



08 November 2010

HTT Huntley Heritage Pty Limited  
539 Avondale Road  
Dapto NSW 2530  
Attention: Mr Robert Renshall

Our ref: 211/141019/162741c  
Your ref:

Dear Robert

**Development Application DA-2009 1037  
Request for Additional Information - JRPP 28th October 2010**

I refer to JRPP meeting on the 28<sup>th</sup> October 2010, and the subsequent advice from Vivian Lee in relation to Lots North of Avondale Road, received by email on 29<sup>th</sup> October 2010. Ms Lee advised as follows:

*Lots North of Avondale Road - A review of your late submission to propose fill in the northern lots to provide irrigation for the fairways hole numbers 11-16 would be unacceptable as this area is located within the flood plain and a flood study has not been provided to demonstrate there are no flooding impacts to the adjoining properties as a result in the proposed fill.*

*The proposed irrigation for the fairways north of Avondale Road hole no.s 11-16 must be addressed such that there is no impact in terms of heritage (i.e. land identified as having "moderate" archaeological potential), flooding or any other impacts that may a result as the final proposed irrigation of this area.*

I confirm your advice that there will no filling on the lots to the north of Avondale Road, and therefore there will be no flooding impacts as a result of the golf course development.

With respect to the irrigation for the fairways to the north of Avondale Road, we have altered the design of the irrigation system so that there will be no impact on the area in terms of heritage. The primary change has been to nominate travelling irrigators for fairway watering for all holes north of Avondale Road.

Travelling irrigators work on the principle that a hose is connected to a piped supply and unwound from a drum / dragged behind the irrigator as it moves over the area to be irrigated. The hose is then re-wound following the watering event. For this to work we need to provide a source of water to each fairway. It is proposed that the supply of water to the irrigators is from above ground pipework, so as not to disturb the existing ground. The route of the proposed above ground pipework for the irrigation of fairways 13, 15 and 16 is shown on the revised drawing DA.005. It is to be noted that this pipework will be laid above ground in the rough; the pipework terminates in the rough, level with the centre of fairway. In this way the travelling irrigator can be used to irrigate travelling towards the tee, or travelling towards the green, thereby minimising the length of travel of the irrigator.

The pipework to the south of Avondale Road will be buried up until it crosses Avondale Road at the eastern end of the site. Once it crosses Avondale Road it will be laid above ground. The route selected is adjacent to the fence along Cleveland Road. By laying the pipe alongside the fence there will be little danger that mechanical equipment will damage the pipe during normal operations of the golf course. At the northern end of the site the pipeline will be laid in a westerly direction immediately north of the area identified as having moderate archaeological potential.



Photographs of typical irrigators that can be used for the watering of these fairways can be seen on the website <http://www.irrigationwarehouse.com.au/prod1787.htm>

#### Summary

In view of the general concern that the site would be filled and the potential for flooding impacts has not been addressed by a flood study, the proposal to fill the site has been withdrawn. Further, rather than providing buried pipelines to water the fairways, travelling irrigators will be used on all holes north of Avondale Road. The pipework providing water to the irrigators will be laid above ground, along routes that have been selected to minimise the potential impact to areas identified as having moderate archaeological potential.

We trust that this appropriately addresses the issues raised by the JRPP.

Yours sincerely  
GHD Pty Ltd

A handwritten signature in blue ink, appearing to read 'David Hickie', is written over the printed name.

**David Hickie**  
Senior Project Manager  
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