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Sutherland Hospital Redevelopment

Integrated Water Management Plan

Project No : 7608

Revision : Review Issue

Date : 20th January, 2015

REVISION SCHEDULE

NO	DATE	DESCRIPTION
1	20th January, 2015	Review Issue

☒	APPROVED	This document is issued for the purpose of the latest revision.
☐	UNCONTROLLED	Content in this document may differ from that contained in the latest revision.

Note: Revisions to the text of this specification section subsequent to Tender Issue are indicated with a vertical line and Revision number in the right margin.

Modified text - eg: Provide and install pressure switches and flow switches where required to ensure correct operation of the pumps.

Deleted text, no longer applicable - eg: ~~Provide and install pressure switches and flow switches where required to ensure correct operation of the pumps.~~

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1 INTRODUCTION

This Integrated Water Management Plan (IWMP) has been prepared for lodgement with the State Significant Development (SSD) application for the Sutherland Hospital Redevelopment. The report should be read in conjunction with the complete stormwater management plan being developed by the civil consultant, Taylor Thompson Whitting (TTW).

The IWMP for the Sutherland Hospital project covers the Hospital redevelopment in Section 1. The IWMP addresses the measures that have been incorporated in this development to reduce the overall water consumption and minimise the effects of the rainwater discharge from the site.

2 SUTHERLAND HOSPITAL – NEW BUILDING

Water Sensitive Urban Design

Sutherland Hospital consists of several buildings across the site. This report addresses the new building only.

Sutherland Hospital will incorporate the following Water Sensitive Urban Design measures

- Water efficent fixtures and fittings
- Fire services
- Gross pollutant trap (refer to stormwater report produced by TTW)

The new building will be supplied from the existing internal Sutherland Hospital water main. To reduce potential contamination of the potable water supply, backflow prevention devices will be installed as per the requirements of AS3500.

Internal Stormwater and Gross Polutant Trap

The rainwater will not be harvested for this project approximately 80% of the new building footprint will be drained via external down pipes and gutter. The remaining 20% of the area are internal courtyards which will be drained via inground drainage. Internal stormwater drainage will be connected to the existing stormwater system within the hospital

Eaves gutters and downpipes will be sized to drain a 1:20 year ARI event. A rainfall intensity of 200mm of a 5min/20year for the rainwater calculations is based on AS3500.3.2

Stormwater Summary

The report produced by TTW will cover the external stormwater drainage and any gross polution traps that are to be installed.

Water Efficent Fixtrure and Fittings

All fittings and fixtures will be WELS star rated, the installation of water saving taps and outlets to reduce water consumption will be adopted. The following ratings are to be used

- 4 WELS stars rated dual flush toilets
- 4 WELS stars rated tapware
- 3 WELS stars rated shower

Fire Services

Fire services flow switch testing will be completed using zone flow test devices. This enables the testing of the flow switches to be completed with in a closed system (no discharge of water) using a recirculated pump assembly.

3 CONCLUSION

Based on the information presented

- The use of water efficient tapware will provide some benefit in reducing the water consumption
- The recirculation of fire services water used in the monthly testing will be reduced.