Landfill course catches world’s attention

By MARK LESLIE

Today, St. Lucie County, Fla. — tomorrow, the world. That is the hope of government officials, environmentalists, and an international engineering firm involved in Fairwinds Golf Course.

The Fairwinds story is one of turning a long-term financial drain into a long-range asset for St. Lucie County.

Today, on the site where pollutants in a closed landfill were contaminating ground water, a system, designed by Hazen and Sawyer of Ft. Pierce, Fla., reclaim contaminated water beneath the landfill, treats it and re-uses it to irrigate the course.

Ron Sigmon, project director and special permitting agent for the county, said: “So far as we know, we’re the first ones to try to do this.”

Course architect Jim Fazio thinks the public could anticipate similar projects in the future, saying there are a number of trench-and-fill landfills in Florida similar to St. Lucie County’s.

Sigmon said: “I would think this is a thing of the future. The reason is, golfers seem to be willing to pay their fair share for recreational activities. As opposed to a park or tennis court, a golf course generates revenue.”

Ed Alley, Ft. Pierce branch manager for Hazen and Sawyer, agreed the idea has application in other areas, but warned that each site is unique.

“Your ultimate goal is to comply with regulations and clean up the ground-water contamination,” Alley said. “If you can do that and incorporate a public recreation project that is self-supporting, you’ve got a situation in which everyone wins.”

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Contaminated ground water treated, used on Fairwinds GC

By MARK LESLIE

Refrigerators, cars, tires, construction debris. All this and more was on the St. Lucie County landfill property, said course architect Jim Fazio.

What looked like a sorry spot to build a golf course is now expected to draw 80,000 rounds in its first year of operation. But getting there was not easy.

“Cars were stacked up 30 and 40 high,” said Chris Nelson, project coordinator at Guettler & Sons, which built the course. “To see it before and now, it is absolutely beautiful.”

Ron Sigmon, the county’s project director and special permitting agent, said the major problem at this and many other landfill sites was petroleum products. Contaminants come from engine blocks, gasoline, diesel.

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Iowa State setting the stage for course construction degree

AMES, Iowa — A golf course and landscape construction course believed the first in the country, is being designed at Iowa State University.

Dr. Nick Christians of the Horticulture Department said, if approved, the program will probably begin in the fall semester of 1994.

Reception to the idea has been excellent,” he said. “A lot of very positive comments have come in from around the country.”

Though it is improbable it will begin next fall, Christians said interested students could get a start in the basics by enrolling in horticulture and turf management. The program major in the Horticulture Department will combine basic science and communication with horticulture, design, engineering and business skills.

The curriculum will also include entomology, plant pathology, agronomy, computer-aided design and video imaging.

He said more graduates from Iowa State’s golf course management program have been entering the course construction field the past few years.

Christians said: “Right now, we’re at the fact-gathering stage. We have to submit a proposal to the board of regents for approval. It’s moving quickly.”

Avoiding college politics, Christians said the program would not compete with landscape design.

“We want to work with that program, not in competition. We’re trying to teach the intermediate person who will implement the design, not the designer himself,” Christians said.

“The golf course area will be a special challenge, though some studies will overlap.”

Iowa State will draw on existing faculty for most of the instruction, including the proposal of hiring an additional instructor experienced in both design and construction.”

Interested people can contact Christians at Iowa State at 515-294-0036.

Uwharrie Point wins accolades

MONTGOMERY COUNTY, N.C. — North Carolina’s newest golf course opened here in mid-July to rave reviews from members and guests.

The Old North State Club at Uwharrie Point, a lakeside course designed by Tom Fazio, is “an outstanding course in every respect,” said Dick Aultman of Charlotte, who will serve as head instructor at the private club on the shores of Badin Lake.

“This is one of Fazio’s finest creations. It has everything necessary for greatness: length, beauty, challenges, terrain ... the works!”

Fazio said: “I am especially proud of this course. It is unique in many respects, including terrain, variety of vegetation, and the vast amount of shoreline it occupies.”

Fazio was involved in the initial planning stages and laid out the course to take full advantage of the unusual site from an environmental and playability standpoint.

Fifteen holes have a view of Badin Lake.

“We were able to take full advantage of the lake, several streams and the area’s wetlands to provide challenges as well as scenic splendor,” Fazio said.

The par-72 layout features four sets of tees measuring from 7,102 to 5,315 yards.
Contaminants treated, used on golf course

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that trails behind the Cushman Turf-Truckster.

that trails behind the Cushman Turf-Truckster.

World's attention

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Alley termed the Fairwinds project "a long term remedial action program...It is a way to treat and re-use 500,000 gallons a day of water.

It also means a huge savings to the county. Monitoring the landfill, which had been closed in 1978, officials knew contaminated ground water was about to reach neighboring wetlands if action wasn't taken.

Hazen and Sawyer, brought to study the situation, said the county had three options:
• Formally close the landfill and just monitor it. This had the lowest capital cost at $4.3 million, and would run $150,000 for operation and maintenance per year. But, the county would have to collect and treat the ground water once contamination meant to contain water on the site.

Guetttler built a berm around the course that will handle up to a 50-year flood stage.

Dealing with a trench-and-fill landfill, they had to make sure everything was covered by two feet of dirt and they had to vent out air pockets where gases could accumulate.

"We could put in lakes anywhere there wasn't landfill," Fazio said, "and we built swales that redirect rain to drainage pipes leading to the lakes."

POSSIBLE ELSEWHERE

Can this system be installed elsewhere?

Sigmon said: "A lot depends on the contaminants, Petroleum products are common. But if you have a lot of pesticides you can't get rid of them with an air stripper."

Alley said: "The process of cleaning up the water is unique to each site. You have to match the process with the site.

"Some other things you see in landfills are iron, heavy metals, garbage. Some landfills are used to dump unprocessed solids from wastewater treatment plants and solids from septic tanks... That can also be treated but with another process."

Alley said St. Lucie County's type of treatment system could not be done in areas where there is underground radiation. Also, he pointed out, in St. Lucie's case, they excavated down to the ground water and dumped the trash. "Up North (where landfills are above ground) contaminants have to go 200 feet deep to reach water."

Sigmon said it is costing $260,000 a year to perform the ground-water testing for all types of contaminants. At the end of the year, if he has found nothing, he will meet the U.S. EPA and Florida Department of Environmental Regulation and ask to be allowed to cut back.

"Each year the monitoring costs will decrease, unless something shows up," he said.

In the meantime, golfers have what Fazio termed "a good golf course they can play fast and enjoy."

He added: "Now the county can give the public something and turn a profit rather than a loss."