BY JOHN WALSH

Water delivery

Development team chooses decoder system for irrigation

In the context of building a golf course, an irrigation system is an unglamorous (and unseen, most of the time) part of a project. Yet it's vital to a successful project. Golfers like – and in many cases demand – green grass everywhere, and effective and efficient irrigation helps provide those results. And for some development teams, a decoder system is the control option of choice.

In Wilson, Mich., the 18-hole Sweetgrass Golf Club is being developed for about \$5.5 million. Golf course architect Paul Albanese of Plymouth, Mich.-based Albanese & Lutzke designed the course. Construction started in August of 2005, and it's scheduled to be completed in July. The 7,300-yard, public course is scheduled to open in May of 2008.

Dan Grassi, owner and president of Grassi Enterprises, a golf course construction company, is Sweetgrass' project manager who's overseeing the irrigation installation. Grassi first looked at the project in February of 2003 and came on board in June of 2005. Kuhn & Associates, an irrigation design firm, drew the original irrigation plans. Changes were made to those plans, mainly adding to the irrigation system because length was added to the course.

Toro, Rain Bird and John Deere bid the irrigation system, Grassi says.

"We looked at the price, then narrowed it

The number of irrigation heads was increased because of the windy site. Photo: EPIC Creative

down to service and reliability of the product," he says. "Then we made our decision. John Deere made a package deal, including the maintenance of the golf course after it was grown in, through One Source. Toro also came up with a package. We were looking long term."

The irrigation system is controlled by a decoder system instead of a satellite or hardwired system. All the heads require fewer wires than heads that are part of a completely hard-wired system, so there's less copper wire and labor required for installation, Grassi says, adding that the price of copper wire has increased considerably recently. With a decoder system, irrigation can be controlled via the Internet, cell phone or hand-held radio.

At press time, Grassi had four holes left to install.

"It's been a much easier and faster instal-



lation because of the decoder system," he says. "This is the first decoder system John Deere has done in the U.S. I had my doubts, but I've been pleasantly surprised by the performance. For example, the heads feature a flushing system that helps prevent sticking caused by the dirt around them during construction."

When completed, the system will have about 1,200 heads, all with individual control. A double-row system is in place from the tees to landing areas. Near putting greens, there are two sets of heads, one to irrigate the greens and one to irrigate the surrounds. The system cost about \$750,000 including the pump station by Watertronics and the control system by Signature Controls. The pump station, which features 60-horsepower motors, pumps 1,500 gallons per minute.

Because Sweetgrass sits on a windy site, trajectory adjustments were made to various nozzles and extra heads were added, mostly on par 5s and tees, and John Deere accommodated that, Grassi says.

"Those extra heads will be taken out because the turf will be in no-mow areas, but enough water is needed to establish them," he says.

Because of the no-mow areas, Grassi says



there are fewer heads (about eight per hole) incorporated into the system than if there weren't any no-mow areas.

Reclaimed water and rain water will be used to irrigate Sweetgrass, yet nothing in the irrigation system had to be changed because of reclaimed water use, Grassi says.

The fairways and tees are a mix of L-93 bentgrass and Southshore, and the greens are straight L-93. John Hoberton, the golf course superintendent who was brought in when the grass started to grow, is in charge of maintaining the turf.

The irrigation system has a 15-year life span. Throughout time, Grassi expects no problems with the system. The pipes will remain, but he expects some heads might need to be swapped out, which is common with any system. GCI



With a decoder system, irrigation can be controlled via the Internet, cell phone or hand-held radio. Photo: **EPIC Creative**