

Keeping it Green



SPECIAL POINTS OF INTEREST:

- **PSP joins Northern Great Lakes GCSAA**
- **PSP is a certified AquaMaster Fountain Technician**



Autumn Ridge before retro-fit



Autumn Ridge after retro-fit



SPRING, 2009

Autumn Ridge GC Avoids Mid-Summer Breakdown

It was early in the golf season, April 28, 2008, and Pumpstation Professionals was performing the annual preventative maintenance (PM) at Autumn Ridge GC in Valders, WI. During our PM tests it was determined that the VFD running the main 75 Hp irrigation pump was faulting. After some troubleshooting, the flow board was determined to be faulty, but we were also experiencing errors on the VFD.

A new flow board was installed and appeared to fix the problem, but a few weeks later, around May 14, the drive faults returned. The boards on the VFD were definitely bad as they had been damaged by an electrical surge. Replacing the boards was not possible as one of them was obsolete and no longer available. To complicate issues further, the 12 year old unit was unique. The VFD was on a single phase service but required a high amperage demand, making the unit a special order.

Since summer golf season wasn't far off, and the weather was starting to warm up, quick action was needed. The unit was ordered from Watertronics, but it would be 3 weeks minimum without a fully functioning pump station. During the down-time PSP provided Autumn Ridge with the ability to run the station in "manual mode" to keep the water flowing.

We also suggested that a controls upgrade be

done on the system to avoid more problems in the future. The old controls relied on an outdated PLC and flow and pressure controls that made future troubleshooting and repair of pressure and flow control very difficult. After expressing these control concerns to Autumn Ridge they made the decision to upgrade to a new PLC and HMI touch screen.

The new VFD was delivered on June 23 and the entire system was up and running the following day. Per Chad Harrington, General Manager, "It was a beautiful sight driving in the parking lot and seeing water spraying across the golf course".

The control and VFD upgrade gives Autumn Ridge a renewed sense of security that their irrigation system will give them years of trouble free service. It was fortunate that the problem was found during the spring PM. It could have been much worse if it was mid-summer with almost no watering capability!

We cannot stress enough the importance of a regular pump station maintenance program. Finding problems early during a PM along with communicating any VFD fault information to PSP will save time and stress on your course by resolving the problems during the off-season or before there is a complete failure during mid season.

INSIDE THIS ISSUE:

Pumpstation PM's 2

PSP Accomplishments 2008 2

Aqua Master Fountains 2

PSP adds Irrigation Controller Repair Service

PSP is now offering Irrigation Controller and Decoder Controller repair services. We have been fully trained and certified by Rain Bird for their PAR+, PAR+ES controllers as well as the MIM integration to these units. If you are

having problems with these parts of your irrigation distribution system, please call us. We will determine what part of your system is causing the problem and can get the system working properly.

Pump Station PM's - Why?

Regular routine pump station preventive maintenance has many benefits. Some of which include:

- Longer Equipment Life
- Lower Operating Costs
- Less Emergency Service Calls
- Better Pump Station Performance
- Smoother Operation

I think the points that jump out at you here are longer equipment life and less emergency calls but all of these points are very important. Lower operating costs means more profits for your facility. Smooth operation and peak pump station performance greatly contribute to lower operating costs and longer equipment life.

Because of this, Pumpstation Professionals takes our preventive maintenance

service very seriously. We have a very comprehensive preventive maintenance procedure to help ensure seamless run time of your pump station during the peak watering season. Our preventive maintenance service includes a checklist report that examines the operating status of virtually every component on a pump station. Some of the major report checks include:

- AC and DC voltage readings
- Motor contactor and overload relay inspection
- Motor winding insulation tests
- Motor amp draw readings
- Pump and Motor vibration analysis
- Surge Protection inspection
- Pressure tank inspection
- Control valve inspection
- Pump packing box inspection

- Motor bearing lubrication
- Turbine motor oil change
- Filtration inspection and testing
- Pressure relief testing and adjustment

We then compile a report from all of the information we gather at your site for our records and then send the customer a copy for their records.

Our preventive maintenance service calls are scheduled in advance with a confirmation call the day before and an hour before arrival. The cost of this service is a flat-rate charge and assumes 4 – 5 hours of labor.

If you believe that your pump station would benefit from our preventive maintenance service, please call us to put your facility on our schedule.

By: *Tom Zinniel*
PSP General Manager

Pumpstation Professionals is now a Certified Aqua Master Technician. For more information on Pond Management, see our web site.



Major PSP Accomplishments in 2008

In business sometimes you have to "toot" your own horn, so here we go. Listed below are some of the major accomplishments for Pumpstation Professionals in 2008:

- Billy Casper Golf names Pumpstation Professionals their preferred service provider for all their courses in the Chicagoland Area including all Chicago Park District and Cook County Forest Preserve Golf Courses.
- PSP completed four Pumpstation Retrofit projects for Milwaukee County Golf courses including Brown Deer, Dretzka, Whitnall Park and Oakwood.
- PSP completed the entire 2008 calendar year with only 2 call backs compared to 143 projects / service calls. That equals a 98.6% success rate. We are shooting for 100% in 2009.
- Following is a list of training Certifications Renewed / Obtained during the Off-Season
 - Tom Zinniel and Wes Derksen receive PSN / Watertronics Field Technician Certification
 - Tom Zinniel receives Rain Bird Golf Irrigation technician certification including satellite repair
 - Tom Zinniel receives Aqua Master Authorized Service Technician for both Electrical and Mechanical



Background image courtesy of Kohler Company and Whistling Strait GC