



ATC Night Racing Project

Response to RtS – Noise

Australian Turf Club Limited

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1. Introduction

1.1 Purpose of this report

GHD Pty Ltd (GHD) has been engaged by the Australian Turf Club to provide responses to the noise related comments within the Response to Submissions for the proposed Night Racing at Royal Randwick Racecourse (SSD 8706).

GHD previously prepared an Acoustic Assessment (12542230-REP_ATC Randwick Acoustic Assessment, dated 26 February 2021) and Noise Management Plan (12542230-REP_ATC Randwick Noise Management Plan, dated 26 February 2021) addressing noise impacts in response to the Secretary's Environmental Assessment Requirements (SEARs).

This document provides responses to the noise related issues raised in the Response to Submissions.

1.2 Scope and limitations

This report: has been prepared by GHD for Australian Turf Club Limited and may only be used and relied on by Australian Turf Club Limited for the purpose agreed between GHD and Australian Turf Club Limited as set out in section 1 of this report.

GHD otherwise disclaims responsibility to any person other than Australian Turf Club Limited arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

2. Responses to noise related comments

2.1 Summary of issues

GHD has reviewed the Response to Submissions, in particular those related to noise impacts. In total, there are 34 submissions (29 public, 4 organisations and 1 public authority) related to noise impacts which can be categorised into the following common concerns:

- Noise from patrons exiting the venue following completion of the event
- Overall noise impacts from the operation of the venue, including:
 - Amplified sound from the loudspeaker system
 - Generators
 - Staged events
- Increased noise impacts from traffic
- Bump in bump out activities

2.2 Noise from patrons exiting the venue

There is a general concern from the community that the behaviour of patrons exiting the venue after an event will cause a public disturbance, with one of the major issues being noise impacts. There is particular concern given this may occur during the evening (6 pm to 10 pm) and night-time periods (after 10 pm as people leave the venue) when residents may expect to experience peace and quiet. The locations of concern are Doncaster Avenue and Ascot Street, Kensington.

Section 4.4 of the Acoustic Assessment addresses the impacts of patrons and vehicles exiting the site following night racing events at Royal Randwick Racecourse. Based on a finishing time of 10 pm, it is noted that patrons and vehicles exiting the site may extend beyond 10 pm. As such, it was determined that the following entry/exit points were to be utilised by patrons exiting on foot to minimise impacts on the surrounding community:

- Gate 1 (Alison Road)– pedestrians and vehicles
- Gate A and B (Alison Road) – pedestrians using buses

These entry/exit points have been reproduced from the traffic report and are shown in Figure 2.1 and Figure 2.2 below.



Figure 2.1 Patron/vehicle entry and exit locations (Figure 2 from PTC Traffic Assessment)



Figure 2.2 Detailed map of patron/vehicle entry and exit points (provided by ATC)

The following mitigation measures were provided in Table 5-1 of the Acoustic Assessment, in order to reduce the noise impacts from patrons exiting on foot:

- Patrons leaving the venue following the completion of the event should exit through the entry/exit gates on Alison Road. The exit to Ascot Street should be blocked for pedestrians after 8 pm.
- Patrons exiting on Alison Street should be directed by security towards public transport and areas away from residential receivers. Staff should be directed to monitor noise levels and ensure that patrons are departing in a quiet manner as to not impact the residents in the vicinity of the racecourse.
- Signage should be erected to inform the patrons to leave in a quiet and orderly manner and to consider the residential neighbours. The signage should also direct patrons to the correct exits.

After blocking the exit at Gate 18 (Ascot Street) at 8 pm, pedestrian access to Doncaster Avenue and Ascot Street will be limited to Gate 1, Gate A and Gate B only. Security will manage the movement of patrons from the site to ensure that patrons are departing in a quiet manner and are not proceeding to locations which would impact the surrounding communities.

The Noise Management Plan has the following measures for site supervision following completion of the event:

At the completion of the event, security staff should ensure that all patrons are directed towards either the member's car park, the infield car park, or the exit gates on Alison Road. Security staff are to ensure that no patrons on foot exit the site via Ascot Street and Doncaster Avenue.

Patrons exiting on foot should be directed towards the taxi rank or public transport. Should the patrons leave the area on foot, security or staff should be directing them to be doing so in a quiet and orderly manner. Should the patrons ignore the requests of security, and there is a high likelihood that residents will be impacted by the noise from the patrons, the police should be called to attend to the issue if security deem the noise from the patrons is significant.

Security and staff shall also monitor the exit points of the member's and infield car park to ensure that all vehicles are leaving in an orderly manner.

2.3 Overall noise impacts from the operation of the venue

Many of the responses were concerned with the overall noise impact from the operation of the venue for the proposed night racing events. The following sources of noise were raised as concerns:

- Amplified sound from the loudspeaker system
- Generators
- Staged events

The following sections address each of the above items.

2.3.1 Noise from amplified sound systems

The acoustic report addressed noise from two potential amplified sound systems:

- Permanent equipment located on site, mainly used for commentary of races and music between races. Speakers are located on the Queen Elizabeth II Grandstand facing the racecourse (south-west) and throughout spectator lawn areas
- Temporary equipment located in other areas of the site, such as the Theatre of the Horses at the rear of the Queen Elizabeth II Grandstand, used for post event music To determine appropriate maximum noise limits for amplified commentary and music from the night racing events, a review of management plans for other inner-city venues was undertaken. Based on the review, the following maximum noise limits were determined:
 - A-weighted maximum sound pressure level at the nearest receiver – 65 dBA
 - C-weighted maximum sound pressure level at the nearest receiver – 80 dBC

Following an independent review undertaken by the Department of Planning, Infrastructure and Environment (DPIE), it was suggested appropriate noise limits should be based on L_{Aeq} , as opposed to L_{Amax} . The recommended levels were

- A-weighted sound pressure level at the nearest receiver – 60 dBA (L_{Aeq} (5 minutes))
- C-weighted maximum sound pressure level at the nearest receiver – 80 dBC (L_{Aeq} (5 minutes))

Based on a review of the latest information related to noise impacts from sporting events, GHD agrees that the above criteria are appropriate to minimise impacts to the surrounding community.

Permanent sound amplification equipment

Noise monitoring of the permanent sound amplification equipment was undertaken during a representative Class 2 event (Colgate Optic White Stakes Day) on 16 September 2017, with an attendance of approximately 12,000.

Based on this noise monitoring, and subsequent noise modelling, it was determined that the permanent sound amplification system could achieve the required noise limits.

Temporary sound amplification equipment

In addition to the permanent sound amplification equipment, amplified music in other areas of the racecourse was considered, which may include live music or DJ performances following completion of the races, in areas such as the Theatre of the Horses. These events would also be required to achieve the noise limits detailed above.

Given the location of these events, it is highly unlikely that the noise limits would be achieved, and as such should not be held at the night racing events.

DPIE recommendation – permanent real time noise monitoring system

GHD recommended a noise monitoring procedure to monitor noise from the night racing events to check compliance with the recommended noise limits, as detailed in the Noise Management Plan. This consisted of a reference measurement location in conjunction with roaming attended noise measurements.

Subsequent to this recommendation, DPIE's independent review suggested that a permanent real time noise monitoring system be set up to continually monitor and control front of house noise levels, and identify any potential noise exceedances without requiring an acoustic engineer on site.

Implementation of a permanent real time noise monitoring system would add an additional level of confidence to the community that the noise limits are being achieved at the nearest sensitive receivers, and therefore minimise the impacts on the surrounding community. GHD agrees that this system should be installed prior to the commencement of night racing, and details of the system are to be included in the Noise Management Plan.

2.3.2 Noise from generators

The public and Randwick City Council have raised concerns regarding the use of diesel generators for lighting towers. As discussed in Section 4.1.2 of the acoustic report, additional generators will be required to power the lighting for the night racing events. At the time of preparation of the acoustic assessment, the exact make and model of generator has not been selected, however 800 to 1,200 kVA generators have been nominated.

To be conservative and minimise the impacts on the community, the noise from the generators was assessed against the requirements of the Noise Policy for Industry (NPI). In lieu of background noise monitoring for the project, a conservative criteria of $L_{Aeq, 15 \text{ min}}$ 35 dBA was selected, which is the minimum criteria for the night-time period for an assessment against the requirements of the NPI.

Randwick City Council have raised concerns that the diesel generators are to be located within close proximity to residential properties. Based on the information provided to GHD, the nearest distance from one of the diesel generators and a residential receiver is located 110 metres.

Based on these distance, calculations were undertaken to determine maximum sound power level requirements for the generators. To achieve a resultant noise level of 35 dBA or less, a generator enclosed in a sound attenuated enclosure should be selected, with a maximum sound power level of 98 dBA.

Prior to installation of these generators, an acoustic consultant should review the specifications and locations to determine whether additional mitigation measures are required to achieve the requirements of the NPI.

2.3.3 Staged events

As discussed above in Section 2.3.1, amplified music in other areas of the racecourse was considered, which may include Staged Events, such as live music or DJ performances, following completion of the races.

Based on the assessment (as detailed in the Acoustic Report), it was determined that these should not be held during or after night racing events as there is a high likelihood that noise limits will be exceeded.

2.4 Increase noise impacts from traffic

As with patrons exiting the premises by foot, there is also a concern from the community regarding noise impacts from vehicles exiting the site. There is particular concern given this may occur during the evening (6 pm to 10 pm) and night-time periods (after 10 pm as patron depart the venue) when residents may expect to experience peace and quiet. To minimise impacts on the surrounding community, vehicles (including taxis and ubers) will use the following exit points (as shown in Figure 2.1 and Figure 2.2 above):

- Gate 18 (Ascot Street) – vehicle access to members car park
- Gate 13 (High Street) – vehicle access to infield car park
- Gate 1 (Alison Road) – vehicle access for taxi/uber

To further reduce impacts on the surrounding community, in particular those on Doncaster Avenue and Ascot Street, Kensington, the following mitigation measures have been recommended:

- Staggered entry times (staggered exit strategies could also be investigated)
- Promotion of car pooling
- Use of integrated ticketing which includes public transport to and from the event
- Police presence at major intersections, in particular Doncaster Avenue and Ascot Street
- Discourage parking on local streets
- Undertake a taxi arrangement study to review alternative access arrangements and management measures to significantly reduce impacts along Doncaster Avenue
- Adopt a pedestrian, transport and traffic management plan
- Posting of police at intersection at Doncaster Avenue during Class 2 events
- Clear signage should be displayed throughout the car park informing patrons to return to their vehicles and exit the car park in a quiet manner
- Security should be located at Gate 18 to monitor the movement of traffic exiting the car park. Speed signs should be located throughout with a maximum speed of 10 km/h
- Security should be located at Gate 13 to monitor the movement of traffic exiting the car park. Speed signs should be located throughout with a maximum speed of 10 km/h

2.5 Bump-in, bump-out activities

Randwick City Council has raised concerns regarding bump-in/bump-out noise impacts, in particular noisy activities such as waste collection and dismantling of structures occurring after completion of the event after 10 pm.

GHD recommends that noise generating activities which have the potential to lead impacts on the community be reviewed prior to commencement of night racing. Should it be determined that these noise generating activities result in noise impacts on the community, it is recommended that these be delayed until the following day



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