

Lied Jungle Pygmy Hippo Exhibit

Henry Doorly Zoo, Omaha, Nebraska



Project Design Features

The Pygmy Hippo pool uses spin filters and sand filters to eliminate animal excretions that cloud the water. To guarantee improved clarity for underwater viewing, Alvine and Associates devised a system to empty and refill the 20,000-gallon Pygmy Hippo pool daily to remove animal waste from the circulation system if the water filtering system alone cannot sustain it. This pool drains in five minutes and refills in less than ten minutes with the required 80° F water to maintain healthy hippos.

Challenging Water Feature Requirements

Nearly one-fourth of the Lied Jungle facility consists of water exhibits. These water exhibits require purification, filtration, heating and recirculation. Eleven ponds in the facility total nearly 450,000 gallons. Each pond is served by its own filter system to prevent cross-contamination with a one-hour changeover rate to sustain a healthy animal environment. Twelve waterfalls pump a total of 750,000 gallons per hour and 250 nozzles distribute reverse osmosis enriched "mist" with potassium chloride water to nourish plants and help maintain the required humidity. All systems operating simultaneously pump 6,700 gallons per minute through the facility

