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Mr John Oliver
Project – Development Manager
Sandy Shores Developments Pty Ltd
PO Box 5178
WOLLONGONG NSW 2520

10th November 2008

Dear John,

SANDY BEACH NORTH DEVELOPMENT WATER AND WASTEWATER SERVICING

I refer to my e-mail dated 30th October 2008 and your verbal instructions to proceed with investigations to address the issues raised by the Department of Planning in relation to Item 10.1 of the Director General's Requirements dated 20th October 2006. The outcomes from these investigations are to be incorporated within an updated version of the Environmental Assessment Report that is being prepared by Planning Workshop Australia for submission to the Department.

Item 10.1 relates to the need for the Environmental Assessment (EA) to:

“address the existing capacity and requirements of the development for sewerage, water, electricity, telecommunications, waste disposal and gas”,

and for the EA to document evidence of consultation with the relevant agencies.

As requested, we have considered the issues associated with water and wastewater servicing for the proposed development of the site for the purposes of a 280 lot residential subdivision. In this regard, we understand that the Department of Planning requires additional advice confirming that there is either sufficient capacity within both the water supply system and the sewerage infrastructure to satisfactorily service the development, or that an engineered solution can be implemented to augment either or both systems to meet the needs of the development.

Accordingly, we have consulted representatives from the Water and Wastewater Division of Coffs Harbour City Council, and have established the current system capacities and the extent of the augmentation that is likely to be required. A summary of our findings is outlined in the following.

1. WATER SUPPLY

Potable water is supplied to the coastal villages north from Coffs Harbour from a 5600 ML storage located to the west of Coffs Harbour known as Karangi Dam. Delivery is provided via a trunk main that runs north from Coffs Harbour and which typically follows the alignment of the Pacific Highway. In the vicinity of the development site at Sandy Beach North, the main is located about 300 metres west of the highway and comprises a 375 mm diameter pipe.

Discussions with the Strategic Manager from CHCC's Water and Wastewater Section have established that this main and the supply have sufficient capacity to service the proposed development at Sandy Beach North. However, connection to the main will require the installation 200 metres of 225 mm diameter feeder main linking the south-west corner of the development site to the existing distribution main that services Sandy Beach and which runs along Diamond Head Drive.



2. WASTEWATER SERVICES

An existing sewage pumping station is located in the south-western corner of the development site adjacent to the Pacific Highway corridor. The pump station services the existing residential area of Sandy Beach and links to Council's trunk system which runs along the eastern side of the Pacific Highway corridor and discharges to an existing wastewater treatment plant at Woolgoolga.

The Strategic Manager from CHCC's Water and Wastewater Section has advised that the existing pumping station is unlikely to have sufficient capacity to cater for the additional loads associated with a 280 lot development at the Sandy Beach North site. Accordingly, it is likely that the existing pumping station will need to be upgraded or replaced in order for it to accommodate the additional sewage load.

In addition, CHCC has advised that the existing rising main that delivers sewage from the existing pumping station to the treatment plant at Woolgoolga, is unlikely to have sufficient capacity. Council has also indicated that it is not in a position to give categorical advice on the capacity of the main, and that the additional load associated with the proposed development would need to be modelled. In this regard, Council is currently embarking on an investigation program which will involve the modelling of its sewerage system to establish available capacity within the network. It is anticipated that the results of these investigations will be available in 12 months.

Accordingly, it is anticipated that some sewerage infrastructure upgrades will be required as part of the development including:

- installation of at least one pumping station within the site to service the carrier main that will be required to service individual lots;
- upgrade of the existing Sandy Beach pumping station to provide sufficient capacity to distribute the additional load from the proposed development to the Woolgoolga WWTW (*or alternatively, replacement of this pumping station*); and,
- installation of an additional rising main to connect the upgraded Sandy Beach pumping station (*or its replacement*) to the Woolgoolga WWTW (*located about 3 kilometres to the north*).

I trust that the advice outlined above sufficiently addresses the additional requirements of the Department of Planning and can be suitably incorporated into the updated EA Document.

In summary, we believe that the existing water and wastewater infrastructure can either service the proposed development or can be augmented to meet any additional loads that the development may introduce. In that regard, we anticipate that any sewer servicing strategy investigation that may be required would be undertaken at the Development Application stage.

Yours faithfully

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Chris Thomas
Manager, Water Resources