Out of the ordinary

Every now and again a golf course architect is presented with a site unlike any they have encountered before. Richard Humphreys explores how designers deal with the exceptional.



In 2006, before Brian Curley, ASGCA, had even set foot on land near the city of Kunming in south China where he had been asked to design three new golf courses, he sensed it was going to be a little different. The site, he was told, was on the edge of an area known as 'Stone Forest'.

Nevertheless, when he got there, he still couldn't quite believe his eyes. Thousands of huge pillars of rock protruded, as if growing, out of the landscape. "They were everywhere!" says Curley. "Many were hidden with dense vegetation and even the taller vertical faces were obscured by thickets of trees."

It was like nothing he had seen before, or since. And he knew the site would present a challenge quite different to anything he had previously encountered. "The 'discovery' period was easily the most time-consuming I have ever had," says Curley. "I spent many days crawling through bushes and over rocks, many so sharp that you could cut a steak on the edge!"

Curley describes the site as "the most wild, rugged and jaw-dropping" he has encountered, noting that he still bears scars from some close shaves from falling rock debris in a particularly challenging construction phase. One thing was certain, he would make the 270-million-year-old Karst rock pillars the star of the show.

"The massive stone formations made for obvious green locations and backdrops," says Curley. "Then, I had to somehow find landing areas that avoided as much rock as possible. When we had rock in a playable area, we would try to create strong grades that would alter the roll of the ball away from the rocks. I decided early on that I would shoot for good green-to-tee connections but that, ultimately, we would want to find holes rather than create them, even if it meant a long ride to the next tee."

Photo: Ryan Farrow

The fifteenth on the Leader's Peak course at Stone Forest, where rock pinnacles protrude from the landscape





Photo: Ryan Farrow

The dramatic par-three twelfth at Stone Forest

The 196-yard par-three twelfth hole on the Leader's Peak course is a prime example of the enthralling end result of Curley's design work. "From the tee, the green looks small, as the rocks stick up and obscure the putting surface, but it is a lot larger – about four times the size of the seventeenth green at TPC Sawgrass – than it appears," says Curley. "Golfers expect their ball to be lost but find it's on land… and there is a super cool walk to the green through stone pinnacles."

Another hole, the fifteenth (pictured on the previous pages), was designed so that one cluster of massive rock pinnacles splits the fairway, giving distinct options. "The rock formation straight over the bunkers in the wide fairway is about 280 yards," says Curley.

A site this unique called for a special local rule. "Any ball in a fairway cut could be dropped along the same line to the pin and as far back as the player felt comfortable to clear the rock formations."

Stone Forest – sadly seen by relatively few golfers, as the club succumbed to the Chinese government's crackdown on golf in the 2010s – was a particularly extreme site. But golf course architects often take delight at encounters with the unusual, as it gives them the opportunity to create something particularly unique.

For Greg Letsche, ASGCA, one of his most memorable discoveries was a network of 17th-century stone walls on the island of Mauritius in the Indian Ocean.

The walls were built by Dutch settlers who settled there until 1710 when, struggling to overcome the hardships of colonization on the remote island, they abandoned Mauritius.

By the time of Letsche's visit, almost 300 years later, Mauritius was home to over a million people and had become a major



Photo: Anahita Golf Club

Seventeenth-century stone walls dictate strategy on the par-four fourteenth at Anahita in Mauritius

tourist destination. Working for Ernie Els Design, he had been asked to design a golf course for the Anahita resort on the island's east coast.

Relics of Dutch settlement can be found throughout the southeast of Mauritius, where they first landed. Between 1999 and 2005, archaeological studies uncovered a variety of structures from the period, including a stone lodge built in 1698, around 20 kilometers south of Anahita.

For their course design, Letsche and Els took inspiration from one of golf's most famous walled layouts: North Berwick in Scotland.

"Our idea of how to use the walls on the fourteenth came from North Berwick's thirteenth, the Pit hole," says Letsche. "It has a similar style and strategy; the closer you hit it to the walls, the better the angle to the green you have."

Letsche and Els laid out the par-four hole to take full advantage of three segments of wall. The first bisects the fairway, giving golfers a choice between wider left or narrower right sections. A successful drive to the right side leaves an open route to the green, whereas those taking the easier left option will have to navigate further sections of wall to reach the putting surface.

It's not just the fourteenth that features remnants of Dutch colonization. "The second plays a lot like the third hole at North Berwick," says Letsche. "A wall goes directly across the fairway. Some of it has broken apart, meaning the best strategy is to hit it as straight as possible at the gap."

For Letsche, the walls were an opportunity to create a really special design. "You're always looking for something that people will remember. At Anahita, we had that with old walls. Anyone that has played the course has enjoyed them, even those playing



Photo: Chris John

An 18th-century stone house ruin defines the strategy of the closing hole at Whiskey Creek in Maryland

in tournaments; it is just a different experience for them."

Maybe Ernie Els is drawn to old stone, because it was on another of his projects that Brian Costello, ASGCA, encountered one of his most memorable design features.

At Whiskey Creek in Ijamsville, Maryland, Costello worked with Michael J. Poellot, ASGCA Fellow, in collaboration with Els as design consultant.

The team had designed the closing hole around an old barn stone wall foundation that would frame the right of the hole and provide a backdrop to the first green, but it was another building that became the primary feature. "On our second site visit reviewing the proposed centerlines, we wanted to check out what appeared to be a small outbuilding on the map," says Costello. "What we actually discovered was a partially collapsed, two-story stone house ruin that had been enveloped by the forest right in the middle of the proposed first landing area. It was a surprising find, to say the least, and one that we wanted to try to incorporate into the strategy of the golf hole."

"The ruin stands at roughly 280 yards and clearly presents two strategic options"

After determining that it could be made structurally sound with some reinforcements, Costello began work on how to integrate the ruin into the closing hole.

"We couldn't shift the fairway to the right because of the barn walls and couldn't shift to the left because of a creek and regulatory setback restrictions," he says. "After trekking back and forth, and careful measurements in the field, we determined that the ruin could bisect the landing area, and dramatically accentuate the underlying risk-reward strategy.

"We shifted the hole back so that, from the championship tee, the ruin stands at roughly 280 yards and clearly presents two strategic options. The narrower and riskier line of play is to the left of the ruin. But the reward is a shorter distance and better angle to the green, providing temptation to go for it in two. Playing to the right side of the

fairway is the safer and wider route, however, it leaves players with a less desirable and shallower angle into the green over the pond."

The stone ruins also emphasize the property's heritage. "We knew Civil War events had occurred in the vicinity, but in this case, the barn and farmhouse ruins were from a German immigrant family that had settled on the property in the 1800s," says Costello. "It was a really poignant reminder of the farming history of the early settlers and now provides iconic imagery and instant recognition of Whiskey Creek.

"Anytime you can save an existing feature that provides some geographical and historical context – a sense of place – you weave that into the golf experience," says Costello.

However, it's not always possible to incorporate unusual finds into a golf course design, as Lester George, ASGCA, found when he visited the Eaglewood Golf Course at Langley Air Force Base after 2003's Hurricane Isabel had inflicted substantial damage on both the Eagle and Raptor courses.

George developed a repair and renovation plan, but when grading began, the project team unearthed a nasty surprise: unexploded bombs. "We used a Doppler radar and once we discovered the first few, we had to call an explosive ordnance disposal (EOD) team to assess whether there were bombs anywhere else on the property," says George. "The EOD team went down to 36 inches, because that was going to be the depth of our new irrigation, and found 17,400 anomalies!"

It turns out that the site had been used by the US Army Air Corps for bomb practice during both World War II and the Vietnam War. And the presence of bombs would shut down George's project for two years.

When it resumed, it's an understatement to say that the project proceeded with extreme care. "The EOD team would go out and extract and dispose of the bombs, and we would plow the irrigation line behind them," says George.

Their caution was well justified, given some of the construction team's experiences. George shares a story about work on the sixth hole: "We had shaped the green and bunker and were getting ready to leave for the weekend," he says. "An outlet from the front of the green was carved so it would drain properly and as soon as that was done, we ran into two 500-pound bombs! It took two weeks for those to be hauled out."

In this instance, the unusual encounter took its toll on the project, with the presence of bombs adding about $2 million to the total cost of the Raptor course. "We were also going to rebuild nine holes of the Eagle course," adds George, "but that course ended up closing due to a lack of budget from the Air Force."

There were additional inevitable constraints on George's design work. He had originally wanted to modify some of the lakes, but with no more excavation work permitted, changes were required to the intended strategy of the renovation.

"They didn't want to go below 36 inches anywhere on the property because they weren't sure what would be down there," says George. "That remains a bit of a mystery!"



Photo: Courtesy of George Golf Design

Lester George, ASGCA, rebuilt the Raptor course at Langley Air Force Base, but was held up by the discovery and subsequent removal and disposal of unexploded bombs