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BY DESIGN



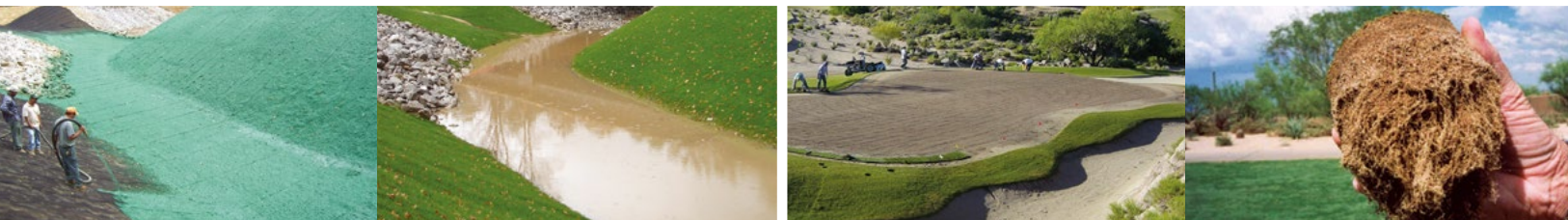
Excellence in Golf Design from the American Society of Golf Course Architects

Inspired designs

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Inspired designs

Like most of my fellow members of the American Society of Golf Course Architects, I spend a lot of time travelling throughout the United States and beyond, visiting golf course projects and helping clubs to address the unique challenges they are facing.

Despite already covering many miles on the road and in the air, when I read about the ASGCA members' projects that have been highlighted by the Design Excellence Recognition Program, I just want to pack my clubs and get on the road again to experience their design work first hand!

I'm lucky enough to have been able to do that for some of the projects profiled in the following pages, and each time it's been truly inspirational. Whether it's creating a new design that will provide a unique experience for golfers, or transforming a golf course so that a local community does not have to fear flooding, the standard of work that ASGCA members complete year in and year out at golf clubs across the world is exceptional.

This work not only benefits the clubs and their members and guests, but in many cases also the environment and community at large. One of the primary reasons the ASGCA introduced the Design Excellence Recognition Program is to share best practices, so that golf facilities everywhere can learn how they can make their courses work better.

I hope you are able to find some inspiration from the stories on the following pages, and that you enjoy this special edition of *By Design*.



Jeff Blume, ASGCA
President
American Society of Golf Course Architects

BY DESIGN

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Todd Schoeder; Steve Vanderploeg

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COVER



The new South course at Arcadia Bluffs in Michigan, designed by Dana Fry, ASGCA, and Jason Straka, ASGCA. Photograph by Chip Henderson Photography.

Design excellence

For the seventh annual ASGCA Design Excellence Recognition Program, 11 projects have been honored for their work with ASGCA members in addressing unique design challenges.

These include practice facilities, short courses, renovations, complete redesigns and brand new golf courses. In each case, the work highlights the problem-solving skills

required of today's golf course designs, and the benefits that golf facilities yield as a result.

As with previous years, the 2018 submissions were reviewed by a panel of golf industry leaders, including representatives of the Club Managers Association of America, Golf Course Builders Association of America and Golf Course Superintendents Association of America.

Clockwise from top: The Preserve at Oak Meadows in Addison, Illinois;
Boca Lago Country Club in Florida; and Baylands Golf Links in Palo Alto, California

Photo: Dave Sansom, courtesy of Forrest Richardson



Meet the designers

The below golf course architects are responsible for the projects highlighted in the latest ASGCA Design Excellence Recognition Program



Dana Fry, ASGCA, and Jason Straka, ASGCA
Read about Arcadia Bluffs South Course on page 7.



Jack Nicklaus, ASGCA Fellow, Chris Cochran, ASGCA, and ASGCA Past President John Sanford
Read about Banyan Cay on page 9.



Forrest Richardson, ASGCA
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Read about The Nest on page 15.



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Read about The Preserve at Oak Meadows on page 16.



Rick Jacobson, ASGCA
Read about Sunset Valley Golf Course on page 17.



Raymond Hearn, ASGCA
Read about Waters Edge Golf Course on page 18.



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Inspired design

New course at Michigan resort is inspired by Golden Age golf design

Arcadia Bluffs Golf Club in Arcadia, Michigan, already had one highly-ranked golf course, which was operating at full capacity. The club wanted to add a second course on land with far less natural interest than the lakeside bluffs on which its first course is situated.

Dana Fry, ASGCA, and Jason Straka, ASGCA, were appointed to create an inspirational design that would give public golfers a compelling alternative to the resort's existing layout.

"Arcadia Bluffs is not only located on one of golf's greatest landscapes but is also one of golf's most successful operations in America," says Fry. "Its location provides stunning views from the bluffs of Lake Michigan and the terrain creates an exhilarating round of golf. With the course being at full capacity, the owner desired to add a second venue. But the chosen land, one mile inland, had none of the grandeur of the original. The challenge was to create a golf experience, on a significantly less dramatic canvas, to rival the acclaim of the original course."

For their design of the South Course, Fry and Straka took inspiration from

America's private clubs, and two of the leading designers from the early twentieth century, an era described as the 'Golden Age' of golf course architecture. "The South Course was inspired by the work at Chicago Golf Club by early American golf course architects CB Macdonald and Seth Raynor," says Fry. "It's a testament to the challenges and emotions experienced at only a few select, classic private courses from golf's earliest days."

The course has been routed in two distinct, walkable nines, each containing a balanced mix of holes orientated in various directions. "Golfers will notice the distinct lack of trees on the course, making the ever-present wind a consideration and affording long range views across the property," says Fry.

Wide, straight-edged fairways offer strategic lines of play. Fairway and green surrounds slope directly into boldly-styled bunkers defined by steep grass faces and ribbons of flat sand. Large greens, often squared off at the edges, are separated into different sections using swales, ridges, slopes and bumps.

"The objective for the South

Course was to strategically position a collection of elements, serene in appearance, ultimately creating a veil of simplicity over the complex challenges that await," says Fry.

"It is this aspect of enduring classic design that both confounds and excites golfers, leaving them with an elevated anticipation to return."

Arcadia Bluffs South Course

Location:

Arcadia, Michigan

Golf course architect:

Dana Fry, ASGCA, and Jason Straka, ASGCA
www.frystraka.com

Project summary: Arcadia Bluffs Golf Club wanted a second course that would be a compelling alternative to its existing exhilarating lakeside layout. Dana Fry, ASGCA, and Jason Straka, ASGCA, turned an undramatic inland site into a compelling course that showcases classic golf architecture.

Partners: E & M Golf Construction; Justin Carlton, Derek Dirksen, Jimmy Kleinschmidt (shapers); Mavis Consulting (agronomy) Michael Kuhn & Associates, Inc (irrigation design); Thielen Turf Irrigation, Inc. (irrigation installation); Pete Bohn (onsite construction manager)

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Photo: Jim Mandeville

Good economics

Architects devise money-saving plan for developers of Banyan Cay Golf & Resort in Florida

Development firm Banyan Cay LLC turned to Nicklaus Design and Sanford Golf Design to help transform a failing 36-hole club into a new resort.

President Country Club in West Palm Beach, Florida, had been through a period of financial difficulty that culminated in bankruptcy, with the club eventually falling into the hands of its bankers.

The new owners formulated a plan to create the Banyan Cay Resort & Golf complex, which would include an 18-hole course, extensive practice facilities, hotel and resort residences.

This would mean using the site of the former North course for housing and resort development, and completely renovating the former South course to a far higher standard.

The first step in the process was to gain land use and zoning approvals to develop over 100 acres of the 250-acre site. A major challenge was the removal of highly-organic soil that was not suitable for buildings infrastructure.

Following hundreds of soil borings, over 250,000 cubic yards

of unsuitable material was identified to be removed from the proposed development parcels. This was to be replaced with soil that met the structural requirements for roads and buildings. This process could potentially be very costly.

The architects devised a more cost-effective solution. "A 10-acre borrow pit was dug on the proposed practice range site," says John Sanford, ASGCA Past President. "The sandy material excavated from the pit was hauled to the adjacent development site to fill the areas for roads, homes, the new clubhouse and resort hotel.

"The final quantity of poor soil was over 300,000 cubic yards, so the practice range was raised to accommodate the additional material and provide better definition," says Sanford. "The extra material also allowed for increased buffers on the perimeter of the practice range."

According to Sanford, this approach was just 10 percent of the cost that would have been incurred if the unsuitable material had been replaced with material from outside of the site.

"Without this solution the project would not have been economically feasible," said Sanford.

Banyan Cay

Location:

West Palm Beach, Florida

Golf course architect:

Jack Nicklaus, ASGCA Fellow, and Chris Cochran, ASGCA Nicklaus Design

www.nicklaus.com/design

John Sanford, ASGCA Past President Sanford Golf Design

www.sanfordgolfdesign.com

Project summary: Development firm Banyan Cay LLC employed Nicklaus Design and Sanford Golf Design to transform a failing 36-hole private club into an 18-hole resort course, with space for development. The project team devised a cost-effective solution to a major engineering challenge to ensure the project was economically feasible.

Partners: ADS (drain pipe and fixtures); Brookside Laboratories (testing); Capillary Concrete (bunkers); Golf Agronomics Supply & Handling (shipping and handling); GT Irrigation (irrigation installer); JW Turf (turf); Ryan Golf (construction); Toro (irrigation)



Reducing flood risk

Reinvention of Palo Alto municipal course helps protect the community from flooding

The San Francisquito Creek in Palo Alto, California, has overflowed multiple times in recent years. The most devastating occasion was in February 1998, when over 1,000 homes flooded, leading to mass evacuation and millions of dollars of damage.

One of a number of measures considered to help protect the community from future flooding was the role its popular municipal golf course could play.

The city hired Forrest Richardson, ASGCA, to develop a transformation plan for the course, that would include widening the part of the San Francisquito Creek that runs along the west and north perimeters of the course and the expansion of wetland areas on the course.

Richardson's proposals would also address deferred maintenance issues by rebuilding all features, replacing irrigation and improving drainage. Managed turf would be reduced by 38 acres and drought and salt-tolerant paspalum grass would be planted throughout.

"450,000 cubic yards of off-site soil was used to raise the elevation of all turf areas so that salt intrusion from the sea-level nature of the site is no longer an issue with turfgrass health," says Richardson.

At the same time, the layout was completely redesigned. "The fully rebuilt course was designed to be fun, flexible and interesting," says Richardson. "Loops of holes within the routing allow playing formats of six, nine, twelve, fifteen or eighteen holes."

The new course includes a number of rare features, such as a double green for holes three and fifteen and twin greens on the fourteenth hole.

The project transformed the landscape to a more indigenous palette of native palms. Five hundred naturally-occurring oak saplings have also been protected in the nearby Pearson Arastradero Preserve.

The completed course—rebranded as Baylands Golf Links—features 55 acres of native vegetation and wetland areas, a 40 percent reduction of managed turf areas and a 35 percent reduction of potable water use.

More than 10 acres of land has been added to the Baylands Athletic Center for future recreational use, and over seven acres converted into in-stream marshland terrace habitat, within the expanded San Francisquito Creek.

"This project has helped to provide economic sustainability, by restoring the 'point of pride' back to the city's municipal golf asset," says Richardson.

Baylands Golf Links

Location:

Palo Alto, California

Golf course architect:

Forrest Richardson, ASGCA
www.golfgroupltd.com

Project summary: Forrest Richardson, ASGCA, was hired to redesign the former Palo Alto municipal golf course, with a primary goal of widening the adjacent San Francisquito Creek to reduce the risk of flooding.

Partners: Wadsworth Golf Construction (construction); West Coast Turf (turf); Profile Products (soil amendments); Toro (irrigation); Ewing (irrigation); Better Billy Bunker (bunker liner)



Twenty-first century design

Comprehensive renovation improves playability and brings Florida club up to modern standards

Originally designed by Bruce Devlin and Robert von Hagge in 1975, the 36-hole facility at Boca Lago Country Club in Boca Raton, Florida, was suffering with ageing course infrastructure.

The club hired Jan Bel Jan, ASGCA, who worked alongside golf course superintendent George Redshaw to identify and address issues throughout the club's golf facilities.

Drainage was particularly poor on the fairways, the 40-year-old irrigation system was failing and there was room to improve the overall playability of the courses. All elements of the holes—tees, fairways, bunkers and greens—needed updating to modern standards.

Bel Jan devised a renovation plan, reducing the number of holes to 27, but making room for an expanded practice range and golf academy, two short game areas, two putting greens, and two practice holes. Bel Jan's plan would also make the courses more playable for golfers of all abilities.

To resolve the problems with drainage, holes that previously had severe slopes were re-graded, with existing bunker sand used to help drain areas with high organic content. Excavated greens mix was used for new tees and to raise the elevation of fairways that were too close to

the water table, which was higher than thought when the course was originally designed.

A new irrigation and pump system was also installed.

Bunkers had altered greatly over the years, leading to unwanted changes to course strategy and areas of extreme wear from golfer traffic. "We reduced long-term maintenance costs by eliminating bunkers that did not contribute to strategy or aesthetics," says Bel Jan. "And we redesigned bunkers to reduce erosion during intense rain events."

Greens, which had previously played inconsistently, have now been redesigned, rebuilt and planted with TifEagle bermudagrass, to enable them to withstand more rounds. Contours were also softened, so that they were more suited for Stimpmeter readings of 10 or 11, compared to readings of eight for which the greens had originally been designed.

Bel Jan reconfigured tees on every hole and added 27 new teeing grounds—planted with TifGrande bermudagrass. Now with five teeing areas on each hole, there is greater flexibility in yardages, and the opportunity for golfers with slower swing speeds to tee it forward. Wind direction and other conditions were

considered for tee designs, locations and sizes, as well as the landing areas and bunker positioning.

"We have incorporated the best elements of the original design with a revitalized approach to strategy and playability," says Bel Jan. "We provided multiple choices of how to play each hole, with the lakes still playing a pivotal role in the character of all three nines."

Boca Lago

Location:

Boca Raton, Florida

Golf course architect:

Jan Bel Jan, ASGCA

www.janbeljan.com

Project summary: Jan Bel Jan, ASGCA, has reconfigured and renovated the golf facilities at the Boca Lago Country Club in Boca Raton, Florida, improving playability and bringing the course up to modern standards.

Partners: Sanders Golf (contractor); The Pignato Group (irrigation designer); GT Irrigation (irrigation installer); Hector Turf (Toro irrigation supplier); Turf Drainage Company of America (drainage consultant); ADS (drain pipe and fixtures); Golf Agronomics Shipping & Handling (sand supplier); Quality Turf (grassing contractor); Armadillo Shield (cart path installer); Golf Range Netting (netting supplier and installer); Southern Features (bulkheads)



Reclaiming nature

New design for Edina municipal provides opportunity to expand wetlands and restore oak savanna

Braemar Golf Course is a municipal facility in the city of Edina, Minnesota, originally built in 1964. Over time, course conditioning had deteriorated to a point at which golf was becoming unsustainable.

“A handful of holes were routed in boggy soils and the course frequently flooded, closing for days at a time,” says golf course architect Richard Mandell, ASGCA. “A lack of tee locations, eroding conditions, difficult forced carries and narrow fairways forced golfers elsewhere.”

According to Mandell, one of the three nines was so poor that golfers would cancel tee times if they were assigned that nine as part of their round.

“The problem was how to revitalize an under-performing and outdated 27-hole course on an environmentally-sensitive property dismissed by golfers, and seen by citizens as draining tax dollars,” he says.

Mandell created a renovation business plan that analyzed the existing layout and provided solutions

for improvements. His course redesign proposal was approved in 2014.

“The solution was a new eighteen holes that preserved floodplain, increased wetlands, restored oak savanna, and provided a great strategic and playable challenge for all golfers,” says Mandell.

Reducing the course from 27 to 18 holes meant that the topography of the property could be better used to provide strategic challenge to golfers.

“The first task was to eliminate the holes that sat on poor soils,” says Mandell. “Poorly-drained soils that are a challenge for golf make a wonderful wetland, which is what it became. To further hedge bets in a challenging permit process, I utilized the maximum sixty-foot wetland buffer surrounding all water bodies, to ensure space was dedicated to golf without any later compromise on the permit side.

“Minimizing maintained turf married perfectly with an opportunity to restore lost oak savanna throughout the golf course as well.”

The design maximizes playability

and strategic options with wide fairways, some of which are shared with adjacent holes, and central hazards. The routing of the course evolved organically and includes a unique six-hole stretch that alternates between par fives and threes.

Construction began in October 2016 and the new course is scheduled for a spring 2019 opening.

Braemar

Location:

Edina, Minnesota

Golf course architect:

Richard Mandell, ASGCA

www.golf-architecture.com

Project summary: Richard Mandell, ASGCA, transformed a 27-hole municipal course into a brand-new 18-hole layout that preserves floodplain, increases wetlands, restores oak savanna, and provides a strategic and playable challenge for all golfers.

Partners: Mid-America Golf and Landscape, Inc (construction); EC Design Group (irrigation design); Toro (irrigation); Better Billy Bunker (bunker liner)



Photo: Todd Schoeder

Community course

City Park golf course in Denver has been redesigned to help protect neighborhoods from flooding

City Park is one of few open spaces in downtown Denver, home to parkland, a zoo and a municipal golf course. It is also crucial for the detention and release of water following rainfall.

However, as a result of urban development, the drainage basin in City Park was not sufficient to prevent flooding of surrounding neighborhoods. So, the city wanted to see how the golf course could be used to minimize flood risk, while retaining the character of its 1913 Tom Bendelow design.

“The 135-acre course is one of the last large open spaces in Denver that offers a natural space to capture and then release floodwater,” says Todd Schoeder, ASGCA Associate. “The main challenge of the project was to detain the required amount of stormwater and release it within eight hours, to keep the course playable.”

As part of a collaborative process with the public, neighborhood, city and golf community, Schoeder drew up a

plan to address the stormwater issues, while at the same time updating the course—capturing the best features of Bendelow’s original layout by retaining the traditional parkland style.

Work began in November 2017 and the course is expected to reopen at the end of 2019.

The design utilizes 20 acres of the course to hold and slow floodwater during storms. “An integrated natural water treatment channel was introduced,” says Schoeder. “It enhances course strategy while creatively conveying stormwater through the course, without looking like an engineered feature.”

Schoeder’s new par-70, 18-hole design preserves the sweeping vistas of the course and uses many existing hole corridors and strategies from Bendelow’s design. It also includes a new First Tee course, chipping area and driving range.

The updated layout is also designed to encourage new players to the game. Various short loops of five

or six holes have been identified in a shorter period of time, providing multiple options to experience the main course, as well as the four-hole short course and new forward tees that are suitable for young and old.

City Park

Location:

Denver, Colorado

Golf course architect:

Todd Schoeder, ASGCA Associate
www.icongolfstudio.com

Project summary:

Todd Schoeder, ASGCA Associate, has redesigned the municipal City Park golf course in Denver to capture stormwater runoff and reduce the risk of flooding in the neighborhood, without changing the character of the 1913 Tom Bendelow layout.

Partners: Aspen Corporation (golf course contractor); CMF Global (drainage pipe); Golf & Support Solutions (greens mix, bunker sand, aggregates); Little Valley Wholesale Nursery (trees); Toro (irrigation); L.L. Johnson (irrigation); Saunders Construction (general contractor); Simplot (grassing)



Photo: Harris Park

Getting into golf

Flexible facility on small plot of land introduces urban children to golf

Harris Park Midtown Sports & Activity Center is an organization in Kansas City, Missouri, dedicated to introducing urban children to, and keeping them interested in, outdoor sports.

The park has areas to play basketball, sand volleyball and a miniature golf course. But facility director Chris Harris wanted to expand the opportunities to learn and play golf at the facility.

Harris Park turned to Todd Clark, ASGCA, to design a new golf learning center on a one-and-a-half-acre plot of land. To compound the challenge, only half of the area was initially available for development.

Clark created a short course layout that could be built in two phases. Designed like a pitch-and-putt course, it comprises three holes, each of which has three tees, plus a practice putting green.

Harris Park has completed the first phase of construction: two holes with synthetic tees and greens, zoysiagrass fairways and fescue rough. Clark's design includes two synthetic turf-lined greenside bunkers with fibers covering the sand, aimed to help minimize maintenance.

"The two constructed greens are approximately 2,000 square feet each and are built on a gravel base, with a pad above that, and then synthetic turf with sand infill," said Clark. "Four different pin locations were installed on each green to create variety. Three tees per hole will allow for a six-hole loop with tee shots ranging from around 25 yards to 60 yards.

"When not being used as a two/six-hole course, the facility will be ideal for short game clinics. Players can hit shots into the greens both uphill and downhill, from zoysia fairways, fescue roughs and from the two sand bunkers."

The second phase will see another hole built, again with three tees, to complete the loop, plus the practice green, which can also function as a nine-hole putting course.

Harris Park

Location:

4029 Wayne
Kansas City, Missouri 64110
www.harrissportskc.org
913-568-6317

Golf course architect:

Todd Clark, ASGCA
www.cegolfdesign.com

Project summary: Todd Clark, ASGCA, designed a golf facility on a small plot of land for Harris Park Midtown Sports & Activity Center in Kansas City, introducing inner-city youth to the sport.

Partners: Viridity Golf Construction; Van Wall Equipment (John Deere machinery); Midwest Section PGA



Photo: Steve Vanderploeg

Designing a landscape

Material excavated for marina development used to create rolling moraine landscape for resort course

The newly-opened Friday Harbour Resort, developed by Geranium Corporation and ConDrain Group, covers 600 acres on the shores of Lake Simcoe, north of Toronto, Canada.

2,500 low rise and town house units have been built around a man-made 1,000 slip marina, and the resort also includes a 200-acre conservation area and a new 18-hole golf course and practice facilities.

ASGCA Past President Doug Carrick was appointed to design the course. One key challenge of the project was to eliminate the costs associated with removing two million cubic meters of material excavated for the marina development.

Carrick's proposal was to deposit the material onto flat agricultural land with no natural feature, shaping it to produce a rolling moraine-style landscape, which would accommodate the first fifteen holes of the course.

The excavated material would be sculpted to capture runoff in specific drainage areas and direct stormwater into a large pond so that it could be recycled for irrigation purposes.

The result was a landscape with

dramatic elevation change of up to fifty feet in places. Golf holes were routed to encourage walking, says Carrick, "with gentle climbs going uphill, and more dramatic elevation changes on downhill holes."

The final three holes of the course were laid out in an adjacent wooded area of the site. To compensate for trees removed here, and elsewhere in the development, more than 14,000 native trees and shrubs were planted around the rest of the golf course. Native grasses in out-of-play rough areas also helped to enhance the natural character of the site.

Having a relatively blank canvas to work with, Carrick produced a design with a wide variety of hole types and strategies. Four par-five holes play in different directions and offer risk and reward options, the longest of which is the undulating 572-yard eleventh. Par threes on the layout include the 145-yard Postage Stamp second and 243-yard Redan-style twelfth, and the par fours are varied, including two that are potentially drivable.

"The bunkering style was inspired by the closely mown green and bunker environs found on the great sandbelt

courses in Australia," said Carrick.

"Greenside bunkers are surrounded by bentgrass, and fairway cut extends to the leading edge of fairway bunkers."

The course opened in August 2018 with a driving range, chipping green, practice bunkers and a nine-hole pitch and putt course. With four greens close to the clubhouse, the routing provides the option of playing three, six, nine, fifteen and eighteen-hole loops.

The Nest

Location:

Innisfil, Ontario

Golf course architect:

Doug Carrick, ASGCA
www.carrickdesign.com

Project summary: The Nest is a new 200-acre golf course at the Friday Harbour Resort on the shores of Lake Simcoe near Toronto, Canada. The project saw two million cubic meters of earth, excavated for the resort's marina development, sculpted into a rolling moraine-style landscape on what was flat agricultural land with limited natural character.

Partners: Northgate Farms (contractor); Turfcare—Toro (irrigation); Lakeshore Sand (bunker sand); Ontario Seed Corporation (seed); ADS Canada (drainage)



An environmental success

Redesign of Illinois course leads to reduced flooding while improving animal and plant diversity

Elmhurst Country Club in Addison, Illinois, regularly suffered flood damage. Salt Creek, which runs through the center of the layout, would frequently overflow, taking the course out of play and leading to a loss of revenue and customers, while heaping pressure onto operations and maintenance staff.

In 1985, the club sold the land to the Forest Preserve District of DuPage County, which has been trying to manage the flood risk since. In 1994, raised banks were built on the sides of the creek, but floods would still breach them and destroy acres of turf. One year, the course—renamed Oak Meadows—flooded four times.

The volume and intensity of Salt Creek flooding continued, worsened by upstream development, and the clubhouse burned to the ground in 2009 following a lightning strike.

Continued market pressures and playability issues led the Forest Preserve District to review alternatives for the preserve and golf course. In 2015, ASGCA Past President Greg Martin was tasked with creating a layout that would be environmentally beneficial for the community, as well as attractive for golfers.

Martin's design saw 27 holes

converted to 18. Planning, design and permitting involved 19 separate agencies, a process which resulted in more than \$5 million in grants.

Martin moved four holes from flood prone areas to more upland positions while other holes close to the creek floodway were raised above specified flood elevations. The remainder of the site was graded to allow Salt Creek to expand and contract during rain events and provide upland sanctuary.

"Most vital to the success of the project was the Salt Creek reconstruction," says Martin. "Salt Creek was diverted through a temporary channel for 18 months to allow for the removal of two low-flow dams, creek realignment, stream-bed reconstruction and bank erosion control techniques, as well as expanding wetlands."

Adjacent to the creek, 35 acres of wetlands were created to accept overflow and 40 acres of prairie ground were established. 1,500 low-quality mature trees were cut down.

This reconfiguration holds an additional 20 million gallons of stormwater from Salt Creek during flood events while also minimizing flood damage to the course. The project to rebuild the course—now named The Preserve at Oak

Meadows—has led to an improvement in water quality and plant and animal diversity, and more than 100 acres of restored upland habitat.

"The Preserve at Oak Meadows will provide a great golf experience, significant environmental benefit and access to a beautiful and revived Illinois landscape, and act as a high functioning, quality landscape by improving water quality, expanding wetlands, creating wildlife sanctuary and providing increased substantial stormwater management capabilities," says Martin.

The Preserve at Oak Meadows

Location:

Addison, Illinois

Golf course architect:

Greg Martin, ASGCA Past President
www.martindesigngolf.com

Project summary: The Oak Meadows golf course regularly suffered flood damage from Salt Creek, which runs through the center of the layout, leading to loss of revenue and customers. ASGCA Past President Greg Martin was tasked to create a layout that would attract golfers and manage floodwater on behalf of the community.

Partners: Wadsworth Golf Construction (construction); Rain Bird (irrigation); Better Billy Bunker (bunker liner)



Science and art

Improved drainage infrastructure leads Sunset Valley back to classic 1920s era course design

The flat topography and outdated drainage system at Sunset Valley golf course in Highland Park, Illinois, meant golf operations would close following storms. Maintenance was focused on repairing, rather than improving, the course.

“Long-term deferred maintenance negatively impacted the overall quality of this 1920s era golf course, which was constructed in a lowland area of floodplain and floodway,” says golf course architect Rick Jacobson, ASGCA, who was appointed to renovate the course.

After extensive public consultation, Jacobson produced a comprehensive master plan that would improve the course’s drainage infrastructure, while enhancing the playing experience for golfers of all standards.

“A conscious effort was made to exploit the site’s existing natural features of wooded parkland and open links characteristics,” says Jacobson. “This combination resulted in the evolution of a heathland

style course that is unique to the Chicagoland market and reconnects the property with its historical origins.

“A landscape management approach identified the removal of non-native species of trees and transformed the previously linear golf into more naturalistic corridors, where holes blend seamlessly into the surrounds. The grading concept delineated locations for swales and strategic landforms that virtually transformed a flat site into a course with sweeping elevation changes that provide dramatic panoramic views throughout the property.

“Landforms were accentuated with flowing masses of fescue that provide an impactful visual aesthetic while accentuating the risk/reward design.”

All proposed grading had to meet specific permitting requirements, resulting in extensive collaboration with the project engineer, to create cross-sectional flow models to determine pre- and post-development storage volume, flow rates and water conveyance. To reduce costs, the grading had to avoid existing drainage

and irrigation wherever possible, while also balancing cut/fill earthwork.

“This process was an ultimate expression of the art and science of golf course architecture that resulted in the enhanced functionality of a recreational amenity built in an undevelopable location,” says Jacobson.

Sunset Valley

Location:

Highland Park, Illinois

Golf course architect:

Rick Jacobson, ASGCA

www.jacobsongolfcoursedesign.com

Project summary: Drainage problems and long-term deferred maintenance meant the overall quality of the 1920s era Sunset Valley golf course was deteriorating. After extensive public engagement, Rick Jacobson, ASGCA, produced a comprehensive master plan that would resolve drainage issues and improve the playing experience for golfers of all standards.

Partners: Wadsworth Golf Construction (construction); IVI-Golf (sandtrapper); AOS (drainage pipe); Toro (irrigation)



Photo: Raymond Hearn Golf Course Design

Attracting new golfers

A reconfiguration of holes at a public Michigan course made room for much-needed practice facilities

Waters Edge Golf Course, a public facility in Fremont, Michigan, was finding that the absence of a driving range was making it difficult to retain golfers and attract new people to the course.

“The lack of a driving range was not appealing to existing members, potential new members and public golf patrons,” says Raymond Hearn, ASGCA. “The golf course needed something to trigger a renaissance with its existing patrons and the local media in order to attract new golfers.”

Waters Edge employed Hearn to develop a master plan that would creatively solve these problems. The solution was a reconfiguration of the course, removing holes to free up space in an area that was ideally located for a range, and accommodating replacements—a new par-three fifth and par-four sixth—on new property.

“I created a master plan and

construction drawings for two new golf holes and a new very upscale driving range with a new putting and a chipping course,” says Hearn. “The features on the range are designed to look like actual golf holes which can be played as such when the main range tee is closed.”

The club hopes the new range will help attract a diversity of golfers to the golf facility, with easy-to-play holes, when used as a par-three course in a welcoming environment.

“Golfers in Fremont and surrounding communities are very excited to experience these course improvements,” says Hearn. “In my opinion this is how you ‘grow the game’. Start first with a driving range that looks like actual golf holes, and play the par-three holes on the range when the range tee is closed. Then venture out and play the forward tees in three, six and nine-hole loops. Over time, a confident new golfer develops and joins an industry yearning for growth and new participants.”

“The project has been a huge success story for the golf course and the surrounding community,” says Hearn.

“These improvements are creating a significant renaissance for this golf course, making Waters Edge more appealing to all golfers, regardless of their skill level.”

Waters Edge

Location:

Fremont, Michigan

Golf course architect:

Raymond Hearn, ASGCA
www.rhgd.com

Project summary: Waters Edge Golf Course in Fremont, Michigan, was having problems attracting new golfers due to the lack of a practice range. Raymond Hearn, ASGCA, made space for outstanding practice facilities by reconfiguring existing holes.

Partners: Toro (irrigation)

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