GOLF COURSE A R C H I T E C T U R E

The global journal of golf design and development





CLAYTON, DEVRIES & PONT Golf Course Architects - Colt Experts

We have assisted 35 custodians of courses designed wholly or in part by HS Colt. Of those, at present, we are advising:

ENGLAND

The Addington Golf Club Calcot Park Golf Club Camberley Heath Golf Club Cuddington Golf Club East Devon Golf Club Hallamshire Golf Club Ringway Golf Club Sunningdale Heath Golf Club

GERMANY

Golfclub Bergisch Land Frankfurter Golf Club Hamburger Golfclub Falkenstein

SPAIN Real Club de la Puerta de Hierro

Website: Twitter: Instagram & Facebook: E-mail: THE NETHERLANDS

Golfclub Amsterdam Old Course Eindhovensche Golf Koninklijke Haagsche Golf & Country Club North Brabant Golf Club Toxandria Utrechtse Golfclub 'De Pan'

UNITED STATES Bloomfield Hills Country Club Indian Hill Club

IRELAND The Royal Dublin Golf Club

FRANCE

Golf du Touquet (La Mer)

cdpgolf.com @cdpgolf1 claytondevriespont info@cdpgolf.com

Terms and References gladly furnished on request.

WELCOME

Kohler's legacy



ADAM LAWRENCE

erb Kohler, who died recently, made a massive contribution to golf through the courses he built and owned. Kohler was the first key mover in the development of his home state of Wisconsin into one of America's best golf destinations, and, along with Pete Dye, created four highly respected golf courses.

It is interesting to ponder what might have been, especially in the case of the flagship course, Whistling Straits. Kohler famously told Dye that he wanted the derelict airfield along Lake Michigan to look as though it was in Ireland. No-one can question the success of the course, which has played host to three majors and a Ryder Cup. But here's the rub: it doesn't look Irish.

Irish links courses are principally fescue. Whistling Straits's fairways were originally grassed with fescue, but the area's hot summers and the consequent need to irrigate the course mean that they are now mostly a mix of bents, rye and poa. They don't bounce and roll like an Irish links. And, most obviously, Dye's design – with allegedly over a thousand bunkers – does not look like an Irish links.

Dye was an architectural genius. But the essence of his genius was his grasp of strategy. It has long been noted in golf design circles that the great architects who got their start working with Dye – most obviously Bill Coore and Tom Doak – did not take their sense of aesthetics from their mentor. And the simple fact is that golf design and construction teams are a lot better at building courses that look like links now that they were 25 years ago. Only a few years after Whistling Straits opened, the Kyle Phillips-designed Kingsbarns raised the bar for what totally constructed golf courses could look like. Kingsbarns developer Mark Parsinen's later Castle Stuart course, done with architect Gil Hanse, is another obvious example, as is the more recent Dumbarnie course in Fife. Rolf-Stephan Hansen's Budersand in Germany was similarly a 'former links' – like Whistling Straits an ex-airbase, but in this case surrounded by natural dunes.

We should perhaps note that all four of these courses were built on sandy ground, which Whistling Straits was not. Perhaps in the end, that is the key lesson. No matter how much sand you truck to the site, you can't defeat nature.

Adan

PITCH or POSTCARD?





Driving Range Solutions

Great driving range facilities lie in the hands that build them.

The industry has accepted the need for innovation to provide solutions for the many challenges it faces. Modern driving ranges require beautiful designs and 'out of the box' outfields to practice every shot imaginable, with a performance that 'wows' every golfer.

Our Company leads the charge in engineered synthetic turf systems creating the perfect balance between exceptional performance and stunning visuals.

Historically, the connection for people between synthetic solutions and beautiful driving ranges has been difficult to make...until now. We prove that our knowledge and skill coupled by our artistic passion makes it today's reality.

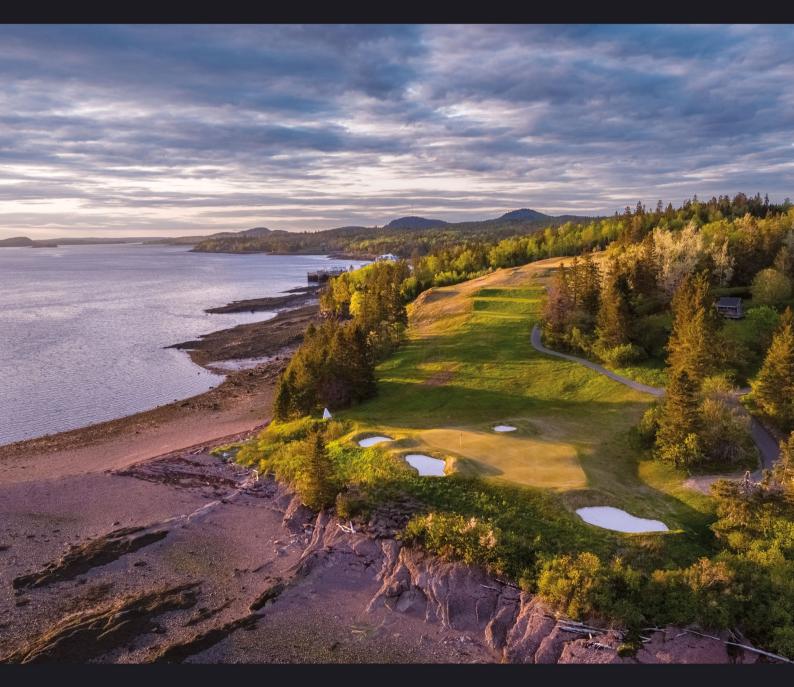
KEVIN HOLINATY

President, Southwest Greens Construction.



Mastering the Art of Synthetic Turf Installations +34 616 582 787 • info@southwestgreens.eu. • southwestgreens.eu SWG Construction, construction arm for SWG International, a Division of Shaw, a Berkshire Hathaway Company





MASTERS OF DESIGN-BUILD

CAMBRIDGE, ONTARIO | MESA, ARIZONA | DELTA, BRITISH COLUMBIA

www.WAC.golf | INFO@wac.golf

FOLF COURSE ARCHITECTURE







Golf Course Architecture is published with the support and guidance of the American Society of Golf Course Architects, the European Institute of Golf Course Architects, and GEO Foundation.

ISSN 1745-3585 (print), ISSN 2754-9828 (online). Printed in Great Britain by Micropress Printers.

© 2022 Tudor Rose Holdings Ltd. All rights reserved. No part of this publication may be stored or transmitted or reproduced in any form or by any means, including whether by photocopying, scanning, downloading onto computer or otherwise without the prior written permission from Tudor Rose Holdings Ltd.

Views expressed in Golf Course Architecture are not necessarily those of the publishers. Acceptance of advertisements does not imply official endorsement of the products or services concerned. While every care has been taken to ensure accuracy of content, no responsibility can be taken for any errors and/or omissions. Readers should take appropriate professional advice before acting on any issue raised herein.

The publisher reserves the right to accept or reject advertising material and editorial contributions. The publisher assumes no liability for the return of unsolicited art, photography or manuscripts.

It is assumed that any images taken from sources which are widely distributed, such as on the Web, are in the public domain. It is recognised though that since such images tend to be passed freely between sources it is not always possible to track the original source. If copyrighted material has ended up being treated as public domain due to the original source not being identified please contact the publisher, Tudor Rose.





Adam Lawrence **Contributing Editor**

Richard Humphreys News Editor

Rob Gavarkovs, Robin Hiseman, John Holmes

Bruce Graham, Libby Sidebotham, Dhanika Vansia Design

Chris Jackson Website Development

AirSwing Media, Mark Alexander, Artisan Golf Design, Carnoustie Golf Links, Brandon Carter, Darnall Photography, Tripp Davis, Erbil Hills, Google Earth, Vaughn Halyard, Harradine Golf, Harris Kalinka, JCB Golf & Country Club, Andy Johnson/The Fried Egg, Jason Livy, Lukas Michel/CDP, Kevin Murray, OCM, Pelz Player Greens, Pelz Golf, Peninsula Papagayo, Stirling & Martin, Schmidt-Curley Design, St Mellion Estate, Royal Wellington, (re)GOLF, Ricky Robinson, RTJ II, Talking Stick, Terras da Comporta, Troon International, Doug White, Fernando Herranz Sánche, Photography

Toby Ingleton

Benedict Pask Publication & Sales Manager

Ritwik Bhattacharjee Circulation

Stuart Fairbrother Production Manager

www.golfcoursearchitecture.net/subscribe Subscribe



Tudor House, 6 Friar Lane Leicester LE1 5RA Tel: +44 116 222 9900 www.tudor-rose.co.uk Published by Tudor Rose

IF ONLY EVERY DECISION WAS THIS SIMPLE

The difference between getting the job done and getting it done right usually comes down to something simple: Like adding a Tee-2-Green interseeding program to your aerification routine. It's fast, cost-effective—and it can be worked in each time you aerate without any downtime.

Increasing playability and sustainability with less stress has never been simpler.

Learn more at Tee-2-Green.com/interseeding



BENTGRASS. IT'S ALL WE DO. www.tee-2-green.com | bentinfo@tee-2-green.com

SPONSORS



Arnold Palmer Design Company

With a storied history of projects in over 37 states and 25 countries, Arnold Palmer Design Company senior architects Thad Layton and Brandon Johnson bring an unparalleled depth of knowledge, expertise and Mr Palmer's influence to every project. www.arnoldpalmerdesign.com

Atlas Turf International

Atlas Turf International provides turf on a global scale as a worldwide distributor of the highest quality turfgrasses for golf courses and sports fields.www. atlasturf.com

Clayton, DeVries & Pont

CDP is a partnership of three of the world's foremost regional architecture practices: Clayton Golf of Australia, DeVries Designs of Michigan, and Infinite Variety Golf Design of the Netherlands. www.cdpgolf.com

European Golf Design

European Golf Design was established in 1992 and is the golf course design company of the European Tour. www.egd.com

Golf Course Architecture By Caspar

By Caspar is the design firm of golf architect Caspar Bay Grauballe, whose aim is to help improve the beautiful game of golf by creating and refining exciting and spectacular golf courses. By Caspar aims to develop golf courses with a clear and unique signature – a signature that enables clubs to attract more players. www.bycasper.com

Golfplan

David Dale and Kevin Ramsey have designed over 200 courses across the world, providing clients with market-oriented design solutions through an approach that is innovative, user-friendly, and environmentally and financially sustainable. www.golfplan.com

Hanse Golf Course Design

Formed in 1993 by founder Gil Hanse, who was joined in 1995 by partner Jim Wagner, Hanse Golf Course Design has patiently nurtured its reputation and its craft to arrive at a position of designing and restoring some of the finest golf courses in the world. www.hansegolfdesign.com

Harradine Golf

Donald Harradine founded the family's golfing practice in 1929. Harradine Golf has designed, remodelled, constructed or supervised construction of more than 200 courses in Europe, Africa, Asia and the Middle East. Many have won awards and some host PGA tournaments. www.harradine-golf.com

_

Kyle Phillips Golf Course Design

The Kyle Phillips design philosophy stems from the belief that golf courses should have their own character and personality derived from the site's existing natural features, as well as its location and history. www.kylephillips.com

Pure Seed

Pure Seed is the global leader in turfgrass genetics. With award-winning plant breeding, Pure Seed is dedicated to developing the world's best turf varieties. www.pureseed.com

Rain Bird

Since 1933, developing and manufacturing innovative irrigation products has been Rain Bird's sole focus. Rain Bird Service Team's sole focus is irrigation and water conservation. We call it The Intelligent Use of Water. www.rainbird.eu

Rees Jones, Inc

Rees Jones, Inc is internationally recognised for its customised design and construction supervision of new courses for private clubs, resorts, real estate communities and public facilities, as well as renovating, restoring and updating existing courses for everyday play and major championships. www.reesjonesinc.com

Schmidt-Curley Design

Founded in 1997 with offices in Scottsdale, Arizona and Hanoi, Vietnam; Schmidt-Curley is a fullservice, international golf course architecture and master planning firm with more than 150 layouts in 25 countries.

www.schmidt-curley.com

Southwest Greens Construction

The official construction arm for Southwest Greens International, responsible for all major golf course construction projects. The Southwest Greens product is the preferred putting surface for more than 40 professional golfers on the PGA and LPGA Tours. www.southwestgreens.eu

Sports Turf Solutions

Sustainable Turf Farms is a subsidiary company of Sports Turf Solutions and is the largest producer of certified turf grasses in South East Asia. www.sportsturfsolutions.com

Stirling & Martin

Blake Štirling and Marco Martin have successfully designed golf courses for 30 years. With a motto of 'SM-art Golf', the firm provides clients with a complete range of design services, construction supervision and budget control, ensuring high levels of satisfaction.

www.stirlingmartingolf.com

Tee-2-Green

For over 50 years, Tee-2-Green has led the field with game-changing bentgrass like Penncross, the A's and G's, and Pure bents. We set the standard for quality and purity with groundbreaking varieties bred to improve playability, resist disease and tolerate extreme conditions.

www.tee-2-green.com

Toro

The Toro Company provides innovative, efficient solutions to help homeowners and turf care professionals worldwide enrich the beauty, productivity and sustainability www.toro.com

Whitman, Axland & Cutten

Whitman, Axland & Cutten (WAC Golf) is an international design-build practice with more than 90 years of collective experience specialising in thoughtful, field-driven solutions.



www.stirlingmartingolf.com

llik

Enrique Larreta 9, 1º B. 28036 Madrid (Spain) T: +(34) 91 063 31 67 • M: +(34) 670 82 59 59 marcomartin@smgolf.es







ON THE COVER

Out of bounds on the fourteenth at Royal St Georges. Read more about the most penal of hazards on page 44

> Photographed by: Jason Livy

12

Our Tee Box sections opens with news of Schmidt-Curley's 36-hole golf project in Cambodia

42

Robin Hiseman of European Golf Design considers when, how and why a course might need tweaking just after opening

44

Adam Lawrence explores the role out of bounds has in the game and how it has been used as a legitimate strategic hazard

52

We hear from superstar golf architect Tom Doak about how he is trying to find a new way of working







56

Toby Ingleton reports on a new Stirling & Martin course that will open in Madrid next year, almost 25 years after the initial routing

62

John Holmes explains how an Abu Dhabi club employed interseeding to help address its — water supply issue

64

Rob Gavarkovs says that synthetic turf could provide a solution to some of golf's pressures

68

We finish this issue at Prestwick, where golfers will have the chance to play the club's 12-hole routing from 1860

Schmidt-Curley GOLF DESIGN

Critically Acclaimed Designs World-Wide

The Team Behind Mission Hills-China

Named One of Golf's Most Influential Architects - GOLFINC. (2018)

Members, American Society

Stone Valley Golf Resort Ha Nam, Vietnam

www.schmidt-curley.com

of Golf Course Architects

ACTIVE PROJECTS



Phnom Penh, Cambodia Animation by Harris•Kalinka



Wildcreek Golf Course Redevelopment New Home of the First Tee Northern Nevada



Stone Highland Bac Giang, Vietnam

MAIL BOX

Dear Editor

The driving range – forgotten land... or is it?

It comes as no surprise that the design of the golf course is 'king' when it comes to golf developments. Architects are paid to focus on the showpiece – the course. So where does the driving range come into play?

There are many magnificent driving ranges and practice areas around the world which will make one salivate! But truth be known, the driving range and practice area are the last piece of the puzzle. What becomes of this very expensive acreage? A range that could double as a polo field. An undersized tee line. A green that mirrors the Himalayas. Bunkers that get little use.

The tide is shifting with an emphasis being placed on world-class driving ranges, practice areas, and learning centres. This bodes well for the sustainability of the game.

Driving ranges are becoming a centrepiece of golf clubs and courses. Innovative range technologies are providing 'entertainment plus performance'. This increased use results in new-found revenues for the range, the pro shop, instruction, club fitting, and food and beverage.

Attention is being paid to the placement and size of target greens and bunkers. Even the cutting pattern delivers an experience that replicates what golfers find on the course. Features rarely seen previously include advanced tee lines, viewing monitors, seating, automatic ball feeders, fans, heaters and music.

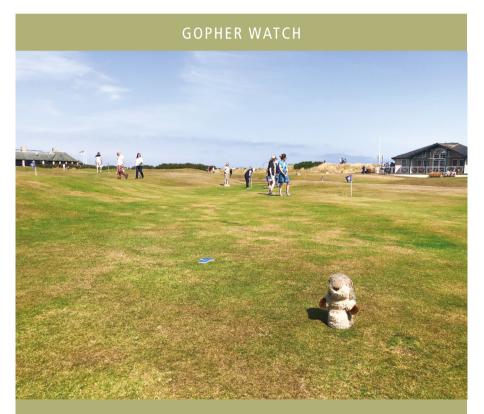
Expanded practice areas are becoming prerequisites. Learning

centres and academies are becoming commonplace. Then we've got extralarge putting courses, designated short-game areas, indoor and outdoor coaching studios, putting labs, and more... all these amenities necessary in today's modern golf environment.

What used to be a forgotten piece of the property is becoming a focus. Member attraction and retention, plus improved revenues from food and beverage, pro shop, and instruction are welcomed by-products. Designing an integrated complex that addresses the requirements of the modern club takes a different type of experience.

Ted Simons Scottsdale, Arizona

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



Sandy was in Ireland in the last issue, in front of the third green ('The Castle') at Tralee Golf Club. Congratulations to Jordan Anderson, from Nottinghamshire in England, who figured it out and whose entry was the first out of the golf cap.

This month, a bit of a change of scene for our rambling rodent. Sandy has fetched up on a very famous spot in a very famous location. Originally for lady golfers, this issue's venue is now enjoyed by golfers of all ages and genders. If you know where it is, and you fancy a *GCA* golf shirt, send your entry to *gopher@golfcoursearchitecture.net*.

TEE BOX

NEWS EDITOR: RICHARD HUMPHREYS

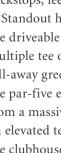
New 36-hole project begins in Cambodia

onstruction has started on two eighteen-hole golf courses, designed by Brian Curley of Schmidt-Curley Design, and scheduled to open in 2024 at a new club in Phnom Penh City, Cambodia.

The East course will be a formal, parkland layout, while the West will feature a more rugged and natural design centred around large expanses of sand, dotted with islands of native grasses and groves of date trees. Detailed shaping is in progress on the East, while the West is still in the rough grading process, and the work is being handled by an in-house team along with Martin Moore's Flagstick Golf Course Construction.

There will be limited residential development around the property's perimeter. "Our clients have decided to place the golf experience first and foremost to create the best courses in the country," said Curley. "There is also a strong desire to create two distinctly different layouts, so every effort has been made to optimise this wish.

"A massive amount of earthmoving was undertaken to create large bodies of water for irrigation use, and the excavated dirt was used to lift grades above flood levels. The design and grading efforts were also used to create vast, sweeping open views across the lakes, establishing a distinct character



mages: Harris Kalinka





Visualisations of the East course (left), a formal parkland layout, and the West (above), which will have a rugged design and feature large expanses of sand

that will be drastically different from other courses in the marketplace.

"There is plenty of cross slope on many fairways and a strong reliance on surface drainage, not catch basins. Much of the dirt was placed under the golf holes as opposed to creating mounds framing each hole, as so many courses do. There was a emphasis on creating landforms, not mounding, so the courses feel as if they were laid out upon a naturally golf-friendly terrain."

Curley says the excavation of lakes enabled them to lift the courses out of the floodplain. "While the lakes are a very dominant feature of the landscape, there was a strong effort in the design to incorporate the water features into play, but always with more than adequate width. We have made sure to not have water in play hole after hole. The concept was to create wide views over water but without a relentless attack of demanding shots with water in play."

The greens will feature significant contour, both within the putting surface as well as drop-off edges, backstops, feeder slopes and ridges.

"Standout holes on the East include the driveable par-four seventh with multiple tee options and a long, thin, fall-away green," said Curley. "And the par-five eighteenth, which plays from a massive landform creating an elevated tee shot looking back to the clubhouse.





Hybrid Zoysia Grasses





Hybrid Bermuda Grasses

#1 Selling Zoysia Grass

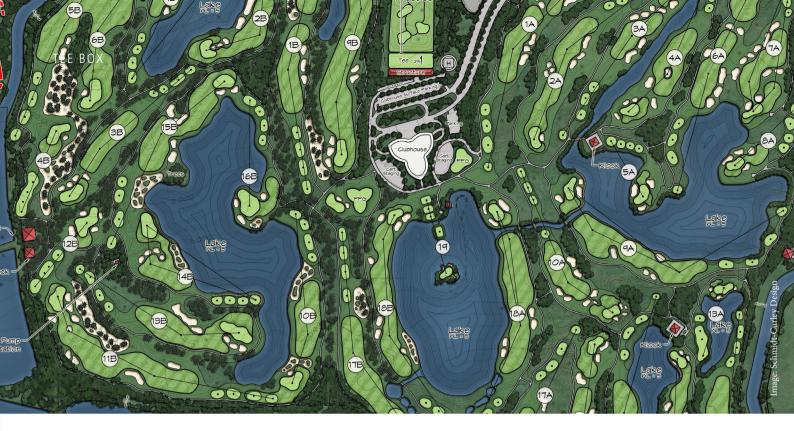
StoneHill Golf Club

Sustainable Turf Farms studied various Zoysia grasses over a period of 10 years before hand selecting the best varieties most suited to the Asian Climate.

These grasses are low input varieties that require up to 50% less water, mowing and fertilizer applications, and up to 90% less Insecticide, Fungicide and Herbicide applications. Each of our highly acclaimed Turf Farms, located in Thailand and Vietnam, are ITGAP (International Turf-Grass Assurance Program) Certified. This program ensures all farms are maintained to a certain level of quality, guaranteeing the buyer gets what he pays for. Each farm is inspected annually by an Authorized ITGAP Inspector and inspections are also done by the Breeder, Bladerunner Farms.

All grasses are produced from Foundation fields direct from the Breeders. Sustainable Turf Farms and Sports Turf Solutions also has a full team of leading Turf Managers and Agronomists to assist with every project from advice to grassing and grow-in contracting. ASIA'S LARGEST PRODUCER OF CERTIFIED TURF GRASSES





"The West will be highlighted with a strong variety of holes with massive sandy waste lows and the occasional landform that sometimes blinds tee shots to the wrong side of the wide fairway. As with the East course, the par-five eighteenth also plays from the same massive landform offering long views across the landscape. I also expect the long par-three sixteenth to be a pivotal hole, but I am focusing on variety within a common playbook to make the courses as memorable as possible."

An island-green nineteenth will lie between the two finishing holes. The green will be directly beneath the clubhouse and reachable by boat, making for an exciting all-or-nothing bonus hole for either course.

"I am very pleased with the design we have established and the innovative elements we have incorporated, and I believe the courses will soon become the most favoured in the region," said Curley.

Grassing of the East course has started, with Zeon Zoysia being used for short grass areas and bahia will be used for rough.



The clubhouse will overlook the closing holes of both courses and a bonus nineteenth hole, a par three featuring an island green, accessible by boat

THE INTERVIEW with Jim Wagner



"We want the player to think their way around the course"

Jim Wagner of Hanse Golf Design tells us about the renovation of Narin & Portnoo Links in Ireland

Narin & Portnoo Links, founded in 1905, is set on the Donegal coast in north-west Ireland. In 2017 the club contacted Hanse Golf Design and the firm has since completed a spectacular renovation. We spoke with design partner Jim Wagner to find out more.

What work has been completed at Narin & Portnoo?

The original course, when it was a par 69, had six great par threes, which

led to our interest in getting involved in the project. We ended up with five par threes as we restored two of them and added three new ones. They all run in different directions and, wind dependent, all range from a wedge to a three iron.

We combined holes, added new tees, renovated all the greens which allowed us to rework and create interesting surrounds. With the nature of the site, adding any 'quirk' wasn't really needed. The project was more about trying to do less to show off the uniqueness of the property along with the natural beauty of the site's location. We also tried to show off the site's personality and character by adding sandy blowouts around the property which tend to lead to quirky lines of play. From a timing standpoint, these changes allowed us to decrease the round by 30 to 45 minutes.





Can you tell us about some of the specific changes?

We moved the second fairway left away from the flat, wetter ground to incorporate the light, choppy and interesting linksland. The relocation of the green on seven makes it driveable but only if you can successfully navigate the humps and hollows to take the ball onto the green. Pushing the eighth green back to the property's sharp drop-off, while raising it to overlook the rocks and beach, has had a dramatic impact.

The new par-five tenth hugs the coastline and has both a short and long way to a unique green, depending on which tee players are hitting from. The eleventh was designed as a typical linksy par three with a small green wedged between two sand dunes. The hole can play from a wedge to a three iron, but more often than not with the right wind you have a great chance to make a hole-in-one. There have been a few!

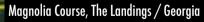
The par-three fifteenth is an amazing hole as it sits on one of the highest – and playable – sand dunes on the property with fantastic views of the sandy beaches and rocky coastline. The green is set behind two large dunes and is somewhat blind. We were able to create sandy blowouts into the foreground dunes to help with the visuals while tying together the property's natural feel. The green site is probably the most dramatic on the property and that is saying something as the course has several greens set on the edge of the amazing site.

What playing experience can golfers expect at Narin & Portnoo?

We want the player to think their way around the course and try and execute the challenging line of play as the course and mother nature allow. We have interesting green surrounds with subtle runoffs that never existed before, challenging lines of play that take on natural features (existing and created), and green contours that flow from the fairways through the approaches and onto the greens. The contours promote the ground game and allow for creative shotmaking skills that the Irish weather demands.

Who else was involved in the project?

Narin's management were instrumental in keeping things moving and we were fortunate to have worked with two of the best contractors in Europe. SOL Golf completed phase one and Atlantic Golf Construction did the second phase. Our team was headed by Neil Cameron from our Caveman Construction group. Neil set the table and enhanced the shaping that was done by me and Gil, along with helping to rejuvenate some incredible architecture. Designing for sweet afternoons down South — and everywhere else





arnoldpalmerdesign.com +1(407) 876-1068



Heritage in Mauritius plans new course for 2023

Heritage Golf Club in Mauritius is planning for a new course, La Réserve Golf Links designed by golf course architect Peter Matkovich with Open champion Louis Oosthuizen, to open in December 2023.

Featuring panoramic ocean views from every hole, La Réserve will join the resort's other eighteen-hole layout, Le Château.

The new course will feature elevated tees and greens to give plenty of vantage points to look over the country's tropical bays and southern shores.

"It's a challenging course and not for the faint-hearted," said Oosthuizen. "We've worked with the land to create a strategic, undulating course that plays in the traditional links style, with running fairways, pot bunkers and long grasses. The location is breathtakingly beautiful with incredible views of the Indian Ocean."

Matkovich said: "I have always had the desire to create a true links golf course, having played many famous venues in the United Kingdom and Ireland. We do not have the natural dunes of a traditional links at La Réserve, but we certainly have the natural shaping, a links feel, and it will require the strategies of playing a links course to score well.

"We have also created six sets of tees on each hole, with the course extending over 7,300 yards from the back tee. There are no courses in Mauritius like La Réserve Golf Links and it will undoubtedly have huge appeal to international golf travellers."

The environment has been carefully considered for this project with La Réserve located alongside a Unesco Biosphere Reserve. Former sugar cane fields have been sensitively cultivated with native island grasses, creating new, species-rich grasslands, encouraging ecological diversity and valuable carbon sequestration. All work is also being monitored, with a view towards GEO Certified Development status.

La Réserve will be reserved for members and Heritage residents only and the the club plans to host a DP World Tour tournament in 2023.

Bloomfield Hills restoration leads to membership surge

Bloomfield Hills Country Club in Michigan has a multi-year waiting list for memberships following the restoration of its golf course by Clayton, DeVries & Pont.

Originally laid out by Tom Bendelow in 1909, Bloomfield Hills was redesigned four years later by Harry Colt to make use of an extra 50 acres of land. In 2019, armed with newly discovered historic materials, Mike DeVries and Frank Pont were hired to oversee a restoration of the course.

"To the best of our knowledge, Bloomfield Hills is virtually unique in that it is an American Colt course that wasn't heavily influenced by Alison," said Pont. "Across town, Colt created the original Country Club of Detroit, but Alison subsequently redesigned the course. As far as we can tell, Alison never worked at Bloomfield Hills."

Pont and DeVries had access to the club's minutes from 1909, an irrigation map from the 1920s, aerial photography from 1930 onwards, and a wealth of information from the club regarding work completed on the course through the years.

"We gathered and studied all relevant information to understand the changes that had been completed," said Pont.





"Often, changes happen for particular reasons, and we try to piece together the valid ones that may have affected the course positively and negatively. We then compared that with what is 'on the ground' to determine the direction forward."

LaBar Golf Renovations began work in August 2020, with DeVries on site almost every day while Pont assisted remotely given the travel restrictions of 2020. "The club essentially decided to do everything in one go," said DeVries. "Perhaps the biggest change came at the first and eighteenth holes – both were par fives with trees between the holes. The trees separating the holes were at the end of their life or already dead, and they were non-native species. Our concept was to remove the trees and make a joint fairway, which Colt did at



a number of places. It also gave us room to expand the range and create an open vista from the clubhouse looking out to the golf course.

"The joint fairway now has bunkers and, in the distance, some old mature oak groves. The work on these holes was really a game changer from a visual standpoint."

The project also included rebuilding three greens, two of which (the par-three ninth and seventeenth) were severe and problematic from a playability standpoint.

"The third and fourth had also been changed," said DeVries. "Originally three was a long par four and the fourth was a long par three of around 250 yards. We think sometime between 1925 and 1945 the fourth had been changed. The fifth is a par three as well so I think the club was opposed to having two par threes in a row. They were very difficult holes. So, they basically made a medium par four of the third hole and a short par four out of the fourth, and neither were great.

"We decided to restore the original balance to the routing by shifting them and making a long par-three third and a long par-four fourth, building a new green for the third and expanding the fourth green."

Bunkers were a key part of the project, with some removed and others restored to a Colt style. "We followed Colt's concept of doing bunkers asymmetrically with an odd number of sand hazards around greens rather than two flanking bunkers," said DeVries. Better Billy Bunker liners were installed in all.

The project also included re-establishing green perimeters to match the 'push-up' style seen elsewhere on the course. XGD had previously been installed, and the greens were turfed with Pure Distinction bentgrass sod that was grown on site. Some greens have been expanded to restore original pin locations while surrounds were expanded to bring back a wider variety of recovery shot options. These recovery areas have 007 bentgrass for playability and maintenance. Fairways have also been widened too. Tree management has included the planting of native species to screen the perimeter of the golf course from nearby development and roads.

Thielen Turf Irrigation has installed a new Toro irrigation



PGA REACH is the 501(c)(3) charitable foundation of the PGA of America

IMPACTING LIVES THROUGH GOLF





PGA JR. LEAGUE is a game changing opportunity to bring family and friends together around fun team golf experiences.



PGA HOPE introduces golf to veterans with disabilities in order to enhance their physical, mental, social, and emotional well-being.







PGA WORKS leverages fellowships, scholarships, career exploration events, and the PGA WORKS Collegiate Championship to inspire and engage talent from diverse backgrounds to pursue key employment positions across the golf industry and beyond.

For more information or to donate, visit **PGAREACH.org** © 2021 PGA OF AMERICA. ALL RIGHTS RESERVED. PGA REACH IS A TRADEMARK OWNED BY THE PGA OF AMERICA.



system, which has been designed by Mike Kuhn Associates.

"So, essentially we did the entire golf course," said DeVries.

Some more complex tasks are being considered for the future, including on the ninth tee, which is being compromised by a pond. "It was an old creek that was made a pond sometime in the 1920s or 30s," said DeVries. "There's a barrier wall on the tee that's failing and needs to be worked on, but it is complex – when you're dealing with water, it is always a challenge.

"The eighth is a big par five in the lowest part of the property and the pond is adjacent to it... there's a lot of water there now. We've had a look at replacing the drainage, but the old tile drainage is working really well. The opportunity to restore the creek and create a dual fairway is there, but from a timing standpoint, it wasn't going to happen due to the complexity. That may happen in future.

"We're also analysing the potential of some modifications to the new parthree third green. The hole stretches 265 yards and it's right on the property boundary and there are some failing trees there, too. We're trying to figure out the best solution for that area."

Feedback from members to the changes has been positive with Bloomfield Hills now having a full membership and a multi-year waiting list for golfers wanting to join. A notable change has been a surge in demand for junior memberships, for which the club has a waiting list for the first time.

"We were fortunate enough to have old photos of the golf course dating back to the first years following Colt's work," said the club's green chairman and incoming president, Geoff Piceu. "It is amazing just how much the golf course had been tweaked and changed over a century. And it is breathtaking to see the property returned to its original state of undulating waves of land, unimpeded by trees and seemingly needless or misplaced impediments.

"In addition to being an exceptional restoration of Harry Colt's original work, the course is far more attractive and fun to play. One objective of the project was that the course become more challenging for the expert and more forgiving for the novice. We were very pleased that the USGA ratings of our golf course from its four different tees ultimately affirmed that this objective was achieved. One USGA rater said, 'Congratulations' before beginning their initial tour, to which I replied, 'Thank you... but for what?'. They said, 'We have already determined that this is the bestlooking opening hole in your region."



THE BIG PICTURE

Landmand Golf Club in Nebraska, photographed by Vaughn Halyard, was designed by King-Collins and opened for play at the start of September.

The 315-yard seventeenth (on the left, with tees visible on the hillside beyond) is a downhill par four

with a 34,000-square-foot green that draws inspiration from Alister MacKenzie's famous creation at Sitwell Park in England. The par-five first (on the right, playing from the opposite direction) has an extremely wide fairway and heavily contoured



green, attributes that are common throughout the course.

"We believe that the total amount of earthmoving to build the course was in the region of two million cubic yards," says principal Rob Collins. "That is an enormous volume, but it was necessary to create a walkable, playable course on terrain of this severity, traversing as it does the towering Loess Hills of eastern Nebraska. I believe it will be something that golfers have never seen the like of before." The 580-acre site is almost four times larger than the average 18-hole course. Landmand can play to 7,200 yards and has 84 acres of maintained turf, four acres of bunkering and over six acres of green surface.

New Harradine course in Russia has soft opening

AK Bars Golf Resort in Kazan, Russia, has held a soft opening of its new course, designed by Harradine Golf.

The project began in October 2020 when the Harradine team visited several sites in and near Kazan, ultimately choosing one that was mostly flat.

"The saving grace was that most of the perimeter is surrounded by trees and a long line of trees crosses the land," said Peter Harradine. "They were naturally kept and used in the design. The second great advantage was that it was adjacent to the 'mother of Russia', the Volga."

With most of the available Volga shoreline to be used for real estate, Michael Harradine – who led the project with help of his father Peter and colleague Matt Osborne – could only design two holes next to the river, the 163-yard downhill seventeenth and the 359-yard par-four eighteenth.

For the seventeenth, the Volga provides a backdrop to a green that has bunkers guarding the front and left side and a large bailout area to the right. Club selection will be an important factor with winds in this area being strong and changeable. The eighteenth doglegs to the left with the entire fairway running alongside the Volga.

"Our biggest problem was that most of the site was below the Volga's high water mark which meant that it had to be raised by an average of two metres," said Harradine. "Around 800,000 cubic metres was dredged from the Volga to reach the required levels and improve the uninteresting topography, although more fill was taken from the three artificial lakes."

Engo Group, under the supervision of Arne van Amerongen, began construction in late April 2021. The project progressed despite snow and freezing conditions until the last hole was completed in late June 2022.

"We have created a mixture of open spaces, tree-bordered holes and water hazards," said Harradine. "There are also large grass and bailout areas where a golfer can play a more conservative game. Angles were used as much as possible, mainly due to the lack of elevation change. The angles apply to the holes themselves but also to the various hazards placed in strategic locations. If all the right 'Tiger' lines are chosen and played correctly, a low score will be on the cards. However, if a golfer bites off more than they can chew, bogeys and double bogeys can quickly ruin a scorecard."

Harradine describes the par-four sixth, which doglegs sharply to the left, as classic risk and reward. "The more golfers can chew off by playing over the trees and bunkers, the closer they will get to the green," he said. "Big hitters must beware of the lake on the right side; club selection and player strategy will be very important! The green is guarded by a bunker on the left and a lake on the right, which will require



precision even if the golfer has a short second shot into the green."

On the opposite side of the lake, the par-five third has been designed to meander between existing trees. "The integration of trees has turned the hole into a double dogleg instead of a simple and straight corridor," said Harradine. "Existing trees guard most of the green and a lake behind the putting surface adds an additional challenge."

The par-four fourteenth has a narrow lake flanking the entire left side. "The golfer has a long carry from the back tee, and they can decide how close to the water they want to land the ball," said Harradine. "The riskier shot will be rewarded with a shorter

BOUTIQUE HOTEL

Fill dredged from the Volga and excavated from the three lakes at AK Bars was used to raise the site and add contour

RESIDENTIAL

approach into the green. There are no bunkers on this hole due to the lake, which provides more than enough problems for players." Harradine also highlights the 574-yard parfive sixteenth, which winds its way between a lake on the left and rolling mounds on the right. "The straightest line to the green is up the left of the fairway, which hugs the entirety of the lake and makes the hole reachable in two for the big hitters," he said. "The sensible strategy is up the right, but that decision lengthens the hole quite considerably and makes it unreachable in two. A bunker guards the right hand of the green, which challenges a safe play up the right side of the hole especially if the pin is behind the bunker."

Harradine's last visit to AK Bars was on 30 August. "I must say that the two visits I had this year were extremely easy and uncomplicated," he said. "The political situation did not influence completion. In fact, life is very normal at the airports and did not affect my travels to and through the country."

Creating and Refining Classics of the Game

"Having been brought up and lived most of my life in Denmark I have been influenced by many of the great Danish designers and architects integrating functionality and aesthetics. Combining this with a strong inspiration from the links courses I have worked on creates fun and practical golf courses.

I design with a strong passion for getting the absolute best possible solutions for my clients - fair, fun, and sustainable golf courses.

My mission is to develop golf courses with a clear and unique style that enables the clubs to attract more players". *Caspar Bay Grauballe*

Tel. +45 26143434

www.bycasper.com



Peninsula Papagayo to reopen back nine in November

Thad Layton of Arnold Palmer Design Company has worked in tandem with Central American-based golf contractor Steve Watkins to complete the back nine portion of an eventual 18-hole remodel at The Four Seasons Peninsula Papagayo Resort, located in the Guanacaste province of Costa Rica.

The project scope included a full bunker remodel, tee expansions, recapturing fairway and green areas, and the removal of overgrown tropical vegetation to restore width and regain dramatic ocean views. In line with the client's emphasis on sustainability, ten acres of maintained rough was exchanged for drought tolerant native grasses. A new Rain Bird IC system was also installed for more precise application of water.

"We started with a very solid foundation," said Layton. "The existing course unfolds one of the most beautiful natural landscapes you could hope for. In many cases, our task was only to peel back the layers of jungle that had obscured views and throttled down playing corridors." The tenth hole is a prime example of that treatment, where treetops and vegetation in a ravine short of the green were pruned, revealing the putting surface from the left half of the fairway.

Selective clearing has also opened vistas of the nearby Santa Rosa National Park archipelago and the Pacific Ocean, making it evident to golfers that they're playing golf in Central America.

Bunker work has also been a big part of the remodel. Every hole on the back nine has had changes to its bunkering, whether it has been the addition of new ones, removing existing bunkers or relocations. Layton says that combining a trio of small fairway bunkers into a much more imposing hazard on the twelfth, while adding a cluster of bunkers further afield has injected strategy and vitality, lending a classic S-shape to this previously straightaway, uphill par five.

Green surfaces, which had contracted in size since the course was originally built, have been expanded to restore old hole locations.

"Cresting the ridge in the middle of the eighteenth fairway, you'll clap eyes on the biggest improvement," said Layton. "A completely reimagined green with a mammoth bunker encircling the lake and a larger, more receptive green with a prominent ridge feature that divides the green into two distinct sections."

Work on the front nine and practice area will begin in spring 2023.

Course prep work lays foundation for Knollwood renovation

Drew Rogers is renovating the Hugh Alison-designed golf course at Knollwood Club near Chicago, Illinois.

In 2017, having renovated tees and bunkers and regrassed greens, Knollwood hired Rogers to develop a master plan for future work.

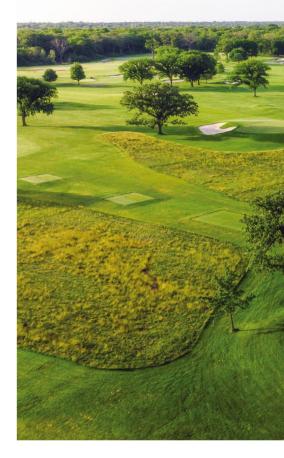
"Our primary and immediate focus was directed at the site itself... the setting for the holes," said Rogers. "To us, that stood as the key missing piece from earlier efforts – and those elements would ultimately make the difference in how the course should be restored."

Rogers studied old plans and aerials. "We sized up Alison's early design touches, assessing the effects of scale and proportion and, of course, the plant materials that would best fit the intended design expression and complement the pastoral site," he said.

In September 2018, Rogers began working with superintendent Drew Barnett to implement the plan, including the addition of forward tees and some initial work in restoring Knollwood's prairie-like landscape. That winter, tree removal and thinning of invasive buckthorn undergrowth began opening hole corridors that were more aligned with Alison's descriptions and intent.



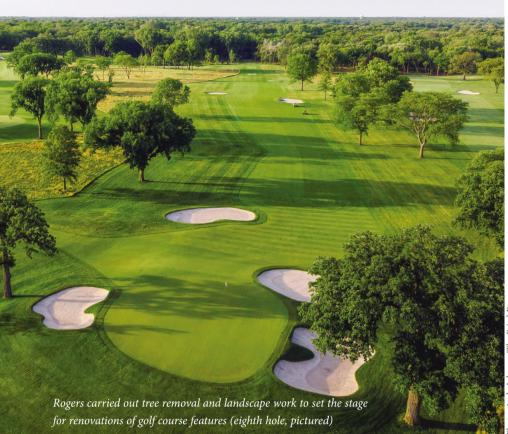
Initial work has focused on restoring Knollwood's prairie-like landscape



"We removed all the lower quality trees that disrupted views and covered up higher quality trees," said Rogers. "We also took steps that would allow for better playability and visibility within most hole corridors, and across the site as a whole – this essentially paved the way for future course improvements, including the rebuilding of bunkers and regrassing fairways, plus their widening and realigning.

"When we could finally feel the holes, presented again in full scale, we then started to address some of the spacious void in a different way, by introducing native fescue spaces in out of play areas. So now, along with the thinning of trees, including retaining old specimen elms, oaks and hickory, we also have another layer of texture and colour with the grasses – all balanced with the new fairway lines and grand bunkering."

Barnett said: "The work has been positively accepted. The slow maturation process of the fine fescue did cause heartache for some members, but with full maturity of



50 ohnson/The Fried

these areas the membership has almost fully embraced the concept. The tree removal was also contentious at the early stages but now the membership enjoys the expansive views throughout the property.

"The reduction in primary rough has improved our maintenance practices by allowing us to spend less time cutting rough and a reduction in fertiliser and pesticide usage in the rough. Even with the ever-rising costs of plant protectants and fertiliser, our budget has remained the same due to lower inputs in these areas. Our staff can continue with detailed items throughout the property instead of simply mowing over 100 acres of primary rough."

In August 2022 work turned to tees, fairways, bunkers and greens, and is expected to be complete in November.

"The work on fairways and bunkers would not produce nearly the same effect if not for all the pre-planning and ultimate reset of the landscape," said Rogers. "The before and after

photos stand to tell the stunning story as well as anything we can possibly say or write... those images will speak for themselves."

Previously, fairways were a mixture of six different turf varieties. The regrassing will produce a slightly different alignment on several holes to accomplish Rogers' design intent, while bunker work and the remodelling of two greens are being completed to better reflect an original Alison design aesthetic.

"The initial course prep step is one that is often disregarded or skipped entirely," said Rogers. "After all, tree removal can be rather controversial. But when the site isn't properly treated to accommodate the design, then all the elements will ultimately be in conflict and the desirable opportunities to do the right thing will be missed. The golf course work is more the 'given' in terms of expected scope, but the site work is every bit as important if we are to achieve a proper balance."

GOOD READ

"The flood created new landforms and dramatic, eroded inlets near the coastline"

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 – sees architects discuss projects to rebuild golf courses that suffered from storm damage.

"The flood created new landforms and dramatic, eroded inlets near the coastline," says Kyle Phillips, who rebuilt both courses at Verdura Resort in Sicily, Italy, following a flood that damaged 14 holes.

Other subjects covered in the Fall issue of *By Design* include the impact Frederick Law Olmsted had on golf course architects, a regrassing project at Columbia CC, and what makes a good partnership between architects and constructors.

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



COURSE BLUEPRINT

The par-four fourteenth presents a riskreward approach to a Cape-like green

Classic Golf Club

Benjamin Warren of Artisan Golf Design will start a redesign of Classic Golf Club in Fukuoka, Japan, in January 2023.

The Classic's 27-hole layout – comprising the King, Queen and Prince nines – was laid out in 1990 by Shoichi Suzuki and Yuzo Tanimizu. The redesign begins with the King and Queen nines, an eighteenhole configuration that has hosted professional events, including the 2020 Japan Women's Open.

The project will see a move from the traditional Japanese layout of two greens per hole to single greens grassed with modern species that can offer yearround playability.

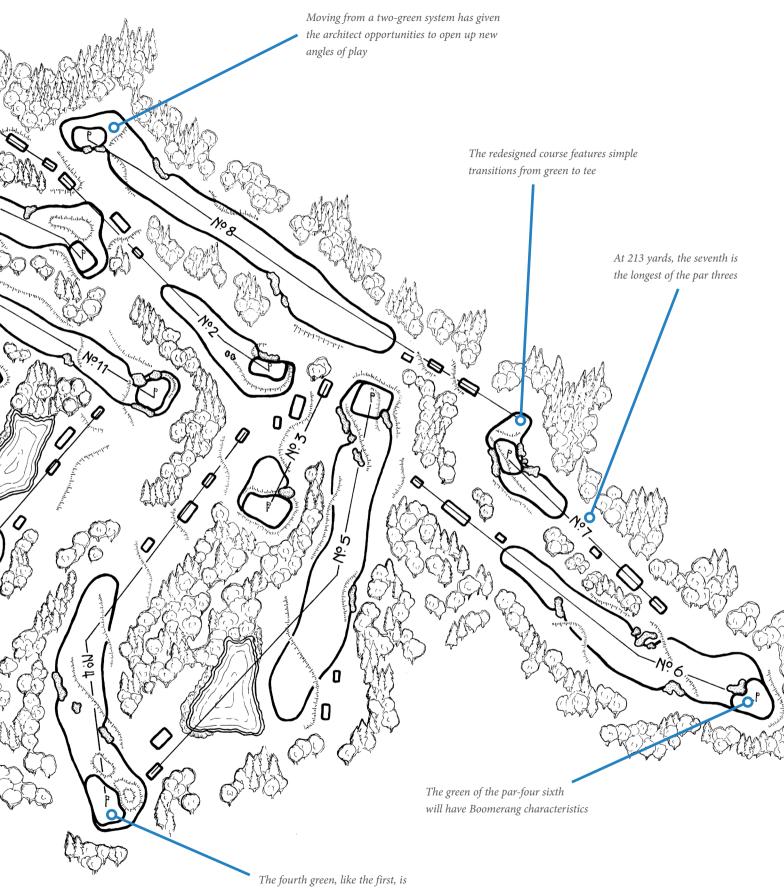
"Redesigning from two greens on each hole will lead to a substantial reconfiguration of the Classic," said Warren. "Including practice putting greens, the club is currently maintaining a total of 56 greens, every day, for its twenty-seven holes. Material and manpower costs are high. Reducing the maintained area of the greens will be a sustainability win.

"But it is the opportunity to transform the playing experience which is most exciting. The redesign to one-green architecture will enable us to reroute golf holes and create new angles of play. A full rebunkering will add a new layer of strategy to the Classic.

"Our new greens will take inspiration from some of our favourite golf courses in the US and the UK. DNA from North Berwick, National Golf Links of America, Crystal Downs, Sand Hills and the Old course at St Andrews will be evident in our work." The eighteenth tee moves across the lake to create a dramatic short par five and an eagle opportunity

B

For the fifteenth green, Warren drew inspiration from the Road Hole at St Andrews



The fourth green, like the first, is protected by contour rather than bunkers



The Art and Science of Golf Course Architecture

Der Aurtin

We also and a second second

ra Binh Tien Golf Club – Vi

GolfplanUSA +1-707-526-7190golfplan@golfplan.comwww.golfplan.com





GEO Foundation hosts first ever Sustainable Golf Week

GEO Foundation for Sustainable Golf has hosted the first ever Sustainable Golf Week to reflect, celebrate and accelerate the efforts towards a more sustainable future for the golf industry.

The inaugural event, hosted on 3-9 October, was centred around the theme of 'Driving the Green', encouraging several mainstream and social media initiatives to support the sustainable work that has been carried out across the industry.

Sustainable Golf Week celebrates the eco-friendly actions of golf courses, developers, designers, tournaments, players and communities in more than 75 countries, as well as promote actions and steps to help deliver the UN Sustainable Development Goals.

Prior to the event, Jonathan Smith, executive director of GEO Foundation, said: "Sustainable Golf Week provides an opportunity for people across the sport to connect around a common purpose – to make sure that golf becomes established as a credible global leader in sustainability and climate action.

"It is about helping to bring some stronger collective focus to the issues, as well as building ever greater energy and momentum to golf's contribution. We are excited about the ways in which this week can go on to be an ever-stronger catalyst for more action and visibility for golf and sustainability around the world." Suzann Pettersen, sustainable golf champion and captain of the 2023 Solheim Cup, said: "Many environmental issues are fundamentally important to our

quality of life. So, whilst taking action is vital for the future of golf, we also have to play our part amongst communities, in business and also with governments. We have to be at the forefront of the global movement in sustainable sport."

Read about Sustainable Golf Week at sustainable.golf/sustainablegolfweek or follow @sustainablegolf on social media

PURE DYNASTY Seeded Paspalum from Pure Seed

#1 SEEDED-TYPE PASPALUM IN THE WORLD

PRODUCT FEATURES

- Advanced Genetics
- Great Density/Color
- Enhanced Playability
- Exceptional Performance in Salty & Poor Water Conditions
- Extreme Protection Against Heat, Drought & Disease

APPLICATIONS

Interseeding • Fairways Greens • Tees • Roughs

Marco Simone Golf and Country Club Rome, Italy



PROJECTS

- Marco Simone Golf and CC Rome, Italy
- Cabot Saint Lucia Point Hardy GC Saint Lucia
- Casa de Campo La Romana Dominican Republic
- Soma Bay Hurghada, Egypt
- Mont Choisy Le Golf Mauritius
- Royal Greens Golf Club Jeddah, Saudi Arabia
- Dubai Hills Golf Club Dubai, UAE
- Saadiyat Beach Golf Club Abu Dhabi, UAE

FULL PROJECT LIST AVAILABLE UPON REQUEST





INFO@ATLASTURF.COM | INFO@PURESEED.COM

in

y



Haninge overhauls Yellow nine

Haninge Golfklubb, located 20 miles south of Stockholm, Sweden, has reopened its renovated Yellow nine as part of an ongoing project based on a master plan created by (re)GOLF.

"The club has 27 holes, but the Red and Yellow nines are the original 18-hole course," said Pontus Leijon, junior design associate at (re)GOLF. "It is over 35 years old, and the infrastructure was outdated. The irrigation was breaking down and the drainage was not functioning well in many places, especially in the bunkers."

In August 2021, contractor Nelson Vecchio started overhauling all tees, bunkers, greens, irrigation and drainage. Work was completed in April, with the holes opening at the start of August 2022.

"We took our inspiration from the site's beautiful heathland nature which has Årsta Castle in the centre," said Leijon. "Our goal has been to create a heathland-parkland style course where strategy and creativity around the greens is important. The new bunkers are placed in more strategic places to give golfers a new dimension and, together with the castle, an experience not found elsewhere in Sweden."

Every hole on the Yellow nine now has new tees, bunkers lined with Capillary Concrete, sandcapped green surrounds, USGA-specified bentgrass greens and a new Rain Bird irrigation system. "On several holes we have made changes to the lakes and streams and implemented rock walls," said Leijon. "The bunkers and water hazards have been moved closer to the greens. This has made the course more beautiful and given golfers a greater challenge.

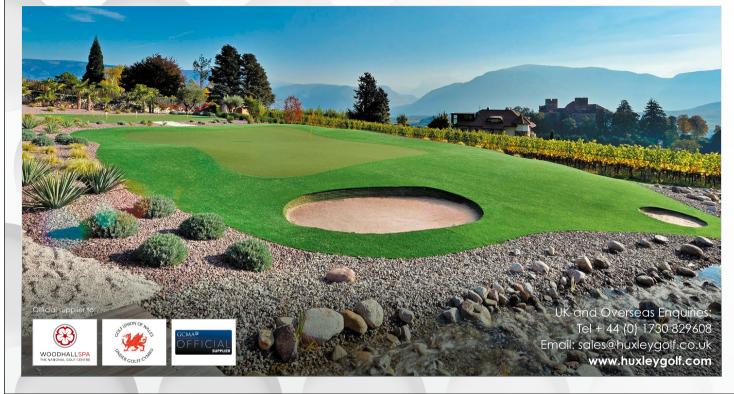
"There have also been changes made to the fairway mowing lines. In general, the fairways are quite a lot wider now. The move from poa greens to creeping bent, together with the new irrigation and drainage, will give the club a longer playing season."

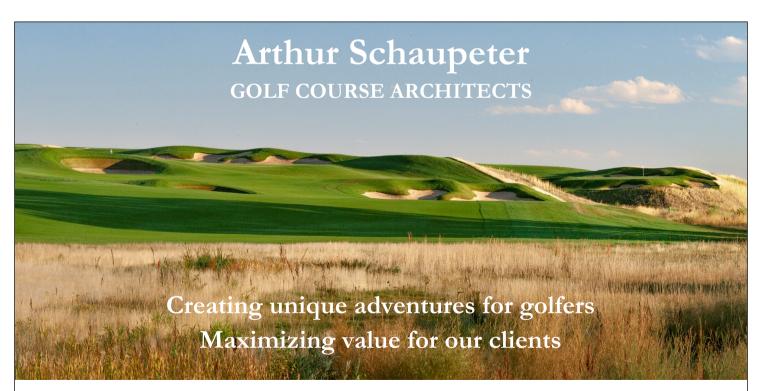
Work has now turned to the Red nine, which were closed for construction in August with a view to reopening within a year. Huxley Golf All-Weather Greens

Private All-Weather Practice Facility, Northern Italy.



Premier All-Weather Surfaces for Golf Proud to be an Employee Ownership Trust since 2020





TPC Colorado ranked #89 on America's 100 Greatest Public Courses - Golf Digest 2021



www.schaupetergolf.com +1 314 443 9029 art@schaupetergolf.com

Davis takes Thunderbird back to the 50s

Tripp Davis has completed renovation work at Thunderbird Country Club in Rancho Mirage, California, host of the 1955 Ryder Cup.

"Our approach was to use a classic bunker style, give the fairways nice pitch and roll, give the greens interesting strategic contouring, and allow grass and trees to be the dominant part of the landscape, which is not often found in a desert setting," said Davis, who began the project in 2021 with work on the practice area and opening three holes. "We want the golf course to look like it is refined, but also look and feel like the design came from the 1950s.

"We took some cues from the original location of tees, bunkers and greens. The original design was evidently more classic in how angles were important to playing off the tee and into greens and we restored that in places."

Playability was a key objective for the club. "We accomplished this objective by placing bunkers to more readily challenge longer hitters, while giving the higher handicappers plenty of options to avoid bunkers and water," said Davis. "We developed subtle angles into greens that allow all players an open approach, while shaping greens so that a good angle and distance control are often needed to get close to many pins. Greens have a lot of subtle movement so better players are challenged to match up speed with the correct line, but we kept them from being so severe that two-putting is a difficult challenge."

Davis has added more tees to offer a wider range of lengths to hit from. "We developed mowing lines so the fairways

extend through all the tees where possible, so players don't look down a hole and see a lot of different tee boxes," he said.

Some of the course's water features were removed. "In the interest of getting back to a more classic look and feel, we removed some of the more artificial waterfalls and parts of lakes that didn't fit well into the landscape," said Davis.

The regrassing portion of the project allowed Davis to bring the native soil back to the surface to provide firmer playing conditions. "We did this in a strategic way so players can use the firm fairway and the pitch and roll to work the ball into position, but they will have to be aware of how this can subtly move the ball out of position," said Davis.

The renovated course will reopen to members in early November.



Global round-up

Construction begins on new RTJ II course in Grenada

Construction work has started on the new Mulan Golf Club layout designed by Robert Trent Jones II (RTJ II) on the island of Grenada in the Caribbean.

The rugged, natural site has 180-degree views of the sea, and the course will be routed through jungle ridgelines, valley bowls and seaside bluffs, with the final three holes playing along the beach.

"We are working with an unparalleled natural canvas that will serve as a setting for a course that will blend into the beautiful terrain," said golf course architect Mike Gorman of RTJ II. "Grenada has long been considered a great sailing destination and now golf will become part of this storied island. Guests will appreciate that this is a 'golf first' core layout that works to preserve and emphasise the natural terrain."





St. Mellion completes upgrades on Nicklaus layout

St. Mellion Estate in Cornwall, England, completed renovation work on its Jack Nicklaus course ahead of it hosting the Challenge Tour in early October.

Greenkeeper Mike Bush has overseen the introduction of new tees at the twelfth and fourteenth – extending the course to over 7,000 yards – and topdressing of fairways to improve surface drainage and playability. Bunkers have been reshaped by Nicklaus Design and significant drainage work has been completed, along with the installation of a new Toro irrigation system.

Bush said: "The new tees and refurbished bunkers will be the most obvious additions but committing to an annual programme of topdressing for the fairways, as well as the greens, tees and landing areas, has made a significant difference in terms of playability."

Dunas course at Terras da Comporta to open in July 2023

The Dunas course designed by David McLay Kidd at Terras da Comporta, near Lisbon, Portugal, will open in July 2023.

Kidd has designed the new par-71 layout to be demanding and fun. "It's pretty challenging but is forgiving if you get into trouble," he said. "You've got a chance to get back into the game, and how could you ever complain about the amazing weather in Portugal together with the beaches, cafes, food and people. It's all beautiful and I would encourage anyone to come and visit."





Nine holes of new course in Iraq to open in late 2022

Nine holes of the new Cynthia Dye course for Erbil Hills Golf Club in the Kurdistan region of Iraq are growing in and expected to open by the end of 2022.

Speaking about the site, Cynthia Dye said: "It has a large valley running through the whole length of the project. The high end has a 3.5-metre storm drain under a new highway that connects the site to the upper valleys. The golf course is routed along a water detention system in the bottom of the valley. Therefore, water is seen by every golf hole but not always in play.

"Most would think of Iraq as a flat desert but this northern part is in very fertile pasture and agricultural land. The large mountain range to the north is only 25 minutes' drive away. It is very important to the Iraqis to see water and green. At Erbil Hills there is a lot of both."

^bhoto: Darnall Photograph



O'Callaghan focuses on playability for Newport Beach renovation

Casey O'Callaghan has completed a renovation project at Newport Beach Country Club in California. The scope of work included rebuilding bunkers, tees, three new greens, four green expansions, cart path work and landscaping.

The thirteenth, fifteenth and seventeenth greens have been completely rebuilt. "Previously greens had multiple tiers and slopes that limited pin locations, and the character of these putting surfaces, which were rebuilt in the early 1990s, was not consistent with the rest of the Billy Bell-designed greens," said O'Callaghan. "The new greens have been designed and constructed with long movements that emanate from the surrounding landforms and now allow for accessible and challenging pin locations."

INSIGHT



ROBIN HISEMAN

Right first time?

Architect Robin Hiseman of European Golf Design considers when, how and why a course might need tweaking just after opening

nce upon a time, it was quite normal for courses to be 'finished' after they were open for play – designers often left the placing of bunkers until they had had chance to observe where golfers were hitting the ball. Architects like Harry Colt would quite often route a course but not indicate where the bunkers were to go, before returning after the course had been played on for a time – and take note of the position of divots before placing the bunkers.

From a strategic point of view, this approach makes a lot of sense. The essence of strategic golf, as described by thinkers like John Low, is to place hazards in or very close to the ideal line of play, so that the bold golfer, who is prepared to drive very near the hazard, is the one who reaps the biggest reward.

But in our modern age, it really isn't a practical approach. Developers and golfers alike expect courses to open in a completed state, and any architect who said 'I'm going to leave the bunkers for later' would be unlikely to secure many other jobs.

That said, golf courses are living things, and change very slightly every day. Once the course is open, change is inevitable, whether it be implemented by the architect, the owner, or just by nature (for example, the growing of trees). You expect a course to evolve,

but I'm trying to get the vision to be complete on opening day. The golf course is a prototype until people start to play it. But it would be difficult not to have planned out bunkers beforehand – you basically use them as strategic punctuation to organise the journey. I'm not quite sure how you could mentally divorce yourself from thinking about where they would go. You will always see things that could be better that you would not have seen until people start hitting balls, especially with my penchant for greens that move quite a lot – I often have sleepless nights wondering if I have gone too far. I say to myself, 'Just build flat greens!' - but I can't!



Small design tweaks are being considered at the JCB course in England, which opened in 2018

There are things you learn about maintenance that you really can only see when you have been sat on a triplex trying to mow the course. At the JCB Golf & Country Club, the biggest change has been the conditioning of the place. We had a development budget, but in the four years since we finished, they have done a lot of work, especially on the out of play areas. It is a lot more manicured than it was, and I think that is a function of senior management taking a greater interest now that it is an actual working golf course. Now they have a greens staff numbering more than twenty, they have the resource to tidy it up.

Design-wise, there have been a number of back tees added to give some more length. Some of those I think are a great idea, others I take the view that if they were needed, we'd have done them originally. The golf course is almost 7,400 yards from the back – it's more than long enough. But fundamentally it is still exactly the same. We have had some thoughts about softening the landing area for the eighteenth, and I have been consulting with them on that and other things, but it hasn't been decided yet.

The Struie at Dornoch has changed a lot since it opened. When I left it, there were some sandy wastes at the far end that looked like Kiawah Island. The course has been altered by greens committees over the years, as the club changed its view as to what it should be.

The Royal GC in Bahrain has changed quite a lot, but in ways they hadn't realised. It is a lot tidier than it was – the edges of fairways are not as natural as we had them, but the main difference is the greens. They have suffered from green creep, and they were running short of hole locations. The greens had receded noticeably and since I had designed them to have hole locations near the edge, this was pretty dramatic. I went out earlier this year and we resurveyed the old edges, so they could start restoring the green sizes to where they were. **GCA**

FEATURE

The worst thing in golf?

Golfers hate going out of bounds more than almost anything else in the game. But once upon a time, OB was a legitimate strategic hazard, says Adam Lawrence

Hogan's Alley, the par-five sixth at Carnousite, where a drive close to the out of bounds line sets up the best angle to attack the green





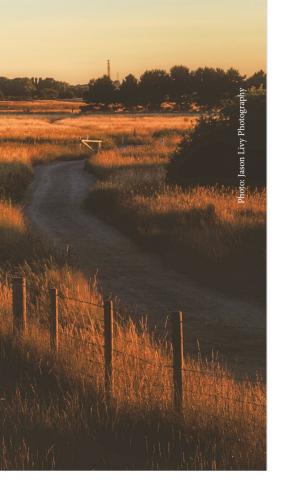
oing out of bounds is, pretty much, the worst thing in golf. Compared to OB, losing a ball in a pond, gorse bush or patch of thick rough is kids' stuff. But the white stakes that mark out of bounds lines are the golfer's most hated enemy.

Why should this be? There is no fundamental reason why going out of bounds is worse than any other hazard; indeed, depending on what is to be found the other side of the OB line, it is often possible at least to retrieve the ball, something which is usually impossible from a water hazard and frequently also the case from vegetation like gorse, heather or rough. No, the issue is the penalty for going out of bounds, the infamous stroke and distance.

Effectively stroke and distance is a two-shot penalty, because it puts you back where you started at a cost of one more stroke. By contrast, tangle with other hazards and it is usually possible to drop fairly close to where the ball ended up: large water hazards can sometimes require going back a long way to find a drop zone, but they are the exception to this rule. Single penalty shots are annoying, but a shot is a shot – it only requires one piece of skill (or a failing on the part of one's opponent) possibly to sneak a half on the hole. In medal play, losing a stroke is annoying, but rarely fatal. Two strokes, though, is something different: in a match, going OB means an almost certain loss of a hole, and in medal, giving up two shots is a more signficant hill to climb if one is to get the round back on track.

Stroke and distance as a penalty for a lost ball first appeared in the St Andrews Rules in 1754. The rule, however, changed many times over the next two centuries, until, finally, in 1952, the R&A settled on stroke and distance as the penalty for hitting off the golf course (the USGA experimented with distance only in the early 1960s, but it didn't last); the situation has remained the same ever since. But it is important to note that, when older courses were built, the penalty for going out of bounds was not necessarily quite as severe as it is today.

Back in the day, the use of out of bounds as a strategic hazard was, if not exactly commonplace, far from unknown. Some of golf's most famous holes incorporate out of bounds lines, and some even present golfers with a strategic dilemma: the closer you can place your ball to the OB, the better the line for the next shot will be. Think, very obviously, of the Road hole at St Andrews. Famously fearsome for its blind drive over the old railway sheds and the former stationmaster's garden (now part of the Old Course Hotel) and for the brutally difficult green, perched above the road and protected by a deep pot bunker, there



is no doubt that the approach shot is easier (a relative term to be sure), especially to back pins that are tightly defended by the bunker, if the player has been brave enough, or lucky enough, to lay his drive close to the OB wall on the right side of the fairway. As the drive is blind, it takes a brave, perhaps foolhardy, player actually to



the favoured strategic line. The ninth (traditionally the seventh), known as the Dowie, is today a fairly unobtrusive par three, but it used to have out of bounds hard to the left edge of the green, meaning that, in the words of Bernard Darwin, 'nearly everyone slices at the Dowie out of pure fright'. The old seventeenth, now the first, known

"Back in the day, the use of out of bounds as a strategic hazard was, if not exactly commonplace, far from unknown"

try to do this. But fortune is said to favour the brave.

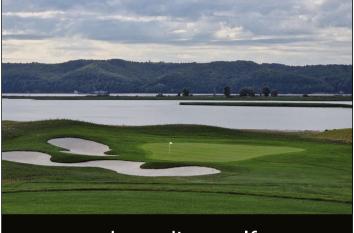
Royal Liverpool is a course famous for its use of out of bounds. The course's traditional opening hole (now played as the third as a result of the changes made to bring back the Open) features a drive over a turf 'cop' which surrounds the practice ground; close to the cop is as the Royal hole, was one of Harry Colt's most famous creations, with the green set right against Stanley Road; sadly, because it was impossible to get specatators round it, the green had to go to get the Open back to Hoylake. Similarly, at Carnoustie, the famous par-five sixth, known as Hogan's Alley, after the great American who won

his only Open there in 1953, offers a definite advantage to the player bold enough to do as Hogan did in 1953 and lay his drive down the left hand side, close to the OB line and left of the centre bunkers. Or there is the famous fourth at Woking, where the course boundary, in the form of the railway line, defines the right side of the hole and the direct, open line to the green, with the centre bunkers built by John Low and Stuart Paton giving the golfer a clear choice of where to play (though the distance today's better players carry their drives has reduced the impact of the hole a little). "The fourth at Woking has long been considered the birth of strategic golf design," says Tim Lobb, who is consulting at the club. "Cleverly the green slopes from left to right so the golfers who take the risk of playing to the right of the bunkers will be rewarded with the easier approach to the green. A very intelligent yet simply strategic challenge for this important



HARRADINE®GOLE

CASLANO . DUBAI . BERLIN



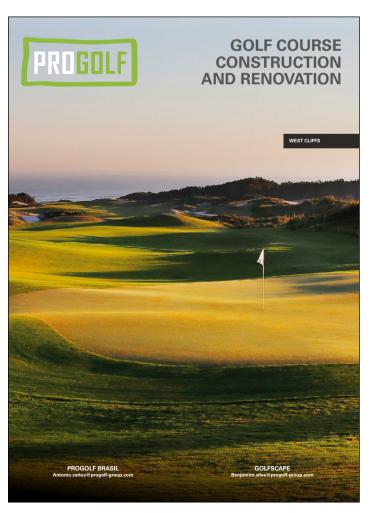
www.harradine-golf.com

We do Bunkers... Better.



www.betterbillybunker.com







A railway line defines the right side of Woking's famously strategic fourth

hole in the history of strategic golf course design." Up the road at Swinley Forest, architect Colt designed the home hole to favour an approach from the left side, close to the course boundary and, over it, the house built for himself by club founder Alexander Davey – the alignment of the bunkers protecting the green shows clearly that Colt intended the best line of approach to be close to the fence. Sadly, Swinley has, to protect the course from balls going off its property, had to remove Colt's strategic choice by building a bunker and growing rough up the left side.

Which illustrates the problem, in today's age, with the strategic use of out of bounds. Even if golfers are prepared to risk the penalty for tangling with the OB (which they mostly are not), golf clubs cannot afford to ask them to do so, because the risk of balls flying over the boundary line and hitting some neighbour or passer-by, with the consequent likelihood of expensive legal action, is just too risky to countenance. "A course has to have edges, but OB is mostly a question of safety these days," says Australian architect Neil Crafter. "What is on the other side of the OB stakes? Roads? Houses? Farmland or scrub? These days there's no luxury in using OB as a strategic hazard. Sadly it's a thing of it's strategic then it needs to be crystal clear and menacing."

American architect Jay Blasi is not generally a fan either. "I hate the idea of OB – I feel if you can find your ball anywhere you should be able to play it," he says. "That isn't always practical but many courses define OB inside of their actual property

"The fourth at Woking has long been considered the birth of strategic golf design"

the past. It can have severe strategic impacts like the last few holes on the Old course."

"OB is better to be avoided where possible in my opinion," says Frenchbased English architect Stuart Hallett. "However, I think a straight line, fence, rail track, or other is better, clear and fair whatever distance you hit it. There's nothing worse than a jagged line, leaving doubts about, in or out. If boundary, which I think sucks." That said, Blasi is prepared to consider the strategic use of OB on a boundary line. "If you have a property boundary and can safely use it as a strategic element then I'm all for it," he reflects. "Put the golf right against it. Probably is best for half par holes like short par fours of fives. And, because of the lack of recovery options, it is probably best to use it in the middle



of the round. Too early and it frustrates the whole day, too late it ruins the round with no chance to recover. Mid-round you can make up for a mistake."

And there are modern architects who have set up strategic OB holes. At the Talking Stick club in Arizona, which opened in 1997, Bill Coore and Ben Crenshaw were faced with a totally flat property, and needed to find ways to add interest to the holes on the two courses they built there. "It was completely flat. I put a Coca-Cola can at one end of the 400-acre property and went to the other end, and with binoculars I could see the can," says Coore. "On a scale of zero to ten potential for golf, it was about 0.5. We've always said we like the site to guide us – but there was nothing to guide us. Yet the club has been incredibly successful – both courses are full and there's a huge amount of repeat play."

The second hole of Talking Stick's O'odham course is famous for its use of OB as a strategic hazard. "There was a ditch that was about two-and-a-half-feet deep and six feet wide that the ranchers had dug, and there was a fence," says Coore. "The fence was absolutely straight. So we said we would use it on one of our holes. We built a par five straight down the fence and put the green hard against the fence. There is a lot of fairway out to the right, but sooner or later you have to deal with the fence! You can play fifty yards or more out to the right on your first or second shot,





On the par-five second at Talking Stick's O'odham course, there is plenty of room to the right, but "sooner or later you have to deal with the fence", says Bill Coore

OCM's redesign of Medinah No. 3 will see the fifth, sixth and tenth holes moved inward, but the out of bounds line will move in too, retaining its strategic impact

but eventually you had to deal with the fence."

Even at Talking Stick though, the fear of OB is strong. "I'm not sure they still play it as OB," says Coore. "I think it's played as a lateral hazard and so a oneshot penalty. Golfers can retrieve their ball but they have to drop."

Which brings us to a current project where strategic OB is very much the order of the day. At the famed Medinah club in Chicago, the championship Course No. 3, which has hosted three US Opens, two PGA Championships, and the 2012 Ryder Cup, Australian firm Ogilvy, Cocking and Mead is currently in the preparation stage for a major renovation, which will bring the boundary line very much into play on two holes. The fifth, sixth and ten holes of Course No. 3 currently sit on the property line, and given the amount of development in the area around the course, have become very loud and busy over the years, so will be moved further away. Because the course has plenty of land – and because it is a regular host of major events – the plan is to move the holes inward on the property, but to build a fence at their edge, and outside the fence to create a 'ring road' to move people and equipment around the course while keeping away from play. Which means there is an opportunity!

Architect Mike Cocking explains: "In looking through a lot of the old aerials it seemed as though the boundary played a bigger role in the design of at least the sixth and tenth holes, but obviously with time and the encroachment of roads and houses the holes moved further away and the fenceline was vegetated to remove this design feature. Clearly we can't once again expose the roads and houses but we liked the idea of using a fence line in this corner. It's probably the plainest section of the course – fairly flat and without the water or large oaks which define so much of the course – and a fence, if done well, could add a great deal of character and interest.

"There is so much room to the right of each of these holes we have ended up suggesting they are moved inland slightly so that the true boundary is further away from play and allows more vegetation to properly screen the houses and roads, but then a new fence line is added against the edge of the fairway to create the strategic interest. This will be an attractive timber post and rail-style fence which will be in character with many other aspects of the redesign. I think it's a clever way to bring a fence line into play without creating safety issues externally or opening up ugly views of the surrounding landscape." GCA

INTERVIEW

A new approach

Superstar golf architect Tom Doak has spent thirty years building courses essentially the same way. Now he is trying to find a new way of working. He explained why to Adam Lawrence

hange is life's only constant, but it is always challenging to implement. The longer you have been doing something one way, and the more successful you have been doing it, the harder it is to change. Which is why golf architect Tom Doak's current plan is so ambitious.

Doak has been designing golf courses for over thirty years – his first solo design, High Pointe in northern Michigan, opened in 1989. And since High Pointe – for which he personally shaped most of the greens - Doak has basically employed the same construction model, best defined as 'design and shape'. In short, this means that by providing his own shapers to construct greens, bunkers, and do any necessary small-scale fairway grading work, the architect maintains direct control over the final appearance of the golf course, rather than handing over responsibility for construction

to a principal contractor (though he eschews full scale design and build, passing over responsibility for bulk earthmoving where necessary and specialist work such as irrigation installation). Doak's four key design associates, who live on site and run his jobs, have been with him for around twenty years and more, and even among the ranks of his regular shapers, there are names that go back many years. It is a remarkaby consistent model in an industry that has changed considerably during the same period, especially in the aftermath of the 2007/08 global recession. And, as the firm's list of courses proves, it has been extremely effective.

Essentially, therefore, the Doak model has been that the principal himself focuses his attention (once a job has been secured, which is obviously mostly his responsibility) on finalising the course routing. He is known to



route, initially at least, primarily from topographic maps - in contrast to his friend Bill Coore, who is famous for routings that came about as a result of weeks tramping across the site. Routing is the core of golf design, and the best golf architects are almost always the best routers. "I spend nearly all of my time on my own projects on getting the plan of the holes together and working on the greens complexes. I probably spend 85 per cent of my time on those things," Doak says. "All of my associates, I know they are pretty good at greens shaping, but I don't know how good they are at doing a routing plan." In other circumstances, one might have expected more of Doak's long-term associates to follow Jim Urbina out of the door and



hang up their own shingle, but as he himself notes, staying as part of the mothership has not been a bad gig for the last twenty years, and, especially given the ups and downs of the golf design industry, who's to say how they would have done on their own?

But now, Doak is rethinking his model. Recently turned sixty, he is keen to reduce his fearsome travel schedule – the enforced reduction in travel during the Covid pandemic proved to him that it could be done. And his current project with regular client Mike Keiser, the construction of a course based on CB Macdonald's lost Lido course, on a site near the Sand Valley resort in Wisconsin, has showed him that other ways exist to get what he wants.



Doak's Sedge Valley course at the Sand Valley Golf Resort is on track to open in 2024



"I only made two big trips in 2020, one in the summer, one in the fall. When the pandemic hit, we were in the middle of St Patrick's, but luckily I had been there to see almost all the greens shaped the previous year. The only problem with our existing model is that the amount of travel it requires limits how many projects I can do," he says. "MacKenzie got away with going to Australia once, leaving plans, because it took him six weeks to get there. But when we have done projects a long way from home in the past, we have resourced them in broadly the same way as our US courses - with associates in full-time attendance and me there regularly. The change which I haven't completely finalised yet - was a reaction to Te Arai and also to the way we used technology to do Lido."

Doak's team is currently wrapping up the Te Arai project near to his existing Tara Iti course in New Zealand's North Island, and that has been the main test bed for his new travel plans. Rather than making several short trips to Te Arai, with the aim of approving three or four holes on each trip, he has only had one, longer stay in New Zealand. "For Te Arai, we shaped everything while I was there," he says. "I even had time to shape a couple of greens myself! I really enjoy doing that, but it's never made sense for me for the last twentyfive years because I have guys around me who do it quicker. In the States, it doesn't make sense to go for a month or two, but I do think it worked in New Zealand – where I spent fifty days as opposed to the thirty I would normally. There was no time pressure to get four holes done this week before I leave, so you could put something off for a while if you didn't like how it was turning out. My wife was with me and I had some days off.

"Having the time to get on the bulldozer myself didn't make the project worse. I had time to do all the

things I wanted to do, and I'm very confident that when I do go back I won't get any unpleasant surprises or have too much to do."

As far as the Lido project is concerned, the plan of the course had been painstakingly assembled on computer by enthusiast Peter Flory. As the idea of the project is to replicate the course in its entirety, much of the shaping work has been done using GPS-enabled bulldozers. In normal circumstances this would be anathema to Doak - "I told Jim Urbina twenty-five years ago that if I ever try to approve something by digital photo, he had permission to shoot me," he says – but this case is different. He's still adamantly opposed to approving shaping from long distance, saying: "My big thing is the greens. I still want to see them get shaped. Two inches matters, and you're not going to see that on a construction photo from far away. That part of the creation is sculpture,



and sculpture by remote control doesn't appeal to me."

Doak's unusual 'semi-detached' role in Zac Blair's Tree Farm project in South Carolina has also been an opportunity to test new methods of working. Blair hired Doak to provide a routing for the Tree Farm course, while working with Kye Goalby actually to build the course. "I had



Doak oversaw shaping of Te Arai North during one long stay in New Zealand, with his team then looking after course construction, which is expected to be complete by January 2023

really talked about it with my clients – they know that, when push comes to shove, I will be there," he says. "If I'm really busy and can't be there so much, they won't be paying so much. If I get pushback, I will tell them firstly 'I told you upfront this is how we work' and secondly 'I really trust these guys I have been working with for many years'."

"If you can't live with ups and downs, this is a very tough business to be in"

an arrangement that I would do the routing and visit once, but leave Zac and the associate to get on with the rest of it," he says. "I'm curious to see how I feel about it when it is done."

It is, of course, Doak's clients who will have the final say over whether any new construction model works or doesn't. Will clients object if they start seeing less of the boss? "I haven't Doak has also stepped back from his consulting work at existing courses, something that has been part of his business since the start. Is he finally done with consulting? "Almost," he says. "I'm still signed up to do whatever we're going to do at Crooked Stick. I spent time there with Mr Dye, I know a couple of the members well and they really want me to. I never say never, but it's really unlikely I would take on any more.

"We are tremendously busy right now, but almost all our work is in the US. The one thing in the business I was unprepared for was that things are really booming in the US at the moment, and the big names from ten years ago – Palmer, Dye, Nicklaus – are gone, or basically gone. I'm signed up right now for way more than I can do. In the past, we have got really busy, and while we've been busy I've had no time to go meet prospective clients. I'm focusing all my energy on the things I like to do most. The advantage of technology is that it means I don't have to make such frequent trips to conform to the construction schedule; I can go and build holes when it suits the rest of my schedule, and have confidence that if anything gets blown away, there is the ability to put it back just like I last saw it. If you can't live with ups and downs, this is a very tough business to be in." GCA



Seeking the exceptional

LA FINCA GOLF LOS LAGOS, MADRID, SPAIN

A new golf course in central Madrid will open next year, almost 25 years after an initial routing was created. Toby Ingleton reports



t's not often that a new golf course is built in the centre of a major European capital, so for one firm to have two such projects in the works is particularly rare.

Stirling & Martin, led by two former Pete Dye associates – American Blake Stirling and Spaniard Marco Martin – is currently one of Europe's most prolific design teams. The duo has seven new courses either in construction or recently completed, two of which are in capital cities. One of those has just started to take shape in Bucharest, Romania, while the other, La Finca Golf Los Lagos in Madrid, is expected to open in 2023, almost 25 years after the architects were appointed. Residents of Madrid will be very familiar with the La Finca brand as the exclusive residential estate in the west of the city, preferred by celebrities and superstar footballers for whom privacy is paramount. Their multimillioneuro homes are only glimpsed by those with credentials to access the gated roads of the peaceful and impeccably landscaped haven.

The group behind that development has been thrashing out the details for another project since before the turn of the millennium. Having considered multiple configurations (including an incredible 84 iterations of the golf course routing, including 36- and 27-hole options) for 75 hectares of land immediately south of the La Finca

The opening two holes at La Finca Los Lagos, a par five followed by a par three, both with lakeside greens

neighbourhood, the button was eventually pushed in the late 2010s. The new development would also focus on the luxury market and carry the La Finca name.

The northern strip of the land will comprise a series of luxury apartment blocks and villa complexes, at the heart of which will be the 'Grand Café', a complex of high-end restaurants, shops and office space. This 'premium lifestyle centre' overlooks a lake that will incorporate sunken dining areas destined to become the city's most prized reservation. It's a remarkable vision and, with the homes being sold quicker than they can be built, a reminder that the cost-of-living crisis is not felt so keenly by everyone.

The Grand Café's centrepiece lake is one of ten that are interconnected and act as a buffer between the real estate component and the golf. They also give the course its name – 'Los Lagos' translates to 'The Lakes'.

The excavation of these lakes was part of a major earthmoving exercise that was required for work on the course to begin. Marco Martin explains: "The areas set aside for real estate and golf were fixed by planning authorities very early in the process, but created a problem in that the homes on the eastern side of the

LA FINCA GOLF LOS LAGOS

development would face out to a large rise in the land, and therefore have very limited views. To give property owners an outlook over the lakes and to the course, we had to flatten this area of the site, moving more than a million cubic metres of earth to other parts of the site."

The most obvious destination for this fill was the southern side of the property, where the land sloped steeply towards a stream that runs alongside the boundary. The earth was used to reduce the severity of this slope, and in the process saw the banks of the stream built up considerably.

Once this major earthworking was completed, Spanish golf course contractor GTM could turn its attention to shaping the golf course.

The opening three holes were the first to be completed, having been grassed

in 2021 and now fully established. The entire left side of the par-five first is protected by two of the interconnected lakes that demark the course from the real estate, while five bunkers are set into a bank that runs along the right side of the hole. Despite these hazards on each side, the opening shot is very inviting, thanks to ample fairway width for all but the longest hitters. The green is reachable in two but nestled against the water, so most players will look for a safe spot to lay up.

The par-three second plays perpendicular to the first, with the green extending into the lake and protected on three sides by water. The hole is relatively short, maxing out at 170 yards from the back tees, but tee shots will need to cover an imposing front-left bunker to access a tiered green that tilts from back to front. Pin

positions at the back will entice players to aim beyond the safety of the centre of the green to the narrower top tier.

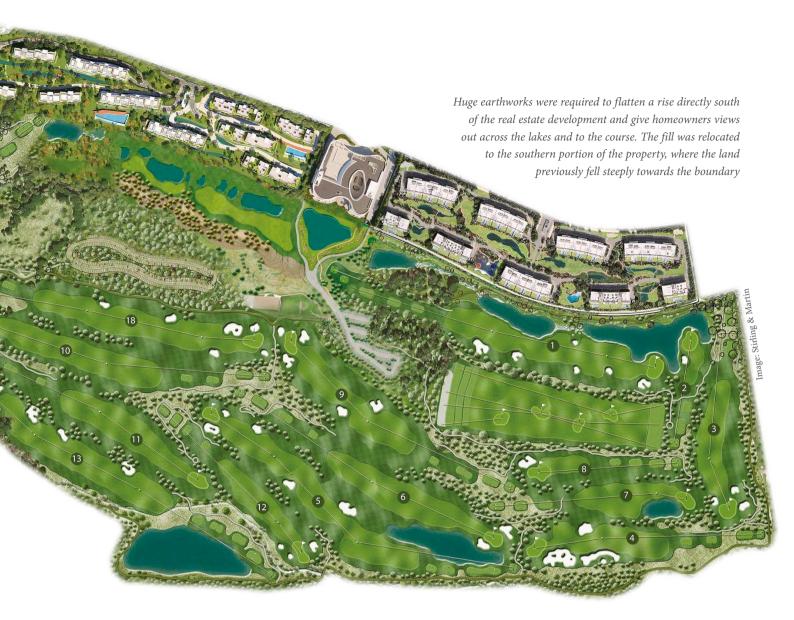
At the par-four third, which takes golfers to the south-east corner of the property and towards the distinctive headquarters of the local television network TeleMadrid, a long drive will catch the downslope towards the green and set up a good birdie opportunity.

Holes four to nine were seeded this year and play over the landscape that was created using the fill generated by the major excavation work. The



oto: Fernando Herranz Sánche

The par-four third presents a good birdie opportunity



highlights of this stretch are the snaking par-five fifth, where three thoughtful and accurate shots will be required to cover its gently climbing 580 yards, and the fifth and sixth; respectively a long and a short par four, both with water to the right of the green.

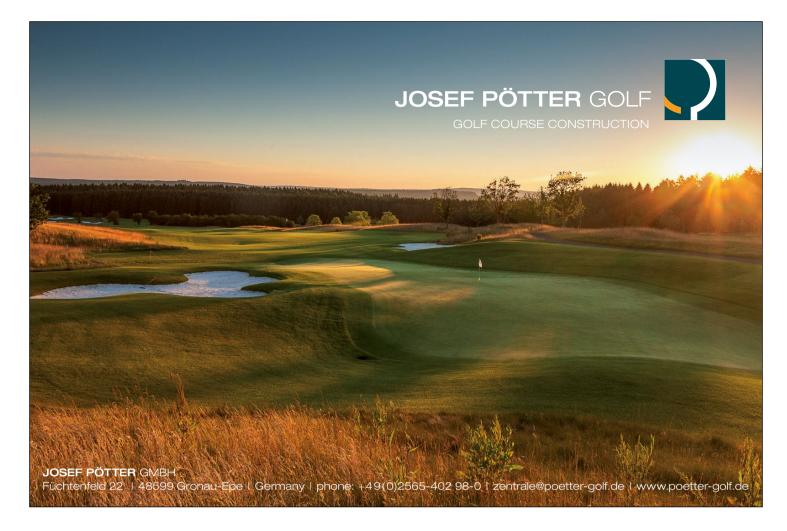
The back nine is shaped and will be grassed in 2023. Holes fourteen to seventeen lie on the very western portion of the property, which was previously occupied by the nine-hole Somosaguas course. The mature umbrella pines in this area, and those that frame the tenth and thirteenth greens, will give the back nine a very different character to the front, at least until the 1,200 pine saplings that have been planted are much more established.

The island par-three fifteenth pays tribute to the architects' mentor Pete Dye and from the back tees plays at the same distance, 137 yards, as the The island will be a highlight for many, but the sixteenth is also very memorable, with water again dominating the hole. The tee shot plays over the edge of the previous hole's lake to a landing area protected

"The island par-three fifteenth pays tribute to the architects' mentor Pete Dye"

seventeenth at TPC Sawgrass. "There was some concern that it could be too penal for the membership," says Marco Martin. "But from our front tees it's less than 70 yards, so every player will have a fair chance to hit it." on the left by more water. But that side of the fairway provides the best window of approach through the pines to a green that sits on the edge of a third lake.

The picturesque yet long par-three seventeenth brings golfers to the final





Spring Lake Golf Club Spring Lake, New Jersey George Thomas - 1910 / A.W. Tillinghast 1918 Tripp Davis Renovation and Restoration

> Tripp Davis and Associates Golf Architecture Norman, Oklahoma USA 405-447-5259 tripp@tdagolf.net

DESIGN WITH PRIDE BUILD WITH PASSION

LOBB + PARTNERS



www.lobbandpartners.com | tlobb@lobbandpartners.com Hole 18 NEWGIZA Photo: Kevin Murray



hole, the last of an impressive and varied set of par fives, which will be punctuated by a volcano-style bunker alongside the green. The designers presumably wanted an explosive end to an exhilarating round.

At the centre of the property a double-sided driving range has been built, with a short game area alongside it. Next to that there is space for further development – enough for a short course, but the owners are currently preferring a country club element, with tennis courts and pool.

The number of golf members will be limited at 777 (a number arrived at with a degree of mystery by the head of La Finca), making Los Lagos a more intimate proposition than Madrid's other upscale clubs, like La Moraleja and Club de Campo, each of which has multiple thousands of members. Only homeowners will have a guaranteed option of membership, a decision that may well be contributing to the success of the real estate operation.

La Finca's corporate slogan is 'Always Exceptional', and it is clearly committed to carrying this ethos to the golf course. While seeking to



The par-four ninth hole returns to the clubhouse, currently in construction. Top, the island green fifteenth, one of a number of holes on the back nine that wind through mature trees of the former Somosaguas nine-hole course. The back nine will be grassed in 2023

deliver a highly manicured course, it remains conscious of the need for good environmental stewardship. This has included the preservation of trees, and respecting the existing waterways, plus the investment in a Rain Bird IC system to give them precise control over water use.

While Stirling & Martin continues to pick up new commissions in Spain, Europe and beyond (their current workload includes a new course in Paraguay, for example), Los Lagos will always be exceptional for them too. When appointed in 1999 for a project a couple of kilometres from their design office, they cannot have imagined that it would be almost 25 years until a course emerged on the land. But the wait is almost over, and Los Lagos will headline the firm's portfolio. **GCA**

INSIGHT



JOHN HOLMES

Turf conversion made easier

John Holmes of Atlas Turf International explains how Saadiyat Beach employed an innovative turf conversion process to help address its water supply issue

with advances in turfgrass varieties and the ageing of courses built during the boom years of golf, it is not surprising that renovations involving turf conversions are currently on the rise. For these projects, the scope of work can vary. Some call for replacing turf throughout the course to upgrade to more advanced grasses. Others involve renovating select holes, and the opportunity is taken to update the turfgrass throughout.

Regardless of the scope, turf conversion through traditional sodding, sprigging or seeding brings challenges to the facility in the form of cost, time and interruption of play. For these reasons, the alternative technique of interseeding is gaining popularity.

Interseeding is the process of incorporating an advanced seed into an existing turf stand. With proper preparation, the newer, dominant variety overtakes the older turf for a gradual conversion. Through interseeding, the labour and expense of completely removing the old turfgrass are not necessary. In addition, interseeding requires minimal disruption to normal operations.

When Saadiyat Beach Golf Club in Abu Dhabi faced a recent shift in its irrigation water supply, the idea of turf conversion arose. Besides the need for a salt-tolerant turfgrass that could withstand the switch from potable water to treated sewage effluent water, wear tolerance was also a goal. In recent years, the bermuda fairways, surrounds and rough showed inconsistent performance due to higher levels of play during peak months.

Under the direction of Troon International, the maintenance team trialled different grasses and planting methods. The results led Troon to recommend interseeding with Pure Dynasty seeded paspalum.

"Pure Dynasty interseeding was chosen as a sustainable and low-impact



Saadiyat Beach used an interseeding process to convert to Pure Dynasty

way to introduce a more advanced turfgrass species to the property while still allowing daily play after the initial interseeding period," said Bryan Cox, Saadiyat's senior assistant golf course superintendent.

Saadiyat, designed by Gary Player and opened in 2010, is an awardwinning championship course that has earned distinction as an Auduboncertified facility. The quality level and popularity of Saadiyat demanded that the conversion not only result in an excellent playing surface with advanced sustainability attributes but that it be done with minimal course closure time.

Preparation for interseeding started in June 2020 with an irrigation audit. While the new seed is drought tolerant when mature, success is maximised by keeping the soil wet during germination and establishment. Following the audit, a gradual scalping began, taking the fairways and surrounds from 12 millimetres to eight millimetres over one month. Next, the team applied a growth regulator. By the end of July, height of cut was five millimetres, and growth regulator was applied again. Thinning out the unwanted turf allowed the new seed to have direct contact with the soil for faster establishment.

At the beginning of August, seeding of Pure Dynasty began at a rate of 500 grams per 100 square metres. By the middle of August, the staff had completed seeding. Eight days later, the newly interseeded fairways and surrounds were mowed at 14 millimetres. A month later, the height of cut on the new turf reached the targeted 10 millimetres. The Pure Dynasty has now reached full coverage.

Whether a turf conversion occurs due to renovation work or simply to upgrade to a newer turf variety, interseeding allows projects to take advantage of improved turfgrass species without significant interruption. In addition to cost savings during the process, advanced seeded products offer benefits such as superior salt tolerance that translate into future savings.

When preparing Saadiyat ownership for the turf conversion, the maintenance team communicated the benefits of interseeding with an advanced turfgrass product, citing "playability, reduced water costs and a sustainability aspect while also having a limited impact on daily play," said Cox. "Worth noting, savings in our annual water costs have been welcomed by changing to TSE [Treated Sewage Effluent] water while being able to continue to produce high quality turfgrass surfaces using the Pure Dynasty paspalum species."

In the case of Saadiyat, interseeding provided the means to reach their goals, including "a more sustainable turf species year-round, in particular through the cooler winter months when golf traffic is at its highest," according to Cox.

"Being able to reduce our chemical applications through this period has been a huge advantage to the property. We have also been able to give the Saadiyat Beach Golf Club members and guests a better golfing experience by providing a better playing surface." GCA

John Holmes is president of Atlas Turf International

INSIGHT



ROB GAVARKOVS

Using artificial with intelligence

Synthetic turf could provide a solution to some of golf's pressures, as Rob Gavarkovs explains

n 2018, short game legend Dave Pelz invited my colleague, 20-year experienced golf course architect Paul Jansen to his home in Austin, Texas, to see what he and his son Eddie had created several years before. Dubbed "the world's greatest backyard" by *The Wall Street Journal*, Dave had built a four-acre practice area where his tour professional clients (including Phil Mickelson, Patrick Reed and more than twenty other major championship winners) could practice and prepare for the biggest stages in golf.

What began as one green became seven, including replicas of the seventeenth holes at TPC Sawgrass and Pebble Beach, and the twelfth at Augusta (at Phil Mickelson's personal request). Eventually, Pelz ended up with what he describes as "every shot you can hit on earth from 100 yards and under". This included practice putting pads at one, two, three and four per cent slopes to teach players scientific green reading plus a wedge calibration area, where targets are sized to reflect PGA Tour proximity averages from varying distances.

Dave, a Nasa rocket engineer before turning to golf, says: "I was tired of travelling all over the country to meet my pros and help them with their games. I had an idea that if I could create the perfect space for them to practice, they would come to me. I didn't have the time or attention to take care of a full short game grass facility here at home, so I turned to artificial turf – maybe it was possible to get it as good as the real thing? Back then, artificial turf for golf was in rough shape, but I saw the potential."

Pelz worked with SYNLawn to develop a bespoke putting and chipping turf for his backyard. And it has stood the test of time, the backyard still looks and plays like real after twelve years of use by the world's best. While a 12-year warranty with a 20-year life expectancy and SYNLawns HeatBlock technology keeping the turf cool in hot temperatures, and



Dave Pelz created an artificial turf facility in his backyard where he says his pros can play "every shot you can hit on earth from one hundred yards and under"

the added fact of zero infill for zero maintenance, the crucial factor was realism. "The artificial turf was no benefit to me if it didn't play like a real grass green," says Pelz. "That was the majority of our work, to create a subsurface technology I developed which sits under the turf – called ShotStopper – that coupled with the turf and gave us the most realistic bounce, spin and putting performance that my pros needed to practice."

Paul was captivated by the visit: "It became obvious to me that with the right turf and technology coupled with my golf design and construction knowledge and Pelz's coaching expertise that it was possible to create systems that were not only real in every way and fun to play but also practice performance driven. What I could do with real grass I could exaggerate using artificial turf, and this made me excited given my creative side."

One of the first of those was at the University of Arkansans' golf team campus. There we designed and built a 10,000-square-foot indoor short-game practice area, including a multitude of short game chipping and putting modules using tight lie and rough turf varieties. This was one of Dave's favourite projects, providing "practice with performance in mind" for the world's future best golfers.

We've also worked at California's Stockton Golf & Country Club, where water restrictions and drought conditions in the state provided a compelling case for the transition to artificial turf. There we worked with both surfaces, extending their grass putting green to reduce wear and tear while adding an artificial practice green, with a view to a future transition to artificial greens and tees throughout the golf course. We also introduced an artificial tee line, and a multi-use fairway strip that the club could use for junior camps, events, banquets, weddings and even lawn bowling. This has significantly reduced the maintenance burden on an area that previously was routinely torn up following these activities, much to the superintendent's delight.

At Cedar Brae Golf Club in Toronto, Canada, we are combining Pelz's turf technology, our grass design expertise, and input from PGA/LPGA tour short game specialist Gareth Raflewski, to deliver a dozen short-game practice modules and a practice scorecard so that golfers can track their development, practice with purpose, and improve their games. This project also involves a new 15,000-square-foot putting and chipping green, an artificial turf wedge calibration range with greens spaced at 20 yards to 100 at the driving range, and a separate 1,500-square-foot artificial putting green will become home to the club's junior camps.

This project blends tradition with the future, using artificial turf where it is needed and grass where it is wanted.

Another application is in the world of golf entertainment. Given Pelz's adeptness for the short game, putting courses are a particularly good fit.

The first of these was at Oxley Golf Club in Brisbane, Australia, where the concept was to design a championship length golf course, then shrink it to

SUBSCRIBE —



Sign up to receive the free digital edition at www.golfcoursearchitecture.net/subscribe

MJABBOTT

MJ Abbott are the UK's leading golf construction experts. Whether re-shaping a bunker, reconstructing a green, or building a new 18 hole golf course, our expertise, experience and depth of resources is second to none.

Our extensive client portfolio includes the R&A,Wentworth Club, Celtic Manor Resort hundreds of private and proprietary clubs, and a number of major resort venues.



Golf construction experts

+44 (0) 1722 716361 • enquiries@mjabbott.co.uk mjabbott.co.uk







CREATORS OF THE WORLD'S GREATEST GOLF COURSES

Sol Golf have constructed some of Europe's most prestigious courses which have hosted the Ryder Cup, Rolex Trophy and Open Championship. Our portfolio is continuously growing with brand new courses along with the renovation of existing courses.

> Photo shows an overview of the new Marco Simone Course in Rome which will host the 2023 Ryder Cup

CALL +353 64 775 1006 EMAIL info@solgolfconst.com





five per cent of that size as a putting routing, where all the contours, strategy, risk/reward and hazards you'd find in the full-length version remain. The club now draws crowds of golfers and non-golfers that reaps more revenue from the putting course than its full course.

At Timberwolf Golf Club north of Toronto, Canada, a 'Pro-Putt' course also eschews clown mouths and windmills for a true golfing experience. Artificial turf can be ideal for driving ranges as well, and we have two designs in construction in Australia that will both have wall to-wall artificial turf surfaces with automatic ball-collecting capability shaped so that balls hit into the range will filter towards collection points then back to the ball dispenser. These facilities will be two of the world's first zero maintenance driving ranges. We are also working on several playable par-three course/driving range concepts where realistic playing artificial turf is essential for the dual capability maintenance requirements.

But why does artificial turf matter to golf? With the pressures of rising costs, labour shortages, water availability and



Pelz Player Greens has designed a putting course at Oxley Golf Club like a full-length layout, but at a five per cent scale. Top, the firm has combined real grass and artificial turf elements for the practice area renovation at Cedar Brae in Toronto

environmental reputation, golf needs to look at creative solutions. For those of you designing, building, maintaining, and operating golf courses for the 95 per cent of the golfers that just want a quick drive from their home, a reasonable price, and a good time with their friends or family, enjoying a game that for centuries has brought people closer together, that solution may be intelligent artificial turf designed and built to play like the real thing. **GCA**

Rob Gavarkovs is a golf course architect and partner at Pelz Player Greens and Jansen Golf Design

HOLING OUT

A step back in time

Prestwick is temporarily reinstating its original 12-hole routing to mark the 150th Open

he Open Championship delivered a fitting spectacle for its special anniversary, with Cameron Smith edging out Rory McIlroy and Cameron Young in front of a record crowd at the Old course at St Andrews.

Prestwick Golf Club is marking the occasion of the 150th Open by recreating the original 12-hole course that hosted the first edition in 1860.

The layout, which will be playable for two weeks in October 2022, has been recreated with the help of historical records and detailed maps. The club has reinstated five greens and created teeing areas to replicate the routing originally designed by Old Tom Morris. Some areas of long grass have been tempered to facilitate play, and wicker flag poles like those originally used have been commissioned.

The layout will offer blind tee shots, double greens, crossing fairways and undulations that combine to create a course "quite unlike anything that would be permitted today".

Ken Goodwin, secretary of Prestwick Golf Club, said: "This is where the magic of the Open began one fateful October day in 1860. There had to be a first, and it happened here at Prestwick."

Prestwick has hosted the tournament 24 times and has previously reinstated the inaugural Open course for special occasions, but the 2022 restoration is the most comprehensive and extensive to date.

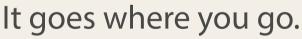
"Part of the Prestwick experience is walking through history," said Goodwin. "In the past, the club has endeavoured to bring back the original on only a handful of occasions. This year, however, to mark the 150th, the club was fortunate to have the necessary equipment required to deliver the 12-hole course to a much higher degree of accuracy than ever before. Together with the wicker basket flags, this has been the most thorough revisit and certainly the most eagerly anticipated." GCA



Prestwick is giving golfers the chance of "walking through history"

BEUID. FLUID. COMING SOON

Scan to learn more about what CirrusPRO from Rain Bird has to offer.



Our revolutionary mobile-first irrigation control system lets you go with the flow while keeping control — whether you're on or off the course.



More Freedom – run your course from anywhere, on any device.



Complete Control – programme your irrigation your way.



Better Data – feel confident and irrigate with precision.



1



THE SPRINKLERS World-Class Courses Rely on.

Toro® Irrigation Systems

The greenkeepers of the greatest golf courses on this planet trust in the skills of legendary toolmakers at Toro[®]. The INFINITY[®] and FLEX Sprinkler Series are the masters of efficiency and reliability.



TORO_®

Salar Straight

Join the conversation

Discover more at: www.toro.com