

MEMO



Attention:	John O'Neill	Date:	1 November 2012
Name of Firm:	Australian Turf Club Ltd	Sender:	Con Vink
Project Number:	20110410	Pages:	2

Royal Randwick Racecourse SSD5002-2011 – PPR Response

As requested we have reviewed the letter dated 17 September 2012 from NSW Planning & Infrastructure titled "Royal Randwick Racecourse – Hotel (SSD 5002-2011) Response to Submissions" and the issues outlined in Attachment 1 to that letter. We respond to specific items in the section **Additional Information** as follows.

Flooding / Drainage

- The in-ground stormwater drainage system shall be modified to be capable of discharging a 1 in 20 year storm flow. Pipes must have a minimum pipe size of 150mm in diameter.

Response:

The existing drainage system within the Racecourse has been designed to surcharge as part of the on-site detention and groundwater recharge system. Accordingly, it has a capacity less than the 10-year ARI (1 in 10 year) design storm flow. The drainage system proposed within the Hotel Precinct has been designed to the 10-year ARI and will surcharge for storms in excess of the capacity of the Hotel Precinct and/or Racecourse drainage system. Overland flow paths will safely convey any surcharge flows overland away from the building and basement entrance. Therefore there is no material benefit in increasing the capacity of the in-ground drainage system to the 20-year ARI. On the contrary, it would reduce the opportunity for groundwater recharge (which can only occur from surface flows) which is an integral part of the stormwater management strategy for the Racecourse.

The minimum in-ground pipe size will be 150mm diameter, as is currently shown on the concept plan C2-00.

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Signed:

A handwritten signature in blue ink, appearing to read "Con Vink".

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Flooding / Drainage (continued)

- *Confirmation of the following is requested:*
 - *that the proposal complies with Randwick Council's on-site stormwater detention policy; and*
 - *that all basement areas, including the lift over-run will be fully tanked systems.*

Response:

First dot point:

The proposed Hotel Precinct results in a net reduction in impervious area compared to the pre-existing situation, which will result in a reduction of peak flows and total stormwater runoff. The Racecourse already uses an on-site detention system and groundwater recharge system which has been operational for many years. Since the precinct runoff will be reduced, this proposed development will reduce the site discharge compared to the existing OSD system's discharge.

Second dot point:

Tanking will be provided up to a level which is 1m higher than the highest estimated water table level which itself included an allowance for water table fluctuation, in accordance with Department of Planning recommendations for the Spectator Precinct. Tanking above this level is obviously unnecessary. As an additional "belts and braces" precaution, perimeter subsoil drainage will be provided at the top of the tanking level to equalise any local "perched" water table that might occur in the immediate proximity of the building. These are discussed in Section 6 of the Water Management Report.

If you have any further queries please do not hesitate to contact me on (02) 9004 8855.

Yours faithfully,

BROWN CONSULTING (NSW) PTY LTD



Con Vink
Manager - Civil