Design case study

Devil's Thumb

PLANNING AND BUILDING AN AFFORDABLE COURSE THAT CAN BE FINANCIALLY SUCCESSFUL IN TODAY'S GOLF MARKET IS NO EASY TASK

by PETER BLAIS ack in the late 1980s, the city of Delta, Colo., looked into the possibility of expanding its nine-hole Cottonwood Golf Course to an 18-hole facility. The city owned the land, and the Cottonwood Golf Committee operated the course. The city asked Phelps Golf Design of Evergreen, Colo., to analyze the property for expansion of the course. Although nothing was done at the time, the city eventually formed a golf task force consisting of city staff and Cottonwood members that were responsible for researching the situ-

ation and making recommendations.

"We came to the conclusion it wasn't possible to expand the Cottonwood site without encountering some of the same costs you would have in building a whole new course," says Rich Englehart, city manager. "The task force finally came to the city council with the idea of building a new course. We had some Bureau of Land Management and County of Delta acreage available, and we felt the land had some potential. Both entities also were willing to donate it. After having looked at



The Devil's Thumb course offers views of Colorado's rugged landscape. Hole three (view from the middle tees) is a par 4 and is 342 yards from the back tees.

numerous sites where we would have had to purchase the land or give up development rights, this site suddenly came into play at no cost."

Living near the Grand Mesa—a high plateau outside the city that's slightly above 5,000 feet—and with gorgeous views of the San Juan and West Elk mountain ranges, the 7,800 residents of this western slope community hoped to build a high-quality, affordable course with green fees between \$25 and \$40, a price range that would make it accessible for most local golfers.

"We had a feasibility study done by THK Associates of Denver," says Englehart, who was the assistant city manager at the time. "They did a market analysis to make sure we could support the course. Knowing it was a small town, we knew we had to draw on the locals and the surrounding area 50 miles out to Montrose, Grand Junction and Ridgeway. That was how far they thought people would travel for quality golf."

The task force issued requests for proposals, and in 1998, the city selected Rick Phelps to serve as the lead architect, develop conceptual plans and design the course.

"Rick's excitement for the location and vision fit into his selection," Englehart says.

"When I first looked at the property, I didn't think there was any way to build a golf course there," Phelps says. "It was rocky, dry and with scarcely any vegetation. It looked flat until you walked over to the eastern side, where it drops off in every direction. It actually had a lot of character and interest. I figured I could route the course to take advantage of that drop-off on both nines."

Water was a major concern until Phelps discovered an abandoned pipeline that came down from the Grand Mesa, which receives abundant snowfall.

"The golf course site gets about seven inches of moisture a year," Phelps says. "It's basically a desert site. But on Grand Mesa, they get better than double that amount of moisture. Twenty-five years ago, the two pipelines from reservoirs on the mesa used to provide Delta its drinking water. The pipelines aren't used for drinking water anymore, but the structures were still intact. The water was excellent snowmelt quality and was delivered right to our front door. All we had to do was repair the pipeline in a few places and tap into it with a new valve. We had plenty of water to grow in and maintain a golf course."

Once Phelps was on board, the task force interviewed three builders.

"We hired Niebur Golf because of its reputation," Englehart says. "They had worked with Phelps on some other projects and had a good working relationship. We wanted a team working on this. We didn't want this to be the city against the architect and builder. We wanted a management team. Teamwork and cooperation are imperative, especially when you have a limited budget—\$2.7 million for course construction and \$3.5 million overall.

Cost-conscious construction

Construction began in the spring of 2000. To meet its limited budget, the development team had to come up with creative ways to save money.

The two biggest ways to reduce construction costs

of a project of this sort are by minimizing earthwork and cart-path construction, according to Phelps.

"You move as little earth as possible to accomplish your design strategy and maintain aesthetic interest," he says. "We only moved 170,000 cubic yards of dirt, with 70 percent of that being for the irrigation reservoir and clubhouse. And you must not put in any more cart path than necessary, which we took to an extreme on this project."

Another way to control costs is to make use of all available resources.

"We used the honors camp from a local minimumsecurity prison that was very valuable in the rock-picking process," Englehart says.

"They mostly picked rock from the tees and fairways to prepare for grassing," says Phelps of the 12man crew. "That probably saved the city \$200,000. It wasn't the most productive crew, as you might expect, but it worked out fine."

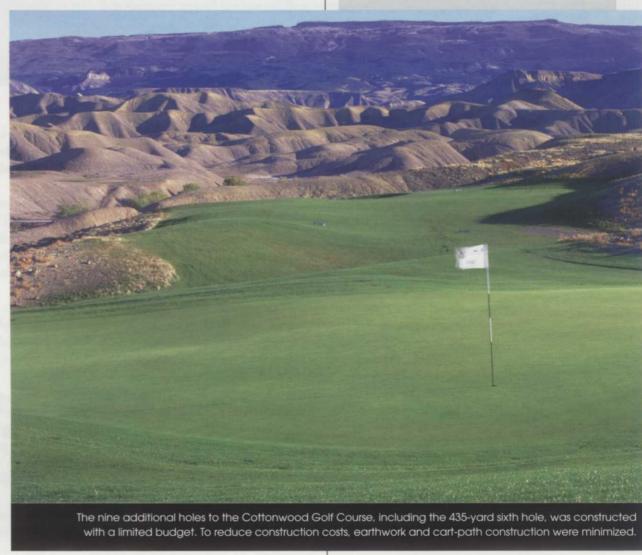
One of the city park department employees, Tony Bohling, worked closely with Niebur and Phelps to build the rock retaining walls and landscaping.

"The whole site was inundated with rock," Englehart says. "Now we have a tremendous rock wall lining the course. It's a nice benefit for the community. In fact, the general public is welcome to take the rock from a designated area to use for landscaping their own homes."

The developers grassed the course in late summer

AT A GLANCE: Devil's Thumb Golf Course

Course Type: Cost:	Municipal
Cost:	i i i i i i i i i i i i i i i i i i i
	\$2.7 million
Construction began:	Spring 2000
Course opened:	July 21, 2001
Yardage:	Five sets of tees
	ranging from 5,180
	to 7,176 yards
Par:	72
Number of bunkers:	60
Average greens size:	5,500 square feet
Greens:	Bentgrass blend
Tees:	Bluegrass
Fairways:	Bluegrass
Accent:	Fine fescues
	around bunkers
Slopes:	132, 125, 122, 112, 120
	(back tee to front)
Ratings:	72.9, 70.3, 67.6, 65.7,
	68.9 (back tee to front)
Professional:	Dave Way
Superintendent:	Matt Smith
Customer Service:	Judy Hays
Architect:	Rich Phelps,
	Phelps Golf Design
Builder:	Niebur Golf



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The Devil's Thumb course, including the 155-yard seventh hole, was budgeted to generate \$587,000 of revenue during 2003. In its first full year of operation, it generated \$665,000.

and had the grand opening July 21, 2001.

"We came in on budget," Phelps says. "We spent a little more money than anticipated on rock excavation, especially in the waterreservoir area. It worked out well, though. We had all the rock we needed to build the water features, retaining walls and tee boxes. The city parks employee was able to do all that work, which saved a bunch of money."

The only environmental issue concerned lining the ponds. The original budget was insufficient, so the city continues to work on this aspect.

"We created some wetlands to make some habitat," Phelps says. "Otherwise we tried to leave the area as natural as possible around the golf course. We didn't plant any trees. I

Water was a major concern until Rick Phelps discovered an abandoned pipeline that came down from the Grand Mesa, which receives abundant snowfall.

refer to it as 'Colorado desert style.' It's not quite target golf, but it's pretty close. If you get off the 105 irrigated acres on the course, you're in the desert."

Bluegrass is the dominant turf on the tees, fairways and first cut of rough. The greens are a bentgrass blend. Lighter-colored fine fescues are used to accent the areas around the bunkers and second cut of rough.

Earning recognition

The city has been pleased with Devil's Thumb, which finished second in *Golf Digest's* Best New Affordable Public Course rankings for 2002.

"The *Golf Digest* designation is a real tribute to Rick's design as well as Niebur Golf, our superintendent, his staff and

our pro," Englehart says. "The course has become a source of pride for the local golfing community."

Devil's Thumb has more than met its original goals. At \$35 per round with a cart for residents and \$40 for nonresidents, the course, with national recognition and design, is a bargain, Englehart says.

Financially, the course has exceeded its original projections. The facility was budgeted to generate \$587,000 of revenue during 2003, its first full year of operation,•Englehart says. The course did \$78,000 better than that, generating \$665,000 during 2003.

Revenue was off about \$9,000 through the first two months of 2004, compared to the same period a year ago.

"But that's mainly because of the weather," Englehart says. "We were only open two days this January. Last year in January, we took in \$41,000. This year it was only \$4,000. But we bounced back in February. Last year, we brought in \$14,000 during February. This year we brought in \$42,000. We felt good about last year and hope this year will be even better."

To attract players, Devil's Thumb benefits from its location. Delta, Grand Junction and Montrose are located in Colorado's "Banana Belt," which stays warmer and drier through

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the winter than any area of Colorado except the southeastern portion of the state, according to Phelps.

"The busy season extends from March through mid-November, roughly three months longer than ski areas like Vail and Aspen," he says, noting that 30 percent of the course's play comes from outside the immediate area.

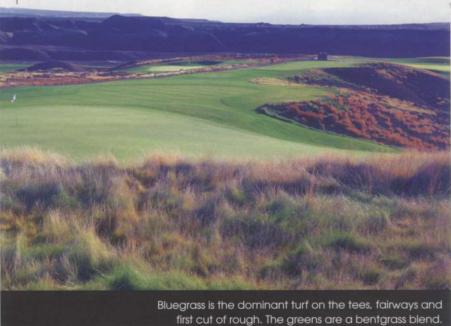
The Delta County airport is adjacent to the course and houses a pair of golf carts to take visiting players from their private planes to the course.

But the support of local golfers and citizens is the main reason this small-community project was built and why it prospers. That support was illustrated vividly during the first weekend of March when almost 75 volunteers attended a barn raising to build a 3,300-square-foot clubhouse to replace the temporary facility that had been used since opening day.

"One thing we do here in Delta is rely on local citizens to get engaged," says Englehart, noting the volunteer labor and materials donations will save the community a substantial amount on the clubhouse's final price tag. "The city council will make decisions and move forward to make something happen, but in most instances, only if the citizens want it to happen and get involved. The barn raising is a good example. We had some quality people on site. The relationships built and the ownership they felt in the project was incredible. We had people from as far away as Carbondale, which is up near Aspen. It was pretty cool."

Community development director Rich Sales, a licensed architect who is overseeing the project, says that by the end of the first weekend of construction, all exterior walls had been framed and sheeted, interior walls framed, openings prepared for the plumbing and mechanical utilities in the concrete flooring system, roof trusses raised and braced, roof sheathing started, window openings cut and heavy timber entry framing placed. Electrical, mechanical and plumbing contractors were scheduled to start their work in mid-March. The clubhouse is expected to open by summer.

"The best result of this effort was not about sticks or bricks or money," Sales says about the clubhouse project. "The best part was that we had citizens from all sectors of



our community come together, work hard, work well together and create something enduring for the community." GCN

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