

3rd July 2020

Ref: S192734-CL01-A

Jessica Duce
WINIM
Suite 214, 40 Yeo Street
Neutral Bay NSW 2089

Dear Jessica,

Re: WCC – Response to Authority RFIs (Stormwater Engineering)

Northrop Consulting Engineers Pty Ltd, as the civil engineering consultant for the proposed Development at 2 Darcy Road, Westmead provide the following to address the stormwater engineering comments raised by the Department of Planning, Industry and Environment dated 27th April 2020 (NCA/8/2019).

Council Comment

Stormwater Engineering

As previously raised in our SEARs submission water quality of stormwater discharges from the site should with Council's DCP 2011 and be modeled using 'MUSIC' or similar software. This information has not been provided.

Council strongly prefers integration of the WSUD systems into the landscape with design elements such as deep soil, bio-swales, wetlands and the like in preference to 'end-of-pipe' proprietary water treatment devices. From the information provided it would appear that the Applicant has chosen tank containing 'Stormfilter' proprietary devices as the only approach to water quality management. (Water Management Plan and Civil Drawings). Given the site of the site, there is sufficient opportunity to design the landscape to incorporate WSUD, and this should be pursued.

Northrop Response

In response, a MUSIC model has previously been prepared to assess the water quality treatment required for the development to comply with Council's DCP as noted in the Stormwater Management Report dated 28th February 2020 Rev A. The proposed design has considered Water sensitivity Urban Design (WSUD) which encompasses a number of proprietary treatment devices and grassed swales for the capture, conveyance and treatment of stormwater.

Due to the proposed batter along Darcy Road, the utilisation of aboveground bioretention systems results in significant catchment areas bypassing the stormwater network and subsequent stormwater water quality systems to therefore not meet the water quality reduction targets prescribed in Parramatta Council's DCP.

As on-site stormwater detention is required for the site, the designer has combined water quality treatment within the detention structure. This is considered to be an appropriate design solution for the project given the design constraints which restrict the possibility of above-ground bioretention systems to meet DCP requirements.

We have reviewed two potential locations to implement a raingarden within the proposed landscaped area however both locations have physical constraints and contradicts with other comments raised regarding the loss of open space and recreational facilities.

It is also noted that small children will have access to this development upon completion. Typically, it is not good engineering practice to have ponded water in the vicinity of small children regardless if access is restricted by fencing or other means.

We trust you find this information satisfactory at this stage.

If you have any queries, please feel free to contact me – (02) 9241 4188

Yours faithfully,

Neville Naicker
Civil Engineer
Northrop Consulting Engineers