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ENTER SANDMAN

Jeff argues sand capping fairways makes course expensive and unnecessarily difficult to build, but there are benefits to consider.

As a young, green-as-a-pea golf course architecture intern, I read an article lauding some upscale new course for sand capping fairways. I joked that perhaps someday, we would be building USGA spec fairways. While we haven't got there yet, we seem to be slowly moving in that direction.

The prevailing wisdom in the first 500 years of golf course building was to use native soils. As golf spread from the sandy shores of Scotland, God apparently didn't foresee the need to provide adequate sandy golf soils everywhere, and man had to adapt. Early architects experimented with soil improvements, focused mostly on greens. Improved soils for tees and fairways couldn't be far behind.

As golf courses have generally drifted further from the "natural" to the "constructed" mode, sand capping the fairways does make sense, as many golf courses have struggled with inadequate topsoil, despite many cultural attempts to correct deficiencies.

Like other trends, sand capping seemingly originates at high-end courses because: They can afford it; they are keeping up with the Jones's; or their members have unrealistically high maintenance expectations.

Since courses play follow the leader, I believe sand capping would be accelerating even faster, if not for the combination of a down golf economy and the million-dollar price tag generally associated with it.

I dislike the idea because it makes courses unnecessarily difficult and expensive to build. However, it's been necessary on some of my new and remodel projects because of inadequate topsoil quantity or quality. Where we have sand capped on renovations, it has improved the turf dramatically.

With deteriorating irrigation water

quality in many areas, it is common for the existing topsoil to become contaminated with salts. In these cases, sand capping allows flushing irrigation salts through the top layer, which is becoming as much necessity as luxury in some cases. Many courses would benefit from this expensive procedure in long-term benefits, if they can af-

patterns similar to USGA greens are typical, but with wider spacing of up to 100 feet. With the rolling fairways, the system must be laid out perpendicular to the contours for best results.

You must choose between cutting the sand in like a USGA Green dish, and feathering out the edges, as is typical when sand capping tees. Feather-

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ford the high upfront costs.

So, what is involved if your course decides on this method? Most courses place a cap 6-9 inches of sand on top of their sub surface.

Many members/golfers/people mistakenly believe fairway sand capping doesn't require the same quality sand as greens mix, but it is a mistake to take that for granted. Sands vary, as some sands need 8-9 inches to drain properly in a fairway situation, while others need only 4-5 inches. A poor match of sand depth and water retention quality can create soupy or droughty conditions. Review water discharge rate curves of proposed sands to determine the right combination of sand and depth. This requires testing similar to sand-based greens, because particle size, angularity, and water retention characteristics are VERY important to your success. It is possible for a sand that is more expensive per ton to cost less to install if you can reduce the depth required.

The next consideration is subsurface tile drains, which are the norm to keep drainage in control just under the sand. Without them, you sometimes create a wet zone below the surface which causes problems. Herringbone

ing takes more sand, especially if you keep the total sand depth across the entire fairway, and the feathering occurs in the rough. Blending naturally from 0 to 6-9 inches on a gradual, land conforming slope (you don't want an abrupt edge on every fairway) can require 5 to 20 extra feet of sand.

You also have to be cognizant that adding 6-9 inches of sand will disrupt some natural drainage patterns, and plan catch basins and pipe on the high sides where necessary.

The whole process is both complicated and time-consuming during construction, which must be figured into any schedule. There are also maintenance ramifications, including modifying your irrigation scheduling and system.

The sand cap will probably use up to 25 percent more irrigation than before, although that may decrease with a developing root mass/thatch layer. And the irrigation need differential between sand fairway and clay-based roughs may become similar to a USGA greens surrounded by clay soils, possibly requiring part-to-part circle heads at the fairway perimeter. At the very least, the superintendent will have to adjust his/her run times. **GCI**