

Are answers needed to sports field questions?

Little data exists to justify or support a cost/benefit rationale for reconstruction or renovation.

OLATHE, Kan.—According to Stephen McWilliams, president and CEO of Turf Diagnostics & Design here, numerous questions remain about defining athletic field costs, benefits and performance. In a letter to LANDSCAPE MANAGEMENT, McWilliams writes:

"Dr. (Henry) Indyk didn't reveal the most critical piece of information that begs the question in his article ('Renovation or reconstruction?') in the April issue of LANDSCAPE MANAGEMENT: How much stress is too much stress for a native field?

"Native soil athletic field research data on the ability of sports fields to handle the day-to-day levels of stress is relatively nonexistent. Until we determine this information, 'renovation or reconstruction?' is guesswork.

"Dr. Indyk cites drainage as the single most important factor in the failure of a sports field. I couldn't agree more.

"Unfortunately, the cost of installing effective types of drainage systems in a native soil athletic field is approximately \$50,000 to \$70,000. The cost of sodding an athletic field is approximately \$10,000 to \$20,000, depending on sod quality. The price could approach \$100,000 to renovate one sports field with no realistic idea of what the long-term performance characteristics will be, or the cost to operate the field.

"The industry needs to know the performance expectations of a variety of sports fields under different stress conditions. What are the internal drainage characteristics of a good native soil field with good performance? What is the percolation rate for different types of native soils, compacted and uncompacted?

"The percolation rate for a compacted native soil field can be as low as 0.01 inches per hour. Is a \$50,000 to \$70,000 drainage system an effective solution to a soggy sports field, when it could take 12 days for the water to reach the system?

"What is the relationship between field grade and soil matrix performance, with or without supplemental drainage systems? What are the moisture retention properties of native soils? How do we determine the impact of stress at various soil moisture levels? How much maintenance expenditure is needed to protect the facility's investment in the field?

"We have very little data to justify or support a cost/benefit/performance rationale for reconstruction or renovation. We continue to put bandages on a problem which is rapidly heading toward resolution



in the courtroom.

"Of one thing I am certain: the legal community would be happy to hold our collective hands at about \$100-\$200 an hour for sports field injury litigation.

"With the various associations—Sports Turf Managers Association, National Youth Sports Foundation for the Prevention of Athletic Injuries, National Youth Sports Coaches Association, National Federation of High School Athletic Associations there is no lack of talented people available to solve the problem and move toward meeting the common goal: making sports fields as safe as possible."

OSU working on turfgrass that withstands drought

COLUMBUS, Ohio—In dry years, it takes more than 4,500 gallons of water each week to keep an average home lawn green and growing.

That's only an inch of water over a 50by 150-foot lawn. But it's still too much, water conservationists say, especially during drought years.

So researchers at Ohio State University are teaming up to develop drought-tolerant turfgrass using the most current biotechnology.

"Everybody's looking for a high-quality turfgrass that requires less maintenance," says OSU's Dr. Karl Danneberger. "Especially water—there are some areas of the nation that can only use non-potable water on their grass. This project is really opening doors to allow us to reduce inputs *continued on page 54*

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