



ISSUE 59 // FALL 2022

# BY DESIGN

Excellence in Golf Design from the American Society of Golf Course Architects



## AFTER THE STORM

How four clubs rebuilt their courses and became more resilient after devastating floods

## FREDERICK LAW OLMSTED

The legendary landscape designer's impact on golf course designers

## ALSO:

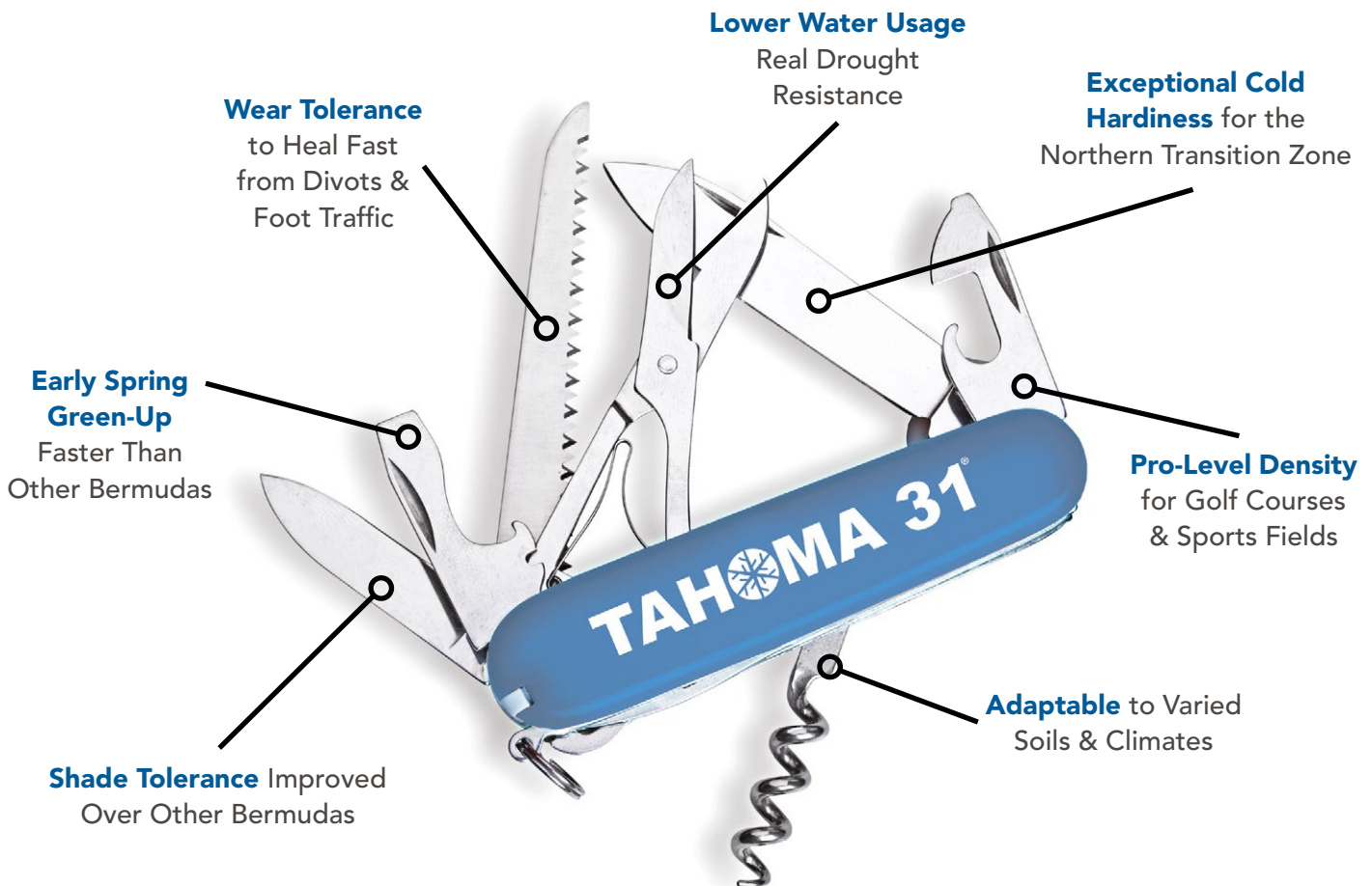
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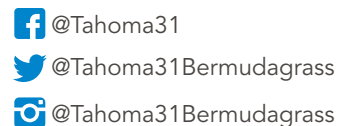
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**Jason Straka**  
President, ASGCA

## At one with nature

In the Winter 2021 issue of *By Design*, my first as ASGCA President, I spoke about what the great outdoors means to me, and how golf is the perfect way to enjoy both sport and our natural environment. So, as I pen this introduction for the final time, it is fitting to have come full circle and again be focusing on nature.

This summer I attended the European Institute of Golf Course Architects' annual meeting in Iceland, where the primary focus was the environment, and how golf courses can protect our natural resources. I am proud to have been able to sign a climate action pledge on behalf of ASGCA, alongside the presidents of the European and Australian societies, to affirm our commitment to sustainable development. Read more on page 6.

Climate is also the focus of this issue's cover story, specifically the impact that storms and flooding have had on golf facilities. We learn about four clubs that have endured the devastation of nature, and find out how they responded, by partnering with a golf course architect to develop a forward-thinking solution to repair damage and make the course more resilient to future storms. Turn to page 14 to learn how.

Legendary landscape designer Frederick Law Olmsted was one of the greatest advocates of the benefits of nature and devoted his life to preserving and creating outdoor spaces the public could enjoy. It was an honor to participate in a forum at The Country Club in Brookline during the U.S. Open this summer, where panelists discussed how his principles and body of work have provided a platform for golf course architects. You can read about this discussion on page 20.

I hope you enjoy the issue.

*Jason Straka*

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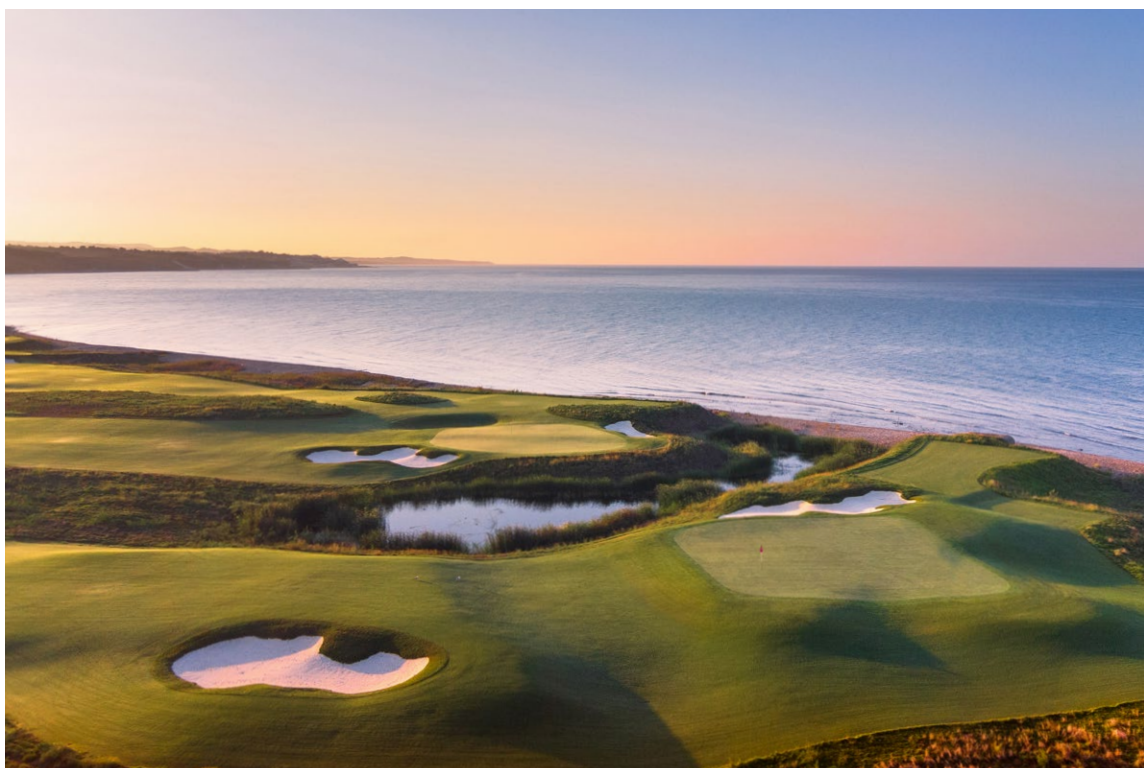
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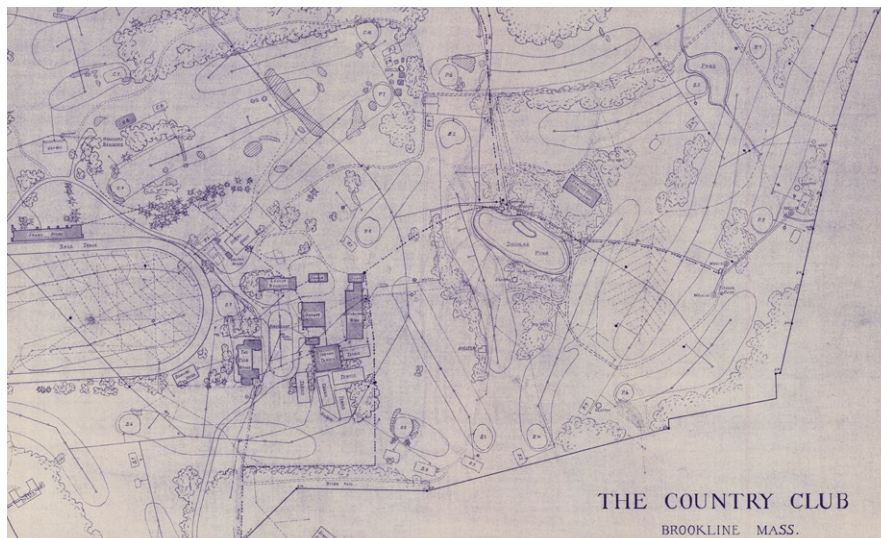
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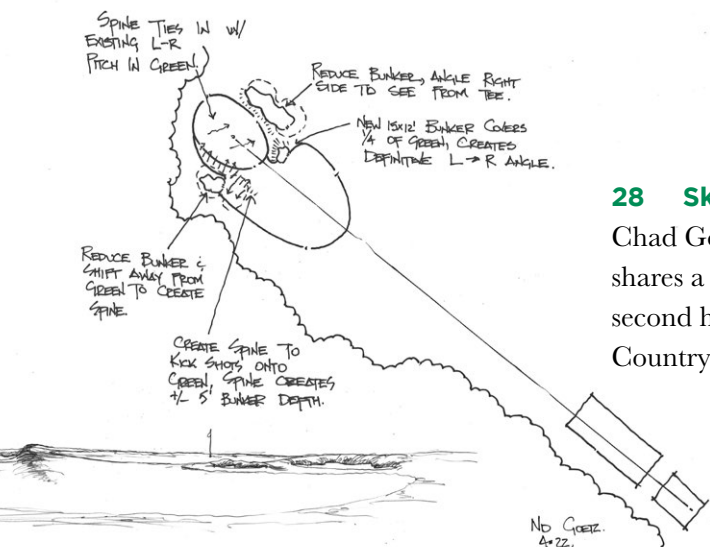
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The Lorette and Kidd courses at Kananaskis Golf Course in Canada were rebuilt by Gary Browning, ASGCA, after a flood. Read about this project and more on page 18.

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Editor and Publisher  
Toby Ingleton

Editorial contributors  
Richard Humphreys,  
Stacie Zinn Roberts

Design  
Bruce Graham, Libby Sidebotham,  
Dhanika Vansia

ASGCA Staff  
Jeff Brauer, Chad Ritterbusch,  
Mike Sheffy, Aileen Smith,  
Marc Whitney, Ann Woefel

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# Golf architects pledge action on climate



ASGCA President Jason Straka signs a pledge from golf course architects to strengthen their commitment to climate action, with EIGCA president Tim Lobb

**T**he American Society of Golf Course Architects (ASGCA), the European Institute of Golf Course Architects (EIGCA), and the Society of Australian Golf Course Architects (SAGCA) have jointly pledged to strengthen their commitment to climate action, within a wider framework of sustainable development as set out in the United Nations Sustainable Development Goals.

The pledge was signed by presidents of the three societies at the EIGCA's annual meeting in Reykjavik, Iceland.

ASGCA president Jason Straka said: "I was thrilled to attend the conference and annual meeting in Iceland which covered many topics regarding climate change and how we as professional golf course architects can help to address it. I signed the pledge on behalf of ASGCA and our members, who continue our ongoing commitment towards climate action through conscientious design."

The three organizations' collective commitment focuses on four areas: increasing knowledge, environmental stewardship, encouraging research

and innovation and the positive impact that golf courses can have on communities and climate.

Tim Lobb, EIGCA president, said: "Sustainability and stewardship of the environment are key considerations in golf course design and as an institute we believe it is important to create a pathway for golf to achieve net zero emissions through how golf courses are designed and developed."

Harley Kruse, president of SAGCA, said: "Climate change is evident across the golfing landscape of Australia. The Australian





Photo: EIGCA

continent is historically one of drought, floods, storms, and bush fires, but now a place where abnormal weather is perhaps becoming normal. SAGCA is very happy to sign this pledge and commit to encouraging and supporting the Australian golf course architecture community to increase their knowledge and understanding of climate adaption in design.”

The meeting included discussions on the theme of ‘driving net zero’. Experts from GEO Foundation and the R&A

spoke to delegates about climate change, its impact on golf, and the practical implications for golf course design. Gudlaugur Thór Thórdarson, the Icelandic Minister of the Environment, Energy and Climate delivered a welcoming address.

Measures towards net zero emissions associated with the conference were undertaken, including Rain Bird and Toro funding carbon offsetting to cover the impact of delegate accommodation, meals and transportation.

## John Lawrence to receive ASGCA Donald Ross Award



Photo: ASGCA

*John Lawrence, third from left, with ASGCA leaders at the 2019 ASGCA Annual Meeting in Arizona*

The American Society of Golf Course Architects will present the ASGCA Donald Ross Award to John Lawrence, director of strategic golf at Toro, at its 2022 Annual Meeting in Providence, Rhode Island.

The award has been given annually since 1976 to a person who has made a significant contribution to the game of golf and the profession of golf course architecture.

“John is the epitome of what the Donald Ross Award was created to honor,” said ASGCA President Jason Straka. “He truly has made a significant contribution to the game and the profession because of his ability to find that missing piece to move a project to success, and most importantly to help an architect or friend in need.

“It seems like he knows everyone; more than once I’ve been stuck on a project and a call to John has led to a solution. I’m proud to call him my friend, and I know that’s true for scores of people in this industry. The night we give John the Donald Ross Award is going to be special.”



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## Abbey Springs reopens with overhauled greens



Photo: Paul Hundley

Lohmann Quitno Golf Course Architects has completed a renovation of the Abbey Springs golf course in Wisconsin.

The focus for the renovation was to overhaul the greens. “Our goal

was to create a lot more variety in the surfaces,” said Todd Quitno, ASGCA, who led the project. “We integrated internal contours to create pinnable areas guarded by fun bumps, ridges or rolls.

“We also rebuilt the surrounds, and now the bunkering has a more classic, elegant look and is accompanied with bentgrass roll-off and roll-on areas that provide more recovery options and interest.”

The project also included new drainage, fairway regrading and a revamp of the practice area. The range now has three greens at varying distances and Quitno also added a new short-game green.

The Abbey Springs course reopened on 5 July 2022.

Since the project’s completion, ownership of Lohmann Quitno has been transferred to Quitno and the firm has been renamed Quitno Golf Designs.

## Planning under way for new golf entertainment center

The Shingle Springs Band of Miwok Indians has selected Richardson | Danner Golf Course Architects to design a nine-hole par-three course and golf entertainment center near Sacramento, California.

The new development is planned on 34 acres of land by Highway 50. The entertainment center plans include a driving range with launch monitors and gaming technology plus a miniature golf course.

“It’s a new age,” said ASGCA Past President Forrest Richardson. “We’re no longer designing just for the game we grew up playing, but for a whole new generation of golfers – many who simply want to have fun as opposed to keeping score.”



Photo: Richardson | Danner

Jeff Danner, ASGCA, said: “The realization that the most social game ever invented does not have to fit a certain mold is now, more than ever, at the forefront of how we approach

projects to make them successful and sustainable into the future.”

Planning will be completed by fall 2022, with the aim to break ground in 2023.

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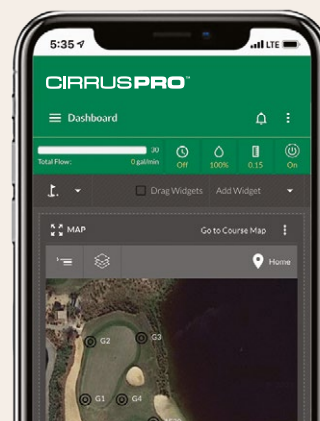
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## Stone Valley opens third nine from Brian Curley

Stone Valley Resort near Hanoi, Vietnam, has opened its third nine, designed by Brian Curley, ASGCA.

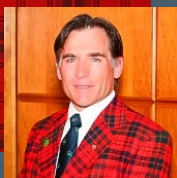
The resort opened its first 18 holes, also designed by Curley, in 2018, with the new nine playing within a landscape that includes towering Karst rock formations and densely vegetated jungle.

Curley highlights the third-to-fifth stretch as some of his favorite holes. “The third is a mid-length par four with a wide landing area and a fairway that narrows as players get closer to the green,” he said. “Behind the green is a towering jungle and rock formations. The par-five fourth wraps around a creek to a reachable green fronted by the creek and rock outcrops. And the long par-four fifth offers the most stunning backdrop of all. It has a slightly elevated green with a creek to the front and is backdropped by the tallest rock-faced mountain found on the site.”



Photo: Schmidt-Curley

*The par-four fifth on the new nine at Stone Valley, designed by Brian Curley, ASGCA*



### “What differentiates golf course architects is philosophy”

**Garrett Gill, ASGCA**

In the latest podcast from *Golf Course Industry's* “Tartan Talks” series, Garrett Gill, ASGCA, talks about his golf course design philosophy and his future in the business.

“In golf course design, it’s almost anything goes,” says Gill. “It has to be playable and attract golfers to come back again and again.”

“What differentiates golf course architects is philosophy. The

easy way to think about different philosophies is bunkers. I see them as an adjustable element, and I try to design them as a chance for recovery. For me, bunkers can be defensible, but they shouldn’t destroy you.”

Gill has been in the golf course design business since the 1980s and he isn’t slowing down.

“I think the career of a golf course architect keeps climbing and climbing and it’s something

I look forward to,” says Gill. “I’m heading towards 70 next year and I can see myself getting better and better. I feel like I still have a good life ahead of me as a golf course architect.”

“The golf business values respect, integrity and honesty, and I’ve been fortunate to work with some brilliant clients in my time.”

*Listen to the full “Tartan Talk” at [golfcourseindustry.com](http://golfcourseindustry.com).*

Here are links to other recent “Tartan Talks,” now featuring over 70 episodes:

- Michael Benkusky, ASGCA, [discusses his recent work in the Midwest and Florida](#)
- David Ferris, ASGCA, [speaks about his 25-year partnership with ASGCA Past President John Sanford](#)



Photo: The Landings Club

## Bergin to renovate Palmetto course at The Landings

The Landings Club in Savannah, Georgia, has hired Bill Bergin, ASGCA, to develop a renovation plan for its Palmetto course, which was originally designed by ASGCA Past President Arthur Hills.

Chris Steigelman, director of grounds and project management at

The Landings, said: “From our first interview with Bill early in 2022, he has exuded an excitement and a passion for the Palmetto course, saying, ‘the course just fits me, it fits my style, and fits my eye’. One of the most resonating keys to Bergin’s design philosophy was making the

golf course more challenging for the low-handicap golfers while making it easier and more enjoyable for the higher handicappers.”

Bergin plans to renovate greens and bunkers, add new forward tees and make other changes to improve the playing experience.

## Boyne Resorts turns to Hearn for par-three layouts

Ski and golf operator Boyne Resorts has turned to Raymond Hearn, ASGCA, for the design of par-three courses at three of its destinations.

At The Highlands at Harbor Springs in Michigan, Hearn’s new par-three layout is routed across a sloping site and set among fescue grass, with nine holes ranging from 38-to-120 yards. He is also working on a renovation of the club’s 18-hole Donald Ross Memorial course.

Hearn’s two other par-three layouts for Boyne Resorts are at Sugarloaf Golf Club in Maine and at the Big Sky ski resort in Montana, which also has an Arnold Palmer course. At both locations Hearn will also be remodeling the practice areas.

All three courses are due to open in 2024 or 2025 and Hearn is also working with Boyne Resorts on long range master planning for four of its full-length eighteen-hole layouts.



*A visualization of Hearn’s plans (alongside, top, the existing conditions) for the redesign of the opening hole on the Donald Ross Memorial course*

Photo: Raymond Hearn, ASGCA



## Grande Dunes to reopen following Harvey renovation



Photo: Grande Dunes Resort Club

Grande Dunes Resort Club in Myrtle Beach, South Carolina, is reopening following a four-month renovation by John Harvey, ASGCA.

Harvey has restored putting surfaces to their original size, reclaiming nearly 40,000 square feet of putting surface, and regrassed them with TifEagle ultradwarf bermuda.

Work on bunkers included coring out the floors and

installing bunker liner from Capillary Concrete.

“We are delighted with the progress in all three phases of the Grande Dunes renovation,” said Founders Group International president Steve Mays. “We allowed four months for the completion of the project, ensuring the course will be in spectacular condition from the moment we welcome players back.”

## Jones livens layout at Westchester Hills

ASGCA Past President Rees Jones has completed a renovation of the golf course at Westchester Hills Golf Club in New York.

Work has included reshaping and expanding fairways, creating new greenside pitching swales, expanding 14 greens, adding new tees, renovating all bunkers with new sand and Capillary Concrete, and installing a new state-of-the-art irrigation system.

“Our design was to liven up a classic-style golf course while upgrading the course’s

playability and maintenance standards,” said Jones. “We fully expect the golf course’s new features to take the Hills golf experience to a new level.”



Photo: Troon

### SOCIAL UPDATE



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“We discovered a piece of land that’s like nothing else,” says William Duane Horton on The Outpost, a new golf course designed by Bill Bergin, ASGCA, and ASGCA Past President Rees Jones



**Instagram**  
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Attendees at this week’s ‘Multi-Course & Resort Operators Retreat’ in South Carolina, from left: Justin Apel, GCSAA; Jay Andersen, NCGOA; Hunki Yun, USGA; and ASGCA President Jason Straka



**Twitter**  
@carriejulie1

My 13-year-old spent eight hours on this golf course design “for the pros”. It is meticulously designed with exact yardages, various tees and relies on using the land “as is”. #CoolGolfKid

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# After the storm

Flooding can cause devastation for golf courses and their communities. Richard Humphreys considers four examples of how clubs have responded and rebuilt stronger.

**T**he Royal Society, the world's oldest independent scientific academy, reports that flooding events are becoming more severe, more intense, and more damaging. And, according to the National Centers for Environmental Information, these disasters have cost US taxpayers more than \$850 billion since 2000

and are responsible for two-thirds of the cost from all natural disasters.

Golf facilities built on or near floodplains, next to bodies of water or in valleys, are at high risk from these catastrophes. But with the support of experts, clubs can build extra resilience to storm events, or rebuild better after disaster strikes.

**Seizing the chance to improve** “One of the most complex meteorological situations of the past 50-to-60 years,” is how Italy's civil protection agency described the events that transpired across the country in October and November 2018. Over seven days, a combination of severe storms





Photo: Verdura Resort

*The fifth (foreground) and twelfth greens on Verdura's East course were among those rebuilt after severe storms raged across Italy*

and heavy rain led to flooding and landslides in various regions, with devastating consequences.

The two golf courses designed by Kyle Phillips, ASGCA, at Verdura Resort, a European Tour host venue on Sicily's southern coast, felt the full force of the storms, with a levee that runs between the site and

the Verdura River breaching and the resulting floodwater causing widespread damage.

"On coastal sites we normally think of erosion as coming inward from the sea," says Phillips. "In this case, the erosion started inland and moved toward the sea. The breach occurred near the new tenth

tees, one kilometer from the sea, and quickly moved across 14 holes [seven holes on the East course, and seven on the West] and into sections of the resort buildings.

"The flood that hit the course in 2018 was obviously devastating, but we needed to approach it as an opportunity to make the golf experience even better."

With this mindset, Phillips altered the routing to incorporate all 14 damaged holes, plus four remodeled holes into a new East course configuration that more clearly defined the two courses, whilst preserving an equal number of coastal holes on each course. "The flood created new landforms and dramatic, eroded inlets near the coastline that have been incorporated into the new design," says Phillips.

Phillips also made the most of new landscapes created by flooding. "The sixth is arguably now the prettiest hole on the property," he says. "The Mediterranean Sea runs the length of the right side and the view down the coastline goes on forever. The approach plays over a saltwater inlet carved out by the flood to a seaside green that sits on the southern tip of the property."

A new drainage burn was introduced to help prevent future flooding on the course. The burn also acts as a strategic element to the redesigned par-four third and par-five fourth holes.

The East course reopened in October 2021 to rave reviews. "To be rated among the world's elite





Photo: Norby Golf Design



Kevin Norby, ASGCA, rebuilt Coal Creek Golf Course in Colorado following a storm that ravaged the layout in 2013

golf resorts and Italy's best is an outstanding achievement for the resort and something that makes us all very proud," says Giacomo Battafarano, the general manager at Verdura.

## Reborn following a flood

In late 2013, a torrential rainstorm hit the north of Colorado, leading to flash floods that caused devastation across several cities, including Louisville.

The storm transformed the traditionally calm Coal Creek into a wild torrent of water that rose out of its banks and washed away roads, bridges and homes, as well as devastating the city's only golf course. In an interview with *Colorado Avid Golfer*, city of Louisville parks planner Allan Gill said: "This wasn't a 100-year flood. It was a 400- or 500-year event."

Prior to the flood, Kevin Norby, ASGCA, had drawn up a long-range master plan for the golf course, which had originally been laid out by ASGCA Past President Dick Phelps in 1990. "The primary concern at the time was new irrigation and addressing some agronomic issues with the greens," says Norby. "There was also a need to renovate bunkers, conduct tree removal, add forward tees and adjust bunker locations to address playability of the course for the modern golfer."

Then the storm hit.

"It was so intense and brought so much water that it carved new paths for the stream and undermined trees and roads," says Norby. "The storm left trees scattered across the course, damaged cart paths, washed out bridges and bunkers, damaged the irrigation system, and covered tees, fairways and greens with rock

and silt. With all this devastation, the golf course was forced to temporarily close."

The closure gave Norby, who has handled numerous post-storm golf course projects, the opportunity to reassess his master plan and incorporate new ideas for the repair work.

Norby explains that the Coal Creek storm occurred shortly after the Federal Emergency Management Agency (FEMA) had made changes to the funding of golf course repair. FEMA would previously only fund infrastructure replacement or repairs. But Coal Creek became the first course to receive federal funding for the re-establishment of turf as well, reducing the city's financial burden for the \$5.5 million project.

"The flood allowed the master plan improvements to





Photo: Chris Wheeler

be implemented quickly and completely rather than being implemented over time,” says Norby. “One of the primary concerns prior to the flood was how narrow the fairway corridors had become due to overgrown trees and brush along the stream banks.”

Norby was able to widen playing corridors, improve turf quality and enhance sightlines. “The stream banks were restored using rock and plantings and the irrigation booster pump was raised to minimize the potential of damage from future flooding,” he says.

Norby’s also oversaw the introduction of new tees, fairways and greens, a new irrigation system, cart paths and practice facilities.

He also proposed significant regrading, which introduced interesting undulation to previously flat fairways and green surrounds,

enhancing the strategy of the course, while also helping to protect it against the type of flooding seen in 2013. This proved invaluable when storms hit the site again, in May 2015. The regrading work, including newly introduced drainage

**“The flood was obviously devastating, but we needed to approach it as an opportunity to make the golf experience even better”**

and collection areas, prevented significant damage to the course.

Coal Creek survived one devastating flood and, with Norby’s help, was reborn with a robust design that proved capable of withstanding storms that followed,

while providing more enjoyment for the city’s residents.

### **Flying high after the storm**

When Hurricane Isabel hit Virginia in September 2003, the category five storm caused billions of dollars’ worth of damage across the state. Torrential rain, violent winds and devastating tidal surges damaged everything in Isabel’s path, including the 36-hole Eaglewood Golf Course at Langley Air Force Base.

A tidal surge around eight-to-ten-feet-high hit the property, resulting in the loss of over 300 trees, creating a host of surface and sub-surface drainage problems, and causing heavy damage to the turf on both the Eagle and Raptor courses, which had been laid out by Ed Ault in 1965.

After the storm passed, the base engaged Lester George, ASGCA, to assess the damage of both courses.

“Little did we know that the golf courses were used as one of the first bombing ranges in the world during the First World War,” says George. “After grading began, we quickly discovered unexploded ordnances (UXOs). We stopped



## DISASTER RECOVERY



Photos: George Golf Design

*Lester George, ASGCA, completely rebuilt Eaglewood Golf Course at Langley Air Force Base following the removal and disposal of unexploded ordnances*



to investigate and discovered over 16,000 pieces of UXO, including 500-pound bombs. We spent almost a year remediating [removing and exploding] the UXOs before work could continue.

“Some were blown up in place by the bomb squad and hazmat specialists, with the more potentially dangerous bombs disposed offsite.”

George outlined the pressing need to address soil contamination on the property. “It cannot be corrected by waiting it out,” he notes. “They are, and will be, the most costly to correct and, if left unrepaired, will cause long term turf and playability problems.”

The greens were also damaged beyond repair. “Native soil greens are characterized by inferior drainage qualities and poor turf growing medium and are doomed

once they are inundated with salt and other contaminants which have little chance of leaching out,” says George. “Poor turf quality will continue and will have a lasting effect on playability, which will reflect on the profitability of the course.”

George completely redesigned and rebuilt the golf facility, reducing the number of holes from 36 to

with hundreds of thousands of cubic yards of fill material, raising those areas from potential future flooding,” he says.

### Restoring a Jones classic

“It was the perfect storm,” recalls Gary Browning, ASGCA, when speaking about the circumstances that caused severe flooding to

**“The flood allowed the master plan improvements to be implemented quickly and completely”**

18 for commercial sustainability. “The bombing range portion of the golf course was rebuilt as an environmental restoration program site by covering the areas affected

Kananaskis and large parts of Calgary in June 2013. “The combination of 300 millimeters of rain landing on a heavy snowpack in the mountains caused an epic flood.”





Photos: Gary Browning, ASGCA

*Gary Browning, ASGCA, says that since reopening in 2018 Kananaskis Country Golf Course has re-established its reputation as “a bona fide tourist attraction” with tee times highly sought after*

Usually a trickle, the Evan-Thomas Creek – which runs through the Kananaskis golf property – became a raging torrent, ripping through the club’s Lorette and Kidd courses (designed by ASGCA Past President Robert Trent Jones, Sr.). In total, all but four of Kananaskis’ 36 holes suffered significant damage.

Browning was struck by how hurt Kananaskis general manager Darren Robinson sounded when he called with news of the flooding. “I went out to Kananaskis the next day and I was just devastated by what I saw,” says Browning. “I described it once as mother nature delivering blunt force trauma to Kananaskis. It was the worst of the worst. There were holes that were completely unrecognizable.”

Thousands of trees were scattered across the course, between six to

eight feet of gravel, mud and debris was deposited on some fairways, and ponds were completely full of silt.

“The city of Calgary [50 kilometers east of Kananaskis] was also impacted by the flooding,” says Browning. “Numerous golf courses in the Calgary region were also terribly damaged.

“Kananaskis Country Golf Course is owned by the province of Alberta so it became a political hot potato as to whether public money should be used to rebuild it. It even became an election issue!” In the end, the Government of Alberta committed CAD\$18 million to rebuild the courses, with Browning installed as the project’s architect. Work was completed in 2018.

Browning says the overall look, feel and character of the courses remains relatively similar to Jones’s original,

but with some subtle changes “to take some of the teeth out”, making them a little less penal. “The courses are still a challenge – tough holes are great, but they can’t all be tough,” he adds. “It’s about enjoying the challenge, but also enjoying the victory. As a golf architect, you have to offer a little victory along the way – that’s what we’ve done. We made them a bit more playable.”

Various flood mitigation measures were introduced, including extensive berming along both the Evan-Thomas creek and Kananaskis River.

Browning says that since reopening in 2018, Kananaskis Country Golf Course has become “a bona fide tourist attraction” with tee times highly sought after and golfers from around the globe travelling to Alberta to play. ●



# Landscapes lent to golf

Frederick Law Olmsted's impact on the landscapes of America extends to its golf courses too.



During the week of the 2022 U.S. Open at The Country Club in Brookline, Massachusetts, ASGCA Tartan Program participant John Strawn, in collaboration with the National Park Service's Frederick Law Olmsted National History site, hosted 'From Greensward to Putting Greens: Frederick Law Olmsted's Influence on Golf Course Architecture', a panel forum, including several ASGCA members, to mark the Olmsted 200 campaign, a year-long celebration organized by the National Association for Olmsted Parks and the 200th birthday of Frederick Law Olmsted.

*This article includes some observations from the discussion, which is available to watch in full on YouTube: [www.youtube.com/watch?v=xXZBX2JBfwA](https://www.youtube.com/watch?v=xXZBX2JBfwA)*

Frederick Law Olmsted is considered by many as the father of American landscape architecture, with the parks and communities he designed during the late nineteenth century becoming a defining aspect of life in America.

"My grandparents immigrated from Italy to Vandergrift, Pennsylvania, which was one of many communities designed by the Olmsted Brothers," says ASGCA President Jason Straka. "And when I attended Cornell University to study landscape architecture, I found it was one of the many campuses Olmsted designed. It's amazing the number of personal connections you find to him."

Originally a journalist, Olmsted's career in landscape design began in the 1850s, when he forged a partnership with English architect Calvert Vaux for a submission to the contest to design New York's Central Park. Their 'Greensward Plan', inspired by Olmsted's visit to the public gardens of England a few years earlier, won the contest and paved the way for the establishment

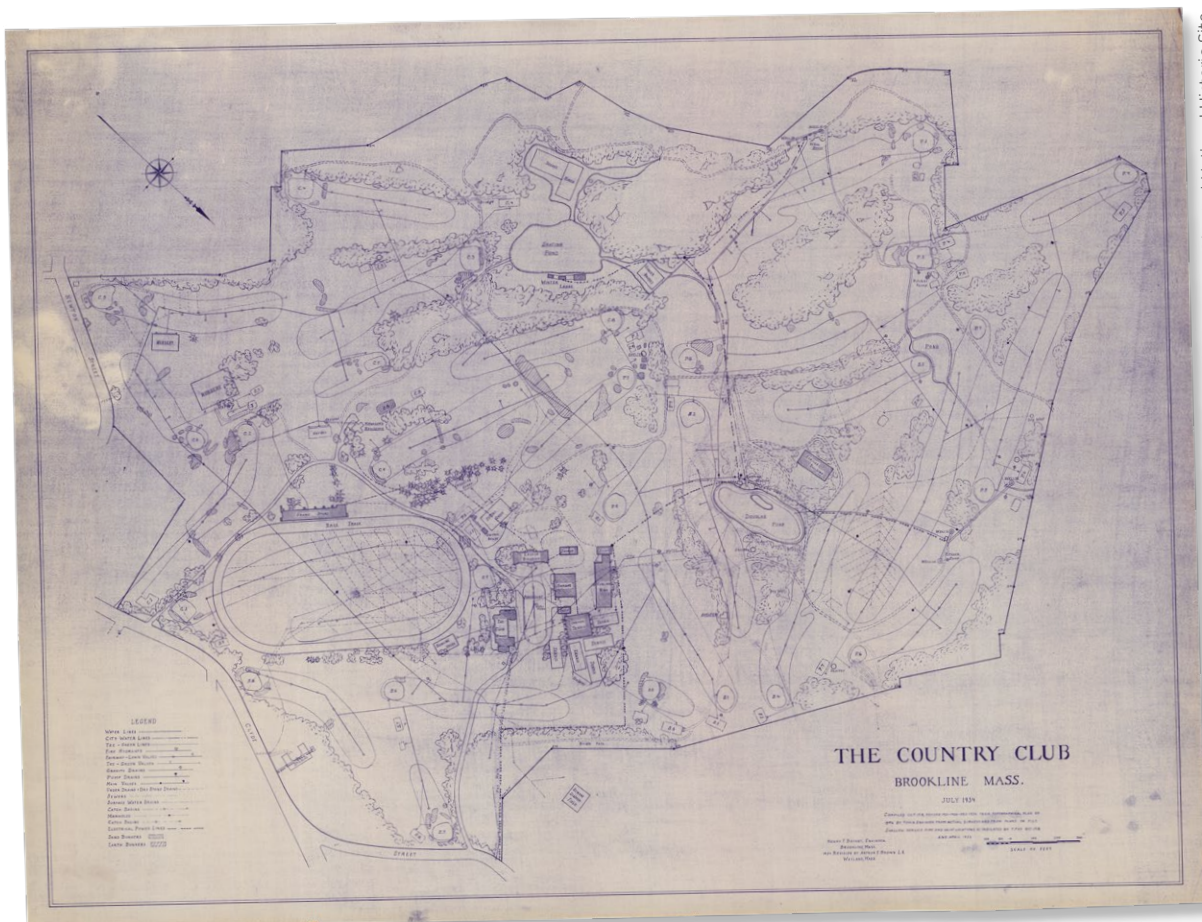
of landscape architecture as a profession, as well as influential future park designs like Prospect Park in Brooklyn and the Emerald Necklace chain of parks in Boston.

At places like Franklin Park in Boston and The Country Club in Brookline, Olmsted's landscapes were found to be well suited for golf, even though Olmsted did not always warm to the idea of golf and other recreations being played in his parks.

Richard Mandell, ASGCA, says: "He may never have designed a golf course, but his principles and everything he put in place, also applies in golf course architecture."

The famous 'seven s's of Olmsted's design' principles – scenery, suitability, style, subordination, separation, sanitation and service – have been studied by landscape architecture students for decades. Olmsted subscribed to the poet Alexander Pope's adage that 'in architecture... all must be adapted to the genius of the place.' He sought to create designs that stayed true to the character of the land and the natural surroundings.





*Olmsted completed landscape work at The Country Club in Brookline following his move to the area in 1883. Willie Campbell laid out six golf holes on the property in 1893 with the club expanding to 27 holes in 1927*

“His core principle was focusing on what makes each site special,” says Mandell. “As a golf course architect, I follow that advice wherever possible. My process is to find the genius of the place and route holes to create something unique.”

ASGCA Past President Jan Bel Jan says one example of when Olmsted’s design philosophies had a particular impact for her was on the Black Diamond project in Florida with Tom Fazio, ASGCA. In particular, Olmsted’s scenery principle was employed to give an enhanced sense of space. “We had to be careful about creating spaces – there were two quarries,” she says. “Creating a sense of space, making the most of the site and routing the holes was quite like music – we had to design with

consideration as to where the crescendo should be.”

“I use Olmsted’s principles on a daily basis,” says Straka. “Creating a sense of arrival and place, that’s what the best golf courses do. You’re leading people through an 18-hole journey, and you want people to come back and enjoy that experience again, developing that sense of community.”

Brandon Johnson, ASGCA, highlights Olmsted’s subordination principle, as an instance of how he, as a golf course architect, has followed Olmsted’s example. Olmsted referred to subordination as “art to conceal art,” meaning that the various elements and features of the site should be subordinate to, and contribute to, the overall design.

“I look at a site and ask myself what to change, what to keep and how to route the course so that everyone can enjoy the experience... without destroying what was great about the site,” says Johnson. “Then it’s time to complement the site with my design. While some choices may be bold, others can be subtle... as if no one is ever going to know you did something.”

Any student of landscape design will quickly become familiar with Olmsted and his principles, and regardless of their specialism, many continue to be inspired by him throughout their careers. “What a wonderful body of work,” says Johnson. “I will always remain a dedicated student of landscape architecture and Frederick Law Olmsted.” ●



# Renovating a classic

**Columbia Country Club in Maryland converts from cool-season to warm-season grass and is immediately recognizing the benefits.**



**Stacie Zinn Roberts**

Stacie Zinn Roberts is an award-winning writer and marketing expert specializing in the golf and turfgrass industries.

**T**here is a delicate balance to renovating a classic golf course.

Heritage and playability must be preserved while implementing modern innovations in technology such as improved turfgrasses for greater sustainability. This was the case at Columbia Country Club in Chevy Chase, Maryland.

Columbia is a century-old landmark Walter J. Travis design steeped in tradition. It is the site of the 1921 U.S. Open where then-President Warren G. Harding presented the winning medal to Jim Barnes, and a 19-year-old Bobby Jones was edged out by one stroke as low amateur by 1916's Open winner Chick Evans.

While Columbia may have been one of the first in the nation to install an irrigation system, very little has changed at the club short of some minor adjustments to hazards and the addition of a driving range. Still, Travis's layout has never been altered. Safeguarded by a passionate membership of low handicappers (two of whom competed for the green jacket at the

Masters), the course is considered hallowed ground.

It was with the utmost respect and collaboration with an informed and vigilant renovation committee, working alongside a dedicated golf course superintendent, that Joel Weiman, ASGCA, senior designer with McDonald Design Group, based in Maryland, began a renovation master plan in 2017.

Several factors contributed to the decision to renovate the 18-hole course. A long-dormant easement that once allowed for freight train traffic through the club's property (it was turned into a walking path many years ago) was tapped back into service. The easement is now being converted into a light rail passenger line to serve commuter traffic for the suburbs of Washington, D.C. This required a slight reconfiguration of the club's second hole and a move and replication of the fourteenth green.

"We surveyed the putting surface, shifted its location, and replicated it to within a half-centimeter tolerance," says Weiman. "It's





Photos: McDonald Design Group

exactly the same green the members played. I remember when a member came up to me during construction and said, ‘you know, Bobby Jones putted on this green, don’t you mess it up’,” he chuckles. “Yeah, we had to get that one right... welcome to Columbia.”

The course was in desperate need of a new irrigation system, and aging bunkers cried out for a rebuild. The decision was made to tackle both projects simultaneously beginning in October 2021. To do it right, every Monday morning, the bunker committee met to discuss the renovation.

“We wanted it to feel rugged, very traditional, classic,” says Weiman. “Our expression with our committee on Monday mornings was, ‘does it smell musty?’, meaning, ‘is it old?’ We didn’t want it to look new and finished. If we could answer yes, then we moved on to the next bunker. That was the character, the style, the identity of Columbia, that the bunkers look broken and aged, that they look like they had been there for 100 years, which gave

it a different character or feel than the clubs down the street.”

Hotter summers and more volatile weather patterns, attributed to climate change, were making it increasingly difficult to keep a healthy stand of ryegrass in the fairways during peak season play. The club’s analysis identified they were getting the most play in the summertime when the existing cool-season turf was at its weakest.

“D.C. is hot. It’s a tough place to grow ryegrass fairways. And they had a lot of fairway slopes that pitch due south. The ryegrass would just become unhappy and wilt under the stress of heat, traffic and disease every summer,” Weiman says. When they most wanted that premium performance, during their busy summer season, the cool-season grass was underperforming.

“If you have one bad season with your fairways every once in a while, it’s forgivable, right? It might be a fluke. But when the ryegrass was taking it on the chin season after season, it was obvious to everyone that it was time for a change.”



*The seventeenth at Columbia, before and (top) after renovation work*

A regrassing project was planned to replace the beleaguered cool-season ryegrass with Tahoma 31 bermudagrass, a new, more resilient warm-season turfgrass developed by the renowned turfgrass breeders at Oklahoma State University. A fairway regrassing committee formed of members whom Weiman describes as having “a high golf IQ” did their research. They toured the Naval Academy Golf Club in nearby Annapolis, Maryland, whose fairways, tees, approaches and green surrounds are grassed with Tahoma 31, and were impressed by its playability, lower water use, lower fertilizer and fungicide requirements, durability, cold tolerance and early spring green-up.

Nearly 30 acres of sod were planted in the summer of 2022,



## TURFGRASS

more than 100,000 square feet (2.5 acres) per day. The sodding was fast-tracked to minimize disruption of play, to make a September reopening deadline, but also to avoid spring washouts that were inevitable considering the predictability of summer thunderstorms and the steep slope of many of the fairways.

Weiman and golf course superintendent Matt Sumpter were expecting significant water savings moving from cool-season ryegrass to warm-season bermudagrass. However, the results on the ground, even just a few weeks after the grass was laid, are remarkable.

"I don't think it's rained for six days, and there has not been a need to water the Tahoma 31 that's been

## "Water savings are going to be dramatic"

established," says Sumpter. "I think we could stretch it out to 10 days. The water usage is night and day. We have established cool-season rough that's wilting before the new, young Tahoma 31 grass is. It's incredible. The water savings are going to be dramatic. I'd say the ryegrass would require 10 times more water than the Tahoma 31."

Sumpter also says he expects a monumental reduction in fertilizer use on the course. "With the

ryegrass fairways we used a pound to a pound-and-a-half of nitrogen per 1,000 square feet, per year," he says. "Next year, with the Tahoma 31 fairways, I hope to be around half a pound for the entire year. I expect about a 50 percent saving there."

Sumpter and Weiman credit Columbia's membership for taking sustainability into consideration when making the grass selection.

"It was forward-thinking as far as the club doing its homework," says Sumpter. "Montgomery County is very progressive and, at some point, pesticide usage is going to be on the chopping block, if you will, for restrictions or reductions. And golf courses are going to be the focus point since restrictions have already been passed for residential and other recreational turf."

Weiman adds: "The club is looking for performance, consistency and playability. But just as important is that it's sustainable. We're in the Chesapeake Bay watershed. It's right near the Potomac River."

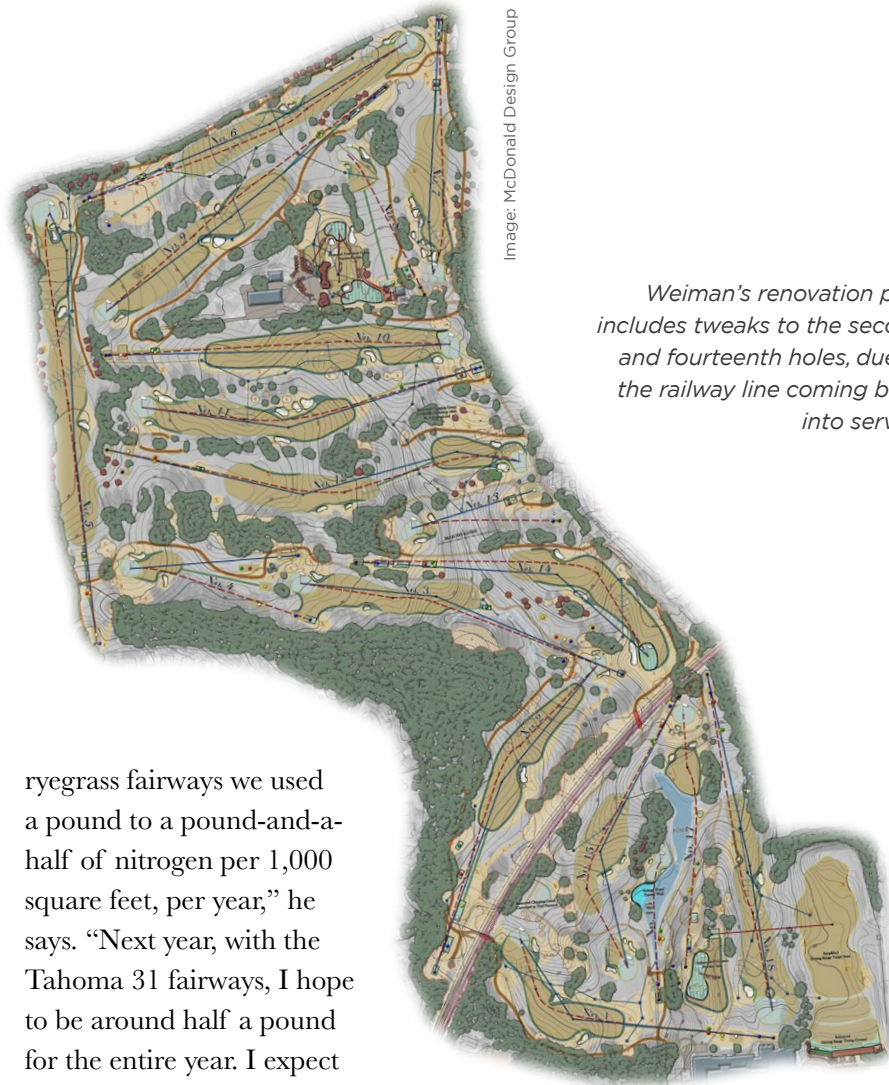


Image: McDonald Design Group

*Weiman's renovation plan includes tweaks to the second and fourteenth holes, due to the railway line coming back into service*

Last year, Columbia supported nearly 30,000 rounds of golf. Sumpter says he expects the number of rounds to increase because of the renovation.

Weiman says the course will be an example for all clubs in the Mid-Atlantic region.

"In the past, bermudagrass was thought of as a somewhat lesser product, but that's all changed now with newer varieties like Tahoma 31," he says. "A club like Columbia doing its research and converting to bermudagrass proactively? That's going to change how many of the area clubs are going to look at that grass. We're going to see the number of turf conversions increase significantly over the next five years, for sure." ●



“Like all great art  
the answer is on the  
canvas, and my  
canvas is dirt. I’m a  
voice of the ASGCA.”

— GIL HANSE



[asgca.org](http://asgca.org)

Photo by Jeey Torril

# A sum greater than its parts

A good partnership between architect and constructor results in a positive outcome in the field. *By Design* speaks with representatives from both sides of the equation to find out more.

Two key cogs in the creation of golf course projects are architects and constructors. Each inevitably has their own vision of how to achieve results, but respect for each other's specialty is imperative.

"Optimizing the whole is the guiding principle that brings out everyone's best," says Jake Rickstins, chief development officer of golf construction firm Landscapes Unlimited. "Listening and then responding from a place of expertise and experience provide maximum utility and value to the project and team. Maintain an even keel and there are definitely times to go along to get along. But don't be a pushover if you feel strongly about a particular aspect of your work. It's why we are in the room. It's all in the delivery – recommend, don't tell, and ask others what they think of your ideas."

ASGCA members relish cooperation and have guideposts of their own. "The architect's primary job is to clearly articulate,

via drawings, words and in-field directives, what constitutes the vision and expectations of the project," says Paul Albanese, ASGCA. "Getting everyone on the same sheet of music from the outset mitigates frustration."

Albanese emphasizes the importance of all parties recognizing that mistakes occur during

writers believe the actor must say every line in the script exactly as its written. Others allow deviation and ad lib to achieve the best result."

Proper planning is what Gene Bates, ASGCA, covets in relationships with trusted construction companies. The build cost must always be consistent and dependable. Construction

**"Getting everyone on the same sheet of music from the outset mitigates frustration"**

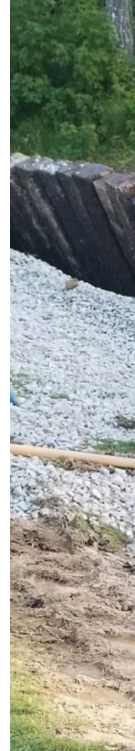
construction and the reasonable remedies for a joint fix. "We are all accountable to one another and, ultimately, golf course ownership."

ASGCA members note the importance of a specialist shaper, with freedom to be creative.

Albanese says: "I often compare this relationship to a writer of a movie working with an actor. Some

schedules must always be on time and budgets are adhered to with change orders only upon unforeseen circumstances and universal buy-in.

Yet there's more: the intangibles and the spirit of the project. "Getting to know the construction team, professionally and personally, ahead of time gets the most out







*Working in perfect harmony: constructor Roberto San Juan of Landscapes Unlimited, left, and Lester George, ASGCA, discuss options on site at Independence Golf Club in Virginia*

of everyone,” says Bates. “You understand where they’re coming from and vice versa. That’s when work becomes fun.”

Albanese agrees: “About 25 years ago, after intense meetings over issues, we were reminded by a senior leader of a team that we’re building a golf course. This is an enjoyable endeavor. We all need to appreciate that we are fortunate to be working in a creative industry for a living. When that happens, there’s much better odds for unfettered unity and a product people will love.”

The talents of on-site staff are complemented by behind-the-scenes work of the office team. “Don’t forget construction companies’ estimators,” says Riekstins. Working closely with architects, irrigation designers and distributors, property owners, superintendents and field managers reduces surprises and bolsters efficiency and on-budget likelihood.

Estimators’ ‘hub’ role adapting to myriad budgets, topographies,

designs and climates is required for both relatively simple and unmistakably complex projects. They are often praised for their keen attention to detail: “No mistakes, timely information, all buttoned up, not to mention friendly,” says one ASGCA member.

“Hire the architect and construction company simultaneously from the get-go,” says a veteran construction manager. “Both can predetermine a budget and overall plan, sharing ideas before the heavy lifting commences. One cannot survive without the other and early-stage collaborations versus hiring a designer, then bidding it to a contractor could be a risky proposition. Why stifle the project with untested relationships and lowest-bid mandates if you don’t have to?”

Justin Apel, executive director of the Golf Course Builders Association of America, promotes complete, unrestrained transparency among architects

and construction companies. He submits that staying in one’s lane of expertise is often the proper path; however, helping each other with difficulties which may arise is the true definition of teamwork.

“It’s not an indictment if architects and owners need help in an area like local permitting and regulatory issues which builders can support,” he says. “Conversely, it’s not an indictment if architects help builders overcome labor shortages, for example. True partnerships work both ways.”

Part and parcel, notes Apel, the best communication is constant communication. Builders may have remarkable interpretations of architects’ plans and architects may have cogent input on cost estimations. The combined expertise defines high performance.

“There’s no shame in letting down your guard and asking for assists in addition to offering assists,” says Apel. “Ideal results go hand-in-hand with professional harmony.” ●



BURLINGTON CC.  
HOLE 2 PAR-3  
230 YDS.

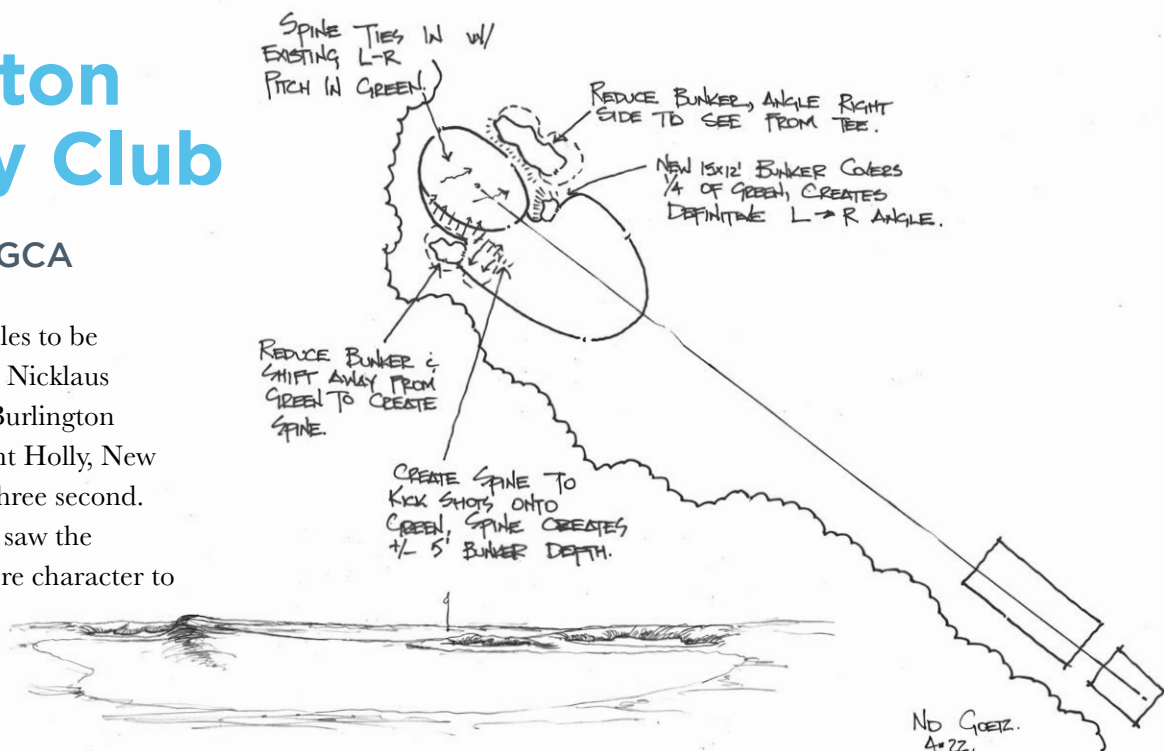
# Burlington Country Club

Chad Goetz, ASGCA

One of the first holes to be addressed by the Nicklaus Design renovation of Burlington Country Club in Mount Holly, New Jersey, is the long par-three second. Chad Goetz, ASGCA, saw the opportunity to give more character to what was a relatively one-dimensional hole.

“By adding a new small bunker short-right of the green, we were able to efficiently change the previously straight-away shot into one that has a more defined left-to-right shape,” he says. “The existing greenside bunkers were reduced in size to better match the scale of the course, and we created a strong ridge right off the left greenside bunker to let players bounce shots onto a green that also pitches left-to-right.”

The work is part of a plan to introduce more variety and strategy at the course, and Goetz’s sketches are helpful in multiple ways. “Our sketches showed the club how these ideas could come together. They were also helpful for instructing the contractor. After doing an initial sketch in the field, I returned to the office where I fleshed out the idea in more detail using Photoshop. That more refined sketch was used to present the idea to the entire membership during a club meeting.” ●



After sketching his plans for the second hole (top) in the field, Chad Goetz, ASGCA, prepared a Photoshop visual (center) to provide members with a strong picture of how the completed hole (above) would look





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[Tahoma31Bermudagrass.com](http://Tahoma31Bermudagrass.com)



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