



WASHED SOD: *A Legitimate Management Option*

By Ray Shane

The spring of 1993 is one that this golf course superintendent will never forget. One of the worst winters for turfgrass had finally taken its toll on Odana Hills Golf Course. The sight of old native soil greens without any trace of plant growth is permanently etched into my memory.

One of the positive items that came out of this was the proof of the value of greens constructed to USGA specifications. At Odana, the top half of the practice putting green is the original surface from 1957. The lower half was built in 1988-1989 of an 80/20 mix. We experienced very little turf loss on the new section, and 100% turf loss on the old half. We had several greens on the four Madison courses that experienced turf loss with Odana and Glenway the hardest hit. These are also the two oldest of the city courses with the oldest greens.

The staff immediately went into a "damage control" mode by overseeding and aerifying using quadratines to bring up any *Poa* seed that was in the soil. In addition we also pregerminated bentgrass by the bucket fulls. By mid-June the courses were in playable condition, but my wife was ready to divorce me for the constant aroma of seed being pre-germinated in our basement.

In July a decision was made to rebuild two of the most affected greens—Odana's #7 and #18. A budget was set at \$70,000 to rebuild the two greens. This budget was to include enlarging and re-bunkering on #7. The 18th green was to remain much the same. It was also decided that staff would do the design work and prepare specifications, but the construction would be contracted out. Washed Penncross sod would be used to minimize the amount of time our customers would have to play on temporary greens.

My first call was to Jake Renner of Trappers Turn on his experience with washed sod and possible vendors.

Jake was extremely helpful and directed me to Huber Sod Farms, located in Indiana as the supplier for this area. A phone call to Huber Sod Farms followed at which time I was informed that he expected to be sold out of Penncross in September and that I would be required to have a 50% deposit to hold the 1,400 square yards that this project required.

The bid document and drawings were completed in August with construction to start the first week in October. Both greens were to be constructed using USGA specifications. Pre-approved suppliers were given the materials specifications. All greensmix was to be mixed off-site and tested prior to delivery. The city was responsible for supplying the washed sod with a seven day advance notice.

Gilmore Graves Golf of Spring Green, Wisconsin was the successful bidder. On October 6th the destruction/construction began. It was a wonderful feeling to take a shovel and dig a hole in the middle of a green that had caused you sleepless nights even during good years. After looking at the soils that we were working with, it was amazing that we provided the golfers with the stand of grass that we did.

The construction phase of the project went very well. The weather was ideal for a project of this type with only minor problems surfacing. The contractor was very acceptable to last minute changes in design and grades. The drainage tiles were laid with wire so that tracking would be done in the future and the ends of the main drain lines were placed in valve boxes in case any future flushing would be necessary.

A phone call was made to Huber Sod Farms telling them that we would like the sod delivered on Friday, October 15. The next day we received a call saying that they would be unable to deliver the sod until Monday, October 18th. That was fine with us and a call was made on the 14th to

confirm delivery. At that time I was informed that Huber Sod Farms was not going to be able to get the sod from their farm to us and that he was going to have another supplier provide us with the sod. This was acceptable to us, but trucking had to be arranged. Finally on Wednesday, October 20th the sod was on its way from Gold Star Sod Farms in New Hampshire.

The concern over the sod was twofold. First, it was going to take the best part of a day to lay the sod for two greens working with a crew of five people. Secondly, the sod was going to be shipped refrigerated and would already have been sitting on a pallet for two or three days. The next phone call went to a truck line to arrange for the delivery. The good news was that the truck was scheduled to arrive late on Thursday and unload early Friday. This would be great for our scheduling. On Thursday I again called the trucking company and was told that the truck had broken down in Pennsylvania and arrival was now unsure. When I went to bed that Thursday night I still had no idea where my sod was. Upon arriving at my office on Friday, there was a message on my answering machine from the driver. The sod was in Madison and he would be at Odana around 6:00 a.m. The Penncross sod looked great and a large bacon and egg breakfast was arranged for the truck driver.

The sod was off loaded at the two greens. Fertilizer was applied to the finished surface and final dragging was completed. A string line was laid out to set a straight line in laying the sod. Plywood planking was used to work off of so not to leave footprints in the final grade. The irrigation had previously been installed and the surrounds had already been completed and sodded. We were fortunate to have our neighbor, Randy Smith, offer advice and assistance in this project.

A light amount of oats was put down under the sod with the idea that

the oats growing up through the sod would help hold the sod in place during root establishment. Extra time was spent to get the edges as close together as possible. The sod is extremely easy to work with as one person can carry several rolls in one arm. The hardest part was having to constantly move the plywood and the beating one's knees took working from the plywood. In 12 hours both greens had been sodded and the irrigation system was set to run for five minutes every hour. It is extremely important to keep the sod moist for the first two weeks. The water not only kept the roots moist, it also helped hold the sod down on windy days.

The biggest problem we incurred was with wind picking up the sod and rolling back. Some staking was done on the most affected areas. Another problem was the few crows that make Odana their home. They wanted to pick up the sod to get at the oats we put down. I am not sure the oats was a good idea because of the crow problems. On the plus side, the oats were growing through the sod in 10-14 days and certainly helped anchor the sod and protect it from the wind pick up. It was apparent early on that we would be hard pressed to have any root

growth before going into the winter months, so blankets were ordered. I selected Evergreen because they are lightweight and I felt they would be more tolerant of the warm spring days as I do not have staffing to be constantly removing and covering as the temperatures might dictate.

A snow mold application was made to the greens in late November and the blankets were put into place. I did not have enough Evergreen blankets to cover all of the greens so we borrowed a Warren's from Randy Smith to cover the remaining area.

On April 7th, the blankets were removed. There was no noticeable difference in the root growth between the areas that were covered with the Evergreen blankets and the areas that were covered with the Warren's blanket. Both sections had roots that were about an inch in depth and had knitted nicely into the greensmix. The top-growth was much more apparent under the Warren's than the Evergreen. After seven to ten days the areas that were covered with the Evergreen blanket had caught up to the Warren's section and also had better color than the Warren's section.

We immediately started to topdress and special attention was given to the

seams as some of them did widen over the winter months. Mowing was done by using a walker set at 1/2 inch. By May 10th the greens had been topdressed four times, fertilized, the mowing height reduced to 9/32 inches and roots had developed to a six inch depth. Some of the seams were visible, but looking very good nevertheless.

The greens were opened for play in late May. They weren't perfect, but no one expected them to be. But they were certainly better than the temporaries our customers had been playing. I feel that it will take the better part of the year to get them as smooth and at the speed we desire.

Would I use washed sod again?
YES!

Would I do anything differently?
YES.

I would start the project much earlier. The sod should be in place no later than September 15th. Another option would be to have everything ready for sod in the fall of the year and do the actual sodding in the spring. The sodding did add an additional \$5,000 to the cost of each green. But the golfers are going to be able to have a playable surface much sooner than if they were seeded. 🌱

