

# Failure to plan ... is planning to fail

**At the STMA Conference** in Phoenix I learned that I should be part of the decision process as my athletic director is considering installing one of the new rubber-infill fields. Our Midwest college is in the middle of an athletic facility fundraising campaign, and because half the teams in our conference have switched back to synthetic our AD wanted to keep pace. I showed them some of the cost comparisons presented at the conference and they asked that I get more information on a range of natural grass options. I may be able to keep grass as an option since they really want to use some of the money for other upgrades like the track and training facility. Our current field gets college games, some practice, and some high school football. We have about 35 activities on the field now but we were also hoping to have more practices on the field if it were synthetic. Our two grass practice fields are really beat up. Can you provide some field renovation/rebuilding options that could be competitive with or even cost less than, synthetic turf?

Grounds Facility Manager from Indiana

**D**ear Indy . . . actually we have shared a few emails over this situation and the manager wanted to understandably remain anonymous through the decision process. We started off with a Ross Kurcab quote that sums it up best: "Failure to plan is planning to fail."

It is vital that the Sports Turf Manager be invited into the decision making process for any type of athletic field development project. Once invited to the table it is important that you provide accurate information that provides the best surface for your entire facility. In the race towards rubber-infill surfaces we have completely forgot about the entire facility planning process; hence failure to plan.

Natural grass is and will always be the preferred surface by most athletes. In the 2004 NFL Players Survey 85% preferred grass, 6.3% preferred artificial, and 8.4% had no preference. Most facilities I visit have noticed improvement of their grass practice or game fields following installation of a synthetic field somewhere at the facility. This occurs because the coach has the option of practicing on the synthetic whenever they choose. If the grass field is too worn or too wet, then go on synthetic. If the synthetic is too hot or players are fatigued and recovering, then go on the grass. The fortunate coach will have both options and both fields should be in the best condition possible.

The part of the equation that is out of whack is that most synthetic surfaces are placed on the competition field in the stadium, thereby forcing players and coaches to play on a surface that is not their preferred choice. A more sensible approach would play to the strength of a synthetic field by placing it in the higher use practice area. It just makes sense, the most durable field in the highest use area. Athletic directors seeking rubber-infill surfaces as a solution to their overused and worn out natural grass fields makes perfectly good sense to me. However, simply replacing a functional grass field just to follow the trend in the conference has no practical basis and shows no fiscal responsibility. Placing the synthetic surface on the practice facility makes better use of a durable surface. Synthetic fields should be viewed as the durable workhorse on the farm. By preference alone, synthetic fields are not the "belle of the ball" and should not necessarily reside in the castle.

Synthetics have a very important role in providing a durable practice field that can be used daily, by multiple groups, and in wet conditions. When properly

placed and used in the practice facility synthetics relieve pressure from grass fields and this improves the conditions of the entire facility. Each facility situation is different and the AD must weigh many factors concerning, traffic, budget, field user groups, boosters, coaches, players, field proximity to other activities, multiple uses, lighting, maintenance and others. In the planning process the AD should consider placing the synthetic field on the practice facility to maximize performance of all the other fields, including the game field.

Since you asked, here are some of my best cost-effective field renovations for comparison. They are based on an 80,000 sq.ft. field. For comparison it is important to include the total cost for installing a rubber-in-fill field, not just the synthetic carpet surface. The total cost for the sub-base, gravel bed, drainage, grading, synthetic surface, and irrigation ranges from \$600,000 to \$800,000.

**USGA Perched Water Table Sand Based System.** This has been the standard for more than 15 years for rapid drainage and they have been used for pro, college, and high school fields with good success when constructed and managed properly and combined with a traffic control program. The cost ranges from \$600,000 to \$800,000.

**Sand Pad.** These fields typically have 6-12 inches of a sand root zone placed directly on subsurface soil with a network of drain lines. They have eliminated the gravel blanket and reduced the root zone depth to provide less material cost. They can provide the same level of drainage and performance as the USGA style field. When reducing material depths it is important to have an experienced contractor since the over designed drainage system is no longer there to buffer drainage imperfections by inexperienced contractors. The cost ranges from \$400,000 to \$600,000.

**Sand Bypass System.** These fields have narrow sand-filled trenches placed 20 inches apart. The narrow trenches are connected to larger sand trenches and a network of drain tubing that carries collected water from the field. A 1-inch sand topdressing layer over the entire field connects the narrow trenches and keeps them from sealing during muddy events. Since native soil remains between the trenches wet conditions can occur during a game, however this type of field stays considerably drier and drains quicker than conventional native soil fields. An example of this type of system can be found at <http://www.korosystems.com/topDrain.html>. The cost ranges from \$72,000 to \$100,000.

So you see, Indy, I'm not against installing a new rubber-infill on your facility. They are sure better than any of the synthetics we have had in the past. What I am against is using them in the wrong situation that leads to competitive play on an inferior surface. I often hear coaches and athletic directors comment that they want the best playing surface for their team. Well, the best game field for a facility with your level of traffic is natural grass and the best practice field is one of the new rubber-infills. Don't settle for second best by failing to plan. **ST**

**QUESTIONS?** Send them to Dave Minner at Iowa State University, 106 Horticulture Hall, Ames, IA 50011, or email [dminner@iastate.edu](mailto:dminner@iastate.edu). Or, send them to Grady Miller at the University of Florida, PO Box 110670, Gainesville, FL 32611, or email [gmliller@mail.ifas.ufl.edu](mailto:gmliller@mail.ifas.ufl.edu).