

DESIGN REPORT ON SITE STORMWATER DRAINAGE SYSTEM

Lot 3007 LORD SHEFFIELD CIRCUIT & AVIATORS WAY, THORNTON

INTRODUCTION AND OVERVIEW

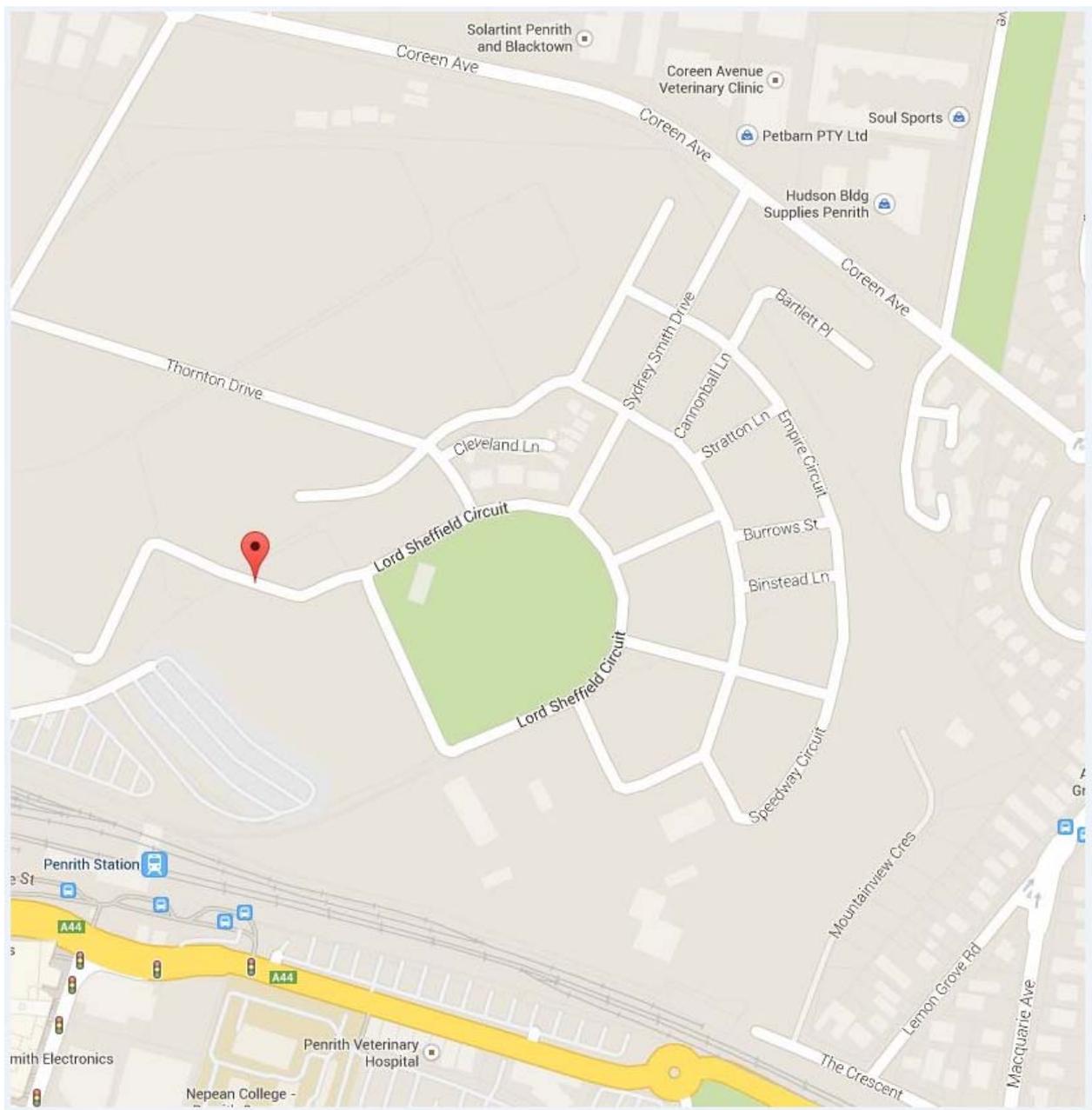
This design report deals with the Site Stormwater Management Plans prepared by LP Consulting Australia (*LP Consulting*) DA – STW 01 to 6 Issue B. These designs have been prepared in support of the drawings prepared by Architects, BKO Architecture.

The design plans address the following key areas:-

1. The Roof Water system will be designed for the 100 Year Design event in accordance with AS 3500
2. The in-ground site stormwater drainage system has been designed to cater for the 1 in 20 Year Average Recurrence Interval storm event consistent with the street system flow capacity
3. The driveway ramp will be raised to achieve the 300mm required threshold

THE EXISTING SITE

The existing site is bounded by Lord Sheffield Circuit and Aviators Way which are formed roadways and carparking areas. The site has been raised to improve protection against any impact of overland flow and river flooding.



PROPOSED FINISHED FLOOR LEVELS

The following initiatives are proposed for the subject redevelopment.

- ❖ The Finished Floor Levels for the site development will be set 500mm above the surrounding flood Level and this FFL 1.2m AHD.
- ❖ The proposed driveway threshold into the basement leading off the proposed private roadway shall be set 300mm above top of kerb.

ON SITE STORMWATER DETENTION

The site is connected to the formed roadway drainage system that ultimately drains to the community style wetland and detention basin system.

Council has advised that On Site Detention is NOT REQUIRED for this site.

ON SITE STORMWATER TREATMENT (Water Sensitive Urban Design - WSUD)

Penrith City Council's Development Engineer responsible for this precinct, Mr Shockair has indicated that the site has been catered for in terms of WSUD.

BASEMENT STORAGE AND PUMPOUT

(Refer to the attached Drawings DA – STW 06)

All exposed areas of the site that drain to the basement are drained to a central pumpout pit. The storage volume has been calculated based on the 100 year Average Recurrence Interval Storm (ARI) for a 1 hour storage. The STORAGE CONTROL VOLUME between top and bottom water levels is approximately 4m³.