# Warren Smith & Partners Pty Ltd

A 1st Floor, 123 Clarence Street, Sydney 2000 NSW Australia ABN 36 300 430 126

T 02 9299 1312 F 02 9290 1295 E wsp@warrensmith.com.au W www.warrensmith.com.au

2<sup>nd</sup> November 2010

Project No. 3426

Morris Bray Architects
188 Willoughby Road
CROWS NEST NSW 2065
Email: <a href="mailto:cmartin@morrisbray.com.au">cmartin@morrisbray.com.au</a>

Attention: Cameron Martin

Dear Cameron,

RE: SYDNEY ADVENTIST HOSPITAL PREFERRED PROJECT REPORT

In regard to the planning issues arising from the comments from the preferred project report, we advise the following:-

## SYDNEY WATER INFRASTRUCTURE

A Section 73 Feasibility Report was applied for by Hydra Consulting and the returned Notice of Requirements from Sydney Water was attached to the original planning submission. This was based on a previous larger development for the site. A new revised feasibility report based on our current stage 1 works was submitted to Sydney Water earlier this month but no formal response has been received. Because our submission is based on a reduced development scheme the only difference we envisage within the Notice Of Requirements is that we may not need to upgrade any Sydney Water assets for Stage 1 works.

Either way WSP and the project team recognise and accept that upgrades to the external sewer and water facilities will occur as required by Sydney Water due to this development. This will be finalised with a Mandatory Section 73 Submission (Not Feasibility) based on stage 1A and the receipt of the Notice Of Requirement prior to construction approval.

#### TREATMENT OF DOMESTIC WATER TANKS

- The two (2) large domestic water tanks currently indicated within the tank farm area were to provide maximum storage for the full Masterplan scenario. As we have now reverted to the installation of smaller roof top tanks located within High Level Plantrooms, these tanks can be deleted from the plans.
- The utilization of tanks located on Roof Plantrooms provides an energy efficient water control system as gravity can be utilized to provide pressure at fixtures in lieu of additional energy required to pump from the lower level external tanks. The hot water system which will also be supplied from the Roof tank with similar benefits.

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# TREATMENT OF PROPOSED CARPARK STRUCTURE

- The Carpark would need to be fire sprinkler protected as an underground Carpark would no longer be naturally ventilated. Electrical and monitoring controls associated with the sprinkler system would also need to be installed. The complete fire system would require periodic maintenance and testing.
- Underground Carparks require mechanical ventilation and associated additional energy via exhaust fans.
- Underground Carparks require an adequate subsoil drainage system to protect walls and basement slabs from ground water seepage. Subsoil drainage is collected and pumped into the external gravity stormwater system. Large Electrical submersible pumps are generally installed so as to prevent possible flooding occurring. The main pump out pit and secondary pits require continual maintenance due to debris or silt build up. Subsequently any pollutants or waste which unknowingly finds its way into the system could potentially pollute nearby creeks and river systems.

## UNDERGROUND FIRE TANKS, PUMP ROOMS & SPRINKLER ALARM VALVE ROOMS

- Underground fire tanks, pump rooms & sprinkler alarm valve rooms are cost prohibitive.
- Fire pump rooms / sprinkler alarm valve rooms need direct egress to a road or open space to which an underground pump room may not provide.
- Underground pump rooms provide accessibility restrictions to Fire Brigade Officers and require special approval.
- Underground rooms are always susceptible to flooding and ground water problems as subsoil drainage system would be required similar to the underground Carpark scenario.
- An underground fire pump room will require mechanical ventilation and lighting as required by the BCA.

Should you require any further information or clarification, please contact the undersigned.

Yours faithfully,

WARREN SMITH AND PARTNERS PTY LIMITED

Mark Price

**Director Hydraulic Services** 

T: 8234 8619 F: 9290 1295

E: mark@warrensmith.com.au