o you need a new field? Here are some guidelines that may help you in the process:

Form a team of representative areas that include all of the areas that may be affected with your field and its construction: Coaches, Maintenance, Architects, Facilities Management, Purchasing, Administration, and Planning Department. Meet with everyone to discuss your strategy before involving any vendors.

Determine what products and conditions your coaches are most willing to consider for the new field. After consulting with your team you can plan the project and develop a timeline. Be realistic as new construction does take a lot of time. For example, for a field to be completed in November '04, construction should have been started before March '04 with a planning start date of January '04. Design the timeline on a “worst case scenario” so you have a better chance of being on time.

Do allow extra time for evaluations, inspections, grow-in (if natural grass), shipping, weather, and production schedules.

Look to local or national organizations that may have experts who can rid you of common field construction misconceptions. Any Certified Sports Field Managers (CSFM) and many other veteran turf managers will provide some realistic thoughts on your project that could save you some time and money.

Determine the development process to provide the Bid Documents and choosing an architect, or if you should send out requests for proposals (RFP) to several architects to get competitive pricing that may save you some time and money.

Work through the actual construction strategy with the team taking into consideration the Planning, Excavations, Drainage, Soil Profile, and Field Surface. Through the architect your team can develop the necessary bid documents and specifications by determining the best materials for your site. This could involve the base preparation, soil profile, and surface material to fit the demands of severe weather, and normal play.

Keep in mind that all athletic fields have specific lines of fair play and you should consider the areas out of bounds or in foul territory just as important as the field of play because most sports do not stop at the line. Most of these fields need 10-20 feet of area outside the lines for the sport to be played safely. These areas should be constructed and maintained on the same criteria as the playing field.

After the bid documents are presented, ask for each team member to review them for revisions before allowing the bid process to begin. Here is another good opportunity to get an expert turf manager involved so he or she may be able to see the prints and specifications before going out to bid. I personally have been able to save many possible “Change Orders” from developing because there was a small discrepancy in the documents that may have made a “mountain out of a molehill.”

Now it is time to formulate an estimated cost. Your architect may be able to help you with this or you may have to contact other organizations that have recently completed a similar project to give you a range for budgetary pricing. After developing a budget range, consider financial options, and make sure of any tax issues (as well as donations) to achieve your goal.

Also consider who will manage this project for you. This person must have a clear understanding of the performance, safety, and playability of the field. Do not underestimate this responsibility, as it is a full-time job and will consume lots of time if it is to be done correctly.

Now that you have a good set of bid documents and budget range, start researching the possible vendors that you will need to complete the project. Be sure to get input from your team on possible contractors they are familiar with. Get information that may pre-qualify them as responsible and competent athletic construction companies. Request a list of references, jobs completed and financial statements from all.

Have your team call several references and check the financial stability of the companies that you are to consider for this project. Analyze the results thoroughly and narrow the list to just those contractors you are willing to consider. Visit the sites of some of their previous projects. Take the coaches, players and appropriate staff along if possible to help evaluate the results of the completed projects and pre-qualify the contractors. Ask questions of the relevant people, who will give you a better insight of how the field will perform as far as maintenance and playability.

Release the bid documents to the approved contractors and analyze the results thoroughly before awarding the contract. The lowest bid is not always the best for your situation. You must look at all the information even after you have pre-qualified the contractors.

For example, the lowest bidder might have so much work scheduled they may not have the adequate personnel or equipment available. You must look at the potential contractor even deeper after the bid has been opened. Schedule a pre-construction meeting with the apparent winning contractor to discuss the logistics of the site, access to the site, staging, construction schedule, available personnel and equipment, testing, possible damage to adjacent areas. Evaluate the contractors’ response before awarding a contract.

Your team may want to have an independent testing lab and a consultant available to confirm test results during construction. Schedule regular progress meetings and have a minimum of weekly reports filed from the contractor to help in determining the percent of work completed. This influx of information will also help in determining the amounts of payment draws the contractor may be able to receive.

Remember it is better to plan now than to rework later.

Tony Strickland, CSFM, can be reached tsstrickland57@hotmail.com.
The elephant in the room

BY N. GROVE TEATES, JR.

I could not help but notice the grudging acknowledgement, at the 2004 San Diego STMA conference, that artificial fields are here, even though only a few turf managers openly embrace them or their concept.

After attending several other trade shows, The Football Coaches Show, the Soccer Coaches show, etc., I was surprised by the fact that little, if any, attention in the major user's market, was given to natural grass fields. This is the first year that there has been no exhibited interest in natural grass as a playing surface at our booth at these shows. This is an astounding observation and represents major change.

Instead, all are asking about the playability of an artificial turf field, how it ages, are the warranties any good, etc. During the 2004 show season there was not a single person who asked me about compaction, wet play/drainage, etc. This represents a major movement in the market sector that uses the majority of the fields (i.e., schools, universities, and municipals). A compelling need has established itself in the minds of these people.

All are faced with the fact that a greater number of athletes must co-exist with and use a diminishing number of available fields. There is no elasticity in schedules because many schedules are inter-related to other schedules; a wet field cannot be allowed to disrupt a game, because more is at stake than ever before (further travel to the game, more expansive scheduling over greater distances, revenue, reputation etc.). Thus, compromise must be made and the available answer, at the moment, is artificial turf.

Various artificial turf companies have a huge array of claims and attributes; yet, I admit they offer almost all-weather playability and can withstand 24-7 play. These two predominant factors (and needs) drive users to forget about natural turf.

This means that the turf manager, who insists that natural turf is the only option, will soon be similar to the buggy whip sales manager who felt that automobiles were not here to stay.

Therefore I must suggest that STMA members play "catch-up" on all phases of artificial turf; there is really not a choice. If we take this opportunity to learn about the industry (many turf managers have not educated themselves) and to become conversant with the terms, meanings, and applications of artificial turf, we then have the chance to lead the industry. If we don't, we will have a diminishing base of opportunities for our members to work on in the future, because, although there will always be applications for natural turf fields, the need and demand for artificial is increasing.

I do not feel that it is the responsibility of the STMA to do the basic research for the artificial turf companies, though there is a compelling need for these companies to do more research. The artificial turf industry has the responsibility to do the research itself. STMA, instead, must seriously educate its members since they are in a position of giving good advice to their employers. At the moment, there are few members who can do this, and many more members who are still saying, "perhaps the buggy whip can be used in a different way," etc. STMA members and the organization need to meet this new challenge immediately.

We all have to admit that there is a major elephant in the living room, and we must learn how to deal with this new, immediate, and compelling animal. We are already behind!

N. Grove Teates, Jr., is president of Alpine Services, Inc., Gaithersburg, MD, which has been building athletic fields nationwide for 12 years.
Artificial turf: a fact of life

Editor's note: SPORTSTURF asked companies currently offering artificial turf products to provide readers with some information about them. Here we share the responses we received.

GeneralSports Turf Systems

GeneralSports Turf Systems built seven synthetic turf fields in 2003. The company's original product was GameDay Grass MP, a synthetic infill system; last year they added GameDay Grass XP and XPe, systems that use the latest in yarn technology to add durability. The new systems also can be custom engineered to meet the specific performance characteristics.

GeneralSports Turf is the only synthetic turf company headquartered in the Midwest. The company develops, designs, constructs, and services synthetic sports fields. Its primary markets are high schools and small to mid-size colleges, where multiple sports are being played on a single surface and therefore require enhanced durability.

Though initially focused on the Midwest, the company has quickly gained business in other regions of the country. Among the projects outside the region was the recently completed multi-purpose athletic field for Lafayette High School in Brooklyn, NY. It was a project underwritten by Take the Fields, a nonprofit organization funding the conversion of 50 city athletic fields from scrub grass to synthetic turf.

FieldTurf

The best surface for athletic contests is good natural grass. And synthetic turf should be like grass not carpet. FieldTurf's inventors are former players and coaches. They approached the challenge from a completely different perspective. They wanted to develop a synthetic system that offered the beneficial biomechanical properties of natural grass, combined with the best attributes of a durable synthetic system: all-weather playability, low maintenance, and unlimited playing time.

The idea was simple but the technology to make it happen was not simple at all. After several years of hard work, after trials, tests, consultations with players, coaches, trainers and doctors, sample plots, equipment modifications, and countless formulations, FieldTurf was born.

FieldTurf is dramatically different from traditional synthetic turf. The most striking difference is the fiber surface is soft, silky, like new blades. Players can slide, tackle, and tumble on FieldTurf's unique blend of specially treated polyethylene fibers without fear of abrasions. Rug burns are a thing of the past.

But FieldTurf is much more than just the absence of abrasions. Unlike traditional turf, FieldTurf does not rely on an underlying shock pad for safety, resilience and player comfort. Rather, like its natural grass cousin, FieldTurf's grass fibers are surrounded and stabilized by a special blend of "synthetic earth," a patented mixture of smooth, rounded silica sand, rubber granules, and Nike Grind made of re-ground athletic shoe material.

The rubber granules are a key component. Tire rubber is cryogenically frozen, shattered into smooth, clean, rounded particles, sized and shaped to stay "in suspension" with the sand, which is of a similar size, shape and weight. The sand and rubber are precision layered to guarantee uniformity, with an installation process that is...
also patented.

The result: A stable, resilient, uniform, shock absorbing surface.

FieldTurf's patented system is now used by: Seattle Seahawks, Oakland Raiders, Kansas City Chiefs, Green Bay Packers, New York Jets and Giants, Detroit Lions, Houston Texans, St. Louis Rams, New England Patriots, plus more than 30 NCAA installations, including Nebraska, Kansas State, Oregon, Washington, and Washington State.

To ensure you get the optimum performance and appearance of your field, the following maintenance procedures must be performed on a regular basis using the recommended maintenance equipment.

A complete grooming of the field should be done every 4-6 weeks. The Supergroomer is a multi-purpose piece of equipment that allows you to sweep the field of debris, aerate the surface, use tines for a deeper clean, and brush the surface.

FieldTurf is also the only manufacturer to offer their very own line of specialized maintenance products. FieldTurf has designed products such as FieldTurf Scrub, Gum Remover, and Liquid Anti Static Conditioner. All of our products are environmentally friendly and will not negatively affect your field.

FieldTurf also recommends Pioneer's Titan II Permanent paint, formulated for permanent markings of lines. This paint has exceptional durability and has been designed with less binding adhesives to facilitate removal and is excellent for temporary markings of lines, logos, hash marks etc. The TITAN R-Remover is a solvent that works hands in hand with the Titan II's to remove the paint. Both products are perfectly suited for the use on both indoor and outdoor FieldTurf fields.

The recommended chalk is from AMS Coating Systems and is available in a variety of colors. It consists of a liquid marking chalk, and can be removed with over the counter solvents from a hardware store. FieldTurf highly recommends the use of Simple Green or Graffiti Remover.

FieldTurf/800-724-2969

Sportexe (Momentum)

It's a whole new game on a brand new field at The University of Southern Mississippi. The Golden Eagles have installed Momentum turf by Sportexe as the new synthetic field surface at M. M. Roberts stadium.

David Hansen, Senior Associate Athletics Director, says it was only after consider-
**StrathAyr Turf Systems**

StrathAyr are sportsturf problem solvers. StrathAyr innovations include removable natural turf modules, removable artificial turf modules, natural turf construction, immediate play repair systems, and portable cricket wickets.

The StrathAyr ModulAyr System, removable natural turf, is in use at Reliant Stadium, Houston. The 8 x 8-ft. modules were moved out of the stadium eight times during the 2004 NFL season. The StrathAyr System is in use at Tad Gormley Stadium, New Orleans; Kix Field, Minnesota; Singapore Racecourse and Sydney's Olympic Stadium.

**DD GrassMaster**

Desso DLW Sports Systems' DD GrassMaster system combines nature and technology. Natural grass surfaces and root systems are being reinforced by synthetic fibers, acting like indestructible grass blades. The amount of artificial grass fibers added is approximately 3 percent, leaving your turf looking and feeling completely natural.

There is no increased risk of injury and the physical demands on players are no higher than on traditional natural grass. This invention offers you a way to protect the natural grass while preventing traditional disadvantages of natural turf.

A DD GrassMaster surface is suitable for different sports, in fact it's suitable for any sport that is played on natural grass. Consequently, professional maintenance of the surface is necessary, very much the same as for natural turf, e.g., fertilizing, reseeding, mowing, etc.

As the grass recovers very quickly, verti-draining is virtually superfluous due to the good water permeating characteristics of the fibers. Few repairs are needed after a game, because worn turf or damaged areas are rare. The maintenance work is required to ensure the playing quality of the top layer and to keep the costs per playing hour as low as possible while maintaining optimum safety.

The lifetime of a DD GrassMaster pitch depends on the maintenance. A sand-based field can last more than 20 years, a DD GrassMaster field certainly lasts as long.

In 2000, the Philadelphia Eagles chose to install DD GrassMaster. “Three years later, the first American football match was played in the brand new Lincoln Financial Field, against the Tampa Bay Buccaneers”, explains Tony Leonard, Sports Field and Landscape Manager for the Eagles. “The Denver Broncos already had the system installed and their positive experience helped convinced the Eagles as well.”

Desso DLW Sports Systems/ptabor09@hotmail.com

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Airfield Systems, Edmond, OK, provides patented drainage solutions for sports field applications worldwide. The unique advantages to an Airfield system under natural turf include a much faster installation than gravel and a 1-inch void space beneath the soil for the exchange of oxygen resulting in healthier turf. No water collects on the field surface as an Airfield system moves water more rapidly than any other drainage system available. Maintenance time and costs are cut.

In an artificial turf installation, an Airfield system enhances player safety with a lower G-Max rating, and eliminates the migration of rubber infill material due to flooding. Additionally, installers find that using the Airfield system not only cuts their installation time, but requires less planning as each field goes down the same way regardless of the sub-base or region.

Airfield Systems/405-359-3775

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WEST COAST TURF ADOPTS BUSHEL

West Coast Turf earlier this year adopted the US Standard Bushel of 1.244 cubic feet as their unit of measure for selling turfgrass sprigs.

“The definition of a bushel has always been somewhat confusing and controversial in the industry. The Golf Course Builder’s Association of America asked us to conform to the U.S. Standard Bushel, and we welcomed the opportunity to eliminate all of the questions,” said WCT spokesperson Danielle Marrman.

Sod companies across the country have historically used a “factored” bushel or “turf” bushel that was based on the amount of sprigs harvested from one square yard of sod. At issue is the “factor” applied was different around the country. To add to the confusion, even different varieties had different factors used.

“What this basically means to our customers is the bushel size is bigger than it once was, and the cost per bushel will reflect that. Planting rates are going to be different as well, but the overall cost for the customer to plant a given area should not change,” said Marrman.

STMA PAST PRESIDENT BUILDING OLYMPIC FIELDS

This month’s XXVIII Olympic Games in Athens, Greece, feature baseball and softball fields with an American infield advantage. Nearly 37 tons of Profile Products’ TURFACE Pro League Red field conditioner has been used in each field’s construction.

Murray Cook, president of Brickman Landscape Company, and Past President of the Sports Turf Managers Association, oversaw the fields’ construction. “We were very pleased with how the field plays and looks and how everything has come together,” Cook said. “Aesthetically, it really looks sharp. The conditioner’s color complimented the red clay used to construct the infield.”

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Airlessco is now shipping its FIELD STRIPE Striper/Airless Paint Sprayer with a choice of Briggs & Stratton or Honda four-stroke engines. Both feature a “Slow Stroking” piston pump paint delivery system. Units meet multiple painting requirements and are priced to be attractive to youth sports leagues as well as high school and collegiate athletic programs. Airlessco by Duratech Co./800-877-4766
For Information, circle 088 or see http://www.oners.ims.ca/2913-088

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Pioneer’s new Paint Mixing System ensures proper mixing of field marking paint and cuts prep time. The 55-gal. tank sits on top of a steel stand for dispensing into 5-gal. paint buckets. The system contains a 1/3-hp mixing motor and fiberglass tank. Pioneer Manufacturing/800-877-1500
For Information, circle 090 or see http://www.oners.ims.ca/2913-090

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For Information, circle 089 or see http://www.oners.ims.ca/2913-089

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