System Specification

| Client: | | Date: | 07 February 2019 |
|-------------|---------------------------|--------|------------------|
| Project: | Pitch up to 70m x 110m | Quote: | |
| Description | Portable Sprinkler System | Rev: | 0 |

Description of system

A set of 7 no. Naan 5022U portable sprinklers will cover an area up to 770m² at each setting and apply water at the rate of 3.3mm/h. The sprinklers may be operated for 1 hour per day in each position, or in one position for 7.5 hours per day, to allow 25mm to be applied within a 10 day period.

The sprinklers will be mounted on free-standing sled bases and linked using 1" Tricoflex hose and 'Geka' type quick couplings. A heavy-duty hose trolley is included to keep the system tidy when not in use and make it easy to move the hose from one position to the next. The hose will plug into quick coupling valves installed at intervals along the side of the pitch.

The system includes a water storage tank and automatic, submersible pump to provide the pressurised water supply to the system.

Naan 5022U Sprinkler

The Naan 5022U plastic impulse sprinkler gives efficient water distribution and has a steady, vibration free operation. The low precipitation rate ensures total absorption of the water into the soil with no run-off or soil erosion. The sprinklers are spaced at 10m intervals along the hose and the line moved 10-12m to each new position.

The sprinklers will be mounted on heavy-duty, galvanised or powder-coated steel sled bases with 300mm high risers and 'Geka' type connections.

Hose and Trolley

Tricoflex hose has a multi-layer construction with knitted reinforcement, allowing operating pressures up to 8 bar and giving excellent handling characteristics and kink resistance. The yellow outer layer is UV and abrasion resistant.

The heavy-duty hose trolley has a coated tubular steel frame with pneumatic tyres and long, rubber sleeved handles for easy manoeuvrability. The trolley holds 100m of 1" hose.

Hose Points

The hose points will comprise a two part quick coupling valve. The valve, by Plasson, is of acetyl and polypropylene, with a rubber seal and stainless steel spring, and has a hinged cap. The male take off fitting is attached to the hose. Once the male fitting is plugged in, the valve opens and water begins to flow.

The 5 no. quick coupling valves will be protected by Carson valve boxes with 230mm diameter, green plastic covers.

Distribution Pipework

The system includes 150m x 50mm black MDPE pipe to run from the pump to the hose points installed along one side of the pitch. MDPE pipe has excellent resistance to frost and stone damage. All pipe fittings are WRC approved compression fittings, by Plassim.

Water Tank

During periods of peak demand, the system will use approximately 19m³/day. To enable the tank to fill over a 24 hour period, a mains water supply delivering not less than 1m³/hour will be required (ideally 1.2m³/hour).

The system includes a 12.5m³ tank with Type AB air gap to prevent backflow into the public mains.

The tank is made from maintenance free black HDPE. The tank is a WRAS approved product and supplied with a 10 year guarantee.

The tank is 2.6m diameter x 2.6m high and needs to be sited on a smooth, level, reinforced concrete base, at least 3.2m in diameter x 150mm thick, provided by the client.

The tank will be supplied with a 3/4" ball float valve inlet.

The tank will be delivered direct from the manufacturer. Access for a large lorry will be required. Off-loading of the tank is the responsibility of the client. The tank has 4 no. moulded lifting lugs equally spaced around the top.

Pump

The Divertron submersible pump has a 1.1kW motor with 4.8A full load current and is supplied with 15m of power cable. The pump will start automatically as soon as an outlet valve is opened.

Dry running protection is included. Should this situation arise, the pump will periodically try to restart automatically without the need for manual intervention.

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