

27 November 2012

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For the attention of: - Ben Eveleigh

Dear Mr Gibson,

Response to Submissions
Dubbo Base Hospital – Redevelopment Project - SSD-5250

DUBBO CITY COUNCIL'S REQUEST FOR ADDITIONAL INFORMATION

We refer to the comments made by Dubbo City Council in regards to infrastructure service, drainage design and OSD controls. Below are clarification and additional information provided by enstruct to resolve the highlighted items.

“There is no information in relation to the drainage to the north towards River Street including information on water quality, gross pollutant traps, etc. Also there is no overall catchment plan supplied for stormwater management.”

Refer to Section 5.3.2 of the enstruct report at Appendix D of the REF. This addresses drainage to the north of the site via the railway corridor.

The OSD tank draining to Myall Street will service the proposed car park; a trash rack is installed within the OSD tank with a sump to capture gross pollutants and sediment before discharging into Myall Street drainage system.

The OSD basin (north west boundary) will have a 200mm sump to collect any sediments and free oil from the first flush. Expected gross pollutant from driveways will be captured in the grated pits before entering the underground system.

“It is considered that the interaction of the detained flows with the existing catchment flows need to be addressed so that the peak flows do not coincide to create an issue. In addition, the overland flows along Myall Street will end up in the railway drain, which may be an issue in larger events.”

Stormwater Management Report, Section 5.6.1 – Myall Street Detention caters for all design runoffs up to and including the 20 year ARI. The discharge into Myall Street underground system is restricted back to the pre-development 5 year ARI. Due to the new drainage system, overland flow on to Myall Street will be significantly reduced for any storm events greater than 20 years ARI. Therefore no additional overland flow will end up in the railway drain, compared to current conditions.

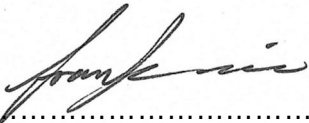
"The downstream underground system may not be a 1 in 10 year system. Council design standards require that this system be designed to a 1 in 10 year system."

The OSD design restricts the discharge to the 5 year ARI pre-development runoff. As outlined in Stormwater Management Report, Section 5.6 for both discharge points.

"It is unclear if the design takes into account any upstream flows from the east and whether they impact on the proposed development. In addition it is unclear if the design allows for future expansion of the site or is it expected that further development will remain within the existing building footprint."

Impervious areas from the eastern properties fronting Leonards Street are drained via kerb connection. Remaining overland areas grades to the east towards Leonards Street. The current Myall Street detention system is designed for the proposed development. The existing volume to earth basin situated in the north western corner will be increased to 115m³ and is designed to allow for future expansion.

We spoke with Mark Finlayson from Dubbo City Council on 23rd of November, 2012. He was made aware of all the points stated above and understood where the information was first supplied (CD, hard copies and website). He appeared satisfied with the responses supplied.



Frank Xie
Senior Engineer

27.11.12
Date