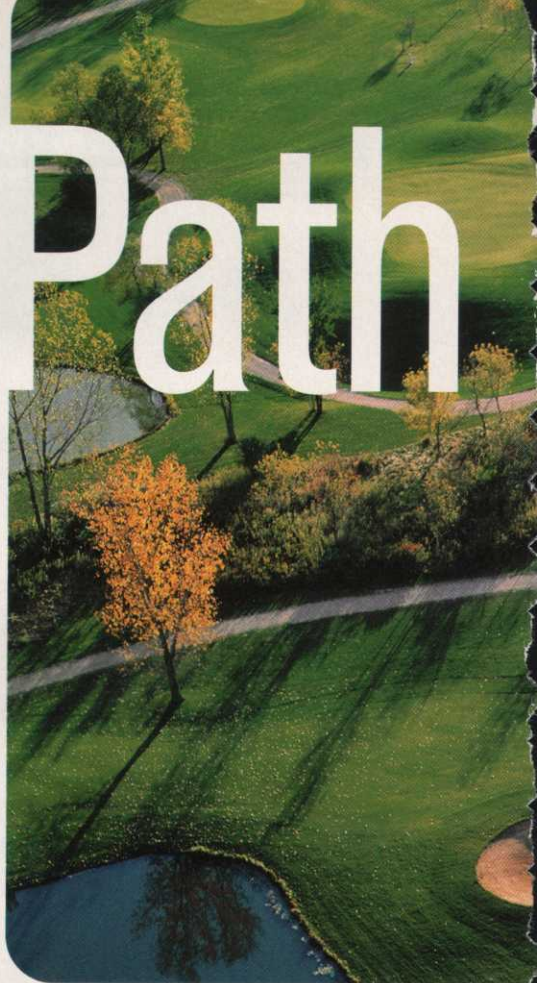
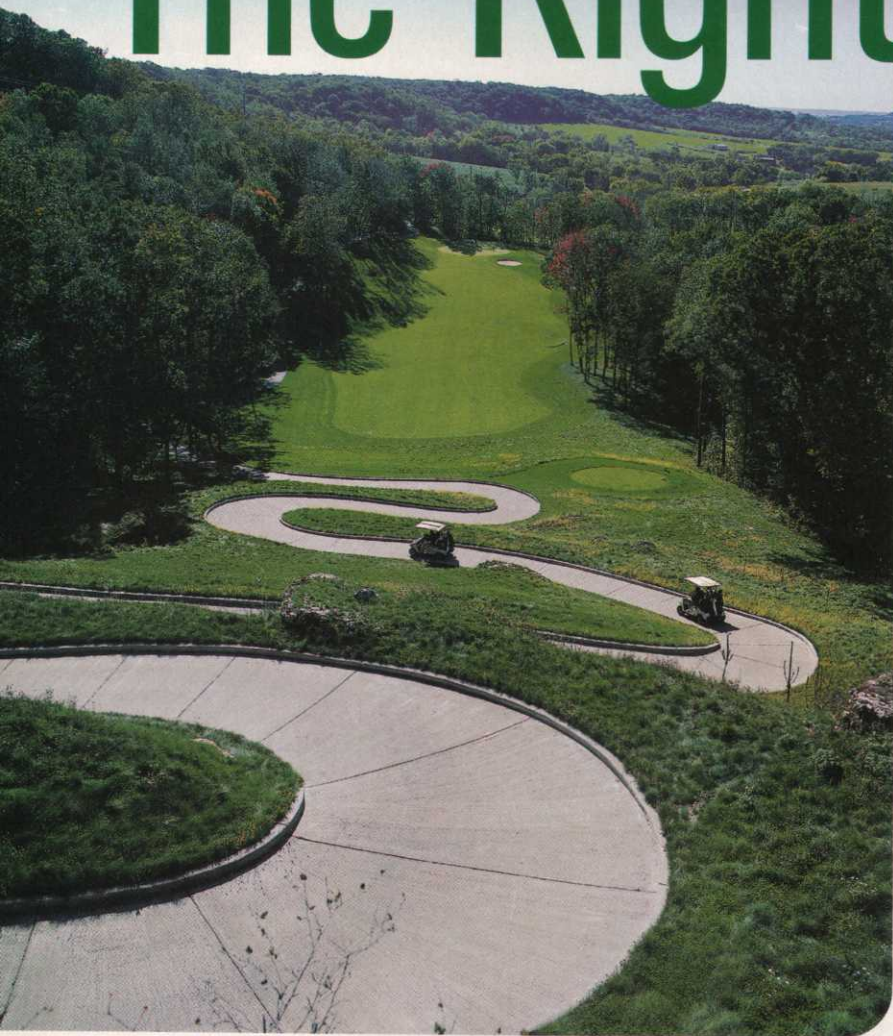


The Right Path



While an architectural challenge, properly planned cart paths are beneficial to a golf course's design and operation

BY BRUCE ALLAR

When Houston-based Benchmark Golf and an Indiana ownership group carried out a \$4.6-million restoration of a Donald Ross design in French Lick, they consulted the famed architect's original plans for the course, which opened at a popular resort in the hills of southern Indiana in 1917 and hosted the 1924 PGA Championship, won by Walter Hagen. One costly — and now essential — item was absent from the drawings: cart paths.

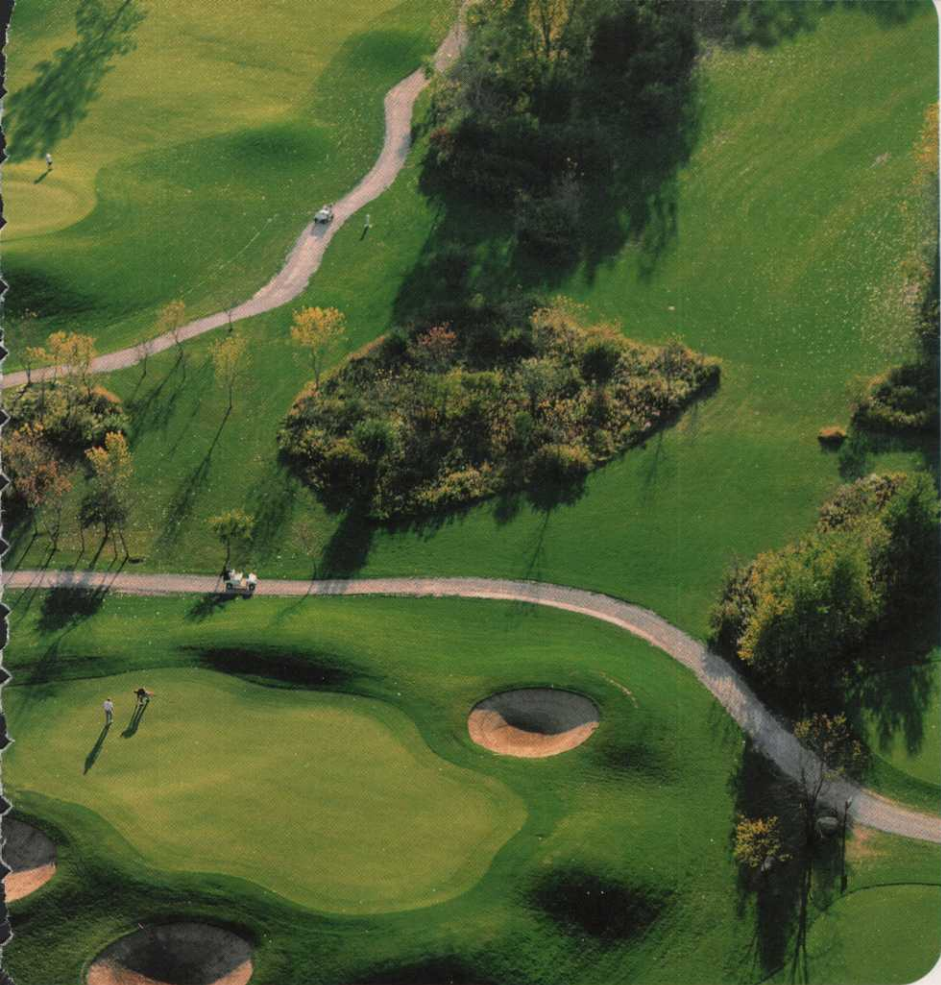
Golfers walked all 18 holes in the day of

Hagen and Ross, and that era's strategy of sitting tees close to greens to accommodate foot traffic led to problems when cart paths were installed later.

In some cases, the narrow asphalt ribbons superimposed on Ross' design were precariously close to greenside landing areas, says Greg French, vice president of golf operations for Benchmark, which will manage the facility. Golfers who parked there to hit their drives were in some serious danger from the approach shots from the group behind them.

"In many cases, they put the golfer in

PHOTOS BY: MIKE KLEMM



grave danger,” French says. “The liability issue was a huge driver of changing the cart paths.”

The monetary factor — a reliance on golf cars’ rental fees and the hope that they’ll also speed play to pave the way for more paid rounds — makes them what several sources for this story call a “necessary evil” in course design and maintenance. Architects despise them for marring the playing landscape, but superintendents can derive some benefits from these surfaces if they’re properly planned and installed.

French says the approximately \$275,000 cart-path upgrade at the Ross Course at the French Lick Resort Casino, which opened for play last September, replaced broken-up 4.5-foot-wide asphalt with concrete that is 7-foot wide beside fairways and up to 12-foot wide in some areas near tees and greens.

Curbing was installed and concrete broadened in places where players park to offset that mysterious human tendency to pull into and damage the grass. (Why do golfers imagine that some phantom

group will play through while they’re putting or teeing off?) More curbing and the wider paths also reduce the need for ropes and stakes, which are both unsightly and a time-eater for mowing crews.

At the Ross Course, curbing also was built up on pathways alongside fairways on certain hills to funnel drainage into preferred collection areas. An enlarged irrigation pond equipped with a “floating intake” system pumps the best water from the top 12 inches of the pond, then it recycles the high-grade runoff.

On three holes, the restoration team decided to forgo paths from a point 30 yards to 50 yards from the tee. The concrete ends in an area where golfers choose from a few options and fan out in different directions onto the bermudagrass. They’re also offered different routes back onto the paths as they exit near the putting surface. Rapid runoff from the inclines on these holes makes golf car traffic little threat to rip up turf.

“The other reason was the visual,”

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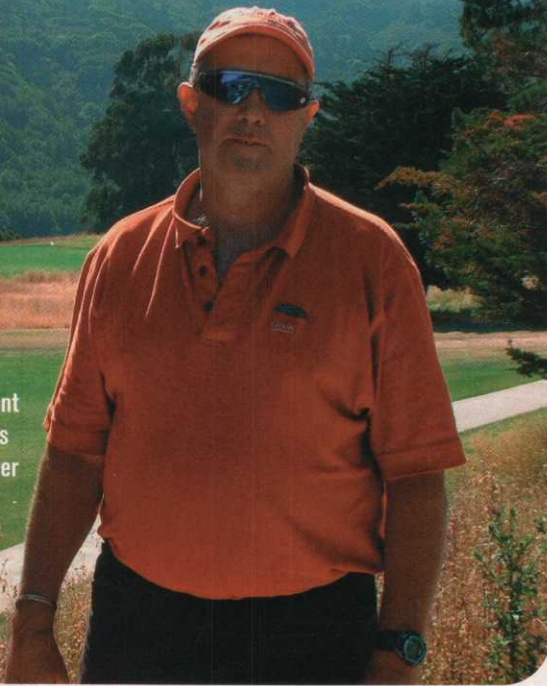
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The Right Path

Tim Powers, certified superintendent of Crystal Springs Golf Course, says concrete costs more but lasts longer when it comes to cart paths.



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French says. "We wanted you to stand up there on the tee and see less cart path."

Vistas on the course have been dramatically improved as the restoration team added back 35 bunkers, many of them of the large fairway variety, and returned greens to the more-expansive squared look originally conceived by Ross.

Others in the industry are also finding better ways to build and hide cart paths. Architect Bobby Weed is of the "necessary evil" school regarding these hole-side highways, and his eponymous design firm has two rules on the subject: Keep them out of play and keep them out of sight.

"As simple as those two criteria are, that's quite a challenge," Weed says. "If you have to have them, it's best not to put them off (when designing and build-

ing). It's best to shape them in from the beginning. You need to cut them in when you're doing feature shaping."

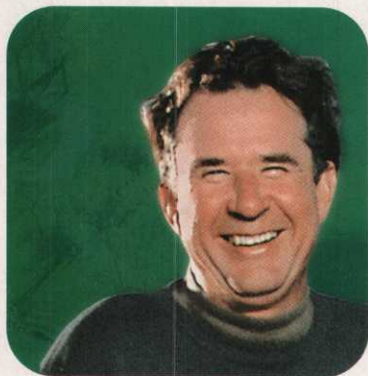
This makes it easier to hide the paths from player sightlines. Balancing nearness to tees and greens — which speeds play — with longer walks, which take the paths more out of sight and out of play, is a difficult proposition in the design phase.

"There is no rule of thumb as to how far they must be from greens because there are so many other factors — bunkers, grass types and slope," says Weed, who notes that he uses a bit of intuition in such cases. "It's a feel thing and a field thing."

"The big thing is getting the path out of sight for the first quarter or third of a hole," says Louisville, Ky.-based archi-

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Architect Bobby Weed has two rules when it comes to designing cart paths: Keep them out of play and keep them out of sight.



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The Right Path

Architect Spencer Holt hopes alternative surfaces, particularly those that might be more porous and natural in their landscape, will become available for cart paths.

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Architect Spencer Holt. At his marquee course to date, the Cardinal Club in Simpsonville, Ky., Holt used high-grass areas and whatever tree coverage he could find during the routing of the links-style course to hide the concrete. He also made quick turns in the path after tee boxes so that a winding route could help hide the path from view.

"You have to think it out when you're creating the hole," he says.

Bruce Matthews points out a path paradox: Because most golfers miss shots to the right, paths on that side of the fairway will speed play, especially on path-only, weather-altered days. However, that same right-hand location means more balls will hit the paths, becoming damaged and bouncing wildly off-line.

"I'm not a fan of wall-to-wall cart paths," says the Michigan-based course architect. "I am a fan of using something other than asphalt or concrete."

While many are replacing less-durable asphalt with concrete, Matthews prefers a

product of crushed asphalt made from recycled road material. He mixes in a little oil and spreads it, creating a softer material that will not rebound balls so high into the air. Crushed granite also works on paths, Matthews says.

He also advises new course owners to delay path installation. Design holes with a best estimate of where they should go, he says, but initially put them in only from green to tee and wait to determine exact connecting routes.

"Golfers will dictate where they should go," he says.

In some cases, the grass will hold up well enough that paths won't be needed. Matthews points out that the \$200,000 or so saved by foregoing paths can pay for repair to a lot of damaged turf.

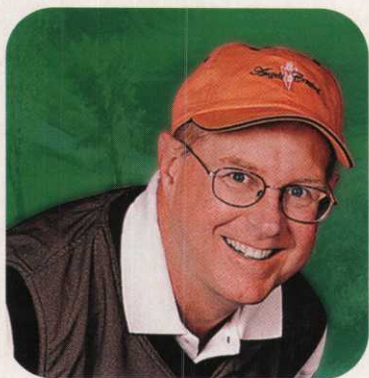
"It's still best to have a healthy turf out there and let the players scatter," he says.

Holt wishes some alternative surfaces, particularly those that might be more porous and natural in their landscape, will become available. Concrete is the most durable, but ground-

Expert Tips

The people at Club Car, the Augusta, Ga.-based manufacturer of golf cars and utility vehicles, know a thing or two about cart path design. Here's what the company's experts suggest when designing cart paths:

- ◆ Width of the path is the most important consideration. You want at least 7-foot paths, 8 feet is even better. But wider paths cost more money. Hence, a lot of courses build paths that are too narrow, which leads to problems: Drivers and passengers get clipped by tree limbs, and beverage cars don't have room to pass a parked golf car.
- ◆ Turnoffs that provide space for golf cars to pull off the main path — often found at tee boxes and landing areas — can save turf and allow beverage units to pass.
- ◆ Curbs should be rounded, not squared off at the top. This is to make it easier for the golf car to go over the curb without damaging the suspension and underbody.
- ◆ Asphalt or smooth cement is the best material to use. Rough cement or crushed shells, which you see on some coastal courses, cause tires to wear excessively.
- ◆ Turnarounds should be large enough to accommodate the widest turning radiuses of golf cars and eliminate cars having to back up in the turnaround.
- ◆ Switchbacks should be built into steep grades to help a golf car climb hills.
- ◆ Use signs to warn players of steep grades, sharp curves, etc.



Architect Bruce Matthews advises new course owners to delay cart path installation. "Golfers will dictate where they should go," he says.

up shells or sand have also been used in places like Florida, where they are plentiful.

Weed says that cart path work should be budgeted carefully because it is such a substantial cost. Don't forget the prep work, he adds, which should be its own line item so it is scheduled appropriately.

When the management at Crystal Springs Golf Course in Burlingame, Calif., needed to purchase a new fleet of golf cars, a prerequisite became obvious: the need to replace damaged cart paths that would shorten the lifespan of new vehicles.

Tim Powers, the certified superintendent at the course south of San Francisco, says widening the paved surface was a key to the project, which he estimates cost about \$700,000.

"It was a bit of a fight to get our company president to go to the 8 feet, but he finally relented," Powers says.

The width increases to 9 feet at the greens and tees, and Powers says 10 feet would've been better. Concrete was selected because it is less susceptible to breaking up and is easier to repair. It cost more at first, he says, but "in the long run, it's a better deal."

The public-access course is in an area that gets heavy winter rains — 48 inches last year, according to Powers — and the clay soils become impassible for golf cars. As a result, there are a lot of cart-path-only days at the facility, which opened in 1924.

A renovation master plan completed eight years ago by architect Gary Linn

laid out routes for the new paths, changing four holes from the right side to left and creating some mounding to hide pathways in selected spots.

Pieces of the old paths were ground up, and some of that material was layered beneath the new paths. About 1,000 feet of curbing and a few drainage basins within the paths were added.

During what Powers describes as "three months of very, very long days," the work was completed without closing the course down. Only one or two holes were impacted at any given time, as the shaper timed his prep work to stay just ahead of the rest of the crew.

One lesson learned by Powers was to come in with a strong understanding of the irrigation system. The work caused a couple of pipe breaks and forced the relocation of a few heads, but those problems were limited by having his irrigation person work with the contractors.

The project's biggest kink involved a question about who was responsible for backfill. Soil was needed around the paths upon their completion, and because that wasn't discussed with the contractor beforehand, there were some disagreements. "We finally got it worked out," Powers says.

Now, the 8-foot paths smoothly carry legions of golfers as well as the crew's fairway mowers and tractors. At Crystal Springs, a necessary evil has been turned to double advantage. ■

Allar, a freelance writer from Floyds Knobs, Ind., is a frequent contributor to Golfdom.



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