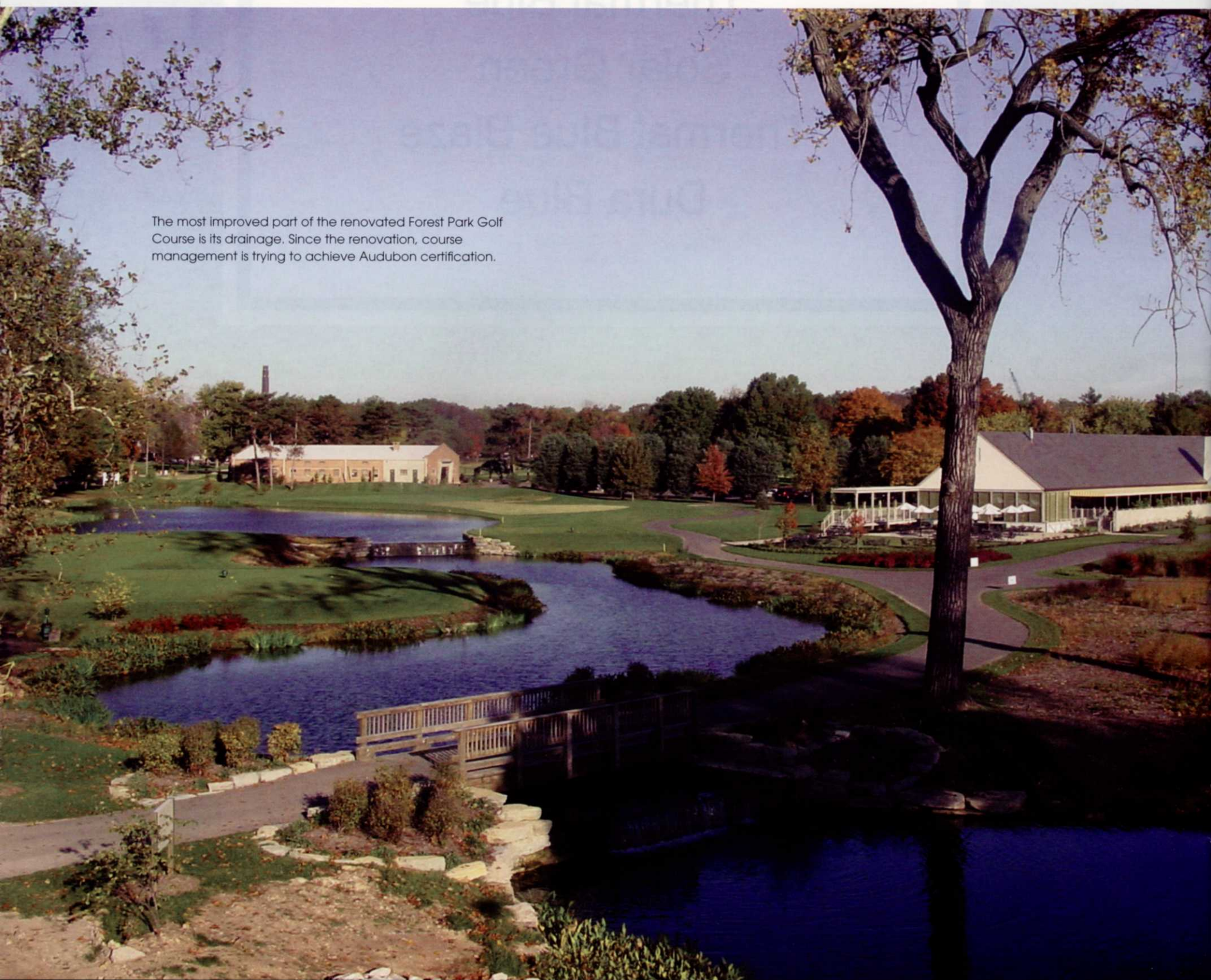


Keeping that old-school feel

**PUBLIC, PRIVATE ENTITIES COME TOGETHER
TO REHAB A TIRED COURSE IN AN URBAN SETTING**

The most improved part of the renovated Forest Park Golf Course is its drainage. Since the renovation, course management is trying to achieve Audubon certification.





by
**JOHN
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*Photographs by
Rob Geary*

Golfing on the site of the 1904 World's Fair is more enjoyable now that the 27-hole Forest Park Golf Course in St. Louis has been renovated. Even though the course has been updated, golf course architect Stan Gentry kept a similar design the course had when it opened in 1912. However, getting to that point wasn't easy, mainly because the course is part of a 1,370-acre urban park that features a zoo, memorial, outdoor opera, science center, planetarium, and art and history museums.

Get the ball rolling

During the early 1990s, the city brought together individuals and consultants to analyze the park because it was falling apart. The water quality in the lakes was bad, the roads were in disrepair, storm sewers were overflowing, the vegetation was old, trees were dying and the sidewalks were cracking, according to Gentry.

"We looked at the whole infrastructure – what needed to go and what needed to stay," he says. "It took about two years to provide a report."

The public also was invited to comment, according to general manager Jeff Raffelson, who says the first consideration was to avoid use conflict in the park. The committee analyzed the roads in the park to improve traffic for cars, joggers, bikers, etc.

The golf course, like the park, was run down. It had poor drainage, undersized tees, worn cart paths and heavy play.

"The course had deferred maintenance and hadn't been changed much since it was first built back in the early 1900s," Raffelson says. "There was a piecemeal approach to upgrading the course because of the number of rounds played."

In the early 1990s, the course generated 100,000 rounds annually. Shortly before the renovation, the course generated about

90,000 rounds annually.

But despite the piecemeal approach, the greens were in good shape, the Bermudagrass fairways weren't too bad, and the course is on a great piece of land, partly because of the elevation changes, according to Chad Carpenter, golf course superintendent at Forest Park.

Raffelson says the renovation project was challenging because there were a number of stakeholders involved. The course has three owners – the city; Forest Park Forever, a private nonprofit group that raised money for the renovation; and American Golf, the company that manages the facility.

"It's pretty unique to see public and private entities come together," Raffelson says.

"We needed to balance the issues among these three, but everyone was on the same page," Gentry adds.

Also in the mix were The Danforth Foundation, which donated a significant amount of money through Forest Park Forever, and the Probststein family. Norm Probststein was a St. Louis businessman and avid golfer who was the catalyst for the renovation and got things moving by donating \$2 million, according to Raffelson.

"It was his vision and donation that started the whole thing," he says.

Forest Park Forever raised millions of dollars for the park improvements and now is getting donations to help maintain the course, according to Gentry.

The budget for the course renovation was \$4.5 million, but the total cost ended up being \$12.5 million, which includes the course, parking, clubhouse and infrastructure.

Back in time design

The old 27-hole layout consisted of an 18-hole course that extended into the park and didn't have returning nines. Many of the holes ran along streets, creating conflicts with

AT A GLANCE

Forest Park Golf Course

Location:	St. Louis
Year built:	1912
Number of holes:	27
Type of facility:	Municipal
Renovation started:	September 2001
Renovation completed:	September 2003
Total cost:	\$12.5 million (\$6.5 million for course, \$4.5 million for clubhouse and \$1.5 million for new infrastructure)
Golf course architect:	Stan Gentry
Golf course superintendent:	Chad Carpenter
General manager:	Jeff Raffelson
Management Co.:	American Golf
Construction Co.:	Sellenriek Grading Co.
Greens:	L-93 bentgrass
Tees:	Quickstand Bermudagrass
Fairways:	Meyers zoysiagrass

joggers, bikers, in-line skaters, etc. The old nine-hole layout was a flat course plagued by poor drainage.

Some of Gentry's guidelines were to provide initial pools and waterfalls for the park's new connected waterway while solving the drainage problem, as well as provide three nines that could be paired in different combinations.

Added to that, American Golf was worried the course would be too difficult for the average golfer after the renovation. So, Gentry says he didn't have a lot of room to work.

"We tried to create land forms that would help drainage and tie it to the new layout," he says. "We tried not to destroy the beautiful trees. We didn't want to move a large amount of land to create forced land forms."

A tree survey was conducted, and that was overlaid on the existing topography.

"I looked at the center line and decided on the trees we wanted to save and which ones could go," Gentry says. "We started grading that way. I found out where I could cut and fill. With one grouping of trees, we didn't change the grade. We had to figure out where the water wanted to go and tie the new

lagoon system to it to minimize the amount of drain pipe we needed to use."

Because the course was old, Gentry wanted to use characteristics of teens architecture that hadn't been used in a while. For example, part of a green and collar slope off into a bunker.

"We were told that's a no-no, but it was a characteristic back then," Gentry says.

Gentry also designed a punch bowl green; a Biarritz green with big swales; an 8,500-square-foot green, which is the biggest on the course; and a rectangle green with cut-off edges. Some greens are flat with the fairways so balls can roll up on them. The bunkers are flat, but some have steep faces with zoysiagrass.

Gentry opened the views of the course by removing growth but still kept the course intimate and easy to walk.

Raffelson says the new design mirrors some of the signature holes from the old course, such as one that went in front of the art museum.

In the end, Gentry created three nine-hole courses: the 3,000-yard Hawthorne, the 3,200-yard Dogwood and the 3,200-yard



Golf course architect Stan Gentry created land forms that helped drainage.

design case study



A \$4.5-million dollar overhaul of the clubhouse was part of the \$12.5-million renovation of Forest Park Golf Course.

Redbud. Eight of the holes on Redbud used existing corridors, but the majority of the other two courses had to be rerouted.

"We tried to create landing areas on one hole that were not near the landing areas on the hole next to it," Gentry says.

Building it

Construction, which was done in two phases, started in September of 2001. Phase I was 15 holes. Then Sellenriek Grading Co. was off for three months and came back and did Phase II, which was 12 holes. Construction ended in the fall of 2003, and the entire course reopened in May 2004.

When Sellenriek started pushing dirt, it found interesting things that were buried, such as wooden box culverts for water to travel through and four Stokes mortars — artillery from World War I.

"The bomb squad came out and shut the project down for a half day," says Drew Sellenriek, president of Sellenriek Grading. "It was an area of concern, so the bomb squad told us what to look for. They took the mortars, hauled them off and blew them up. But that didn't slow the project down. It took us one year to find the mortars. After we found the first one, it wasn't a concern because the bomb squad knew what they were."

Carpenter was the grow-in superintendent, and from his perspective, weather slowed things down a bit.

"[Eventually] the course opened sooner than I liked, but there wasn't a lot of flexibility with the grow-in," he says. "We wanted to keep nine holes open at all times."

Carpenter says the new drainage has helped a lot, but there could have been more drainage. However, the irrigation budget was a little low. Irrigation was added in-house before the course was grafted, he says.

"When we first bid on the project, it was

overbudget, so the city cut irrigation," Sellenriek says. "But as we were laying out the irrigation, they added stuff back in."

"After consulting was done, we needed to put in more drain pipe," Gentry says. "It took Chad a while to figure out how much water to put down because he never had zoysiagrass fairways before."

"We went with zoysiagrass fairways to keep up with the competition," Carpenter says. "It does well in the winter and has better density than the old Bermudagrass."

Sellenriek says the more drainage the better, so water doesn't have to travel far. It also helps the superintendent and playability.

"This is the most drainage of any course we've built," he says. "Irrigation is an unseen amount, and developers hate to spend a lot of money underground because it's unseen."

Raffelson says the renovation went amazingly smoothly considering the project was operated in a public park and the potential for things to go wrong was high.

A done deal

Carpenter says the maintenance has been elevated on the new course. For example, bunkers are raked seven days a week, the course is aerified more often, tee markers are moved and divots are filled daily, there's mowing on weekends. In general, maintenance practices are done more frequently.

The course, which generated 85,000 rounds last year, has moved up to a gold level with American Golf, according to Carpenter. It was previously at a silver level.

"The drainage is the biggest improvement," Carpenter says. "The golf course is an improved product, and the perception of the golf course is better. The clientele seems to take care of the course better."

Carpenter says being involved with the renovation was a fun experience.

"It's great to be involved in the construction and seeing the transition," he says. "The new design fits into the park nicely. It has the same feel as the old course."

The fees increased after the renovation. It's \$37 to ride during the week and \$47 during the weekend. But Raffelson says the ability to cope with the level of play has increased greatly. For example, the sizes of the tee boxes have quadrupled, and golfers aren't literally dragging the turf with them as they leave the tee boxes.

Golfers' response to the renovation has been mostly positive, according to Gentry.

"Some people didn't hear of this design because the ideas are so old, so I had to explain it to them and why I used it," he says.

Raffelson says the most exciting thing is when someone who hasn't been there in a while plays a round.

"You don't get to play golf on a course in this urban area very often," he says.

Additionally, the staff is working toward Audubon certification and hopes to have it by 2008 or 2009. Native areas were planted, including a half million dollars of plantings along waterways, Raffelson says.

"It's great to be a steward in the park," he says. GCN



Golfers at Forest Park seem to take better care of the course now that it has been renovated, according to golf course superintendent Chad Carpenter.