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Penrith City Council
601 High Street
Penrith NSW 2570
Attention: Stormwater Engineers

DESIGN REPORT FOR ON SITE STORMWATER DRAINAGE SYSTEM
Lot 3008 DP 1184498 LORD SHEFFIELD CIRCUIT, PENRITH.
SERVICED APARTMENT BUILDING

Introduction & Overview

IGS Pty Ltd have been engaged by Thornton North Penrith Joint Venture to provide design services for North Penrith Serviced Apartment development of Lot 3008. This report outlines the proposed method of stormwater collection and disposal from the site.

The attached drawings have been prepared to support our application and the DA Drawings prepared by DKO Architects for the project.

The design drawings outline our proposed methods of addressing the following and are based on the following criteria.

1. Roof rainwater collection will be designed for the 1 in 100 year design storm event in accordance with the requirements of AS 3500.
2. The in-ground gravity stormwater has been designed to cater for a 1 in 20 year storm event which is consistent with the street system flow capacity.
3. The driveway ramp will provide a 300mm threshold to the street level.

Site information

The existing site is located adjacent to the North West corner of Lord Sheffield Circuit and is known as Lot 3008

Total Site Area is 1,370 sq metres

Flow Rate from the total site is approximately 66l/sec for a 1:20 year storm.

Proposed Finished Floor Levels.

The following initiatives are proposed for the site and development.

- The finished floor levels for the development will be set at a minimum of 300mm above the surrounding top of kerb level with this level being 26.945m AHD at Ground Floor with a roadway level of 26.645m AHD



On Site Stormwater Detention.

The development site is connected to the existing formed roadway drainage system that has been installed as part of the formation of the road network for the Thornton Precinct . This roadway network and site infrastructure drainage has been constructed by Urban Growth and contains a community style wetland and detention basin as part of the features of the stormwater management and disposal for the site.

Based on the community detention requirement being available and the site area for Lot 3008 included within the calculations for the Community Based Detention scheme we do not propose to provide any On Site Stormwater detention as part of this scheme.

On Site Stormwater Treatment (WSUD)

The development site is connected to the existing formed roadway drainage system that has been installed as part of the formation of the road network for the Thornton Precinct. This roadway network and site infrastructure drainage has been constructed by Urban Growth and contains a community style wetland and detention basin as part of the features of the stormwater management and disposal for the site.

Based on the Community Water Sensitive Urban Design requirement being catered for in the Community Stormwater system it is not proposed to provide any additional stormwater treatment for the site as Council have considered the WSUD Aspects to have been catered for.

Drawings

The following list of drawings are attached as part of the submission package for Council approval.

- H-900 Rev 01 Hydraulic Services Cover Sheet & Drawing Schedule.
- H-901 Rev 01 Hydraulic Services Ground Floor Stormwater Layout.
- H-902 Rev 01 Hydraulic Services Level 1 Stormwater Layout.

We trust the foregoing is satisfactory and should you require any further information on this matter please contact the undersigned.

Yours Faithfully

Jim Gorringe

Associate

Senior Hydraulic & Fire Services Consultant