

# Pool Water Treatment Existing Conditions and Planning Report

**Aquarena**

Doncaster



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DRA = Design Risk Assessment.

## EXECUTIVE SUMMARY

Manningham City Council engaged Hydrautech Designs Pty Ltd to prepare a Pool Water Treatment and Planning report for Aquarena, Doncaster with specific reference to the integration of the upgrade works proposed for the facility.

The report provides advice regarding the pool water treatment requirements for the additional pool water treatment systems proposed as a part of the upgrade works – namely a new programme pool, aqua-play area, splash-deck and water slide.

The environmentally sustainable design (ESD) initiatives available as a part of the proposed upgrade works are also addressed.

The staging plan as prepared by Peddle Thorp Architects has been used as the basis for the proposed upgrade works.

Section 9 details the summary of findings identified in the report.

Plans indicating the proposed water spaces and plantroom requirements are provided as appendices to the report.

The ESD findings of the report outline a recommendation for co-generation. This initiative represents the following;

- A capital works budget of \$480,000 AUD+GST
- An annual power saving of 600,000 kW (electricity)
- An annual heating saving of 1,331,520 kW (gas)
- An annual energy cost saving of \$113,880
- An annual CO<sub>2</sub> emission reduction of 588,812 kg/CO<sub>2</sub>
- An estimated payback of 4.5 years

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