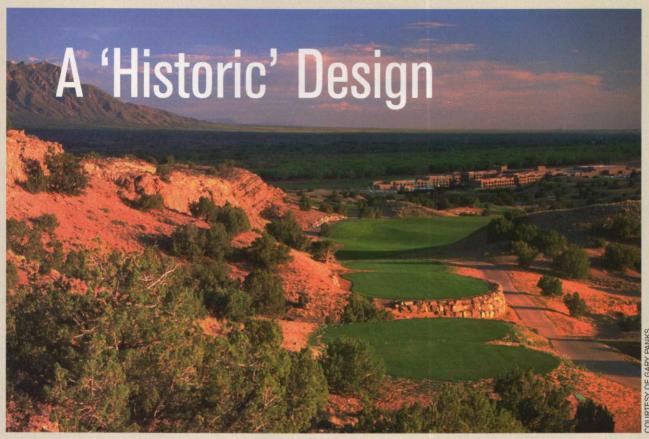
Real-Life Solutions

■ DESIGN CHALLENGES ON AN INDIAN RESERVATION



Arizona architect Gary Panks was more than happy to reroute his initial design of Twin Warriors GC to preserve the sacred grounds of a local Indian tribe

The Challenge

To design a golf course on a New Mexico Indian reservation around sacred grounds to preserve artifacts and maintain the property's history.

The Solution

Do it carefully. Scottsdale, Ariz.-based architect Gary Panks did his homework and worked closely with members of the Santa Ana Pueblo tribe to make sure the course was designed to not disturb the sacred sites.

BY BRUCE ALLAR

hen architect Gary
Panks
won the
competition to design Twin Warriors GC in Santa Ana
Pueblo, N.M., he knew he'd
be laying out 18 holes in an
unique desert environment.
But he didn't know how
unique.

From the very beginning, Panks took a strong personal interest in the project. He traveled five times to New Mexico during the interview phase and produced preliminary routing plans to further his chances (the other two finalists, Tom Fazio and Jack Nicklaus, sent representatives to the interviews, according to Roger Martinez, director of operations for Twin Warriors). Those early renderings showed how Panks would design the course around sacred grounds on the site belonging to the Santa Ana Pueblo tribe, whose reservation land also encompasses nearby Santa Ana GC and the Hyatt Regency Tamaya Resort & Spa.

Nothing's final

Panks' persistence won him the job, but it was only the beginning. Later on, after much work, Panks pro-



Gary Panks took a strong personal interest in Twin Warriors GC even before he was hired as the course's designer.

duced what he thought might be a "final" layout for Twin Warriors. He would later learn that he had unwittingly plotted tees, fairways and greens over a number of Pueblo cultural sites.

"I had a routing plan completed," Panks says. "Then the client produced a map of some cultural sites that no one was aware of. So we had to go back to the drawing board."

Panks, whose firm is headquartered in Scottsdale, Ariz., got a quick education in how things work on tribal lands held in trust by the Bureau of Indian Affairs. After plans for the course were announced, a group from the historic preservation office of the state of New Mexico walked the entire grounds - 200 acres at the time - positioned at arms' length distance from one another. They searched the sacred ground for artifacts and found pottery shards and

animal bones. They also discovered about 20 previously unknown culturally sensitive areas.

As a result of those findings, the course was rerouted and its area, all reservation land, expanded to more than 400 acres. "We routed the golf course around, through and intermingled with those sites," Panks says. "They are there in the nonplay areas."

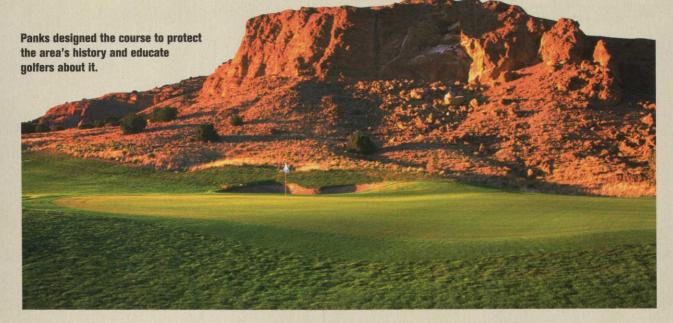
The result is a championship track that cost \$6.8 million for course construction and \$9.1 million with buildings included. Twin Warriors GC, which opened May 2001, is the site of the 2003 PGA Club Professional Championship. Signs identify culturally sensitive sites, including an old cave dwelling believed to have been inhabited in the 1400s and a horse corral from the 1800s.

A sacred butte with mystical meaning for the Native Americans called Tuyuna (translated as "Snakehead") is near holes 14 through 16. The Santa Ana Pueblos were initially concerned the course would border Tuyuna too closely, which the tribe does not want approached by hikers. Knowing that golfers would not trespass onto the sacred butte and that trespassers likely wouldn't cross a golf course to hike there, Panks suggested a plan - and won its approval from the five tribal members on the board of directors overseeing construction — for a design that borders the holes near Tuyuna. "We suggested that the golf course become a buffer that you can have control of," Panks says.

This collaboration between the architect and the client produced a course that protects the area's history and educates visiting golfers about the setting. Each golf cart is equipped with a global positioning system set up to monitor the environs. When a cart strays into protected land, a light goes on in the golf shop and notifies course management to watch its progress. A message on the individual cart's GPS screen tells the golfers, "You are in a culturally sensitive area." Most immediately exit the site.

A nursery operated by the Santa Ana Pueblos was used during construction to supply native, drought-tolerant plants such as sage and four winds saltbrush for nonirrigated areas on the course. Irrigation was put in to re-establish replanted native species in off-fairway areas. Then, after a year when the plants were healthy, the water was shut off. As a result of working with the tribe on course vegetation, Twin Warriors exhibits a more natural look and, at present, only 93 of the over 400 acres are irrigated, despite the highdesert climate.

> "In the end, we had a Continued on page 53



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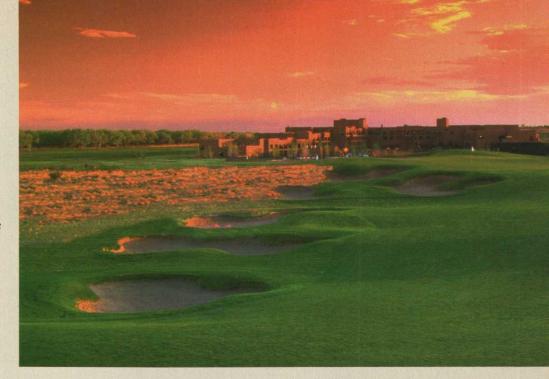
Continued from page 51 better golf course," Panks says.

Done it before

Gary Panks Associates underwent a similar experience in designing two courses for the Gila River Indian Community at the Whirlwind GC in Chandler, Ariz. In planning the Devil's Claw Course, the first project there, Panks personnel attended tribal meetings and learned that a goal of the Gila was to restore the Gila River to its original state; it had become choked with vegetation and suffered other environmental degradations in recent years. The idea was to let the river flow between the two golf properties and to bring back indigenous vegetation.

Gary Brawley, an associate designer with Panks, says: "Once we got the golf routing staked in the field, we took their cultural people out there. You'd be amazed—things that are so miniscule to you and I are of great importance to the Native American people. There's a lot we can learn from them as to what the land can yield. They use every piece of what's on the land."

The Gilas walked the course three times prior to construction, saving each individual plant of importance to them. On one excursion, they found an arrow weed plant and salvaged it. Arrow weeds were harvested and tightly stranded to make arrows in previous centuries. A cactus about 3 inches tall was





As a result of working with the tribe on course vegetation, Twin Warriors displays a more natural look. Despite its high-desert climate, only 93 of the course's more than 400 acres are irrigated.

also saved and replanted.

More common varieties special to the Gilas — such as squawberry plants and mesquite trees — were salvaged before construction and then transplanted back onto the course. An onsite nursery was built as a temporary home for about 300 squawberries and 80 mesquite trees awaiting transplanting.

"One time we found a grove of about nine mesquite trees," Brawley says. "We actually went back and changed the design to incorporate them rather than box them and salvage them. Now they frame the fourth green."

The bermudagrass fairways and ultradwarf bermudagrass greens are surrounded by hearty native plants at Whirlwind, another reservation resort course, this time near a Sheraton Hotel. Brawley says working with the Native Americans has taught the designers to stress well-adapted native vegetation in future projects — and think less about forcing other grasses.

"The Native Americans have learned to use the re-

sources they have for survival, so they've learned what each individual plant can do for them — whether it's for food, for medicine, for weapons or tools," says Brawley. "I think we've taken that for granted."

While the Panks group may have taught the tribe something about golf course design and construction, the Gilas and Pueblos reciprocated by educating the designers in new ways to view the landscape.

"Whenever we do a project, we're environmentally concerned about the properties," Panks says. "Now we also look more into the histories of the properties than we might have before. We look a little deeper."

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