



Renovations will make the busy Charleston Municipal Golf Course an even better asset to golfers and the surrounding community.

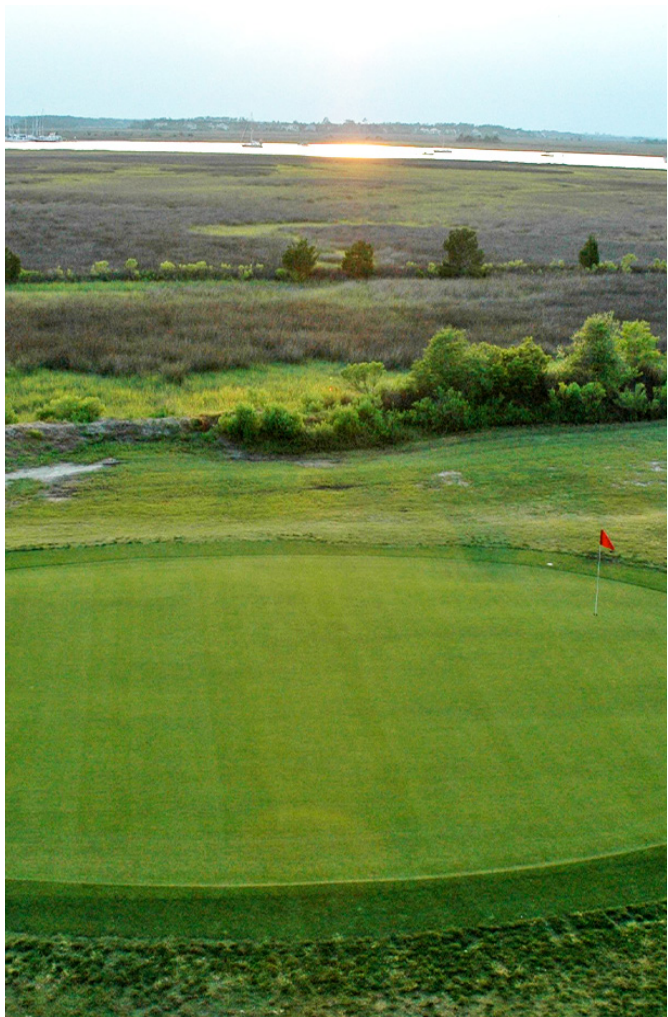
GOLF COURSE RENOVATION ENHANCES COMMUNITY ASSET

BY BRADLEY S. KLEIN

The only thing more exciting than undertaking a major overhaul of a golf course is doing it while the course remains open. That's the challenge of the work now underway at Charleston Municipal Golf Course in Charleston, South Carolina. When it's all done later this year, it won't just be area golfers who have an updated facility. The whole community will benefit.

The busy layout, only 5 miles west of downtown Charleston and accustomed to more than 50,000 rounds a year, went under the knife in January and expects to make a full recovery by midfall of this year. To minimize impact, and because the scope of work has been carefully planned so as not to require wholesale closure, the work began on the back nine, with the front nine kept open until work begins there in midsummer – at which time as many holes as possible on the back will be reopened.

Charleston Muni, as it's popularly known, occupies a low-lying parcel of James Island, with two holes abutting the Stono River. Across the entire 115-acre site elevations range from 2 to 18 feet above sea level. Parts of the back nine are subject to tidal surges from the coast that impinges on the bordering river.



The renovation includes protective mounding along the waterfront holes to reduce flooding on the course and in the surrounding neighborhood.

The tidal surges are not just from storms. High water can also result from rising sea levels, fall supermoons and seasonal winds. In justifying the city's commitment to the golf course renovation plan, Charleston mayor John Tecklenburg cited the need to protect the surrounding community; that entails plans for protective mounding along the waterfront side of the golf course.

The course, opened in 1929, was long rumored to have been designed by Seth Raynor, who died in 1926. The mistaken attribution is understandable given Raynor's considerable impact on Charleston golf with his highly regarded work at nearby Yeamans Hall Club as well as the Country Club of Charleston – the latter also on James Island and only 1.5 miles from the municipal course.

An outstanding local amateur golfer named J.M. Whitsett is the designer of record. No doubt he was influenced by the Country Club of Charleston, where he was club champion. Charleston Municipal's first pro, Johnny Adams, went on to make numerous improvements to the course, but without changing the routing or basic design elements.

If you looked carefully at the course during the last few years you would have found a Redan, maybe even an Alps – hole designs often associated with Raynor and the architects he inspired. But to do so you would have had to overlook a lot of tree clutter, shrunken greens, neglected bunkering and sappy conditions that prevented a firm, fast ground game.

Now, thanks to the inspired redesign work of course architect Troy Miller, there will be more Raynor in the course than there ever was – including the famous template par-3 holes: Redan, Biarritz, Short and Eden. Plus, some of the longer holes will look like Raynor had designed them once the new bunkering and greens are done. There are plans for a Knoll hole, a Maiden, a Cape and a Double Plateau.

It's a job for which Miller, 38, has been destined – to the point where he donated his professional services. For one thing, he gets to walk 400 yards to the work site each day from his home in the Riverland Terrace section of town – a district that includes part of the golf course. He grew up there, played the course as a boy, and has been immersed in the game through his father, golf pro Ronnie Miller, who worked at the Charleston Municipal in the 1960s before becoming the golf pro at Kiawah Island Resort.

Troy Miller holds a master's degree in landscape architecture from the University of Georgia. He worked on construction for Tom Fazio and Pete Dye before becoming director of golf for Landmark Land Co., then hung out his own design shingle a decade ago.

He says “I always knew Charleston Municipal was special. There's been talk about fixing it up for years, but not much happened for a long while.”

Credit Mayor Tecklenburg for taking the initiative. A nongolfer, but someone who understands the value of the game and of greenspace in the city, Tecklenburg put together a public-private initiative called “Friends of the Muni, Inc.” that coordinated the restoration effort. The city pledged \$1.5 million in bonds, roughly half of what the work was anticipated to cost, with the rest raised through private contributions. The resulting campaign, under the banner of the slogan “Fore Y'all,” is well on its way toward raising the remaining funds.

Following a formal bid process, NMP Golf Construction Corp. landed the contract against six other qualified firms. They're now at work bulking up two holes in the middle of the back nine along the marsh bordering the Stono River. The goal is to raise the area out of the tidal flood zone while creating expanded ponds elsewhere to make sure the property retains its ability to handle storm water.

Miller's plan calls for expanding the stormwater detention capacity of the golf course fivefold. Much of this will be achieved by enlarging two existing ponds, from a total of 1.5 acres to 9 acres. Those ponds can also be used as an irrigation source – reducing reliance upon wells or external sources. Throughout the course, drainage channels are also being installed to divert water from fairways to low-lying lateral areas. Because the golf course also functions as a drainage basin for the surrounding community, the results of this work will be quicker recovery for the neighborhood in times of high water surges.

BECAUSE THE GOLF COURSE ALSO FUNCTIONS AS A DRAINAGE BASIN FOR THE SURROUNDING COMMUNITY, THE RESULTS OF THIS WORK WILL BE QUICKER RECOVERY FOR THE NEIGHBORHOOD IN TIMES OF HIGH WATER SURGES.

The existing irrigation system, installed six years ago, will be able to accommodate the planned changes with some modifications for greens and bunkers because there will be virtually no change of tee-to-green corridors – other than sliding the par-4 10th hole 10-15 yards to the right.

What golfers will notice when the course reopens is a more expansive sense to the holes. Modest tree work will open up some areas to sunlight while creating better viewsheds of the river and marshland. The average green size will expand from 3,200 square feet to 4,800 square feet. Fairways, now 22 acres, will expand to 30 acres. All 48 bunkers will be rebuilt and, where needed, repositioned. Extensive tee work will outfit the course with four equitably spaced sets of regular tees plus two sets of junior tees playing

as short as 2,800 yards. Meanwhile, the back tee markers for the par-72 layout will extend about 150 yards from the current length of 6,417.

Regrassing will be major part of the overhaul. Addison Barden, a USGA agronomist in the Southeast Region, provided extensive input through his Course Consulting Service visit and the subsequent report. The recommendations were based on Barden's assessment that the course occupies a semi-transitional climate, where warm-season grasses do not go fully dormant in winter. That's a function both of latitude and proximity to the Atlantic Ocean, which tends to buffer temperature extremes. Moreover, the region is very rainy, with annual precipitation in the 70- to 80-inch range.

With the course seeing a lot of winter activity, there is a need to keep the surface playable while not requiring extensive maintenance. "Labor shortage and expenses were a big consideration," Barden said.

His report discussed the pros and cons of various methods of greens construction as they applied to the site. Cost was one consideration; so, too, were the ambient humidity and high rainfall levels. Based on the analysis, says Miller, "we made the decision to go with a profile that eliminated the gravel layer. We have 12 inches of 80/20 rootzone mix over drainage tile. The possibility of a drier surface was appealing in our choice."

In choosing grass types, Miller paid close attention to Barden's analysis of greens and tees. Miller also consulted with course superintendent Shawn Geouge and other area superintendents and agronomists. He also examined various test plots.

The old greens were '328' bermudagrass. The surfaces of the new greens will be 'Sport TifEagle' ultradwarf bermudagrass. The increased performance on the golf course's most important surfaces will have a major impact on the quality of play, according to Miller.

The tees and fairways will be sprigged with relatively drought-tolerant 'TifTuf' bermudagrass. As Miller explains it, the advantage of this grass for fairways will be lower water requirements, deep-rooting, and aggressive growth that will enable turf to thrive on the edges, where it will come into competition with tree roots.

While the report did not specifically refer to roughs, Miller said that they would continue as a combination of '419' and common bermudagrass as well as bahiagrass, and that the disturbed areas of rough would be established with 'Pensacola' bahiagrass. By replacing about 10 acres of maintained rough with grass that will only require infrequent mowing, the plan reduces the actual area of active management. "The intent of the roughs is to be somewhat naturalized, like what you'd find at Yeamans Hall. I often find myself impressed by the Department of Transportation roadside turf conditions as a model for roughs," said Miller.

Barden's report went into considerable detail on the issue of tree management and the need to open up areas for sunlight. It is the only way to provide the 10 hours or so of daily sunlight that the bermudagrasses need. One specific recommendation he made that influenced Miller's approach was for back tees tucked into corners without enough sunlight. Those areas will be sprigged with zoysiagrass, which is more shade tolerant.



Grassing shaded back tees with zoysiagrass will improve playing conditions because the turf is more shade tolerant than bermudagrass.

All of this planning, design, and now construction has gone on while keeping the golf course open – at least in part. General manager Marshall Ormond admits it’s a bit of a juggling act, but it’s one undertaken in the best interests of the city’s golfers – and of the city’s residents as well. It’s also part of an industry-wide effort to focus maintenance efforts on where it has the most impact on play and on golfers – down the middle, from tee through fairway to green. By fixing infrastructure, upgrading drainage and modernizing turfgrass cover with grasses that need less water, maintenance becomes more efficient, with fewer inputs of labor, chemicals and water.

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They’ve managed to mostly keep nine holes open – at times it’s down to six – but the golfers keep coming, showing interest, supporting the project and anticipating the full reopening later this year. However, it remains to be seen how much of the schedule can be maintained given the uncertainties brought about by the COVID-19 pandemic.

One thing is sure – the Charleston Municipal Golf Course is finally getting what it has long needed. And when it’s done, it will be even more of an ecologically sustainable asset to golfers and nongolfers alike.

Brad Klein is a veteran freelance journalist whose biography, “Discovering Donald Ross,” won the Herbert Warren Wind Book Award for 2001.