

14 January 2021

**RICHARD CROOKES CONSTRUCTIONS**  
**Level 3, 4 Broadcast Way**  
**Artarmon NSW 2064**

**ATTENTION: MR Isaac Pinkerton**

**RE: ALEX AVENUE SCHOOL, SCHOFIELDS**  
**RAINWATER HARVESTING**

Dear Isaac,

Rainwater (Down pipes) provided to collect and convey rainwater from all roof areas of the development and connect to and stored in an underground 210KL rainwater tank and reused for irrigation, urinal and WC's flushing around the school. The system provided with a potable water back up in the event the rainwater has ran out the potable water will switch over and start being used.

There is a 40mm water meter on the rainwater pipeline to determine the amount of rainwater that is being re used, as well as the potable water pipeline. Adequate backflow prevention is in place to protect the potable water supply.

The Tank is equipped with a submersible pump, overflow protection, Ultraviolet disinfection, stainless steel screening, float valves are used for the mains water inlet fitted with the appropriate back flow prevention.

The rainwater harvesting system consists of the following components;

Submersible pump duty: 6L/sec @ 500 Kpa

Harvesting System comprising of;

Two (2) multistage submersible pumps. Control system comprising the following.:

1. Dual Variable Frequency drives with PLC interface.
2. Auto/off/manual function
3. Circuit breaker fitted
4. Dry run protection
5. Rain/mains control, diverting to mains water in the event of rainwater depletion and/or
6. power failure.
7. All mounted on Galvanized baseplate

Two (2) automatic backwash screen filter, 50-micron stainless steel screen, 50mm inlet/outlet connector unions, pressure rated to 16bar.

Filter fitted with automatic backwash actuator with timer settings, and differential pressure switch for optimum performance.

Two (2) automatic backwash screen filter, 20-micron stainless steel screen, 50mm inlet/outlet connector unions, pressure rated to 16bar. Filter fitted with

The automatic backwash actuator with timer settings, and differential pressure switch for optimum performance.

Two (2) Ultraviolet Disinfection system with alarms and volt free contacts for BMS. Initial UV Dose at rated flow of 40mJ/cm<sup>2</sup> @70%UVT.

System supplied with mains water back up solenoid, float switch and non-return valve.

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

Yours sincerely,

MEINHARDT (NSW) PTY LIMITED  
Assad Shuhaiber

Associate

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