

April 17, 2015

Austino Property Group
Suite 603, Level 6
377 Sussex Street
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Attention: Mr Russel Strahle

Email: *russel@austino.com.au*

**RE: 42-44 DUNMORE STREET,
WENTWORTHVILLE NSW
PRE DEVELOPMENT APPLICATION
STORMWATER MANAGEMENT DESIGN STRATEGY**

**HARRIS PAGE
& Associates
Pty. Limited**

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Dear Russell,

As instructed Harris Page has carried out investigative works & liaised with Holroyd City Council regarding the necessary stormwater design principles which are to be applied to stormwater design of the proposed subject development.

We confirm the following design standards are to be considered & applied where required to provide a compliant stormwater design:

- Holroyd City Council Development Control Plan 2013- Section 7 'Stormwater Management'
- AS3500.3- 2015: Plumbing and Drainage- Stormwater Drainage
- Upper Parramatta River Catchment Trust

It has been identified that the lot is not classified by Holroyd City Council as a flood control lot.

The following is a list of key design components within the overall stormwater drainage system design which are to be requiring consideration during the design phase to satisfy the above codes & guidelines:

- **Roof design & layout**
Care should be taken when designing the roof layout to address & avoid potential design flaws which could result in system non-performance or failure
- **Rain water catchment & discharge calculations.**
Calculations applied to the catchment areas & associated discharges shall be in accordance with the relevant design standards & result in system performance equal to or exceeding those standards.
- **Gutter & downpipe system designs**
Gutters & downpipes to convey discharge from catchment areas to the in ground stormwater drainage system shall be capable of system performance as outlined within the relevant guidelines & codes

- Inground stormwater drainage systems

Gravity drainage systems shall be designed to provide performance equal to or greater than that outlined within HCC Stormwater DCP

- Sub-soil & Stormwater Pump Station

Where required sub-soil drainage & stormwater pumping stations shall be incorporated to capture & convey ground water & surface water. Catchment area discharge shall not discharge to a pumping station unless evidence is provided to demonstrate a gravity drainage system cannot be achieved

- Stormwater filtration systems as required IE. First flush device, gross pollutant trap etc.

Stormwater discharge shall be treated to minimise pollutants both solid & liquid to achieve a water quality acceptable for reuse or discharge to the authority system as outlined in the relevant guidelines

- On-site retention (OSR) & On-site detention (OSD) systems

As required by the relevant guidelines one or a combination of both OSR & OSD systems shall be incorporated into the stormwater system to limit site discharge in line with PSD as outlined within HCC DCP guidelines to one that will not adversely affect downstream properties during all storm events.

- Rainwater harvesting

Rainwater harvesting shall be provided to capture, store, filter & distribute for reuse with sanitary flushing & irrigation.

- Water Sensitive Urban Design (WSUD)

WSUD key points as outlined within the HCC DCP shall be assessed & implemented where necessary to provide a development which achieves the intent of a water sensitive urban design.

- Preparation of a water balance analysis (if required for DA)

An assessment of water consumption versus potential harvesting volumes can be prepared to identify key processes or uses where savings can be achieved both financially & environmentally.

- Sediment & erosion control measures

A sediment & erosion control plan would be prepared in line with the requirements of HCC for DA submission.

In addition to the above mentioned it may be necessary to engage a civil engineer to provide additional information such as:

- Overland floor study
- Flood hazard analysis & mitigation strategy
- MUSIC type modelling & water quality control measures

Yours Sincerely,
HARRIS PAGE & ASSOCIATES PTY LIMITED



KYLE JOHNSON
HYDRAULIC SERVICES DESIGNER