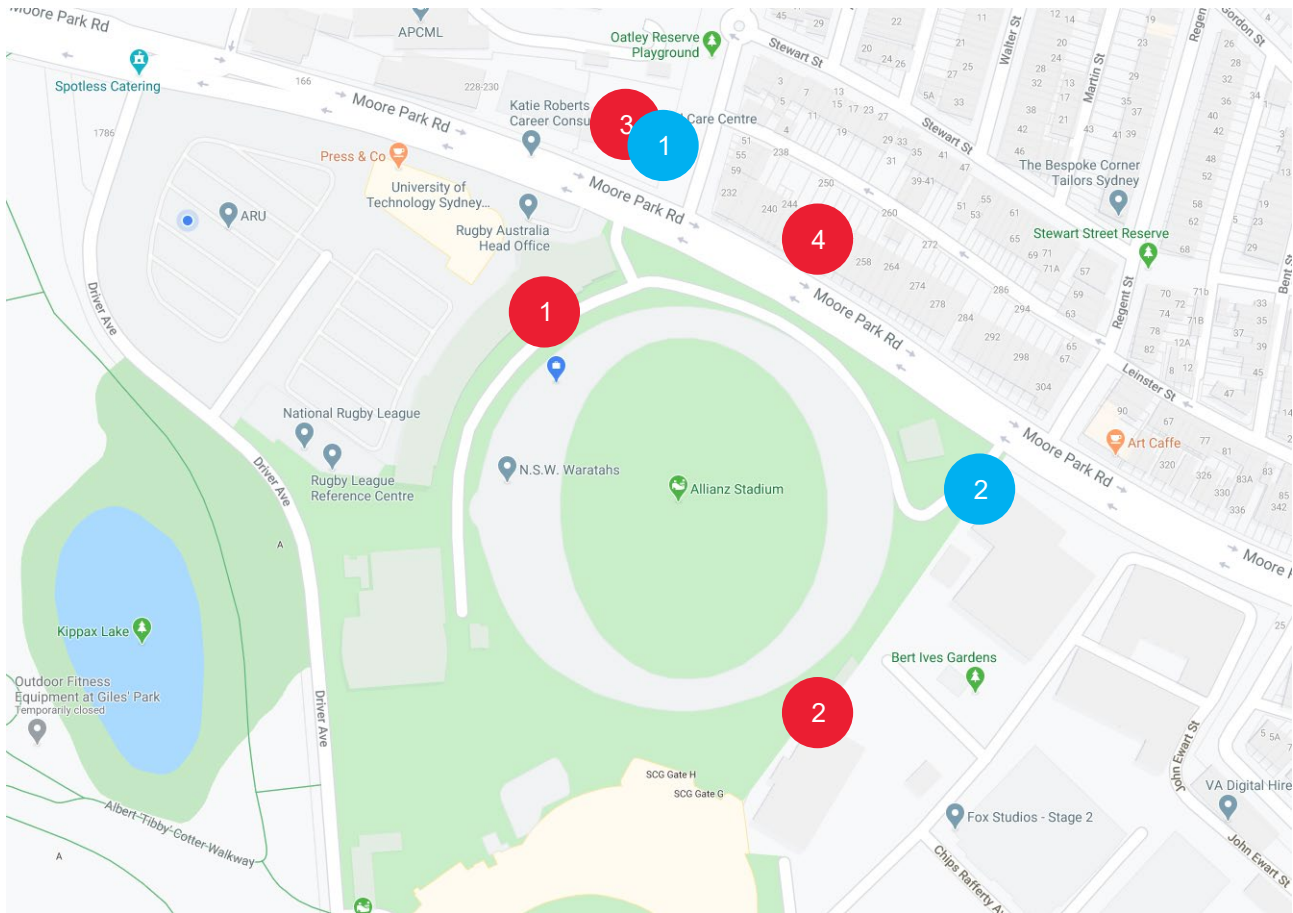


Figure 2 - Noise Monitoring Locations. Red icons denote short term attended monitoring locations, blue denotes real time monitors

This monitoring will be conducted at the beginning of each stage of works, and on an on-going monthly basis during 'High Noise Impact Works' on site.

## 2 Noise Monitoring

### 2.1 Real time monitoring

Real time monitors are located at the following locations

- Kira Childcare
- North East Boundary near Moore Park Road

The adopted criteria are as per the conditions of the Development Consent below:

*C7. All works that generate noise exceeding 75dB(A) LAeq (15mins) are subject to the intra-day respite periods, as approved by the Planning Secretary in the CNVMP in condition B28*

B28e(iv). the following intra-day respite periods (as defined by ICNG) for works exceeding 75dB(A) LAeq(15 mins), unless otherwise agreed with the identified sensitive receivers such as UTS, Kira Child Care Centre and / or Fox Studios and evidence of the agreement provided to the Planning Secretary, prior to the commencement of the works:

- in continuous blocks not exceeding 3 hours each with one hour of respite every three hours block;
- scheduling of works outside of the examination time for educational establishments; and
- noise intrusive works commencing after 8am and be undertaken within the approved standard construction hours.

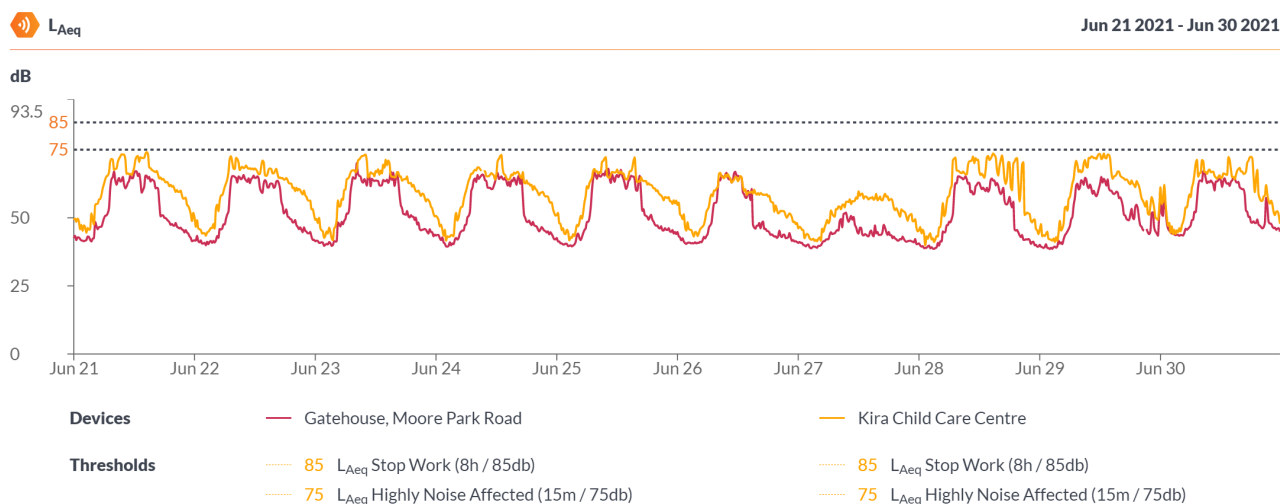
### 2.1.1 Works being undertaken

Works during the period consisted off

- Site Establishment
- Bulk earthworks
- Piling
- Pile trimming
- Haulage of spoil
- Concreting

### 2.1.2 Results

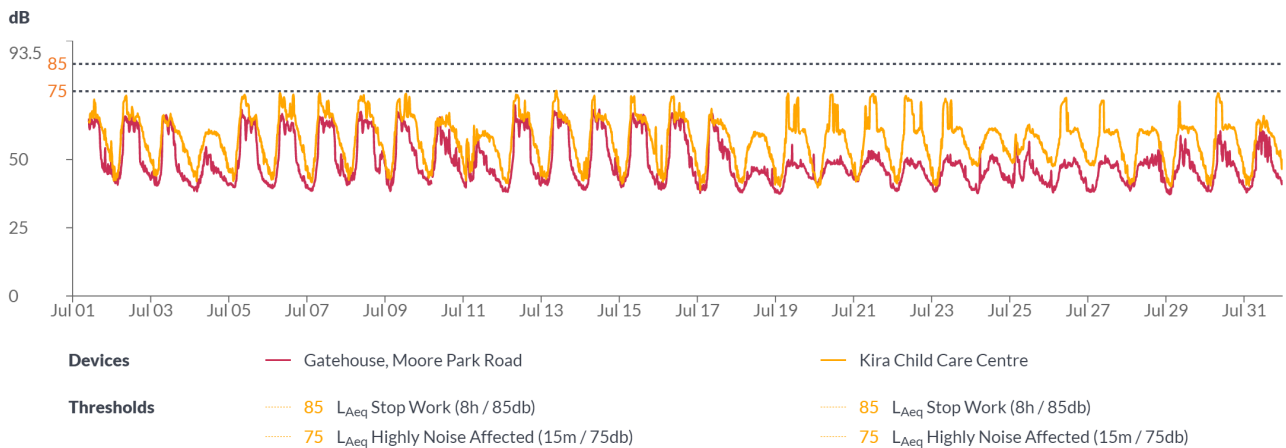
June 2021 (21/06 to 30/06)



July 2021

L<sub>Aeq</sub>

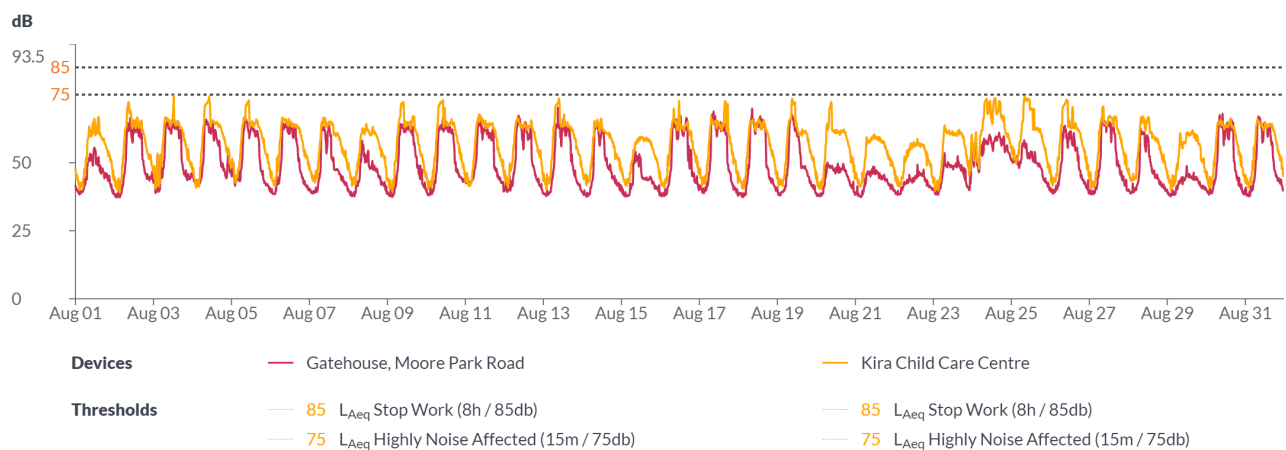
Jul 1 2021 - Jul 31 2021



## August 2021

L<sub>Aeq</sub>

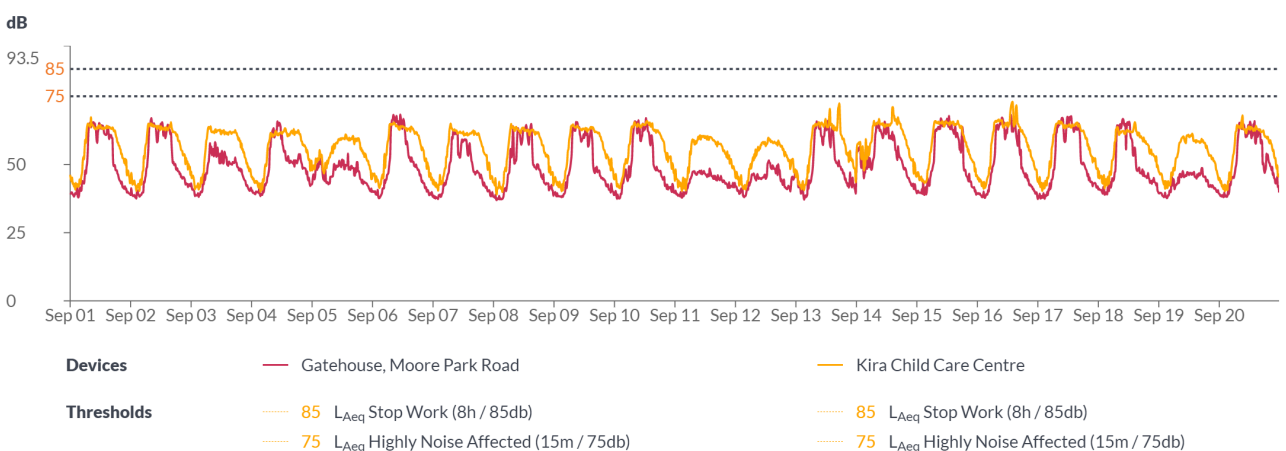
Aug 1 2021 - Aug 31 2021



## September 2021 (01/09 – 20/09)

L<sub>Aeq</sub>

Sep 1 2021 - Sep 20 2021





### 2.1.3 Discussion

Works were generally compliant with the criteria. There were no exceedances of the stop work criteria. Where applicable, all high impact works followed required respite.

Attended monitoring during the period also demonstrated that construction works were largely inaudible to nearby residential receivers due to road noise. Attended results did not exceed the predicted levels of the CNVMP. Exceedances of the NML are considered compliant as in nearly all instances road traffic was the primary noise source and predicted values are not exceeded.

## 2.2 Attended Monitoring

Attended monitoring was carried out at 5 locations as below. Note due to COVID 19 restrictions, attended monitoring was not carried out at Location 2 – instead a representative location was chosen on the adjacent boundary.

### 2.2.1 Results and Discussion

Date	Time	Location	Predicted Laeq(15)	NML Laeq(15)	Result Laeq(15)	Monitoring Trigger	Comment
8/7/21	13:02	1	77	55	70.1	High Impact Noise	Compliant – heavy traffic and SFS works were not audible
8/7/21	13:20	3	74	55	71.3	High Impact Noise	Compliant – heavy traffic and SFS works were not audible
8/7/21	13:37	4	80	62	69.8	High Impact Noise	Compliant
8/7/21	14:25	3	76	70	69.2	High Impact Noise	Compliant – Traffic dominant noise source
26/8/21	11:59	1	77	55	67.0	High Impact Noise	Compliant – heavy traffic and SFS works were not audible
26/8/21	12:15	3	74	55	70.6	High Impact Noise	Compliant – heavy traffic and SFS works were not audible

Date	Time	Location	Predicted Laeq(15)	NML Laeq(15)	Result Laeq(15)	Monitoring Trigger	Comment
26/8/21	12:31	4	80	62	69.2	High Impact Noise	Compliant - high impact activities barely audible
26/8/21	12:54	2	76	70	71.2	High Impact Noise	Compliant –SFS works were audible
17/09/21	08:20	1	77	55	68.2	High Impact Noise	Compliant – heavy traffic and SFS works were not audible
17/09/21	08:39	3	74	55	70.6	High Impact Noise	Compliant – heavy traffic and SFS works were not audible

### 3 Mitigation Measures

Whilst construction levels exceeded the NMLs on a number of occasions, they were still under the predicted levels. It can be confirmed that the mitigation measures were in place accordance with Section 5 of the Construction Noise and Vibration Management Plan, in particular;

- Respite hours (3 on and 1 off) and no high impact works prior to 8am
- Class A hoarding installed on the boundary

No noise complaints were received in relation to the construction works.