



Sustainability standard

The Lodestone Golf Course project turned a scar in the landscape into a standard for new course development in Maryland. Its designers discuss the project with GCI.

by Chris Wilczynski, ASGCA

The word “sustainability” gets used frequently in our new “green” world.

Given that there has only been a handful of new golf courses built within the U.S. during the last few years, it has been challenging to find much to talk about in this sector of our industry.

I recently learned about the Lodestone Golf Course facility in McHenry, Md., that fits sustainability to a perfect “T.” Prior to Lodestone’s 2010 opening, the property had been completely cleared by timber-harvesting operations. What was left was a site that was void of any significant vegetation, had damaged and poorly functioning wetlands and streams and an overall fractured environmental ecosystem.

It was a mess and a scar in the landscape.

In taking on the project, the architectural team at Design Workshop was charged with creating a tournament-caliber facility while holding to strict ecological criteria set forth by the Maryland Department of Environment (MDE). Through strategic hold placement, the designers incorporated the pre-existing environment – streams, vegetation and rocks – into the overall vision.

From a sustainability perspective -- as well as an environmental, social and economic perspective -- Lodestone Golf Course has turned many heads. As a result, the course received the designation of being the sixth-best new golf course in the world by Golfweek magazine, and it received a merit award for design from the American Society of Landscape Architects Colorado.

The course, built out of an area cleared by a timber-harvesting operation, has been so beneficial it set standards for course ecological impact in the state.



Zimmermann:
"Sustainability to us meant a 'light touch' on the land. How could we use what existed and make it better?"

GCI and golf architects Todd Schoeder and Jeff Zimmermann, with the Denver-based Design Workshop, had a chance to discuss the Lodestone Golf Course and why the project has been so good for the golf industry.

GCI: The golf course property had been previously harvested for timber and the landscape pallet that you were given was void of mature vegetation. Many of the wetlands and streams were contaminated and fractured from the timber operations. Did Maryland fully support the project, given the opportunity to improve a degraded site, or were there obstacles and challenges with the approval of the golf course?

Design Workshop: Actually, yes, the State of Maryland and

the Maryland Department of the Environment completely supported the project. We had worked with them on the renovation of the Wisp Resort Course and they saw how willing we were to work together and develop practices that benefited the environment and people. There were many agencies involved with the Lodestone permitting process and we met several times over a two-year period to collaborate and identify how we could transform the site and provide a functioning ecosystem again. In essence, the property and land has been sustainable. It once served the purpose of timber-harvesting and now we have transformed the property into a beautiful landscape that will provide benefit and enjoyment for people and the environment into the foreseeable future.

The Lodestone golf course has won many awards and been given many accolades since it has opened. The design of the course proved to be so beneficial that the Maryland Department of Environment set the sustainability metrics of Lodestone as the new standard for golf course development in the state. What did sustainability mean to you in this project and what practices did you use in building the golf course that motivated the MDE to set new standards for golf course development in Maryland?

Sustainability to us meant a "light touch" on the land. How could we use what existed and make it better? How could we develop a sustainable landscape



Design Works architects envisioned a landscape that was not only beautiful and viable as a course but sustainable.




ecosystem that could be incorporated into the golf course? Those were the questions we had to answer. The property sits adjacent to two to three major watersheds that feed to creeks or directly into Deep Creek Lake. We had an extensive and sediment erosion control system in place during construction. This system, believe it or not, is also the permanent erosion sediment control system. Most of the fairways are pitched to one edge of the hole. All drainage runoff is collected into natural drainage basins that were constructed along the perimeter

of the golf course. The run-off flows through a daisy-like chain of swales, bio-filters and naturalized areas before it is released back into the environment. This extensive system, both pre- and post-construction, is what the state has adopted.

Being a golf course architect, I know that site-specific challenges can sometimes lead to golf holes where the playability or aesthetics are compromised. What was the most challenging aspect of building the golf course given

the degraded site that you had to work with? Did these challenges compromise the course or improve it?

The most challenging aspect was dealing with a semi-mountainous site that was treeless. There were trees but it was scrub,




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nothing significant or worthy of inclusion in the elements of the course architecture. So, instead of carving the golf holes through stately forests and framing the holes with beautiful mature vegetation, we had to find other ways to make the holes dramatic. Given the lack of trees we were able to discover these dramatic rock outcroppings and panoramic vistas of the Deep Creek Lake valley. In many instances the trees may have limited the viewing or use of these landscape elements. We were able to maximize them. The lack of mature trees also allowed us to create wide golf hole corridors. The width is great for playability and it also gave us the space to build the erosion and water quality control basins along the perimeter of the holes.

From a sustainability perspective it appears that the golf course is used for more than just playing golf. What other uses does the golf course support and how did you incorporate these uses into the design?

There are nature hiking trails throughout the course and the course is also used for cross-country skiing during the winter months. But the neatest non-golf use of the property is the wildlife corridors that meander throughout the course. We were required to create "connectivity" across the entire golf course for all kinds of flora and fauna. The permitting agencies wanted the flora and fauna to be able to cross and connect through the golf course unimpeded. Wildlife corridors existed prior to the timber-harvesting operations but

were fractured and broken during the clearing of the property. We restored many of these areas and some of them came back on their own once we restored the hydrology. The cool thing about the wildlife corridors is that they are always open during play.

The golf course has been open for a few years now. Are there any ongoing course maintenance challenges given the site's former use and how badly the property was degraded?

There really aren't any ongoing problems or maintenance challenges. The property was in bad shape when we started. Two years later it is thriving and beautiful. The state has ongoing water quality testing measures in place. The erosion and sediment

control measures are working great. The wildlife corridors are functioning and there is an abundance of diverse flora and fauna throughout the property. We believe that the success of all of this is in direct correlation to the collaborative process that we took during the development phase of the project. We worked together and developed systems and practices that benefited the environment and allowed our client to succeed. It is a balance, and both need to be cared for. GCI

Chris Wilczynski, ASGCA, is the principal of C.W. Golf Architecture, and a frequent GCI contributor.

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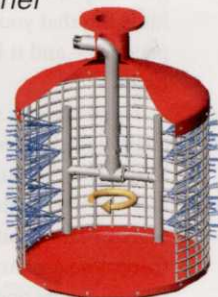
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