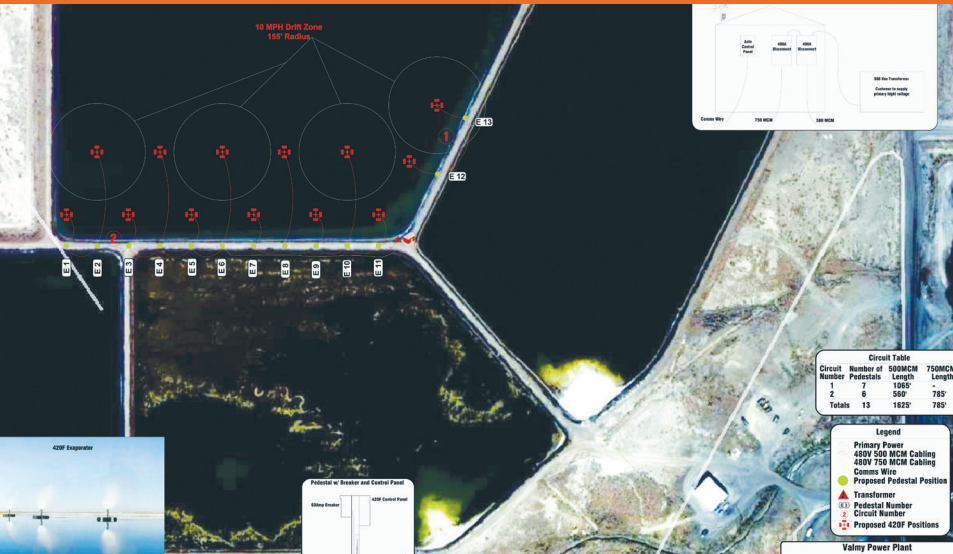


# System Design

AUTOMATION



## SMI SYSTEM DESIGN AND AUTOMATION

SMI Automation offers flexible and customizable software, high performance evaporators, proven communication options, accurate weather measurement, supporting equipment and instrumentation, integrated auxiliary equipment, and service that is second to none.

SMI systems can include:

### Flexible and Customizable Software:

SMI's Smart H2O automation software and control system makes it easy to operate your evaporation system.

### High Performance Evaporators Designed for Automation:

SMI offers the PoleCat and 420 product families with various automation levels to fit your needs.

### Communications Options:

Our proven radio, fiber optic and hardwire options give you the ability to tie into existing networks for outside access and install the most reliable communication system for your site.

### Accurate Weather Measurement:

Includes accurate weather sensors, optional weather tracking software and various power supply options (such as solar power).

### Supporting Equipment and Instrumentation:

Our automatic valves, sensors and instrumentation are field-proven for reliability.

## SMI SMART H2O™ SOFTWARE

Automation will shut down and start up the evaporator and pump based on different weather conditions (wind speed and direction, rainfall, humidity levels and temperature).

An automation system is highly desirable if the water being treated is corrosive or contains chemicals detrimental to the environment or people. The automation system ensures that water droplet drift is controlled so that droplets are deposited in a planned containment area without depending on human operators needing to respond to changing weather conditions.

SMI automation systems for evaporators come in various packages, are usually customized and will need to be priced individually. The typical packages and features are listed below:

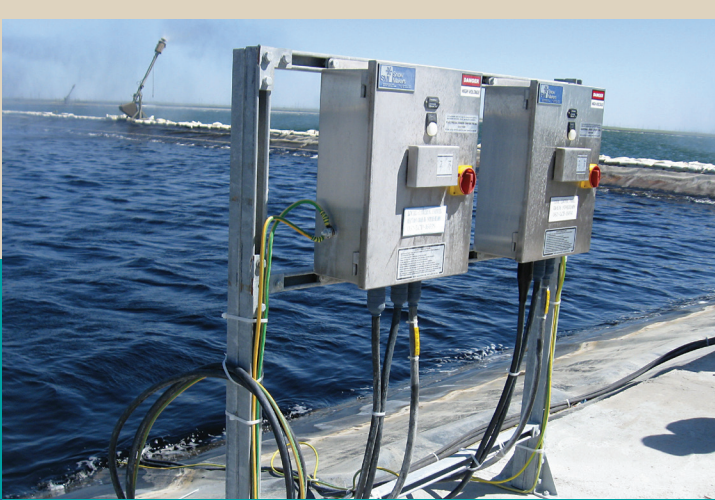
### Basic Smart H2O Automation Package

**Typically includes:** Master control panel (containing PLC, panel view to input set points), weather station (typically includes wind speed, wind direction, humidity and temperature), mounting pole.

**Operation:** Shuts off and starts evaporator(s) and pumps based on weather conditions (usually wind speed, wind direction; temperature

# System Design

AUTOMATION



## SMI SMART H20™ (CONT.)

and humidity), speed and direction are set for 8 quadrants of compass; temperature usually triggers at below freezing and humidity triggers at above 80%; system reacts after length of time that new weather condition is experienced.

### Premium Smart H20 Automation Package

**Typically includes:** Basic Smart H20 Automation Package plus control software located on central personal computer plus documentation (software gives user the ability to control the function of the system and monitor, store and graph system data via a computer as well as locally at the master control panel via panel view input).

**Operation:** Same as Basic, plus allows control or setpoint input via computer or a local master control panel.

### Custom features that can be added include:

Sensors and controls programming that can control based on water level (in ponds), salinity levels (in ponds), and rainfall; and can control water flow and pressure to evaporators to increase evaporation during favorable conditions.

In addition, the premium package can provide data interface programming; can monitor data for water levels, salinity levels, rainfall, water flow rate, water pressure, water flow; and can upgrade to optic fiber and radio communications.



Evaporative  
Solutions

E V A P O R . C O M

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