

YES! SAND TEES WITH A PURE PERENNIAL RYE GRASS SURFACE

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The White Bear Yacht Club is a very old Donald Ross Golf Course with a lot of Scottish flare. Unfortunately, at the time it was constructed neither Scotland or the United States had the high traffic present day golf courses have; thus the tee boxes were small and built with the existing soil.

It became obvious to me in the spring of 1979 that with the higher maintenance levels and the ever increasing amount of play, it would be necessary to rebuild our tees in order to produce a high quality turf stand. With this criteria in mind as well as the basic Donald Ross design, I began to investigate my options. After considering a variety of soil mixes, I decided upon an 80% Fine Building Sand, 20% Northern Peat mix.

Using this media, I was able to curb compaction and increase water infiltration while still keeping the tee boxes consistant with the Scottish design. Besides a soil mix, I had to consider a seed mix that would stand up to heavy play, a short mowing height and a variety of climatic conditions. The seed mix decided on was a straight Perrennial Ryegrass 40% Delray, 30% Pennfine, 30% NK 200. Manhattan II was incorporated into the mixture last year because of its Rhizome development. This mixture would give us a superior establishment rate which we also thought was quite important.

The tee building procedure is listed in chronological order:

- 1. Remove pop up irrigation head.
- 2. Plow existing tee under and increase size and/or shape slightly.

- 3. Set subgrade with 2% grade from front to back. Subsurface drainage lines were installed only on the practice tee.
- 4. Cover tee area with top mix to a depth of 8-12 inches.
- 5. Rough grade top mix with box blade and set 2% grade, (front to back) with engineer's level.
- 6. Hook up a sprinkler and hose system to a nearby quick coupler and water pack for 20 hours (10 hours per night).
- 7. Check for low spots and reset grade where necessary. Water pack tee one more night.
- 8. Set final grade with hand rakes, shovels, engineers level and sand traprake. Replace pop up irrigation head at this time.
- 9. Distribute Milorganite at a rate of 25 lbs. per 1,000 sq. ft. Incorporate this into the tee with sand trap rake.
- 10. Seed the tee three different directions with rotary type spreader at a rate of 20-25 lbs. per 1,000 sq. ft. Incorporate the seed into the tee with sand trap rake and roll it.
- 11. Keep the seed moist and when it begins to germinate, spray for damping off organisms.
- 12. This tee can be put into play about twenty-one days later.

We maintain our tees at 1/2 inch cut and mow three times a week. It was necessary to elevate our fertilizer levels on the sand tees. We irrigate when necessary but never have to syringe the sand tees. Diseases are controlled when active, usually Pythium or Rhizoctonia. Divots on the practice tee and the par 3 tees are seeded once a week with the same seed and top mix.

In four years since the start of the project, we have seen no winter injury to the ryegrass. The sand gives an excellent surface with firm footing and the rye gives us a dense cover with excellent wear tolerance.