FEATURE II Scott Goniwiecha, *The Glen Club*

The Glen Club Bunker Project



The Glen Club is a Tom Fazio designed championship golf course located on a 195-acre piece of land in Glenview, Illinois. Some may know it as the former site of the Glenview Naval Air Station. The course opened in 2001 and has hosted seven Illinois Opens and numerous Nationwide Tour events.

Throughout the brief history of The Glen Club, there have only been minor changes made to the golf course. The bunkers remained relatively untouched and were in need of some work. Being a Tom Fazio course, most of the bunkers have his usual steep sloping faces of sand, which look great, but washed out frequently. This movement of sand plus the regular wear and tear wreaked havoc on them. In their short lifespan they became contaminated with silt and p-stone. The p-stone created poor playing conditions and the silt clogged the pore space in the sand, which stopped the bunkers from draining properly. Even a medium sized precipitation event would leave a large pond of standing water in the bottom of many of them that would have to be pumped out. This, combined with the repairing of the washouts, resulted in a horrendous amount of labor after each rain. The need for a bunker renovation was a necessity.

In the summer of 2011, we decided to start with the greenside and approach bunkers and leave the fairway bunkers for later. The project entailed renovating a total of 39 bunkers, which covered approximately 52,000 square feet. The scope of the project included removal of all the old sand, the cleaning of the drainage pipe, installing new p-stone, installing a liner, adding new sand, and re-sodding the edges

of the bunker. Leibold Irrigation, Inc. was selected for the project, and work started the first week of October 2011.

We began each bunker by first marking out the entire area that was planned to be re-sodded. It was amazing once we started analyzing the bunker edges how much bunker area was actually lost over time. We typically re-sodded the entire bunker face and approximately two rows outside of these lines. After the sod was stripped, the sand removal began. The old material was hauled and dumped into one of our fescue rough areas. The Glen Club has over 70 acres of fescue rough, so finding a spot that was not in play and easily accessible was relatively easy. Once the old sand was removed the depth of the bunker changed dramatically. This was something that I was not expecting and had to adjust my plans. I only budgeted to install an average depth of five inches of new bunker sand. When the old sand was removed, often there was a cavity that was two times larger than the original had existed. To resolve this issue this shortfall of sand and dollar quantities, the contractor recommended to dig a hole where we were dumping the old sand and use the native soil to lessen the depth of each bunker that was too deep.

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At this point all the drainage lines were exposed, so the next step was to remove all the p-stone and discard it with the old sand. Then the drainage pipe was disconnected and brought outside of the bunker to be cleaned thoroughly. We also wanted to make sure that all the drainage lines leaving the bunkers were draining properly so they were flushed with water. Once they were certain that everything was working, the pipe was placed back into the trenches and backfilled with new p-stone.

After the drainage system was completed, the installation of the bunker liner followed. Throughout the many meetings before the bunker project was approved by my supervisors, the most questioned item was the need for a liner. By talking to many different superintendents, and researching all the different kinds of liners, we decided to go with the SandMat 350 white fabric liner. The main reason we chose this option was to correct the issues that had plagued the original bunkers. It was important to keep the bunker sand in place and to prevent the migration of larger stone particles into the bunker sand. Most important to the success of the project was to reduce labor costs associated with washouts and maintenance. Purchasing and installing the SandMat added a large expense to the project, but one, I felt was worthwhile.

Once the liner was installed and stapled down, the new bunker sand was added. Of all the different options of bunker sand that are available, we narrowed our choices down to the Steep Face Bunker Sand and the Best Tour Grade Bunker Sand. We selected these two sands because of their angular properties. We knew the shape would help to keep the sand on our severely sloped bunker faces in place. In the end we decided to go with The Steep Face Bunker Sand because its natural brown color would fit in with the land-scape of The Glen Club when compared to the bright white sand of the Best Tour Grade brand. After it was distributed evenly throughout the bunker, the sand was compacted to a five-inch average. Once the sand was installed, new sod was laid and the bunker was completed.

We had a massive pile of old sand that was located in one of our fescue areas that had to be leveled, shaped, and contoured to match the surrounding landscape. This area was prepped, and in early November we seeded it to the original fescue mix and laid a straw blanket to help prevent washouts from heavy rains.

The entire project really couldn't have gone better, and thanks to the amazing weather that we experienced in the fall of 2011, everything was completed in five weeks. From a maintenance standpoint, it has been a great relief to not have to pump and repair washouts after every heavy rain, and all of that labor can now be allocated to other areas of the golf course. In addition to reducing labor costs, the level of playability has increased also. All of the feedback I have received from the membership has been very positive. The completion of this project has been a great addition to The Glen Club.

I wish everyone a great fall as you put your courses to bed for the winter, and let's all hope for a little cooler 2013! -OC

