31 August 16

WATER CYCLE + STORMWATER MANAGEMENT PLAN

3 WATER CYCLE MANAGEMENT PLAN - BUILDING

The following report will identify the measures to be undertaken within the development site to address the issues of reducing stormwater run-off from the site (roof and surface water) including site discharge and water quality, and reducing potable water use.

The following report and plans detail stormwater quality and quantity measures to be implemented on the site as well as the potable water saving measures to be included with the development.

3.1 Reduced Potable Water Demand

a. Standard Water Saving Devices

To reduce demand on potable water all internal water fittings shall meet the following standards;

• water saving shower heads - WELS 3-star rating or higher
• dual flush toilets 6/3 or 4/3 and waterless/water efficient urinals or urinal equipment - WELS 3-star rating or higher
• tap aerators or tap equipment of WELS 3-star rating or higher
• clothes washing machines and dishwashers where provided shall achieve a WELS 3-star rating or higher
• Any proposed WELS device shall be rated 3 Star or better

c. Potable Water Substitution

Water uses that do not require potable water quality have substitution from water supplies other than town water available in the form of:

• Rainwater tank (1 X 10,000L)

The rainwater tank has been sized from the following table

Single Dwellings & Dual Occupancy						
Total Site Area in m² (round up to the nearest 100)	500m² or Less	600m²	700m²	800m²	900m²	1000m² or more
Minimum Retention Volume Required	5.0m³	6.0m³	7.0m³	8.0m³	9.0m³	10m³

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3.2 Onsite Rainwater Harvesting

The 10,000 litre water tank acts as a rainwater collection point.

3.3 Roof Water Treatment

The following devices must be installed:

a. *First Flush Disposal* - The First Flush device is required with the installation of rainwater tanks.

b. *Overflow* from the rainwater tank shall be directed to an appropriate disposal point as listed: connected to the street kerb, table drain, Council drainage line, inter allotment drainage line or dispersion trench as appropriate (or directed by Council).

* *Gutter guards* are recommended to reduce nutrients getting in the rainwater tank.

3.4 Natural Water Courses & Drainage Channels

A grated drain is provided at the end of the proposed ramped driveway to collect water running down the driveway and to avoid flooding the carport. Grassland and pervious paving in covered / uncovered outdoor areas are proposed to minimize the impact of water volume. This can be further investigated during detailed design stage.

3.5 Additional Requirements

Flooding

The subject property is not in a flood-affected area.

Point(s) of Discharge

The WCMP shall be clearly labelled and marked, indicating where the site stormwater will discharge from the site. This may be to Council drainage such as Kerb & Gutter or open drain or to a private Interallotment drainage line and easement etc, easements shall be clearly marked and evidence provided showing that the easement is in existence. Where a new easement is proposed the plans shall clearly identify the location of the new easement and shall be endorsed by the property owner(s) burdened by the proposed easement.

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