5.0 SYSTEM DESIGN

5.1 Introduction

The filtration and water treatment plants installed by Trisley's Hydraulic Services are designed to provide optimum water quality. They are also designed to reduce the liability of random breakdowns and equipment failures. Wherever practical, valves and controls have been installed at an accessible height.

5.2 Description of the Operating System

5.2.1 Process treatment for the Wave pool

* Collection of soiled surface water via perimeter wet deck grating and side skimmer grates.
* Discharge of soiled surface water into dedicated balance tank that is equipped with overflow and make-up provisions.
* Direct suction from the balance tank.
* Screening of all soiled water through pre-pump strainers.
* Filtration through bank of UFF filters that are equipped with dedicated pump sets and face plumbing for reverse type backwashing.
* Correction of high pH levels via the injection of dry acid.
* Residual disinfection with controlled dose of Hypochlorous generated by electroclytic salt chlorinator which is regulated by a Free chlorine controller.
* Metered control of filtered and chemically treated pool water to strategically placed floor nozzles located within the pool.
* Water Make-up and overflow provisions are installed in the balance tank.
* Complete scheme controlled via manual valves and dedicated Control Board complete with necessary interlocks, controls and alarms.

Process Treatment for the Wading Pool

* Collection of soiled surface water via perimeter wet deck grating.
* Discharge of soiled surface water into dedicated balance tank that is equipped with overflow and make-up provisions.
* Direct suction from the balance tank.
* Secondary screening of all soiled water through pre-pump strainer.
* Filtration through a UFF filter that is equipped with dedicated pump set and face plumbing for reverse type backwashing.
* Correction of high pH levels via the injection of acid.
* Residual disinfection with controlled dose of Hypochlorous Acid that is regulated by a Free chlorine controller.
* Metered control of filtered and chemically treated pool water to strategically placed floor nozzles located within the pool.
* Water Make-up and overflow provisions are installed in the balance tanks.
* Complete scheme controlled via manual valves and dedicated Control Board complete with necessary interlocks, controls and alarms.

Pool balance tanks are fitted with automatic level devices. All operating levels have been carefully established and have been set during the commissioning process. These settings should not be changed without approval from Trisley's Hydraulic Services.