Thursday, 1 March 2018

Project No. 2016-5619000





Attention: Mr Geoff Bentley Paynter Dixon Constructions Pty Limited Level 2, 2 Richardson Place Riverside Corporate Park NORTH RYDE, NSW 2113

Dear Geoff,

# RE: Seniors Living Reservoir Road, Blacktown - Masterplan Blacktown Workers Sports Club Stormwater Management Report Peer Review Comments

Warren Smith and Partners (WS+P) has been engaged by Paynter Dixon Constructions to undertake a peer review of the Blacktown Workers Sports Club Stormwater Management Report, undertaken by Wood and Grieve Engineers on the 21<sup>st</sup> December 2015, for Site B – Seniors Living Village. Site A has been approved by Council and is currently under construction. Please refer to Figure 1 for a location plan of Site B.



Figure 1: Site Plan

Warren Smith & Partners Pty Ltd Consulting Engineers ABN 36 300 430 126

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Hydraulic Services Fire Services Civil Services Sydney Water Accredited Water Servicing Co-ordinator and Designer

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The following items from the Stormwater Management Report have been reviewed:-

- Proposed Stormwater Conveyance;
- Proposed Stormwater Attenuation, and;
- Proposed Stormwater Treatment.

For details on flooding, please refer to the GRC Hydro Flood Report.

The following are our review comments for the aforementioned design items.

## Stormwater Conveyance

- Stormwater runoff shall drain through a conventional in-ground drainage network. It shall not, however, be conveyed to an attenuation system before discharging to the creek. An On-Site Detention (OSD) tank will not be required due to the Section 94 Contributions Plan No. 1 with Blacktown City Council (BCC). This allows the proposed stormwater network to connect into Council's trunk drainage system, which is designed to cater for flows up to the 1% AEP storm event, for a reparation of cost.
- 2. All captured stormwater shall be reticulated to several stormwater pump stations which will provide water for the irrigation of Site A; an outdoor sports facility. Any overflow from the pump system will reticulate to the Council stormwater system.
- 3. Runoff flows in excess of the capacity of the in-ground drainage system shall be conveyed as overland flow via the proposed road network to the existing club road and ultimately Bungarribee Creek, or to Penny Place.

#### **Stormwater Attenuation**

1. As discussed previously, an attenuation structure will not be required as part of the proposed development. Refer to Figure 2 for a location plan of areas with BCC which are subject to OSD in relation to the proposed site.



Figure 2: Areas subject to OSD (Source: BCC)

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#### **Stormwater Treatment**

1. Any overflow from the proposed pump system shall be treated in accordance with BCC standards prior to discharging into the trunk drainage system. MUSIC modelling will be undertaken in accordance with BCC WSUD guidelines to ensure that the required treatment targets are met for the proposed development.

Should you require any clarification, please contact the undersigned.

### Nicole Meo

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