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The Art and Science of Golf Course Architecture



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WFICOME

The Saudi conundrum



ADAM LAWRENCE

he biggest recent story in golf has been the proposed LIV Golf International Series professional tour, fronted by Greg Norman and bankrolled by Saudi Arabia's sovereign wealth fund, to the tune of US\$400 million. Norman has revealed the initial schedule of eight events across Europe, America and Asia, starting with a US\$25 million event at the Centurion Club outside London, which will be, up to that point, the richest purse ever played for in golf.

No players have yet committed to the series and given the bad odour that surrounds Phil Mickelson after his ill-judged comments on the whole affair, it remains to be seen how many will, and how many 'marquee' names Norman can get to sign on the dotted line.

Part of the Saudi government's Vision 2030 strategy is to diversify the economy away from petrochemicals, with golf now an important part of the country's development mix, both in terms of leisure assets in new cities for a growing population, as well as a hoped-for golf tourism offer. The Royal Greens course near Jeddah, which has already hosted events on men's and women's tours, opened in 2018. Up to sixteen new courses, including designs by the Norman and Nicklaus firms, are expected to follow before the end of this decade – an ambitious target, but not the sort of eyewatering number that marks unattainable strategies.

Saudi Arabia has, to put it mildly, a PR problem; as an absolute monarchy, the state there is used to doing what it wants; as the home of Islam's most sacred sites, it is understandably protective of its religious heritage and has, in the past, been exceedingly private, basically off-limits to non-Muslim tourists.

I have been invited to visit the country on a number of occasions and I have decided that Saudi is, as things stand, a step too far for me, as a journalist (not that I think my life would be at risk if I didn't like their golf courses). But I have been to, and accepted hospitality from, plenty of countries whose human rights record is not all it should be. I am, and remain, conflicted.

Adam



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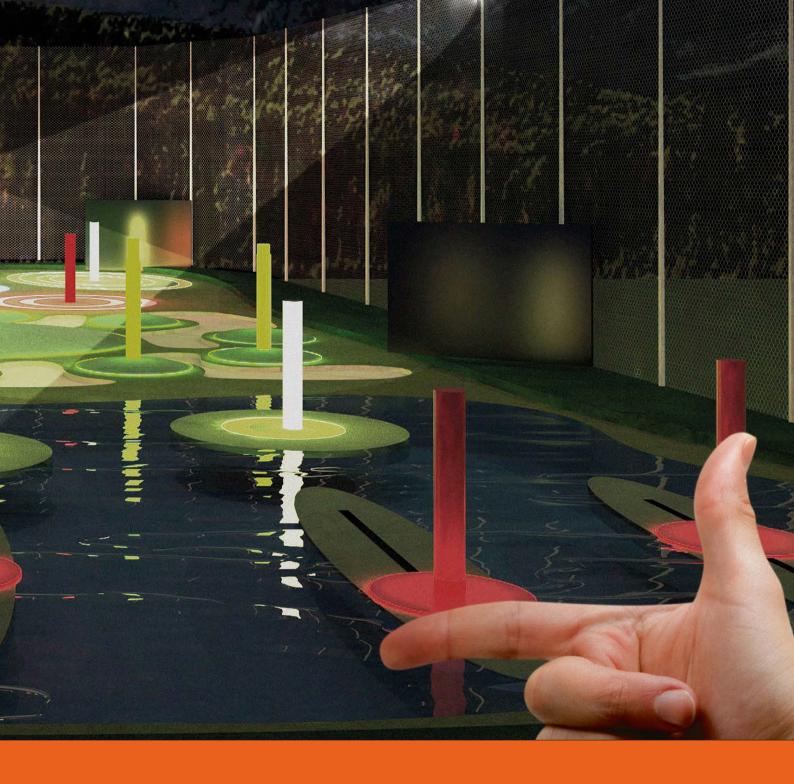
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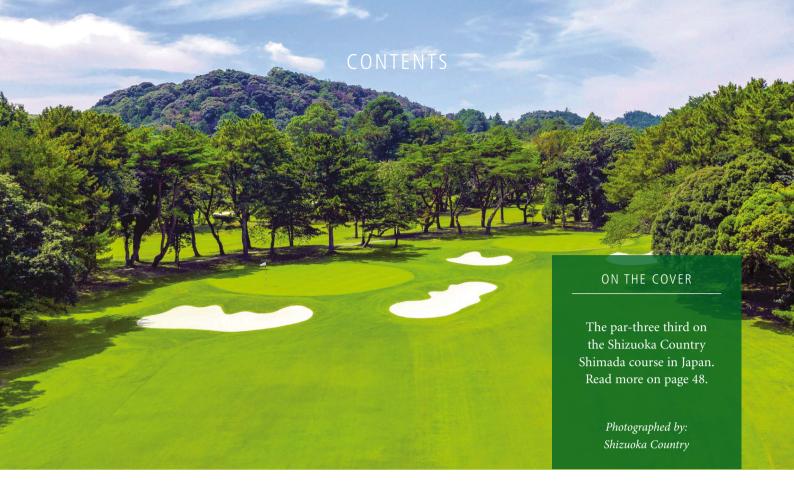
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Icelandic golf course architect Edwin Roald says that some golf facilities may already be carbon positive

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With players hitting the ball ever-further, Adam Lawrence asks what should be the role of a par five, and what can designers do to challenge the big hitters







Twin greens and a fresh design provide options galore at the Shizuoka Country Shimada course on Japan's south coast

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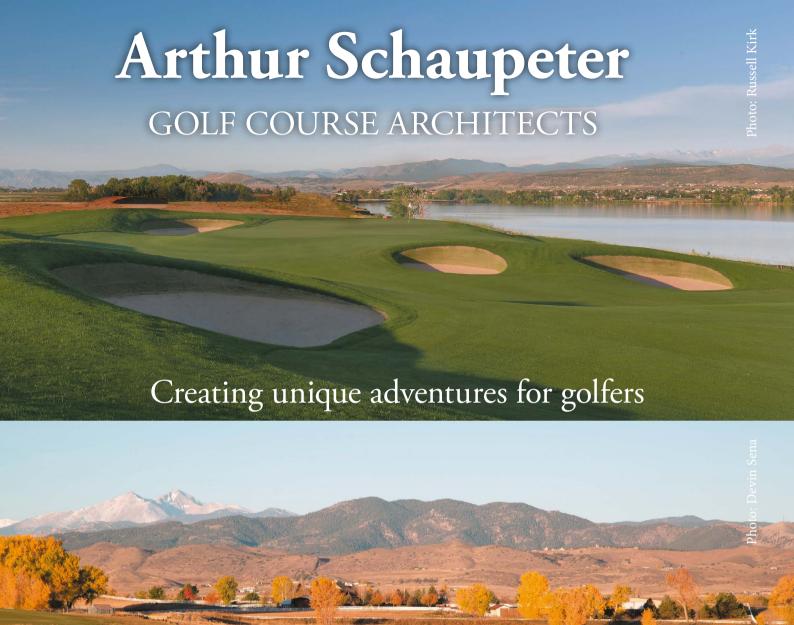
Adam Lawrence visits Real Las Palmas to find out how the oldest golf club in Spain is planning to improve its course

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Coore and Crenshaw's Wicker Point, the pair's first design in Alabama, is being built with the aim of bringing top class golf to the state

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A Texas municipal plans to redesign its short course and practice facilities to cater for the entire town



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MAII BOX

Dear Editor

I live in Baytown, Texas, and our city leaders have finally heard me and the rest of the golfing community, to return Evergreen Point GC as a golf course.

Evergreen closed down six years ago and the city purchased the course, only to help a developer build a custom home neighborhood – which did *not* come about. They built 30ish tract homes in six years, not exactly a wild success! The city kept the remainder of the course, roughly 105 acres, as a park, with the cart paths as walking/jogging paths, stocked the water hazards as little fishing holes, added a disc golf course and whatever footgolf is.

It would be funny if I were not so passionate about the loss of an incredibly nice and challenging golf course. I have petitioned our mayor, City Hall and the City Council for these past six years to renovate this course. The city has been focused for years on building a hotel and convention centre less than a mile from Evergreen Point GC and I was told that we could not talk about golf until they broke ground on this.

Now, our city has appointed a developer for what I thought was going to be a traditional golf course. Due to the limitations (land size/ footprint) that the city has imposed, the developer has come back with a 'compressed' design, putting their 18-36 holes into a nine-hole footprint, with each hole having five or six tee 'spots', not boxes. Have you ever heard of such a gimmicky golf game like this T36 I have described?

Is this a laughable joke? I am familiar with more than a few course designs

of nine- and 12-hole courses, and parthree courses looking for ways to grow the game of golf and considerations for limited real estate and land. I get it, these make sense, with more people having time for nine or 12 holes or an hour or two to play a par-three course.

At 63 years of age I maybe a little too set in my ways, but I do not see this as an answer to anything other than getting into a lawsuit.

Chet Theiss Baytown, Texas

Chet, thank you for your passionate letter, which demonstrates how important local facilities are to us all. It appears that the developers are proposing nine holes that would be played twice (from different teeing angles and in some cases to different greens) to form an 18-hole round. Hopefully this mitigates safety issues and, while it may not be one of a kind, if implemented with care and expertise, it could bring enjoyment to many. I would prefer to have some form of golf available than none at all.

We are delighted to receive letters from readers, and the best in each issue will be rewarded with a golf shirt. Send to 6 Friar Lane, Leicester, LE1 5RA, UK, or email us at letters@golfcoursearchitecture.net

GOPHER WATCH

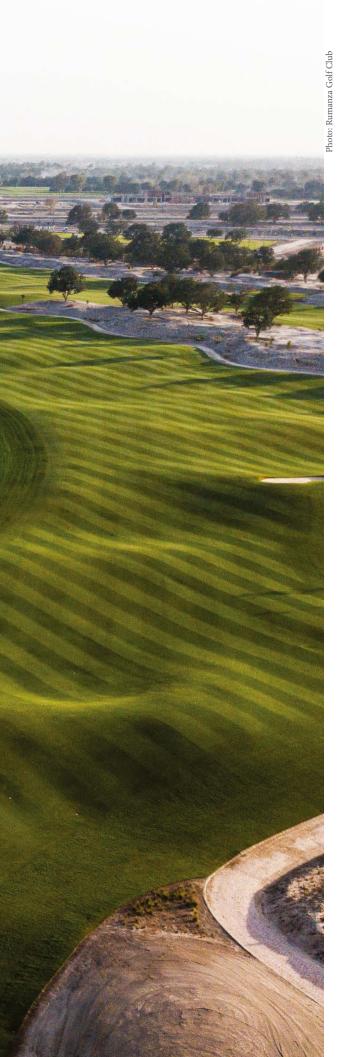
Sandy was in his happy place last time out, on the first tee of the historic Lundin Links course in Fife, Scotland. Though the club was founded in 1868, golf has been played on those links for much longer: Lundin and the adjacent Leven course were originally one, but the increasing popularity of golf forced the two to separate, and some additional holes to be constructed to give both clubs eighteen holes. It was a local who was first out of the hat, so congratulations to Martin Bonnar of nearby Ladybank GC. A prized *GCA* shirt is on the way.

This month, Sandy is quite a long way away from Scotland! And if Lundin/Leven is one of the first few places where golf was played, this venue is famous for being the last place where something happened. No more clues! Answers, as ever, by email to gopher@golfcoursearchitecture.net.

TEE BOX

NEWS EDITOR: RICHARD HUMPHREYS





New Faldo course opens in Pakistan

Rumanza layout takes golfers through three distinct areas, characterised by desert, trees and water

umanza Golf Club in Multan, Pakistan, has opened its new Sir Nick Faldo Signature course.

The club, part of a new 9,000-acre community being developed by the Defence Housing Authority of Multan, also has a six-hole parthree layout and a practice range.

"The course should challenge the top players from the back tees but be eminently playable for all other standards of golfer from the other tees," said Andy Haggar, lead architect at Faldo Design. "The fairways are quite generous to help golfers keep the ball in play, whilst at the same time, the shaping and placement of the hazards challenge the better players to put the ball in the right place.

"Often the strategy of the hole is created with the green's design as the starting point. Here, each green features a range of pin placements that will be either hard, medium or easy. There is noticeable movement in the greens, but the surface areas are large enough to accommodate that movement. As with the fairways, it is about being in the right place on the green to give yourself the best chance of a good score."

The layout, which is over 7,500 yards from the back tees, takes golfers through three distinct areas, with the first four holes characterised by desert, holes five to twelve among trees, and the remainder traversing around a water storage lake to the clubhouse at the centre of the course.

"On the playing side at Rumanza, we wanted to create an interesting, strategic and memorable golfing experience," said Haggar. "Once we had scraped off the top surface of material on this very flat site, we found pure sand. That moved us towards creating something of an inland links-style golf course.



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"The closing three holes are spectacular. They play around a large lake that features a peninsula, where we have retained mango trees. Also, because of the peninsula, it will mean that the extent of the lake is only revealed as you play the holes around it. This means you won't see the lake alongside the par-four eighteenth until you walk off the par-three seventeenth green and stand on the final tee. It is certainly impressive and memorable."

Faldo Design created an inland links style layout, with greens that have significant movement and are defended by revetted bunkers

Haggar says that alongside some links-like shaping, revetted bunkers were the obvious choice. "Bunkers are revetted in a traditional style using EcoBunker, with turf rolled down over the edge," he said. "We also used EcoBunker to create a revetted edge to certain sections of the waste areas adjacent to the fairways, which provides another nice feature of the course, and which complements the bunkering."

Grassing Pakistan's first signature course

When selecting turfgrass for the Rumanza course, sustainability and performance were primary considerations. The conditions called for a durable warm season turfgrass able to thrive in extreme temperatures and conducive to the pure sand base. To meet these demands, the architect team at Faldo Design specified a turfgrass with which they were familiar from previous projects, Platinum TE paspalum, supplied by Atlas Turf International.

Rumanza features Platinum TE throughout the course from tee to green. As a versatile cultivar, Platinum TE is adaptable to various heights of cut and can be mowed as low as 2.03 millimetres for tight and fast greens or grown to higher heights for fairways and rough.

"Rumanza has successfully opened to the public with rave reviews from the Pakistani golfers for the overall facility - including the Platinum paspalum," said general manager Sam Clayton. "The highest praise came from Sir Nick Faldo, Graeme McDowell, Rafa Cabrera-Bello and Charley Hull on their recent visit.

"The Platinum paspalum has endured six months of 45-50C heat from May to October, followed by three months of freezing overnight temperatures with heavy, frequent frosts and fogs from December through February. With the extreme weather conditions, the praise is a testament to the durability of the Platinum paspalum and assurance that the turf selection was the right choice."

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Vingroup selects design team for new courses at Ha Long Bay

Vietnam's largest conglomerate Vingroup has selected Clayton, DeVries & Pont (CDP) to design two new 18-hole golf courses on the banks of Ha Long Bay (pictured), a Unesco World Heritage Site in the northeast of Vietnam.

The golf courses will sit within a massive new US\$10 billion urban complex, Ha Long Xanh, that spans 9,000 hectares and is expected to become home to 240,000 people.

The golf project will be led by Mike DeVries, who will be supported by Hendrik Hilgert. Several other team members, including Mike Clayton and Frank Pont, will also be on site during construction.

"I have visited Vietnam several times in the past 15 years," said DeVries. "I love the country and its people and am pleased that I and my colleagues will now have the opportunity to deliver courses in one of its most famous and beautiful regions. The intention is to design two excellent golf courses which will be enjoyable for all golfers and could also serve as a venue for a professional tournament should that ever be of interest."

"Our team started liaising with our counterparts at Vingroup in January," said Hilgert. "Our initial plans are already well advanced."

"We are delighted to be undertaking the partnership's first project on the Asian continent in Vietnam, a country whose population is embracing the game of golf at a quite staggering rate," said Edward Cartwright, chairman of CDP. "We are honoured to be working for Vingroup, whose Vinpearl and Vinhomes subsidiaries will be overseeing the development of Ha Long Xanh's main facilities."

THE BIG PICTURE

The par-five fifteenth hole, known as Pirate's Plank, at the Tom Doak-designed Cape Kidnappers golf course, located south of Hawke's Bay on New Zealand's North Island, photographed by Jacob Sjöman.

"Sometimes when I arrive at a very special hole on a golf course, I feel as if I want to spend as much time as possible there to do it justice," said the Swedish photographer. "When I arrived at the fifteenth at Cape Kidnappers, I had to pinch myself to realise that I was not dreaming."

Superintendent Brad Sim and his crew are nearing completion of a project to improve turf quality on the course, with assistance from Renaissance Golf Design's Angela Moser.

Greens will be reinstated to their original size, with the original contours restored. On fairways, turf will be replaced with a new bentgrass variety.

"We are happy to see the work being done with the purpose that the course will play how it used to play," said Moser.

The course will reopen for play on 1 July.

For another view of the fifteenth at Cape Kidnappers, turn to page 40.





Brian Ross and Colton Craig have completed a redesign of the 18-hole course at the former Cave Valley Golf Club in Bowling Green, Kentucky. Now named Park Mammoth Golf Club, the layout will open on 28 April.

The course was purchased in late 2019 at a bankruptcy auction and in January 2020 the owners appointed Ross and Craig to oversee a small renovation project, which included adding the first bunkers to the layout.

A plan was approved in February 2020. "They began clearing trees the next day, but it was not long before the project scope grew," said Ross. "By mid-March, the project had evolved from a small renovation into a total rebuild. It can't be overstated how big of an opportunity this turned out to be for two architects whose respective businesses were, at the time, both less than one year old!

"The decision to rebuild all the greens gave us the opportunity to make the course markedly better so we took the ball and ran with it. As we were already under construction, every design decision from that point forward was made in the field, on the fly. I personally shaped the golf course features – with an assist from Jay Smith early on – and we finished many of them by hand, along with our two interns, Scott and Lawson.

"The client allowed us to build whatever we felt was best for the golf course. Our only instructions were that it had to be fun to play and that it would keep people coming back again and again. It remains to be seen whether we achieved those goals, but I believe we did!"

The major aspect of the project has been the rerouting, which has included the nines being switched. The architects have also extended the course from 5,884 to 6,165 yards.

The original opening three holes have now become holes ten to twelve. "I really disliked the old first, a 299yard par four with a 100-degree dogleg that required you to thread your tee shot through a 17-yard gap between two large trees," said Ross. "I came up with a proposed routing that would completely alter the layout of these three holes, and we pitched the idea at a site visit in early February 2021. Fortunately, the owners unanimously agreed to make the changes on the spot! This was, in part, what eventually led to the dramatic increase in the overall project scope, too.

"I believe the changes we made vastly improved this section of the course. While it's not the opener anymore, the new tenth hole is now a 336-yard par four with a great risk-

reward tee shot that plays straight ahead to a 14,500-square-foot double green we created by combining the new green with the old fourth green – now the thirteenth."

Ross and Craig were able to create a 109-yard par three at the eleventh that plays across a valley to the original first hole's green. "This change allowed us to dramatically increase the variety in the par threes," said Ross. "Previously, there was only a 23-yard difference between the longest and shortest par threes. Now, there's a 131-yard difference!

"The last puzzle piece required clearing a large section of forest to create an epic downhill tee shot for the long par-four twelfth hole, which continues out to the original green site for this hole. This allowed us to gain 50 yards while also opening up one of the best views on the course and providing the golfer with the chance to really let one rip!"

they are but have been substantially renovated, apart from the ninth. A couple of the biggest changes to greens include moving the fifteenth's 50 yards right across a deep valley and lengthening the seventeenth's by 60 yards.

"The greens we inherited were 3,700-square-foot ovals with five-to-seven per cent back-to-front slopes, and thatch so thick you could bounce on them like a trampoline," said Ross. "Having the opportunity to rebuild all the greens was a gamechanger for this project. It turned what would've been a nice story about a solid, low-budget renovation into a golf course that I believe can challenge for the title of best public course in Kentucky."

The new greens are on average about 70 per cent larger than what existed before. "They are full of internal contour, sneaky false fronts, and

tucked pin positions," said Ross. "Most slope off in multiple directions which will provide great variety in the dayto-day setup."

The project has seen 25 bunkers added to the course (10 fairway and 15 greenside). Ross says his highlight bunkers are the 168-square-foot pot bunker fronting the eleventh green, the 4,235-square-foot hazard (pictured) that separates the second and fourth greens, and the 12-foot-deep pit that guards the left side of the fifteenth green.

Fifty new tees have also been added. "We were able to improve the flow and sightlines on the course by making simple, slight adjustments to the angles of the holes," said Ross. "This was accomplished most notably on holes nine and seventeen. There are also a few alternate tees located throughout that will give some flexibility in course setup."



THE INTERVIEW with Jonathan Gaunt



"What is nice is that 25 years later they still want me back"

GCA spoke with Jonathan Gaunt about returning to Breinholtgård Golf Club in Esbjerg, Denmark, to oversee a renovation project

How did the new project come about?

I designed the golf course in 1992 for the previous owner, Preben Christensen, which is within a few kilometres of the west coast of Denmark on the Jutland peninsula. I was quite young at the time, 28 years old or so, when I designed 18 holes – the Sletten and Skoven nines – with a local building architect, Michael Møller, designing the Ådalen nine on his own later.

Breinholtgård has happily – and profitably – operated since then and, a few years back, I was invited to the club's 25th anniversary - their jubilæum. I went to the event, and I was asked, "when are you going to come back and advise on some course improvements for us".

Following the jubilæum event, I returned to the club twice and soon after completed a full course review

and created a master plan, with various upgrades across all three nines.

What work have you completed so far?

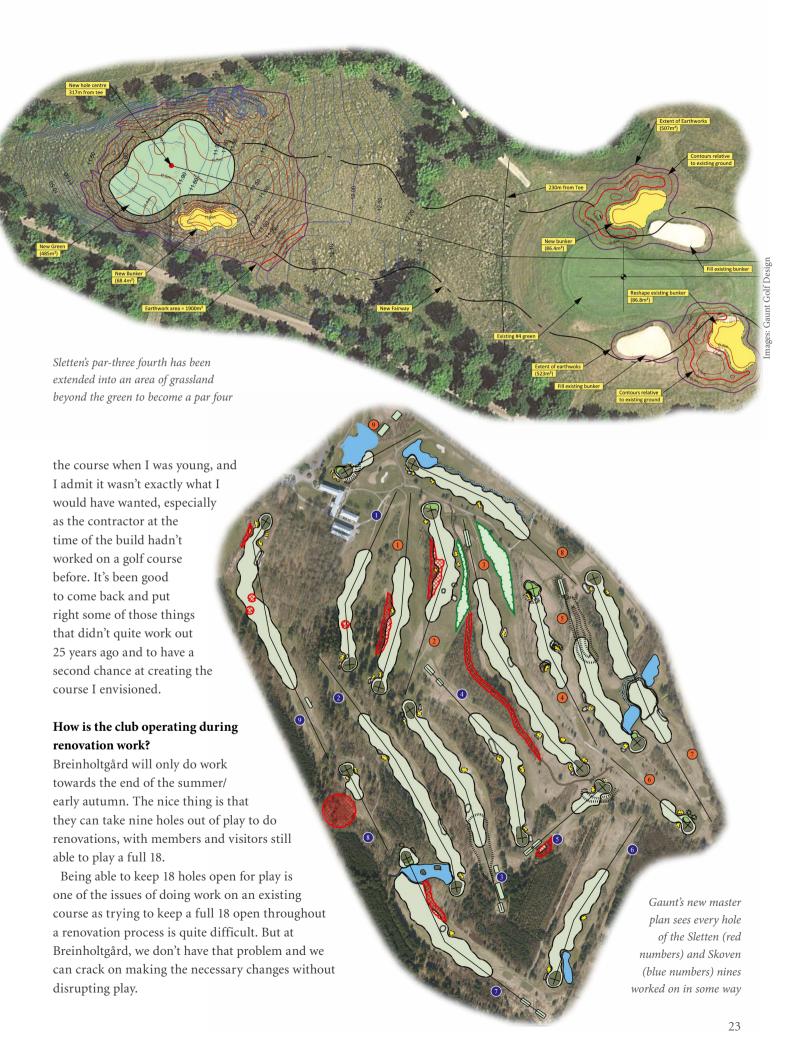
Last autumn we worked with Polish contractor All Golf Services on the fourth and ninth holes of the Sletten nine. We'll be working on all 27 holes over the next two or three years – we'll be resuming renovation work on the Sletten nine again this coming autumn.

Our work on Sletten's par-three ninth included creating a new spring-fed irrigation lake, extending the green, rebunkering, and creating a new tee complex... it is effectively a new hole. At the fourth, another par three, we have extended that hole into an area of grassland beyond the green. So, we've turned it from a par three to a four — there were already three par threes — so that nine has now become a par 36.

The site is amazing – it's rolling heathland, pine woodland and sandy grassland... it's a really beautiful site, with wider views of the surrounding forest and farmland.

What is nice is that 25 years later they still want me back. I designed







Seattle Golf Club in Washington state will hold a grand reopening of its 18 holes in May following a renovation completed by Thad Layton of Arnold Palmer Design Company.

In 2017, the club identified the need to renovate greens, greenside bunkers, and surrounds to improve playability, drainage, and aesthetics. Layton was appointed to prepare a master plan and oversee the work with Tacoma-based golf contractor Ridgetop Construction.

"Years of sand splash buildup from greenside bunkers had eliminated some of the most interesting hole positions," said Layton. "On these greens, we restored the old perimeters and elevations to increase pinnable areas and promote drainage. We also completely rebuilt five greens to permanently solve playability issues that arose from severe internal slopes."

To complement the new strategy at the greens, Layton made fairway bunker modifications on the second,



Top, the new fairway bunker complex on the par-four second and above, the resculpted bunkers set up a new green on the par-five ninth

third, fourth, and tenth holes. Several new tees were also constructed on holes one, five, nine and sixteen to add distance options.

"Our objective was to maintain Seattle GC's storied past while enhancing the strategic options and beauty of one of the most iconic clubs in the Pacific Northwest," said Layton. "That amounted to a three-pronged approach of restoration, renovation, and remodel. We tightened up the relationship of greenside bunkers and eliminated sand in key areas to increase recovery options. We also replaced organics in the approaches with sand to get the ball rolling in what can be a very wet climate."



Caspar Grauballe is progressing with major renovation work at Golf de Rougemont-le-Château in eastern France, close to the borders of Germany and Switzerland.

Grauballe has created a development plan for the course – a Robert Berthet design that opened in the late 80s – and initial work, the construction of new tees, took place in autumn 2021. The contractor Celtic Golf Management returned in March 2022, building a new hole and new practice greens.

"My plan aims to improve the playing experience by developing the framework for better playing surfaces, changing the layout to reduce the climbs on certain holes, making the course more visually attractive and reducing the blindness of a few holes," said Grauballe.

This has involved some rerouting of the layout. "The rerouting uses much of the existing hole locations, but there are major changes on both nines," said Grauballe. "A new short par four is introduced as the fifth hole, and the ninth is an amalgamation of the old sixth and ninth holes, to form a great par five.

"On the back nine, a new fourteenth hole is introduced on new land; a par four playing from an elevated tee position to a rolling fairway with great views towards the village. The old seventeenth is being replaced as well. This opens up some changes that will reduce the climbs for players and also

introduces a new thirteenth hole – a par three sitting on the top of the site with tremendous views across the landscape. The eighteenth [pictured] will change from a short par five with a blind drive to a par four with a very dramatic tee shot to the fairway and green – 25 metres below – next to a lake."

Grauballe's plan, which will be carried out over the next few years, also includes renovating greens and installing a new irrigation system from Toro.

"The players will experience a course with challenges that are visible and with an emphasis on playability," said Grauballe. "Blind holes will disappear, and the greens will feature more movement than the current ones, putting more focus on the short game."



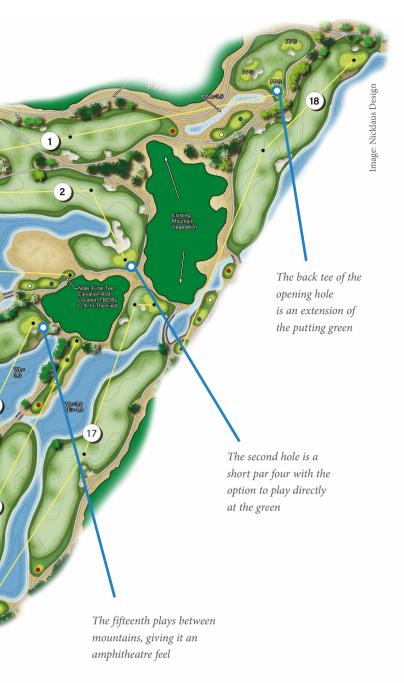
COURSE BLUEPRINT

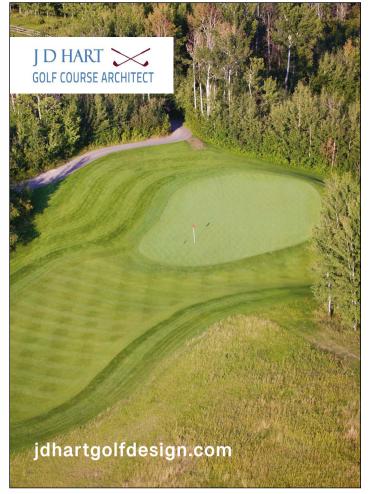
Rose Canyon (South)

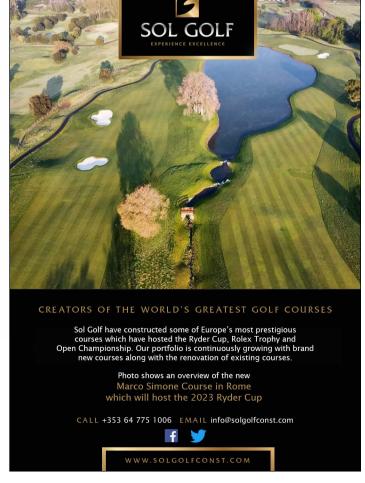
Construction work is advancing on the first of two Nicklaus Design courses at the new Rose Canyon resort in Ha Nam, an hour's drive south of Hanoi, Vietnam.

"The golf course site was an old quarry comprising impressive near-

vertical mountains, low lying flat lands and water filled excavations," said Sean Quinn, senior design associate at Nicklaus Design. "The dramatic mountains relate to every part of the golf course. Holes play between and around the monolithic







forms, with some green sites having 60-metre-high cliff backdrops."

Construction is expected to be completed in late 2022 for a mid-2023 opening. Work on the North course will start as soon as the South is complete.

Read more about the project at www.golfcoursearchitecture.net



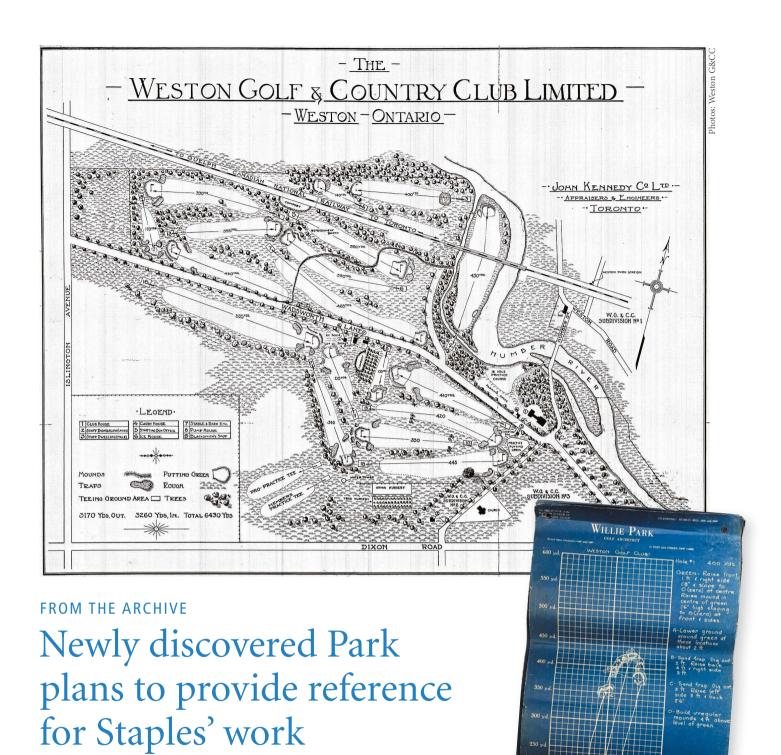
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Andy Staples – who has worked on Wille Park Jr designs at Olympia Fields (North) in Chicago and Meadowbrook in Michigan, and has also recently been hired by Canadian club Mount Bruno – will reference Park's original, recently discovered, plans to develop his own master plan to guide work at Weston Golf & Country Club in Toronto, Canada.

Among the Park materials Staples is referencing for his new plan are sketches of every hole (sketch of first hole, pictured right), which have detailed annotations about the height and slopes of green complexes and mounds, as well as depth of bunkers. He is also armed with 1947 aerial photography and historic ground shots, plus a 1926 master plan (pictured above) drawn up by Toronto-based engineering firm, John Kennedy Co Ltd.

"It's incredible to

have the quality and quantity of resources available for our historical research – the Weston members should be commended," said Staples.





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A four-year renovation project is under way at Glenelg Golf Club in Adelaide, Australia.

The plan was developed by Neil Crafter of Crafter + Mogford Golf Strategies in collaboration with Glenelg life member and former professional golfer Bob Tuohy and the club's project and construction manager Ryan Van Der Veen.

Six greens will be completely redesigned, and the remainder will be renovated, bunkers will be rebuilt, and the irrigation infrastructure will be upgraded to a new Rain Bird IC system.

Crafter's plan also includes adding more teeing options, reducing the amount of maintained rough, increasing fairway areas for more shotmaking options, and restoring sparsely vegetated sandy areas with indigenous plantings.

Work has been completed on the eighteenth and is in progress on the thirteenth, following preparatory work on the nineteenth hole (pictured). "The extended use that the nineteenth hole will see over the next four years was the reason upgrade works have recently been undertaken on it to expand the tee and fairway areas and eliminate one greenside bunker," said Crafter.

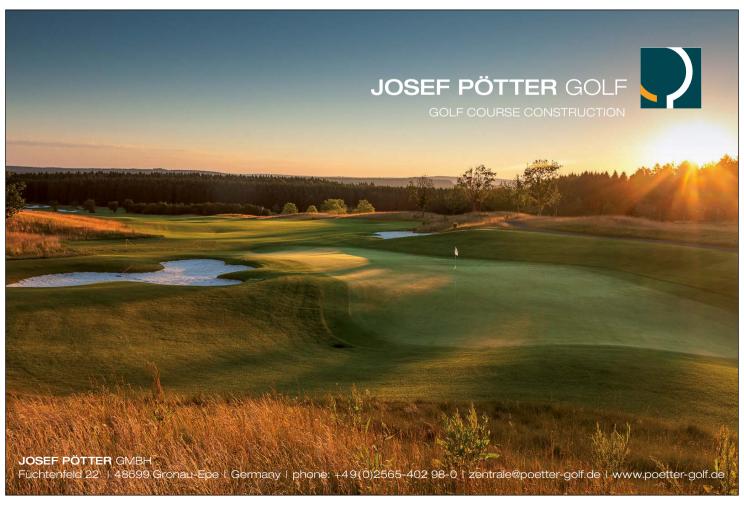
On the eighteenth, the club reconstructed bunkers, expanded fairway areas, resurfaced the green and replaced an ageing retaining wall to the left of the green.

A hybrid style of fairway bunkers that combine revetted and natural sand faces will be developed. "Reducing bunker numbers while enhancing strategy has been a real design challenge, but I expect the reimagined holes will provide a good test of golf for all levels of golfers," said Crafter, who expects the project to be completed in late 2025.

"The visual appeal of the course as an inland links – Glenelg is located on sandy linksland less than a kilometre from the ocean – will be enhanced by the additional sandy rough areas and hybrid bunkers we have envisaged," said Crafter. "Working collaboratively with Ryan Van Der Veen, an experienced architect and shaper in his own right, is proving very rewarding and the club is gaining the benefits of our combined skills and expertise."

Read more about the Glenelg project on the GCA website







First nine of new 27-hole Cape Verde project opens for play

The first nine holes at Viveiro Golf Course have opened for play on the island of Sal, which is part of the Cape Verde archipelago.

Italian agronomist Fulvio Bani is leading the project on the desert island that is located 350 miles off the west coast of Africa. The development includes 27 holes of golf along with a clubhouse, hotel, leisure facilities and residential areas.

"The strong influence of the wind, which comes exclusively from the northeast and can sometimes reach up to 75mph, and the need to save water, led us to create grassy playing areas interrupted by coarse sand

sections," said Bani. "My design avoids penalising the average golfer.

"We have used sand that is resistant to the force of wind – the few sand bunkers are small and deep to avoid their emptying by the wind. We also considered the wind's presence for the placement of tees."

The island is almost absent of rainfall, experiencing around 350 days of sunshine a year. "The orography of the terrain, especially in the steep areas, required us to soften and shape fairways to optimise the visibility of landing areas and spots near greens," said Bani. "As there are no trees on the site, we planted some tall, native

trees to improve visibility of playing areas and to increase the perception distances, especially for doglegs and behind greens."

A computer-controlled Rain Bird irrigation system is installed, operating with integrated control (IC). It features more than 550 rotors, automatic mains filtration and high-density polyethylene pipe.

Paspalum Vaginatum from the Pure Dynasty variety has been selected for all playing surfaces. Bani said: "High temperatures heavily influenced our choice as they needed to be resistant to the hot climate and to the lack of water."

WAC makes progress with Oregon newbuild

Construction is under way on a new 18-hole golf course, designed by Whitman, Axland & Cutten (WAC), in central Oregon.

The Tribute Club at Thornburgh will sit at the base of the Cline Buttes mountains, with sweeping views of the Cascade Range and the Three Sisters peaks. Vegetation on the near-2,000-acre property, which is untouched by development, includes sagebrush and juniper trees that are over 1,000 years old.

Used as a family ranch for more than 70 years, there has been a shift in focus for the land over the past 15 years. In 2006, Bill Coore, Ben Crenshaw and Dave Axland visited the site to design a golf course, but the project stalled following the financial crisis.

Fifteen years on, the owners decided to revive their plans and contacted Coore, who recommended WAC for the project.

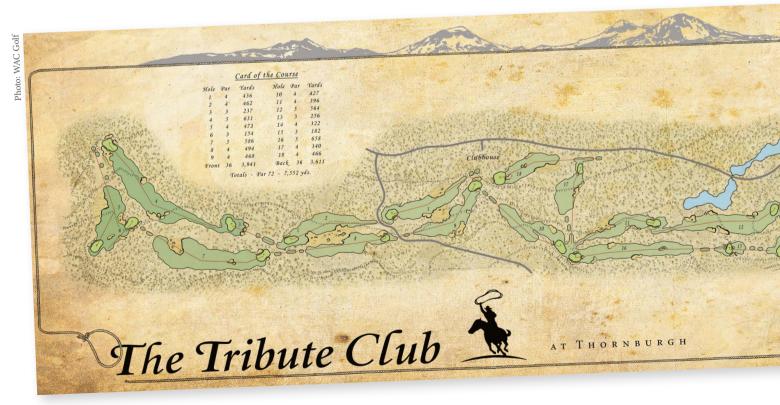
"It's a site that seemed like it had all the things you'd hope for to build spectacular golf that would stand the test of time," said Rod Whitman. "It spoke to us immediately."

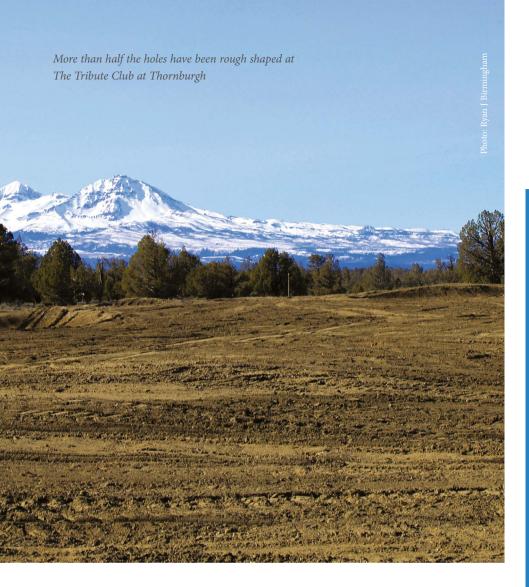
WAC is working with a figure of eight routing. "The most dramatic holes were found at the extents of the loops, giving purpose for a routing that works to highlight the 'bookends' of the property," said Whitman. "A steep ridge dotted with rock outcroppings adds drama to the 'hub' crossing between

holes ten to eleven, and sixteen to seventeen. The bookends and hub do well to contrast the flatter and wider middle sections of each loop. The result is a fun, dynamic, and varied walk."

Following clearing of the site in summer and autumn 2021, the design team moved in during the winter and began shaping. More than half of the holes have now been rough-shaped and irrigation lakes are nearing completion. Landscapes Unlimited is assisting with construction and grow-in. Six to eight holes will be grassed by late summer.

"The mental exercise of considering the limitless types of shots required to access a green, either along the ground or through the air, is both exciting and rewarding," said Axland.







"This is compounded when one then considers the putts and recovery shots played over the putting surface contours. Constructing these surfaces from the seat of a bulldozer, while envisioning the ways in which the ball will bounce, roll and change direction, is just as thrilling to me as playing those actual shots."

"As a design team we derive great joy from this artistic effort and believe our passion lingers in the design of the golf course."

"Good green complexes require thought, and that focus should begin on the tee. A green and its surrounds can have a major influence on a player's overall tactical approach to a hole. The greens at Thornburgh are thoughtful and varied, so that different pin positions demand different strategies, day to day."

Keith Cutten said: "This is a wonderful opportunity to showcase the talents of our experienced and talented team. Each golf hole should present a unique challenge, one inspired by nature and contour.

"We are just happy to have another fantastic opportunity to build a great golf course that everybody will enjoy." Preview play is expected to be available in 2023.

GOOD READ

"There is a balance that must be struck"

The cover story of the latest issue of *By Design* magazine – produced for the American Society of Golf Course Architects by the team responsible for *GCA* – explores the impact an effective client-architect partnership has on a club's golf facilities.

"There is a balance that must be struck, and I am looked upon to find it," said David Dale of Golfplan, who has worked with CJ Group for over 25 years, designing and updating both The Club at Nine Bridges and Haesley Nine Bridges in South Korea.

The Spring issue of *By Design* also includes insight from Jon Last of Sports & Leisure Research Group and images from the 2022 GCSAA Conference & Trade Show.

To download the latest issue and subscribe to By Design, visit www.asgca.org



Global round-up

Royal Birkdale appoints Mackenzie & Ebert as course advisors

Royal Birkdale Golf Club in Southport, England, has appointed Mackenzie & Ebert as course advisors.

Tom Mackenzie will be the lead architect, charged with developing a master plan for the course, which has hosted the Open Championship 10 times. Mackenzie also plans to create a shorter layout and to renovate the practice facilities.

"Royal Birkdale is quite rightly renowned the world over, so we are obviously delighted and feel honoured to be selected to advise the club," said Mackenzie. "We look forward to making its wonderful links even more enjoyable for members and visitors alike, enhancing its reputation as one of the great Open venues."





Redesigned Aurora International course opens for play

Greg Norman Golf Course Design has completed a 'remastering' of the golf course at Aurora Anguilla Resort & Golf Club, located on the Caribbean island of Anguilla.

One of the design features brought back to life at Aurora International is the double green at the second and tenth holes (pictured). The par-three second, which measures 194 yards from the back tee, has Rendezvous Beach as a backdrop.

The project has included re-grassing playing surfaces, new bunkers, reconstruction of tees and greens, removal of overgrown plants, new forward tees, a total renovation of the irrigation system, and some design changes.

Pickala Golf targets 2024 opening for new short course

Pickala Golf in southern Finland has appointed Lassi Pekka Tilander to design a new nine-hole par-three course.

"The area reserved for the new Rock course is unique," said Tilander. "The ancient rocks, partly covered with moss and low-growing conifers, create a magical atmosphere. The golfing experience will be new to players; building a standard course on such a site is impossible. But it is perfect for a stunning par-three course as each hole does not require much more than a tee and a green."

The layout, with holes ranging from 90 to 260 yards, is being built between the club's Forest and Park courses.





Alan Rijks returns to Texelse for nine-hole renovation

Alan Rijks has returned to Golfbaan de Texelse in the Netherlands to renovate the first nine holes of the Links course. Rijks designed nine holes in the early 1990s before completing the layout in 2014.

"The first nine holes were originally made with a little amount of sand," said Rijks. "We now have used about 65,000 cubic metres to improve this part of the course. One of the nice changes is that we removed the fences on each side of the driving range and replaced them with natural dunes. Now it has a natural look and players on the range think they are playing a links hole with targets."



Richardson and Danner begin design work at Hyderabad The Hyderabad Golf Association has appointed Richardson | Danner Golf Course Architects to transform the course at Hyderabad Golf Club in India.

The layout, a David Hemstock design, has holes among the granite walls of the Golconda Fort, a fortified citadel built in the sixteenth and seventeenth centuries.

"Our mission is to bring international exposure to the city of Hyderabad,"

said Dayakar Reddy, president of the Hyderabad Golf Association. "We are looking to the future to train athletes for the Olympics and to play internationally."

Jeff Danner, who will manage the project for the design firm, said: "The unique character of the site has created a very distinct identity that will be leveraged to enhance visibility to the golf course."



EDWIN ROALD

Can golf courses earn money from carbon?

Edwin Roald explains how some golf facilities may already be carbon positive, possibly eyeing an additional revenue stream

esponding to the climate crisis requires us to minimise greenhouse gas emissions and sequester carbon. The importance of these actions will soon be reflected in new legislation from governing bodies, taxation, our bottom line, and ultimately in our attitude and behaviour regarding this pressing issue.

Like trees, and plants in general, grass can store carbon, and managed turfgrass can even sequester more carbon than unmanaged grassland. Furthermore, more frequent mowing can encourage sequestration.

This puts golf courses in a unique position. For as long as we can remember, fairways and mown rough on most golf courses have been mown frequently enough so that the removal of the tiny grass clippings has been avoided. Instead, they are left to break down in the sward, as organic matter, where they seem to contribute to an even faster and greater build-up of carbon, in the soil and biomass. Very few other owners of turfgrass areas, or lawns, do this.

On the other hand, wetland drainage emits carbon dioxide. Therefore, some

golf course areas store carbon, while others, usually unknowingly, release greenhouse gasses into the atmosphere. A golf course is therefore either carbon positive or negative, under or over the 'carbon par'.

Carbon Par is the title of Eureka Golf's research into the carbon status of land used by all Icelandic golf courses, the first national governing body in golf to produce such a complete account.

In addition to each course's carbon par, the research is expected to reveal how much carbon may be sequestered



Borgarnes Golf Course is one of a number of Icelandic courses that is having its carbon status assessed

in turf and its soil, by variables such as soil type and mowing frequency. Also, an effort is made to identify wetlands that may be restored without negatively affecting the golf operation or customer experience.

Inevitably, some golf courses will show a negative result. However, scapegoating is not an objective here. Moreover, courses that use wetlands to a certain degree may be in the best position going forward, with the most revenue potential, since the prevention of emissions through wetland reclamation can yield more carbon, per area unit.

The emergence of this new economy and currency is bound to change golf course architecture. The already intensifying pressure on land builds even further, with increased land demand for forestry and wetland reclamation projects contributing to higher prices. Emissions from

construction will be under greater scrutiny, as therefore will be the scale of earthworks. This should increase the importance of good site selection and flexible routing, possibly including more responsive hole counts, to steer away from wetlands and thus facilitate their protection or reclamation. Tree removal will not be as widely celebrated.

Turf management is getting cleaner, including mowing, which may also become less expensive with automation. Advocates of 'width and angles' will rejoice, as minimising the total area of managed turf will no longer be a default position. This may depend on the irrigation water source and associated energy use. On the other hand, carbon sequestration potential will cause us to see irrigation in a new perspective, where it will contribute to the plant's health, helping it to store carbon.

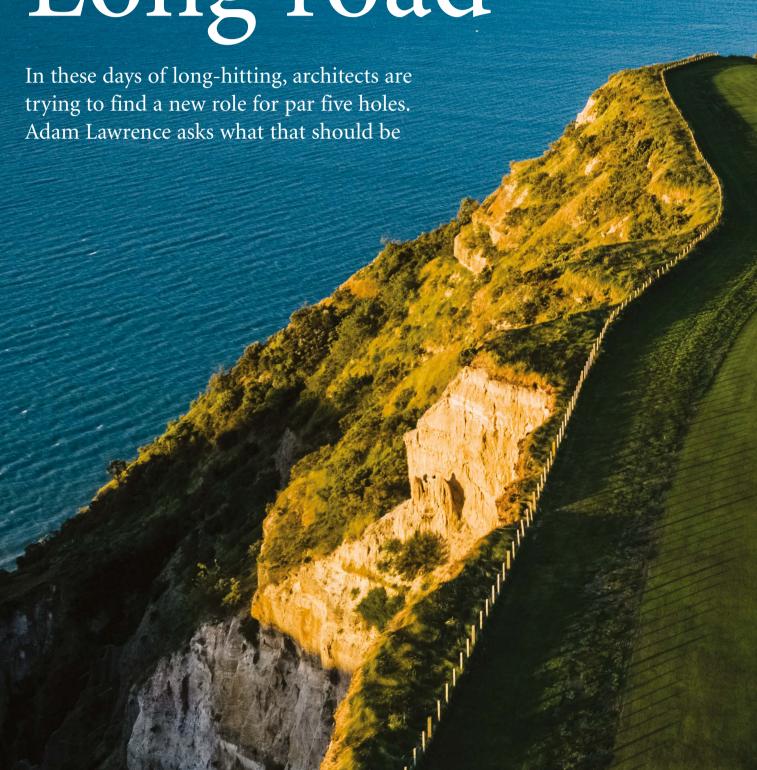
A few golf clubs have recently pledged to achieve carbon neutrality.

So far, this has mostly been defined in terms of operations, and not what the land is doing. Considering both, it is possible that a number of golf facilities are not only carbon neutral already, but carbon positive.

Being on the right side of par, and getting recognised for being a part of the solution, and not the problem, minimises or entirely avoids future purchases of carbon credits or payments towards carbon offsetting that are bound to become mandatory in the new economy. Depending on how this develops, golf courses that are well located, planned, designed, built and managed have a realistic chance of being seen as carbon sinks. GCA

Edwin Roald is an Icelandic golf course designer and is the founder and director of Eureka Golf





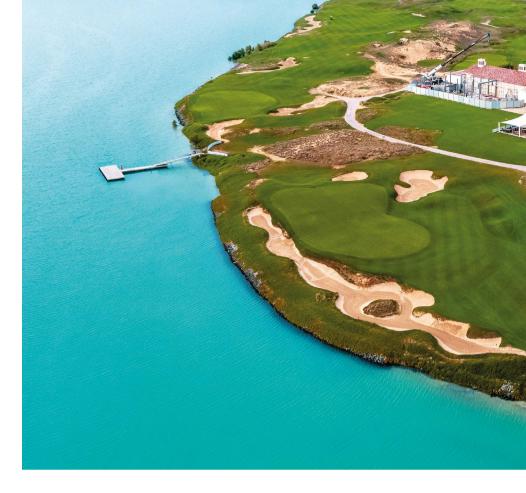


t the end of this year's Abu
Dhabi Golf Championship,
which was held in January at
the Kyle Phillips-designed Yas Links,
Tyrrell Hatton, the 2021 champion,
was not happy. Hatton finished sixth
in the event, three shots behind winner
Thomas Pieters, but that was after
taking seven on the par-five eighteenth
on day two of the tournament and
nine on day three.

The home hole at Yas is a huge par five, 646 yards long and with the Persian Gulf – or at least the sliver of it that separates Yas from its neighbouring islands – all the way down the left-hand side. Architect Phillips has set the hole up to offer clear decisions on both the first and second shot: one can cut the corner, going over the water, and shorten the hole, or one can bail out to the right, making it a certain three-shotter. A central bunker in the drive zone separates the two routes. It is a highly strategic hole.

Hatton, however, let fly at the hole with both barrels when talking to reporters after the tournament. "What's wrong with it? Where do you start? It shouldn't have a bunker in the middle of the fairway, and it shouldn't be over 600 yards from a forward tee," he said. "If you hit a good drive as a pro you should have at least a chance to go for the green in two, otherwise the hole becomes a par three, and that's if you play it well. Hardly anyone will get there in two with the wind even slightly against you.

"I would love for a bomb to drop on it and blow it to oblivion to be honest. It's just such a terrible finishing hole.



And the fact that they moved the tee back today is ridiculous. I hit a really good tee shot and still had 290 yards to the front. I could peg-up a driver and still not get there. It would be a much better finishing hole if you're actually rewarded for hitting the fairway, which as it stands, you're not.

"As for me, I hit my tee shot straight down the middle into that ridiculous bunker and thought my best route out all week. The safe play from the backmost tee was short-right into the 50-yard-wide fairway. It is a hole that can be a three-shot five some days, but if the tee is forward by one box, it becomes a two-shot. From the pro tee it allows professional players to risk hugging the shoreline and being rewarded with reaching the green on the second shot. Playing from forward tees, higher handicap players can

"Holes which are out of range for the tour pros are few and far between"

of there was to steer my second over to the tenth fairway, although that still left me nearly 220 yards to the pin for my third."

"I don't think the hole needs defending," architect Phillips told *GCA*. "The wind was huge that week, and all the folks involved in the course setup felt it held up amazingly well to remain playable all week. In that wind, you had to be careful and thoughtful

tackaround the shoreline in three shots and avoid having to make a heroic carry over the water."

Part of Hatton's rant can safely be considered as the outpourings of a very disappointed man. That a professional golfer would be unhappy at a central fairway bunker is hardly surprising, but at the same time, that fairway is about 75 metres wide where the bunker is. If the fairway were half the width



and lined by trees, no-one would be complaining. The bunker, we can safely conclude, is a perfectly legitimate strategic device used by Phillips.

Where his rant gets interesting, though, is his assertion that all par fives should be in principle reachable by a professional golfer who has hit a good drive. Golf architect Robin Hiseman of European Golf Design, for one, does not agree. Of Hatton's comments, he says: "I thought he was actively deflecting responsibility away from himself for poor decision making and shot execution. The hole in question was within range with a good drive. He just hadn't hit one. The key word here is 'always' and I don't agree with that. In reality now, any par five under 600 yards falls into that bracket and quite a few above, so holes which are out of range for the tour pros are few and far between. Provided the hole poses an interesting strategic choice for the lay up then I think a true three-shotter is perfectly valid, albeit undesirably long for the other 99 per cent of players.

"Essentially it is the same design task as you would face on a shortish to medium length par four, assuming a drive into A1 position. The approach is as easy or as difficult as their lay-up makes it, but I'd like a target with hole locations that will make them vary their thinking as to the side of the fairway and





On the 562-yard seventeenth on Jonathan Davison's Heritage course at Penati, Challenge Tour players only required an iron approach to reach the green in two, even into a prevailing wind

distance to the hole that they choose to lay up at. A forced carry with no variation other than distance would be dull. There's no one answer, but it is the same conundrum that all the rest of us face with pretty much every par five!"

The young English architect Clyde Johnson says: "It does pose an interesting challenge, if stopping those guys from getting home in two is going to get in their heads! Length alone isn't the answer to that. I can see what Tyrrell is getting at, about it becoming a par three, but not all par threes are created equal, and the key difference is that not everyone is starting from the same place. Making it interesting to get to the best starting point for that becomes the challenge for an architect in that case."

Tom Doak has thought about this issue for many years. "The first big article I did for Golf magazine in 1982

[when I was 21] was about all the par five holes that had never been reached in two," he says. "There were about two dozen of them in the USA back then, although, of course, a place like Crystal Downs was never visited by Tour pros so its two long holes were both on the list.

"One thing that comes from that is that these types of holes get us talking about the longest hitters, when in fact they are beastly holes for the 95 per cent of golfers with higher handicaps. For most people, any par five is a three-shot hole, and an 'untouchable' par five is probably a four-shot hole if you miss either of the first two.

"As part of that article I interviewed a lot of architects, and the consensus back then was Augusta's reachable par fives were the most dramatic type of hole, and most architects felt that you shouldn't have any hole that players didn't even think about reaching. Pete Dye would usually build one that was only rarely going to be reached, but I think he sort of agreed with Hatton — if it was really totally unreachable then players would just hit two lay-up shots, and that would be boring to watch. He wanted them to hit driver off the tee and be actively thinking they might have a slight chance.

"What I noticed about that type of hole back in the old days was that short hitters played them the best. Hitting it in the rough off the tee made for a difficult slog and keeping in the fairway was paramount. None of the holes were really long enough that a great player would have more than a wedge third shot if they kept it in play on the first two, so the long players' length advantage was pretty well negated, whereas on most par fives it is pushed right to the front.



"For my own designs, I generally build less than four par-five holes, because I think they reward the long hitter too much, and the long hitter already has a lot of advantages. I've only built a handful of holes that are usually not reachable in two, the best known of them being the fifteenth at Cape Kidnappers, 650 yards, where two cautious shots to stay in play could leave you a very long way in. Sure enough, though, in their second pro exhibition there the wind was howling at the players' backs, and Sean O'Hair reached that green in two with something like a 6-iron. The annoying part was that right after that, they

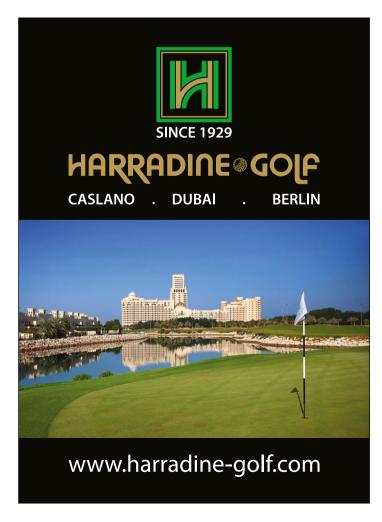
suspended play because the ball was 'wobbling' on the green – but really because none of those players wanted to play the last three holes back into the teeth of that wind.

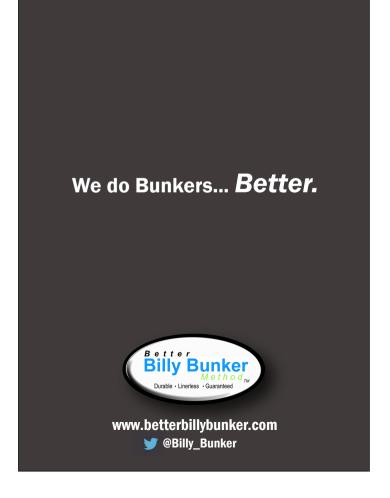
Doak hits on a key problem with unreachable par fives. The wider dispersion of length between average and elite golfer that has emerged over the past twenty years is inevitable a greater problem the longer the hole becomes. To take two extremes: for a veteran woman golfer with an extremely slow swing speed, a three-shot hole could easily be less than 200 yards: but for a young male professional or elite amateur, holes in excess of 650 yards are



Tom Doak notes that shorter hitters have tended to play reachable par fives, like the thirteenth at Augusta, better than longer hitters









EGD's Ross McMurray designed the eighteenth hole of Celtic Manor's Twenty Ten course with the 'hero' shot in mind

potentially reachable in two. Elasticity is an important component of good golf design, but nothing can stretch that far. British architect Jonathan Davison says: "I think a course should have a genuine three-shotter if possible, but it is very hard now because elite golfers hit it so far. The seventeenth hole on my Heritage course at Penati in Slovakia is over 500 metres into the prevailing wind, but when the Challenge Tour played there, the guys were hitting long irons into the green. I guess a genuine three-shotter for pros is the par six on Penati's Legend course, but that hole is 783 yards long!"

The second shot on an unreachable par five has been referred to as the most boring shot in golf. Kyle Phillips says he sympathises with this view, but not absolutely. "There are examples of par-five holes where the lay-up second shot has plenty of pressure of both distance and accuracy in order to achieve the preferred spot to get up-and-down for birdie," he says. "Yas Links' eighteenth is an example of this, as is the eighteenth at Pebble Beach.

The yardage on the card at Pebble is less, but there is less dogleg to bite off on the second shot, out of bounds looms tight on the right and both trees and bunkers cut into the fairway and approach to the green."

An additional complication is that reachable par fives are one of only a few occasions where professionals are required to hit the sort of long,

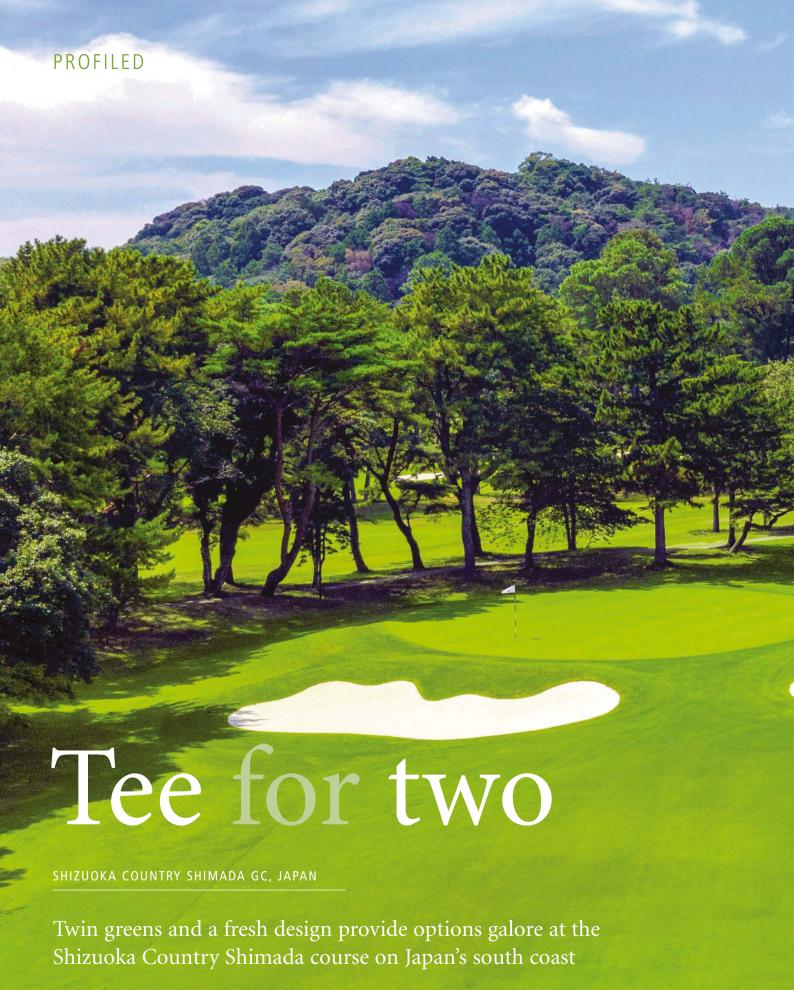
One needs a potent jeopardy for it to work most effectively. The eighteenth at Celtic Manor does this – it is, in conception, the same as the fifteenth at Augusta, but longer."

Jim Nagle of Forse Design says that no hole should be an automatic goor no-go decision. "The chance of reaching a green in two is dependent on the overall distance, but nothing should

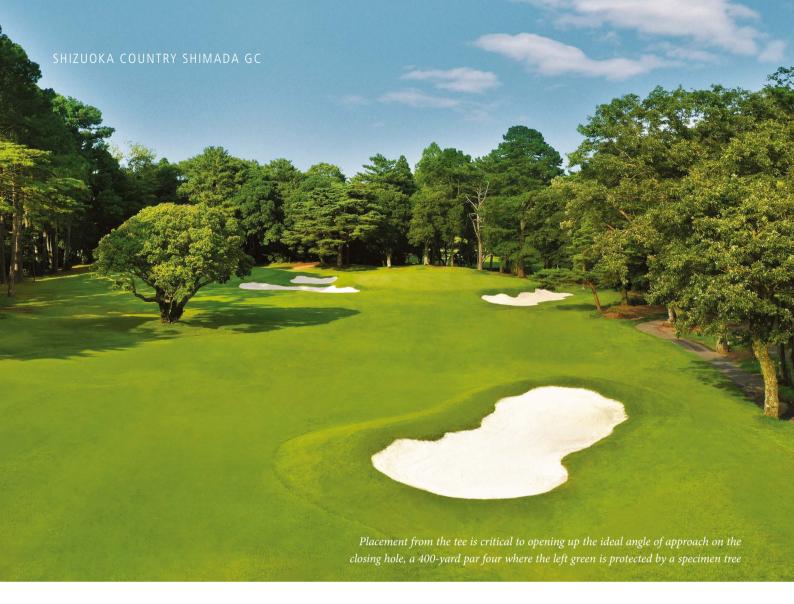
"I find it much more interesting to tempt them to go for it in two"

challenging approach shot to a tightly guarded green that has been the hallmark of the champion throughout the game's history. Citing the eighteenth hole on his colleague Ross McMurray's Twenty Ten course at Celtic Manor in Wales, Robin Hiseman says that testing this sort of shot remains an important goal for golf architects. "It's the eagle/double bogey gambit," he says. "The 'hero' shot is very enticing and par fives offer this more than other holes.

be guaranteed," he explains. "I find it much more interesting to tempt them to go for it in two but also to provide the option to lay back. Additionally, a well-designed green with tucked hole locations to the perimeter will make the 'par three' element equally as exciting as going for it in two. If it's going to be a par-three approach, make them play to the appropriate distance and angle to attack the pin. Then build strategies around the lay-up." GCA







he twin green system is still commonplace in Japan, even though one of the primary factors for its initial development is now largely irrelevant.

The Japanese climate has distinct extremes, with temperatures regularly plunging below zero in the winter and well into the 30s, along with high humidity, in summer. As such, many early courses were built with two greens per hole, one with bentgrass for winter use and another with korai, a zoysia grass, for the summer.

Thanks to advances in golf turf science, however, strains of grass that can withstand Japan's temperature extremes have now been available for many years, and clubs across the country have converted to single greens.

But there are still good reasons for retaining twin greens (usually denoted simply as 'A' and 'B'), if the circumstances are right: by alternating between each, foot traffic is spread and conditions can be maintained at a higher standard; twin greens offer the golfer variety, and the potential for a distinctly different experience from one day to another. Tradition shouldn't be forgotten either – the sight of two greens at the end of a fairway is a distinctly Japanese golfing experience (although it is common in Korea too, and famously occurs on two holes at Pine Valley).

When golf course architects Rees Jones and Bryce Swanson first visited the Shizuoka Country Shimada course, they could see that the circumstances were ideal for preserving tradition, albeit with the same grass type on each green.

"It's a really good layout," says Swanson of Shimada, which was designed in the 1960s by Kinya Fujita, who thirty years earlier laid out the original two courses at Olympic venue Kasumigaseki in Tokyo. "Most holes are lined with majestic pine trees, and the course runs from some flat ground to some interesting topography that has a really wonderful feel to it."

Crucially, the expansive nature of the property meant that no compromises had been required to accommodate two greens on each hole. Ample space means a different challenge is presented by each green. "They can be a club or even two clubs different," says Swanson. That is evident throughout the scorecard, including



on the par three third and seventeenth holes, where there is 30 yards between the A and B greens.

Swanson highlights other factors that add variety between the two targets on those holes. On the third, for example, the teeing grounds are placed so that the routes to the A and B greens cross, the two greens, in this case the longer B option playing to lower ground.

On par fours and fives, the green locations can give the holes a very different character too. "Some of the angles mean that playing to one of the greens almost turns a straight hole into a dogleg," says Swanson.

"Many green complexes in Japan are guarded by either bunkers or rough. Chipping areas give players more options for the recovery shot"

forming an X shape, and providing a substantially different direction of play. While the seventeenth is one of several holes where there is a significant change in grade between With so many options presented by the existing layout, Jones and Swanson felt no need to make routing changes, or significantly alter the placement of the greens, in order to return the course to Fujita's original design intent.

They did, however, see the opportunity to make substantial improvements by evaluating the challenge presented by the bunkering, which has been impacted by 60 years of play and maintenance, as well as advances in club technology.

"They weren't in the right spots for today's players, and they didn't create a strategy," says Jones. "They were just penal and didn't give you the shot options."

The designers carefully evaluated the location of each bunker and created a new scheme where every hazard had a strategic value. "It's harder to redesign bunkering for the twin green system," says Jones. "If you introduce a bunker that is designed to drive the strategy for play to one green, you have to be

careful that it doesn't overly penalise play to the other green."

On many holes, bunkers located between the two greens have been removed in favour of natural swales of closely mown grass. "Many green complexes in Japan are guarded by either bunkers or rough," says Swanson. "Chipping areas give players more options for the recovery shot."

Jones also emphasises the importance they placed on ground game options into greens: "By opening up a lot of the entrances, we've reintroduced the ground game," he says. But the golfer may in turn have to decide whether they want to attack the pin. "They may have an opportunity, for example, to

carry a bunker if they want to go for the right side of the green, or hit a ground game shot to the left side."

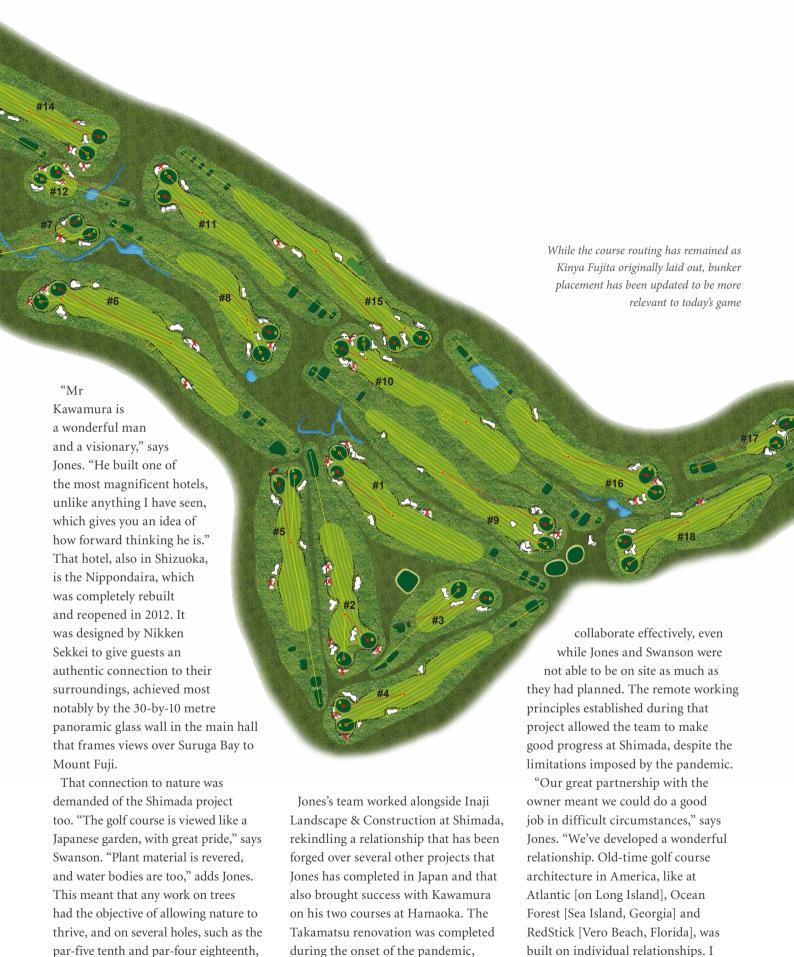
In addition to revisiting the strategy of the bunkers, there has been a change in visuals. "We wanted to bring the character of a windswept bunker," said Jones, of the lightly ragged-edge hazards they have introduced. It is a marked contrast to the bland ovals that Jones says are common on Japanese courses, particularly those that were built around the same time as the Shimada layout.

Shizuoka's owner, Norihisa Kawamura – also the owner and president of Nissei Corporation, one of Japan's largest drinks bottling operations – would have known what to expect from Jones and Swanson, because the project at Shimada is their third collaboration.

The previous two were at his Shizuoka Country Hamaoka Golf Course, a little further south of the city, where Jones and Swanson rebuilt both the Ogasa (where they replaced twin greens with singles) and Takamatsu (where twin greens were retained) courses, in 2018 and 2020 respectively. The results, particularly in terms of member satisfaction, delivered on these projects gave Kawamura the confidence to proceed with the same team for his flagship golf property at Shimada.



The project team of, from left, Shizuoka owner Norihisa Kawamura, Rees Jones, Inaji Landscape & Construction managing director Hiromi Yanagisawa, and Bryce Swanson



and saw the design, construction and

ownership teams establishing ways to

specimen trees have an important

bearing on how the hole is played.

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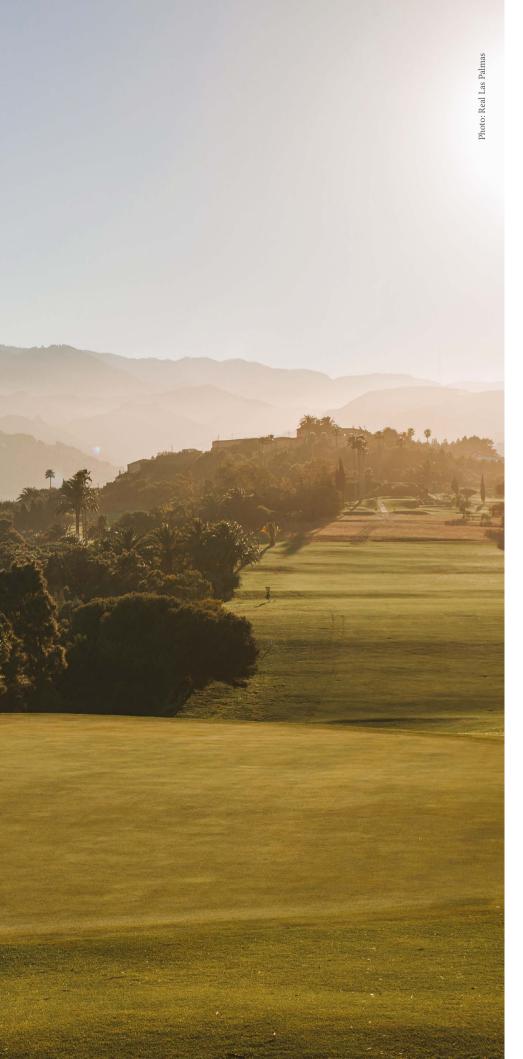
think it is much the same here with

Mr Kawamura." GCA

A rebirth begins

REAL LAS PALMAS, SPAIN

Real Las Palmas in Gran Canaria, the oldest golf club in Spain, has ambitious plans to improve both its course and clubhouse experience



henever a club or course is especially venerable, there is an extra responsibility on the shoulders of those who steward it. Golfers are by nature relatively conservative: witness the difficulty in getting alternative forms of the game, whether they be courses of non-standard length, new formats for competition or whatever, accepted by the mass of players.

As the oldest club in Spain, therefore, Real (Royal) Las Palmas on the island of Gran Canaria, is a precious artefact. Established in 1891 by British military and commercial gentlemen resident in the Canaries – the island was an important staging post for British maritime interests – the original course was located downtown in Las Palmas, next to the iconic Santa Catalina Hotel, which remains to this day the grandest address in the city – and whose founders were also instrumental in the foundation of the golf club.

Exclusively a British club for the first forty years or so of its history, the club transitioned to being authentically Spanish over a twenty-year period. But the growth of Las Palmas made the course untenable after World War Two (as club member Alejandro Nagy of golfindustria.es wrote in the October 2016 issue of *GCA*) and so, in the 1950s, the club upped sticks and moved out of the city to a spectacular site in the mountains, right next to the caldera of the extinct volcano that created the island. British golf architect Philip Mackenzie Ross, the man who recreated Turnberry after the war, was hired to design the new course, and the club has gone on very happily ever since.



The caldera of an extinct volcano provides a backdrop for golf at Real Las Palmas

Although short, at little more than 5,500 metres (6,015 yards), the course is no pushover. Mackenzie Ross's greens are its principal defence, and they do the job stoutly. The site, at 37 hectares (91 acres) is tiny for an eighteen-hole course, and it is to the original architect's credit that he managed to fit eighteen interesting holes, with, in most places, more than adequate width (there are a few tight spots, but they are the exception to the rule) into such a small parcel. There is no prospect of extending the property; in places the course is hard against roads, and in others it comes right up to the volcanic caldera (the view from the clubhouse is quite remarkable; more of that later).

Elsewhere, though, the course is not without its problems. Water is hard to come by on the island; the main source of drinking water is desalination, while the golf course is irrigated with wastewater. This is all very well, but good management demands a fallback plan, and some sort of water storage is certainly desirable; but there are few good places to build such storage on a mountain plateau. The bunkers many of which are not original – are not in the best of condition. But in my opinion, the most pressing problem is the tree stock. The property, which was barely treed at all when the course was built in the 1950s, now has over 3,000 trees and, being a tight site, these mostly stand, sentry-like, in lines between the holes, far from the sort of clumped planting that looks natural. There are many different species, from the indigenous Canarian pines, through yellow mimosas and any number of palm trees. It is, frankly, something of a mess, and the course would benefit hugely from a strategic

plan to reduce the number of species and focus attention on those that actually belong there, principally the Canarian pines.

With these priorities in mind, the club has engaged British architect David Williams (who has been working at Pedreña on the Spanish mainland, a club to which Real Las Palmas is close, for some time) to produce a long-range master plan for improvements. The plan was initially produced in 2018, and now the club is just about ready to start executing it – Williams submitted a final revision to the club in early March.

"The course has changed massively since it was built," says Williams. "The greens were all rebuilt in the 1980s, every hole is now played through a corridor of trees, and there are a lot of non-original features. I'm not a fan of bunkers behind greens, and there





weren't any in the original design. Now there are half a dozen."

Williams agrees that the proliferation of trees is the course's biggest problem. "The property is small and tight, and it really can't hold as many trees as are there at the moment," he says. "On several holes, there are trees right in the middle of the fairways – which are not wide enough to accommodate them – and at a distance from the tee that really affects average golfers far more than the better ones. On the fourteenth hole there are some lovely native trees that you really cannot see, because they are surrounded by planted ones!"

The architect has plans for a reservoir between the first fairway and the rather unusual practice facility, which really cannot justify the title of 'range' – it is a practice tee hitting into a large depression, nowhere near

big enough for golfers to hit long clubs. The twelfth hole currently has two greens - the newer one, further back and right, was built to give extra distance, but is essentially blind from the fairway. Williams prefers the old one. "I think it's a better hole to the old green because it is visible and makes for an interesting driveable par four," he says. "Because the new one is near the clubhouse of the equestrian club, where they have some facilities, I suggested making the new green into a short game practice area. However, there is reluctance to surrender length, because the course is short enough as it is."

Although the course is short, there is one group of players for whom it is too long. "The ladies play from far too far back. At the time it was built there weren't that many ladies and invariably the tee was just built

on the front of the men's tees. We're going to do something about that," he says. "Also, a lot of the bunkers are hazards to lesser golfers and not in play for better ones, we need to sort that out, as well as introducing new drive bunkers on all three par fives to make better players think a little. But in general, it's tweaking, rather than reinvention." He also plans to introduce native vegetation into carry areas to reduce the irrigation requirement.

If Williams' plans are properly executed, Real Las Palmas will be significantly improved. And if plans to build an extended clubhouse terrace with billion-dollar views over the volcanic caldera come to fruition, the club will truly be making a splash. After over a hundred and thirty years, the club seems set fair for the same again and more! GCA



WICKER POINT, ALABAMA

Coore & Crenshaw is working with local developer Russell Lands to bring top class golf to Alabama





hen you think of top quality golf, Alabama isn't a location that springs immediately to the forefront of the mind. About the only times the state has touched on the consciousness of the international golfing world have been when the Nicklaus-designed Shoal Creek, outside the city of Birmingham, has hosted big events - two PGA championships, a US Women's Open and a US Amateur; oh, and also when club founder Hall Thompson became involved in a very public debate about the club's lack of African-American members at the time.

Next year, though, a course will open that promises to take Alabama golf to a whole new level. An hour and a half southeast of Birmingham is Lake Martin, a reservoir created in the 1920s by the damming of the Tallapoosa River. At the time of its creation, Lake Martin was the largest man-made body of water in the world, and it remains among the largest man-made lakes in the United States, with over 700 miles of shoreline.

Most of that shoreline is owned by two organisations, Alabama Power and Russell Lands. A long-established family-owned company, based in Alabama since its foundation, Russell Lands traces its history back to the 1840s, when the family started acquiring land in that part of the state. It continued expanding its holdings for eighty years, until the lake was created in the 1920s. The family farming business officially changed its name to Russell Lands in 1960, and, later in that decade, began the development of the Willow Point Golf & Country Club on the lakeshore. Now, the company

has developed eight neighbourhoods on the shores of Lake Martin, and wanted to do another golf course development, just a couple of miles away from Willow Point.

Russell hired Coore & Crenshaw to design the course, to be known as Wicker Point. Bill Coore says: "When I first visited the site, Russell Lands president Tom Lambeth said to me, 'Bill, we want to showcase the lake and this part of Alabama. If you do the course, we definitely want you to use the lake. We have plenty of shoreline here!' He wasn't kidding either - the lake has so many inlets that it creates hundreds and hundreds of miles of shoreline. I have heard that there is as much water frontage on Lake Martin as there is in the whole of California. But it's all ins and out, and it is very, very beautiful. The



shoreline is very broken, with coves and inlets and peninsulas."

Lambeth was as good as his word. Coore & Crenshaw's routing gets its first glimpse of the lake on the par-three eighth hole, but from there, it is by the water almost all the way – nine of the eighteen holes have water frontage.

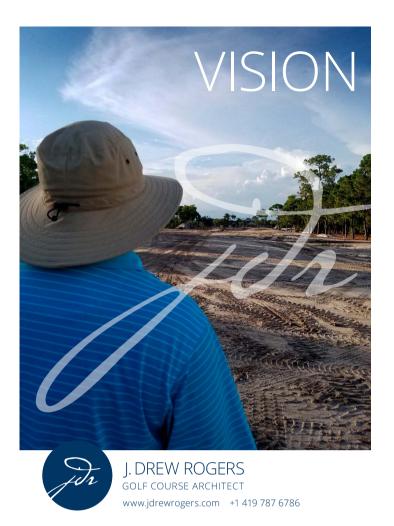
Coore says that, despite the beautiful surroundings, the routing was not an easy creation. "The difficulty was that, because the lake is man-made, all the peninsulas that run down to the water used to be ridgelines," he explains. "They're quite rounded, and not naturally that conducive to golf. But Russell gave us free rein to find the right land – of which they have a lot! Some sites that we looked at were beautiful, but their landforms were too severe for interesting golf. The Russell guys said, 'You look

at the properties we've got within the general area'. I said, 'What's the flattest ground you have?' Which isn't the sort of question I normally ask a prospective client! But the family live there, so they're very sensitive about how they treat the area."

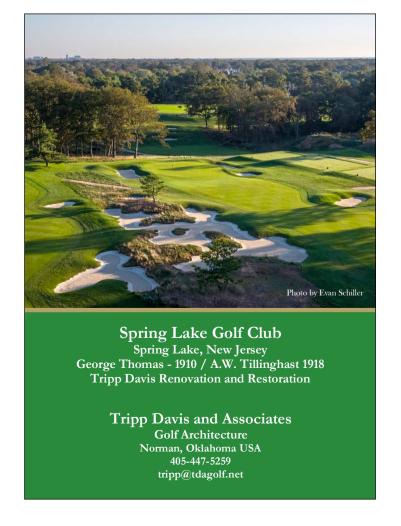
Unlike most of Coore & Crenshaw's more famous courses, Wicker Point is not built on sand, but on the red clay so common in America's south. "The soil is heavy, but there is plenty of it," says Coore. "Birmingham, which is the nearest city, is quite hilly – it's the lowest reaches of the Appalachian mountains. But fortunately we haven't encountered any rock on the site, so no need for blasting." The course is also requiring more earthworks than the minimalist firm is associated with. "I'd be lying if I said the holes were just there – we have had to do some

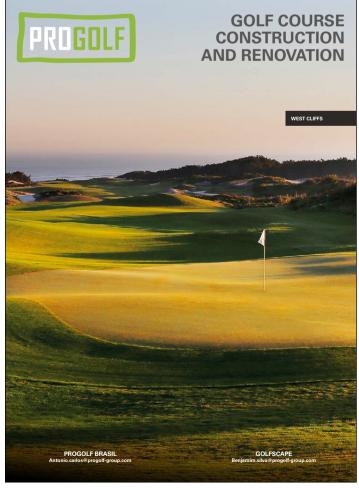
substantial recontouring of the ridges for the fairways," says Coore. "But hopefully we're doing it in such a way as it'll still look pretty natural. There are some places with maybe ten-foot cuts and slightly bigger fills, but we're trying to leave lots of tilt and sweeping movement. Most of the earthworks are basically taking the natural landforms that are there and keeping them intact, but softening them to accommodate golf."

The requirement for some fairly significant earthworks meant that a main contractor was required, and Landscapes Unlimited were hired to build the course. "Landscapes also built the first course for Russell, so they are familiar with the client and the area," says Coore. But most of Coore & Crenshaw's regular construction guys have been on site











A large bunker complex in construction on the approach to the sixteenth. Behind, the par-three seventeenth plays over water

during the build. "Jimbo Wright is there, along with Jeff Bradley who is building the bunkers, and at different times quite a few of our crew will have rotated through," says Coore.

The course will feature Zeon Zoysia grass for the approaches, tees, fairways and rough and TifEagle species, Russell Lands is working in conjunction with Claude Jenkins, the most recent recipient of the National Wildlife Federation's National Conservation Leadership Award. Course superintendent James Morgan worked with Coore & Crenshaw on the Trinity Forest course in Dallas,

"Most of the earthworks are basically taking the natural landforms that are there and keeping them intact"

bermuda on the greens accentuated by bunkers with sand native to the area. The Alabamian appearance of the course will be surrounded by longleaf pine plantations. In addition to the native forests, out-of-play areas will be plentiful with native grasses and wildflowers. To preserve and encourage the growth of these where he was first assistant during the build. "James is a super-talented young guy, and he had dealt with Zeon Zoysia, which is what we are using at Wicker Point, at Trinity Forest, so he was a great choice," says Coore. "They are going to sod the fairways. With some of these rolling hills and slopes down to the lake, there is potential damage that could occur and damage the quality of water in the lake as well as eroding the golf course. Sodding will reduce the risk of that happening."

Wicker Point is the anchor for a new 1,500-acre residential development called The Heritage, which, in total, includes twelve miles of shoreline. Russell expects to begin residential sales later in 2022.

Meanwhile, Coore says that the aim is to finish golf course construction this year. "The goal is to finish by the end of October," he says. "It might lap into November a bit, but that is still really nice weather in Alabama. Last fall, we completed four holes – including the eighth and seventeenth, both par threes – that all come very close to the lake. Those were sodded last year, and the rest will be done in 2022." Wicker Point is expected to open in the spring of 2023. **GCA**

Golf for all

Texas municipal will redesign its short course and practice facilities to cater for the entire town

ith an increasing amount of people opting to play shorter rounds of golf (the National Golf Federation found that the number of shorter rounds as a percentage of total rounds played in 2020 had risen by over 15 percent), it is no surprise that golf facilities are paying a bit more attention to their short layouts.

For some, like Lozano Golf Center in Corpus Christi, Texas, their short layout is in fact their only layout. Earlier this year, the city hired Art Schaupeter, following his work on the Tower Tee facility in St Louis, to redesign Lozano's nine holes and practice facilities.

"This is an opportunity to upgrade the only public-access practice range in town as well as the only short course," said Schaupeter, who is expected to begin work in November 2022. "There is a lot of opportunity for increased use of this executive course since it is the only alternative to a full 18-hole round."

Schaupeter's plans are considerate of both low-handicappers and high-handicappers. He will design 'micro-slopes' throughout the course, especially around greens, to create strategic challenge for the stronger players, while the three par-four holes

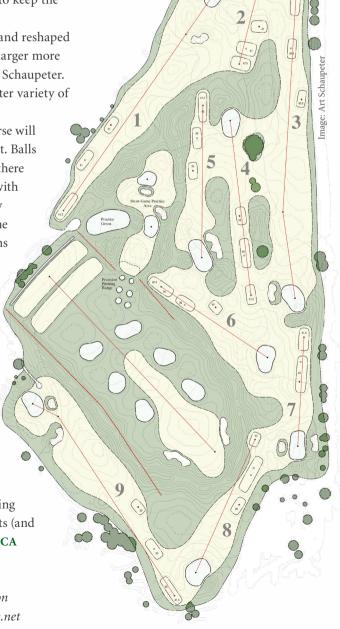
will all be relatively short to keep the course playable.

"Greens will be lowered and reshaped so that they are generally larger more undulating surfaces," said Schaupeter. "This will allow for a greater variety of hole locations.

"The majority of the course will be mowed at fairway height. Balls will be easy to locate, and there will be minimal hazards, with only six small bunkers, few trees, no water and only one lateral hazard area that runs alongside two holes."

Schaupeter's work at the practice facility includes widening the range to accommodate more hitters. It will also be reshaped so target greens can be created in addition to a new shortgame practice area. This two-acre area will include a large practice green, chipping area with two greens, two bunkers, pitching range, and it will have lights (and so will the short course). GCA

Read more about the Lozano Golf Center plans on www.golfcoursearchitecture.net





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