April 17, 2015

Austino Property Group  
Suite 603, Level 6  
377 Sussex Street  
SYDNEY NSW, 2000

Attention: Mr Russel Strahle  
Email: russel@austino.com.au

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

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

[Signature]

KYLE JOHNSON
HYDRAULIC SERVICES DESIGNER