
ANNEXURE 3

Halcrow

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Walter Gordon
Meriton Apartments
Level 11, 528 Kent Street
SYDNEY NSW 2000

4 November 2011

Dear Walter,

**Re: 14-18 Boondah Road, Warriewood Removal of Internal Public Road -
Emergency Vehicle Access**

As requested, Halcrow has reviewed the proposed Revised Master Plan Layout¹ of the above site with regard to manoeuvring of emergency vehicles. The revised plan proposes removal of the approved internal public road through the above site, and provision of two separate private driveways for the development; one running east-west and accessed from Boondah Road, and the other running north-south and accessed from Macpherson Street.

As requested, Halcrow has tested the proposed layout with regard to manoeuvring of an emergency vehicle. The NSW Fire Brigade's (NSWFB) emergency vehicles are generally larger and heavier than those used by other emergency services, and as such, the manoeuvring of a NSWFB appliance has been used for this assessment. Fire and Rescue NSW has published information on their appliance fleet and vehicle specifications² which indicates that the pumper appliances are in the range of 7.6m long to 8.04m long, and the most common aerial pumper appliance is 9.8m long.

On this basis, the swept path of a 9.8m long truck consistent with the NSWFB aerial appliance has been assessed using the AutoTURN 7 (for AutoCAD 2010) software. The results of the swept path analysis are presented on Figure 1 attached to this letter.

The swept path analysis indicates that the proposed layout of the two private driveways would be sufficient for a 9.8m long emergency vehicle to:

- enter the site in a forward direction;
- access the full lengths of the two private driveways;
- turn within the site; and
- exit the site in a forward direction.

¹ Drawing No. SKC22, Issue P4 (Preliminary), issued to Halcrow on 31 October 2011

² www.fire.nsw.gov.au/page.php?id=161 accessed 4 November 2011

It is noted that the swept path analysis has been undertaken on the basis that on-street parking along the private driveways is prohibited. Occasional parked vehicles would however not block emergency vehicle access.

It is recommended that a condition of consent be imposed in the future Project Application for the new driveways requiring appropriate parking restrictions and corresponding 'No Parking' signage to be installed in the turning areas and on the approaches to the intersections of the private driveways with Boondah Road and Macpherson Street.

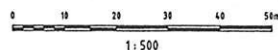
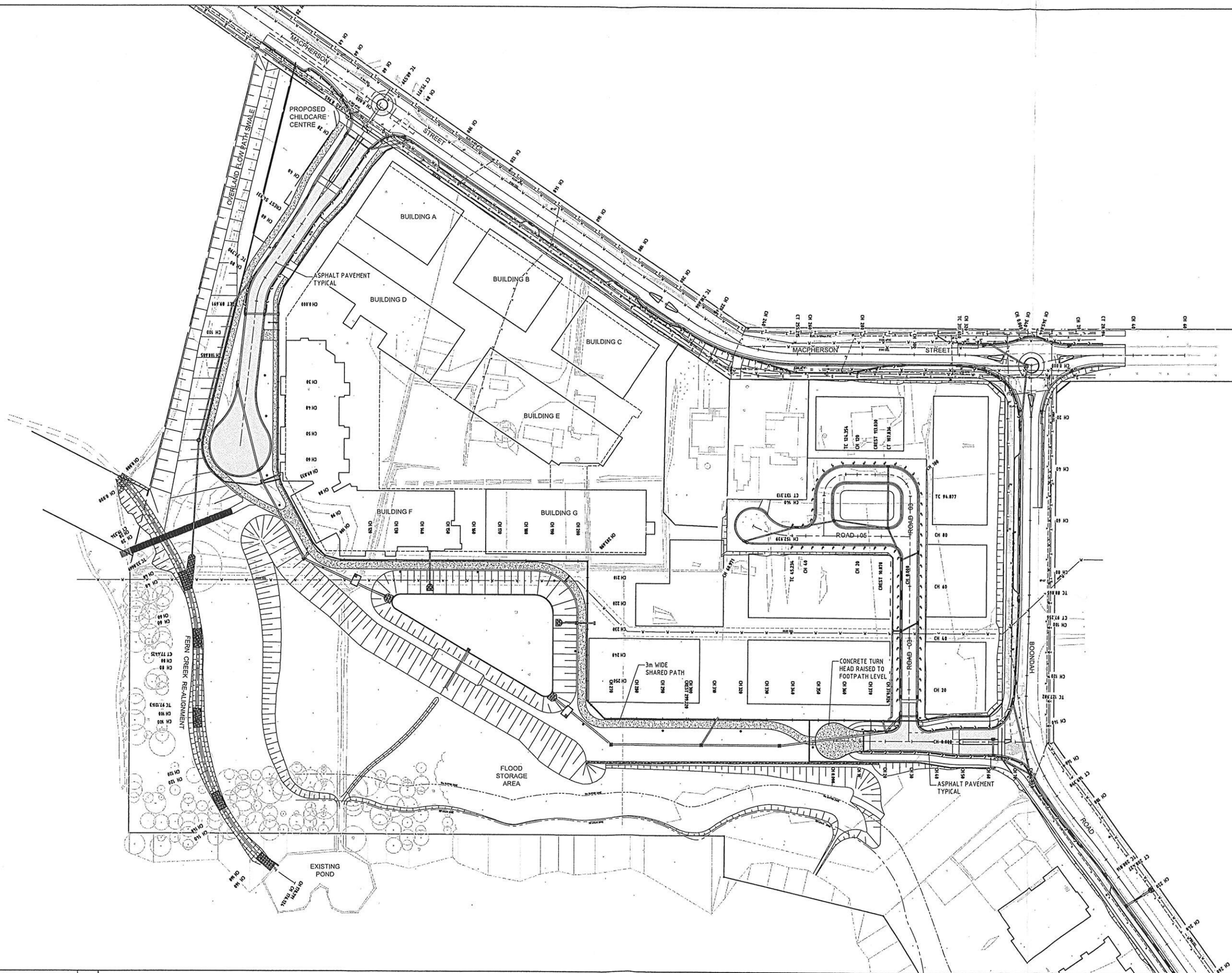
I trust that this information is satisfactory. Do not hesitate to contact the undersigned should you wish to discuss any aspect of this submission.

Yours sincerely,



Piran Trethewey
Executive Transport Consultant

Att: Drawing No. SKC22, Issue P4 (Preliminary)
Figure 1 – Emergency Vehicle Manoeuvring (Halcrow, 04/11/11)



Issue	Description	Date
P4	ISSUED FOR INFORMATION	28-10-11
P3	ISSUED FOR INFORMATION	21-10-11
P2	RE-ISSUED FOR INFORMATION	28-09-11
P1	ISSUE FOR INFORMATION	26-09-11

Client
**MERITON APARTMENTS
PTY LTD**

Status	PRELIMINARY NOT TO BE USED FOR CONSTRUCTION	
Scale	1:500	Current Issue Signatures
Original Size	A0	Drawn
Height	AHD	Designed
Grid	MGA	Checked
Filename	SKC22.dwg	Approved

Project
**PROPOSED RESIDENTIAL
DEVELOPMENT
14-18 BOONDAH ROAD
WARRIEWOOD**

Revised Master Plan Layout

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AT&L

Drawing No. SKC22 - Project No. 10-23 - Issue P4