# All 18 are test greens at Outlaw

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by Michael Hurdzan on which Schreiner was project architect - tests proved hopeful for the golf industry.

"In general, we found that while the concentrations of some of the contaminants were fairly high — and that being primarily the nutrients, nitrogen and phosphorus the volume was almost insignificant," said John Barten, Hennepin Parks District water quality manager. "Only about 5 percent of the rainfall made it through the green."

Primarily, then, the water stayed in the turfgrass and root zone, or ran off the green. Studies by Watschke and Cooper report only traces of chemicals, far below danger levels, running off turfgrass.

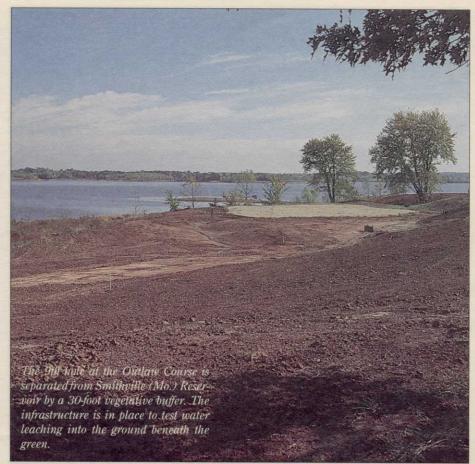
Before building the Outlaw, Schreiner sold his idea to the U.S. Army Corps of Engineers, which owns the reservoir, and the Clay County Parks Department, which is leasing the land for the golf course from the Corps.

"We already know what's coming through these brand-new greens and it's insignificant," Schreiner said, referring to the findings at Baker National which opened in 1990. "We're not hiding anything. We've got data that shows that insignificant nitrates and some phosphorus comes through these greens when they're first being established.

"From there, we don't really know. But, should we encounter any problems, we feel we have a system to deal with the leachates that come out... As the greens get older or mature, or if you have an application of a very hot chemical followed by a heavy rain that causes it to leach out faster than normal, you have an infrastructure in place.'

While he is taking the initiative as a golf course architect, Schreiner said the Park Board also "loves that image."

"What I hope to have is the first 18-hole public course in this part of the country if not anywhere else - that's got an



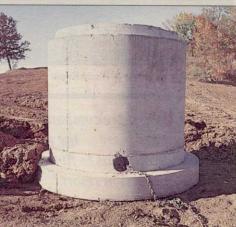
infrastructure set up and ready to go," he said.

#### **FINANCIAL SUPPORT**

Schreiner's next sales pitch will be to the Missouri Department of Conservation, area universities and a superintendents group to fund the testing at the Outlaw.

"This is the perfect study for master's degree-level students," he said. "We have brand-new greens. Nothing's been dumped on them. We've got them set up to be monitored. They're on a beautiful reservoir, built by the Corps of Engineers, and the course is built by the Clay County Parks Department.'

Schreiner estimated the monitoring cost to be around \$10,000 a year. "That gets a half-dozen quality samples done,"



Basins like this have been installed at each hole at the Outlaw Course. Note the inflow hole at the top of the basin and outflow hole on the bottom of the other side. This allows a gravity flow over filtration material before the water leaves the site.

### Morrish, Weiskopf opening Broken Top and Buffalo Creek

BEND, Ore. —The opening of the private 18-hole Broken Top course, in the shadows of the snow-capped Cascade range., is scheduled to take place Independence Day. The ceremonies will include a playing tour by Tom Weiskopf, who designed the course with partner Jay Morrish.

The course is the centerpiece of a new 2,000-acre community. Broken Top neighbors the massive Deschutes National Forest with spectacular views of the Three Sisters Mountains, Mt. Bachelor, and Broken Top Mountain, the dormant volcano after which the course and community were named.

In designing the Broken Top course, Weiskopf/Morrish showcased the varied terrain and scenery of the Central Oregon landscape. Integrating huge rock outcroppings, swales and forested lands, the 7,200-yard, par-72 course tests skill and strength, and promises the Northwest's premier golf experience in terms of beauty, course design and construction quality.

Meanwhile, Buffalo Creek Golf Club, a public-access layout in Rockwall, Texas, designed by Weiskopf and Morrish, will hold its official grand opening April 20.

The design, according to general manager Joe Cotter, produced "the highest quality championship course conceivable, and was developed to challenge the very best golfesrs while providing an enjoyable golfing experience for the average player."

Buffalo Creek is an upscale facility on the order of others of that concept emerging around the country, offering activities and services like those at private clubs.

Chris Rather is the course superintendent.

#### **Garl designing first** track in Detroit area

MILFORD, Mich. - Architect Ron Garl intends to move a lot of earth when he builds Prestwick Village Golf Club.

Garl, of Lakeland, Fla., will add character and definition to the 18-hole track which will be the centerpiece of a 425-acre residential

Course construction begins in September, with opening expected in mid-1995.

"This is my first course in the Detroit area and I'm excited about the possibilities with this intriguing site," which features gently rolling land, said Garl.

The project will include a 25-acre "state-ofthe-art" practice facility.

## Rivercliff GC adds 9

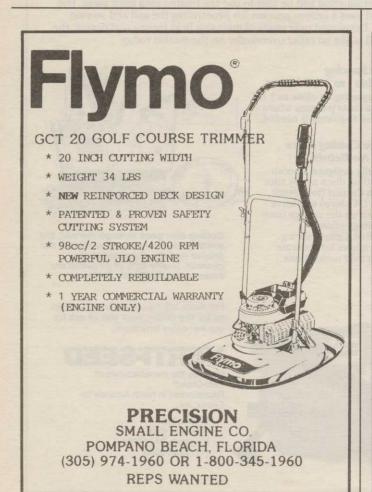
BULL SHOALS, Ark. — Construction is nearly complete on a nine-hole addition to Rivercliff Golf Course here — making the course the only 18-hole track in the retirement area around this community.

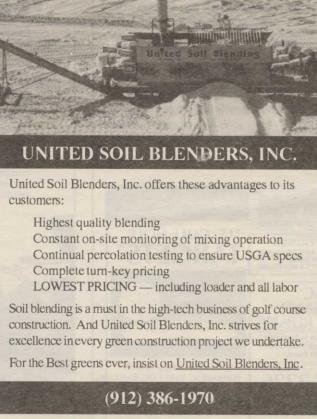
The Tee To Green Golf Course Construction Co. of Bedford, Texas, began work on the course last September, and TTG President Steve Hutchison said it should be completed around June 1.

Set in the hills of the Souther Ozark Mountain region, the course will have two natural blowing streams and two manmade

Four wooden bridges blend in with the hillsides at strategic places on the course.

Hutchison took extreme care to preserve the beauty of the rocks and trees of the





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