

29th November, 2013

**LEND LEASE PTY LTD
30 THE BOND, HICKSON ROAD
MILLERS POINT, NSW 2000**

Attn: Johanna

**Re: 4 Murray Rose Avenue, Olympic Park
Water Management Plan**

Further to the Authority's requirements we hereby submit for your approval our proposed Water Management Plan for the above property.

Our intention for Water Management for this particular site is as follows:

Stormwater discharge.

All stormwater including basement carpark subsoil pumpout system is treated on site before discharging into the street stormwater system. The street stormwater system is further treated via gross pollutant traps located further downstream before discharging into ponds that have vegetated marsh zones for further filtration of the stormwater.

Sewer discharge.

The street sewer main will discharge to the sewer main on Benelong Road. The SOPA's Water Reclamation & Management Scheme (WRAMS) system does further reduce the flow to sewer through some sewer mining from the sewer mains in the area.

Potable water

The WRAMS system is then supplied back to the site as non potable water for use in the cooling towers, toilet flushing (low flow urinals and W/C's), irrigation supply and external hose taps. Based on previous buildings on neighbouring lots that we have been involved in, we have based the following calculations and assumptions for the WRAMS daily water usage:

Approximately 1500 people / population for building use.

Average daily toilet and urinal flushing – 17,000 litres

Average daily cooling tower water usage – 40,000 litres

Average daily irrigation water usage – 3,000 litres

With the above items connected to the WRAMS system we are able to reduce the domestic water demand by 60 k/l per day. In addition, high WELS rated taps and shower fittings along with water efficient landscaping also contribute to the significant reduction in potable water usage for the site.

WRAMS - Water Reclamation & Management Scheme

The WRAMS system has been designed with the stormwater catchment of approximately 900m² of plantroom roof area. This rainwater is diverted to the WRAMS tank via first flush devices. The reuse of the rainwater will reduce the total demand on the WRAMS system.

We trust the above information is sufficient for your approval, however, should you require further information or wish to discuss any matter regarding the above design intent please do not hesitate to contact the undersigned.

Yours faithfully

J & M GROUP PTY LTD

A handwritten signature in black ink, appearing to read 'Malcolm Clarke', written in a cursive style.

MALCOLM CLARKE

Director