

# STMA 2008: AN SFMANJ MEMBER REPORTS ON HIS EXPERIENCE

(continued from page 6)

felt it was needed. The first one I attended related to irrigation scheduling. This is one area where I think a lot of people need education. You can not just set a program on your controller and let it run. I learned to always check my soil moisture levels and air temperature and humidity for a specific region. I also spoke with Don Savard of Salesianum High School in Wilmington, DE. He wrote a very good article a few months back about doing an irrigation audit; I am planning on doing one myself this spring with his help and expertise.

The second session I was looking forward to attending was how to manage a synthetic field. This is such a hot topic now in schools; I wanted to get all the research that I could just in case this ever comes up at my school. All of our fields at Kingsway are natural turfgrass and they are continually getting better. Synthetics are what everyone is talking about these days and I have learned that the more educated you are about these fields, the better you can prepare when the school board wants to install one. You can talk with the board about what you have learned and hopefully with your knowledge you can all work toward achieving a great field.

The last session that I was really looking forward to attending was one focused on managing turf without pesticides. This is probably the biggest topic currently being discussed within schools and many other most segments of the green industry. Many ideas were brought-up on ways to control all kinds of pests with new and innovative ways without

resorting to pesticides. In my state of New Jersey, the use of pesticides in turf - whether it is an application intended for crabgrass control or vegetation control along fence lines - is becoming harder and harder, so new ways need to be examined. This should be the one session everyone at the conference attends. There are more and more pesticide regulations and we all need to do our part in limiting the use of pesticides when we can.

The Kindergarten through 12<sup>th</sup> Grade (K-12) membership segment of STMA should ideally have the most members and should be the biggest group attending at the annual conference. Most of these individuals have the least amount of training and knowledge. I was included in this group until I started attending the annual conference. We have the most to gain by attending. The education sessions can teach a new sports turf manager many things that professional and collegiate managers already know; however individuals just starting in the industry may not have a high degree of knowledge. Conference attendance could be a great jumping point to much better fields and improved professional abilities. I am hoping that this message can be passed-on to many K-12 districts that are not currently members of STMA; hopefully they will become members. We can all learn from one another and by attending this conference, or any conference, we can help improve the safety and playability of sports fields.

*Kevin Shipman is Sports Turf Manager,  
Kingsway High School, Woolwich Township, NJ.*

<b>Beam Clay®</b> Baseball Diamond Mix Pitcher's Mound Mix Home Plate Mix Infield Conditioner Mound Bricks Mound Top-Dressings Permanent Pitcher's Mound & Batter's Box Pads Warning Track
Pro's Choice®
Diamond Pro®
Stabilizer®
Hilltopper®
Diamond Dry®
Nail Drags & Scarifiers
Drag Mats
Cocoa Mats
Infield Grooming Equip.
Mound Bricks
Mound Building Tools
Batter's Box Templates
Cleat Cleaners
Batting Practice Screens
Batting Practice Mats
Backstops
Batting Cages
Batting Tunnels

**YOUR "ONE-STOP SOURCE"  
FOR AMERICA'S  
BASEBALL & SPORTS TURF  
SURFACES & SUPPLIES!**



**A SUPPLIER TO EVERY MLB TEAM,  
OVER 150 MINOR LEAGUE TEAMS,  
OVER 700 COLLEGES AND THOUSANDS OF  
TOWNS & SCHOOLS WORLDWIDE!**

**800-247-BEAM (2326)  
www.BEAMCLAY.com**

**OVER 200 INFIELD & SPORTS TURF PRODUCTS  
INCLUDING REGIONAL INFIELD MIXES & RED WARNING TRACKS  
BLENDED FOR EVERY STATE & CLIMATE  
FROM BULK PLANTS NATIONWIDE!**

**PARTAC PEAT CORPORATION • KELSEY PARK, GREAT MEADOWS, NJ 07838**

**"The best infield mix I've ever used!"  
— GEORGE TOMA**

FenceGuards™
DuraPad™ On-Deck Circles
Hollywood® & Schutt® Bases
Rogers® Break-Away Bases
Soft-Touch™ Bases
Mautz® Athletic Field Paints
Athletic Field Stencils
MarkSmart™ Layout Systems
Jiffy® Line Stripers
Field Marking Equipment & Material
Permanent Foul Lines
Yankee® Rakes
Midwest Rakes
Rain Covers
Safety Fencing
Windscreen
Wall Padding
Ball & Barrier Netting
Benches / Bleachers
Watering Equipment
Water Removal Equipment
Geotextile Fabrics
Top-Dressing

# Effectively Incorporating Synthetic Turf Fields into Athletic Programs: *A Groundskeeper's Perspective*

By Matt Olivi

As the popularity of both competitive and recreational sports continues to grow in our region, so does the demand for turf playing surfaces that are safe and aesthetically pleasing. As turf managers, we are constantly battling the daily traffic on our natural turf fields. The resulting soil compaction can be devastating with even the most thorough and well-planned turf maintenance programs. Finding the time and resources to maintain our fields between practices and game times for every sport that our facilities cater to is often a difficult task. As synthetic turf fields are rapidly becoming a considerable part of the turf industry, they can be viewed as a great tool for maintaining the playability and beauty of our natural turf fields.

Approximately three years ago, the Piscataway School District, in cooperation with the Piscataway Recreation Department, installed a synthetic field in place of a natural turf field in a heavily trafficked high

school football stadium. As in most cases where a natural turf field is replaced by a synthetic one, there has been and will continue to be healthy debate relating to the safety, cost-effectiveness, environmental impact, maintenance and installation issues of this synthetic field. As turf managers, we are all aware of such debates and may or may not have formulated our own opinions for or against these relatively new fields. This article attempts to offer a positive outlook for proponents of both natural and synthetic turf.

Since the installation of synthetic turf in the Piscataway High School football stadium, there has been a noticeable difference in the appearance and playability of the natural turf fields that make up the majority of the sports field surfaces in the school district. Over the past few years, the natural turf has

*(continued on page 17)*

## ***THE GREATEST TEAM ON TURF!!***

***Wilfred MacDonald is your team when it comes to athletic field equipment. We offer a wide variety of equipment from striping reel and rotary mowers to athletic field conditioners, line stripers, groomers, top dressers, aerifiers and more! Our comprehensive line of Jacobsen, Smithco, Turfco, National and Vertidrain gives you the largest variety of turf equipment to choose from! Check out our new Rental Division for equipment rentals! Contact your sales representative today for a demonstration or rental!***



**JACOBSEN**  
A Textron Company

**TURFCO**

NATIONAL MOWER COMPANY  
SINCE 1919

**Wilfred MacDonald, inc**  
19 Central Boulevard  
South Hackensack, NJ 07606  
888-831-0891  
[www.wilfredmacdonald.com](http://www.wilfredmacdonald.com)

**Sales Representatives:**  
Bernie White  
Mike Clifford  
Tim Kerwin  
Steve Kopach-Rentals



# BEN SHAFFER & ASSOCIATES Inc.

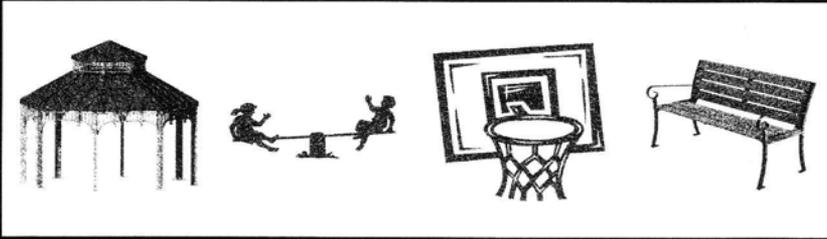
many items available  
on NJ State Contract

Toll Free

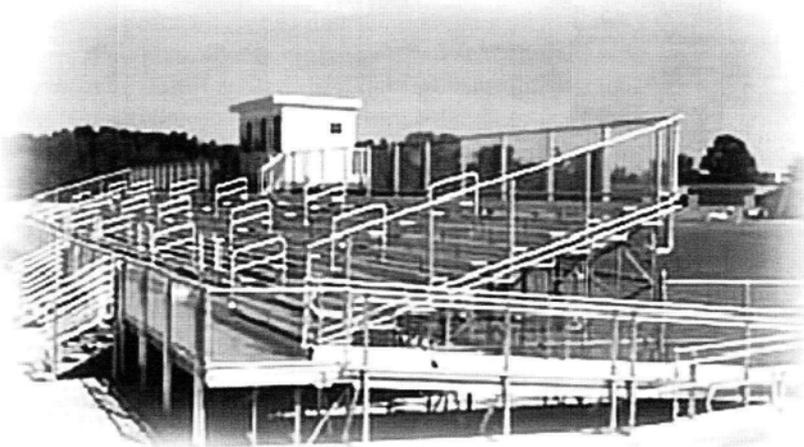
1-800-953-2021

sales@benshaffer.com

www.benshaffer.com



PARK, PLAYGROUND & STREETScape SOLUTIONS

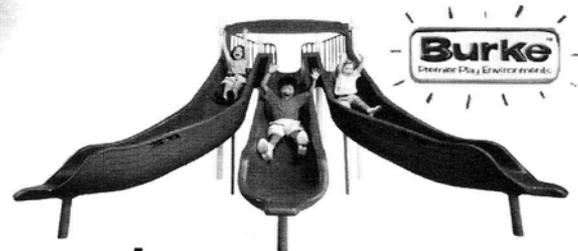


- Bleachers
- Benches
- Bases
- Sports Equipment

- Tennis  
Nets

- Sport  
Goals

- Water  
Fountains



and much more!

## Experience the Ben Shaffer Difference

## Serving NJ since 1921

# Writing Technical Specifications for Athletic Fields

By Sean Connell

Well-written technical specifications for an athletic field construction project are necessary for the successful completion of the project. All contracting, both public and private, is based on technical specifications. The specifications are used to qualify contractors, choose specific materials, specify agronomics, establish construction procedures, specify equipment, and set quality standards for the project. The specifications can be used for any and all reasons. Notably, the specifications need to clearly state your instructions so that all bidding contractors and procurement or purchasing officers understand them and that the bid-winning contractor understands what is required to perform the work.

Being a construction contractor who has completed construction projects in 12 states, I have read hundreds of specifications for all kinds of jobs: some good, some bad and some really bad. I have to read and understand all specifications because of financial liability. When I accept and sign a contract, the sole responsibility of that project is mine;

so, it is critical that I completely understand the technical specifications. From my experience, most specifications are written poorly and not thoroughly researched resulting in unaddressed issues. This is where the end user receives incomplete projects or unexpected additional costs. There is the equally unfortunate issue of projects being under-budgeted from the start and owner's rationalization is, "At least we did something." While this is worth noting, the focus of this article is on the authoring of technical specifications.

The process should start with listing all the specifications you have for your project. Considering we are dealing with sports fields, the wording should be industry specific. You will have to integrate purchasing language into the specification to ensure it is enforceable by law. Any public bid has to be advertised publicly with all information disclosed to all potential bidders. This is critical because if all considerations are not met, anybody can challenge the results for the bid. This often results in no project at all or a watered down version of your project. Either way the end result can be negative.

So, we have to write specifications that attract qualified contractors. Ask for a minimum length of time for construction of similar or like projects. Ask for referrals from the clients of these projects and/or contact information to follow-up. Ask for experience with similar products or installation of products. You want to hire a sports turf construction contractor not a site contractor. For example, you do not have a plumber do electrical work so why would you have road builder build an athletic field? I am not saying a road builder can not do the work; I am saying that they have a lot more examples of why you do not want to hire them in the first place (i.e. most high school fields)

*(continued on page 15)*



## grass roots

*"Serving the Turf Professional Since 1978"*

FERTILIZERS SEED FUNGICIDES INSECTICIDES HERBICIDES

GROWTH REGULATORS WETTING AGENTS ADJUVANTS

EROSION CONTROL SPREADERS TOOLS ...& MUCH MORE!

LAWN & SPORTS TURF DIVISION  
(973) 252-5455 Fax: (973) 252-2881  
4 Middlebury Blvd., Ste. 14, Randolph, NJ 07869

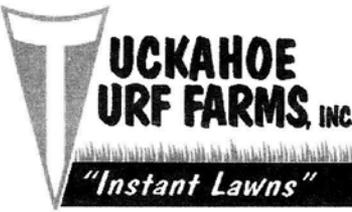
### High Quality Bluegrass & Tall Fescue

*Sand Sod grown on Hammonton sandy, loam-type soil designed for today's specialized modern athletic fields*

Visit Us at Our Updated Web Site:  
**www.ttfarms.com**

*Our Completely Irrigated 700-acre farm allows production and deliveries to parts of Pennsylvania, Delaware, New York and all of New Jersey.*

Labor Saving Big Rolls, please call for custom installation prices. **800-222-0591**



609-561-7184  
609-561-0296 Fax  
401 Myrtle Ave. • P.O. Box 148  
Hammonton, NJ 08037

*"Instant Lawns"*

# Writing Technical Specifications for Athletic Fields

(continued from page 14)

in America). If site contractor must be employed, at least have a site contractor mass grade and sports field contractor finish grade and grass the field.

A typical athletic field construction project includes removing or demolishing an existing field, stripping and storing topsoil, rough grading the subgrade, replacing topsoil and adding topsoil as needed, amending topsoil based on soil test results, laser grading the finish grade, soil preparation and grassing. This is just an example of a typical renovation of a field. The first step is identifying what needs to be accomplished and how you want it accomplished - of course, the variations are endless. Now that you have identified what services are needed, you will need to explain in technical terms every item in detail.

Field removal or demolition (demo) will need to have a construction entrance/exit to access the work area. A typical installation has 6 inches of soil removed and replaced with a geotextile woven liner and #4 large gravel placed in entrance to clean-off vehicle tires that leave the construction site. Provisions for the removal of the construction entrance should be detailed. The demo should also list how to remove the existing sod and store onsite for future use. It takes about 6 months to break down the organic matter for use as topsoil. Hauling it away

should be a last option considering we are in the green industry. After completion of demo, the next phase is to remove the existing topsoil and store it onsite. Instructions should include stripping the topsoil without contaminating or mixing it with fill soil. Storage should be provided on the construction site. Other instructions could include screening the topsoil for rocks and/or debris.

Rough grading the subgrade is a critical stage because the soil needs to mirror the finish grade. In most applications of reconstructing existing fields, utilizing the existing soil may be sufficient and is the most economical way reconstructing a field. Utilizing the existing soil and avoiding the import or export any soil will reduce costs. Compaction of fill soils in the subgrade is a standard practice - if fill soils are less than 2 feet, usually the subgrade can be compacted with the equipment doing the work. Remember you are reconstructing an athletic field not building a parking lot; over-compaction of soil will make it difficult to grow grass. Keeping equipment on-the-job increases costs; thus, excluding the use of a smooth drum roller could be considered for cost savings. If there is unsuitable soil because it is soft and it will not compact, this should be taken care of in the subgrade by removing and replacing it with dry, firm soil that compacts.

(continued on page 18)

## EVERGREEN™ Turf Blankets... ...trusted around the world!

**“Results Outstanding...,  
Could Not Believe...”**

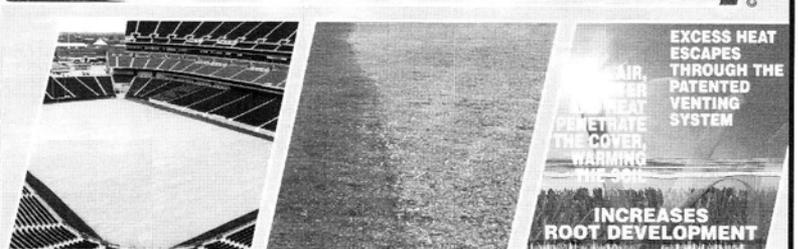
wrote **Dann Daly**, Park Maintenance Supervisor,  
**Parks & Recr. Dept.**, North Smithfield, RI

- Earlier spring green-up
- Faster seed germination
- Deeper root development
- Delays dormancy in fall
- Ideal winter blanket
- 3 & 7 yr. warranty covers
- Best for quick turf repairs
- Available in any size

Want to know more?  
**CALL TOLL FREE**  
**1-800-387-5808**

**COVERMASTER**  
MASTERS IN THE ART OF SPORTS SURFACE COVERS

COVERMASTER INC., 100 WESTMORE DR. 11-D, REXDALE, ON, M9V 5C3 TEL 416-745-1811 FAX 416-742-6837



Covers for football and soccer fields are also readily available.

Covered... Uncovered...

It works on the greenhouse principle, every time!

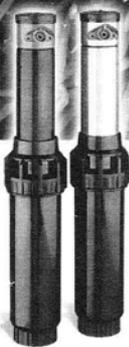
**covermaster.com**

E-MAIL: [info@covermaster.com](mailto:info@covermaster.com)





AMAZING PRECISION FROM ANY ANGLE.



Pro Sport™

ROTORS | SPRAYS | NOZZLES | ELECTRIC VALVES | CONTROLLERS | PUMP START RELAYS

CORPORATE OFFICE

1640 Australian Avenue | Riviera Beach, Florida 33404

Phone: 561-844-1002 | 800-735-7246 | Fax: 561-842-9493 | [www.krain.com](http://www.krain.com)

**K**  
RAIN®

# Effectively Incorporating Synthetic Turf Fields into Athletic Programs:

## *A Groundskeeper's Perspective*

(continued from page 12)

gradually improved in terms of blade density and soil permeability. The turf has come back thicker and stronger each year as there has been significantly less traffic on these fields. As athletic administration has been urged to limit the use of game fields for team practices and gym class use, the obviously more durable synthetic turf in the football stadium has been able to absorb a great deal of this traffic that used to damage the natural game fields. For example, on an average day, there used to be as many as six gym classes of well over twenty students playing on the natural turf varsity soccer field. As the field was constantly being used all day long, its playability was greatly undermined by mid-season despite the aeration and top-dressing efforts of the grounds crew to alleviate as much soil compaction as possible. Fortunately, as efforts to divert such traffic clearly had positive results, the Piscataway Soccer Club, also sharing the same natural turf fields, recently began using the synthetic field for the majority of its winter season games as well.

As a groundskeeper, it is always more challenging and rewarding to maintain an aesthetically pleasing natural turf field that meets community demands for

playing consistency. As we all know, the communities we serve sometimes overlook the efforts of those managing and maintaining their athletic fields. However, I hear about more and more compliments every season in regards to the improvements of our natural turf fields in Piscataway. In combination with the efforts of an experienced and well-trained grounds crew, utilizing the synthetic turf as a resource for heavy sports field trafficking has produced very positive results.

As turf managers in many different affiliations, we will always have different opinions and arguments in the debate of synthetic vs. natural turf fields. However, I think one thing we will all be able to agree on is the beneficial playability characteristics and the large amount of traffic that synthetic fields can accommodate while still maintaining their pleasing appearance. As the use of sports fields and the corresponding maintenance costs are not likely to decrease in the future, perhaps we can look at synthetic turf as a necessary component of a versatile sports facility.

*Matt Olivi is Sports Turf Manager,  
Piscataway Board of Education, Piscataway, NJ;  
and a member of the SFMANJ Board of Directors*

### Dual Slope Laser Grading



- Automated dual slope
- Accurate to .125" (1/8")
- 1 day service available
- Complete athletic field construction
- Bonded and insured
- Local references

Georgia Golf Construction, Inc.  
1441 Route 50  
Woodbine, NJ 08270  
Tel (609)-628-2597 or (404)216-4445  
Fax (609)-628-3087

[www.georgiagolfconstruction.com](http://www.georgiagolfconstruction.com)

Increase your field's drainage and playability.

E T u r f a c e \* T r i C u r e G

a  
r  
t  
h  
W  
o  
r  
k  
s  
\*  
L  
e  
b  
a  
n  
n  
\*  
G  
r  
a  
s  
s  
S  
e  
k

**Fisher & Son**  
COMPANY, INC.  
The "Green Industry" Supplier

Tom Defino  
302-419-8269  
[tdefino@fisherandson.com](mailto:tdefino@fisherandson.com)

Mike Oleykowski  
609-410-0709  
[moleykowski.fisherandson.com](mailto:moleykowski.fisherandson.com)

Superior Products for the  
Turf and Horticultural Professional!  
110 Summit Drive \* Exton, Pennsylvania 19341  
610-363-5225 \* fax 610-363-0563  
[www.fisherandson.com](http://www.fisherandson.com)

d T u r f a c e \* T r i C u r e s

## DID YOU KNOW?

Fouling-off one pitch as  
a Designated Hitter (DH)  
for the New York Yankees,  
Yankee fan and actor  
Billy Crystal struck out  
on a 3-2 count against the  
Pittsburgh Pirates' Paul  
Maholm in a Spring  
Training game on  
March 13, 2008.

# Writing Technical Specifications for Athletic Fields

(continued from page 15)

The soil can also be allowed to dry in-place and then compacted. Last but not least, the surface of the subgrade should be free of rocks and debris down to at least  $\frac{3}{4}$ " in size and be finished graded to mirror the finished grade. The topsoil should be spread at uniform thickness from 4" to 6" which does not need compaction from a roller.

Rough grading can be attained with all sorts of equipment but the final grade needs to be completed with machine-controlled laser equipment to ensure the field will drain and perform properly. Use of bulldozers with machine control is appropriate in a mass grading situation, but when you are performing finish grading, a tractor with machine control is required. This guarantees your level of quality – besides, this is the national standard. After grading is complete, quantities of lime and fertilizer determined by prior soil testing can be applied and tilled and mixed in the soil. This satisfies seedbed preparation by loosening the top couple of inches of soil and mixing amendments. Of course it brings more trash, rocks and debris to the surface so be prepared to pick-up and laser grade lightly at least one more time.

At last you are ready to establish turfgrass on your newly graded field. Considerations need to be taken in choosing your new turfgrass. The National Turfgrass Evaluation Program (NTEP) is always a great resource review all grasses ([www.ntep.org](http://www.ntep.org)). The turfgrass data on this website is generated via nationwide University-based testing. Also,

local references seem to go long way. Noticing what seems to be working successfully "up-the-street" can assist in your decision making. I often read specifications for new field projects that spec turfgrass varieties that were released in the 1950's. We have come a long way since then, so take advantage of the newest information at fingertips. Do your research; it is worth your time and the owner's money.

The realm of technical specifications is a huge, complicated subject that integrates so much information. Navigation of the subject often requires more than one person as it crosses so many topics. Writing technical specifications for athletic fields in public contracting is especially critical because of how the technical specifications are interpreted. However, it can be accomplished. Regardless what is being built, specifications have to be in-place and used to protect all parties involved.

*Sean Connell is Owner and Primary Project Manager,  
Georgia Golf Construction, Woodbine, NJ;  
and a member of the SFMANJ Board of Directors*

## Did You Know?

The final regular season game ever to be played at Shea Stadium is scheduled for Sunday, September 28, 2008 against the Florida Marlins.

# PLANT FOOD COMPANY, INC.

## The Liquid Fertilizer Experts

We specialize in liquid fertilizers and sell many other types of fertilizers, biostimulants, lime and protection products. Everything in the green industry, including trees and shrubs, turf and flowers, grow stronger and more beautiful with our products. Contact us to learn more and request your free catalog.

800.562.1291  
609.443.8038 (fax)  
[pfc@plantfoodco.com](mailto:pfc@plantfoodco.com)  
[www.plantfoodco.com](http://www.plantfoodco.com)



Grow with us as part of our expanding family of customers.

**Tri State Athletic Field Services™ & Supplies**

**Distributor & Installer of Pro's Choice Products  
Serving NJ, NY & PA**

Contact us toll free at (866)474-6777

or at (201)760-9700

Visit us on the web at [www.tristateathletic.com](http://www.tristateathletic.com)

**You can't win the game,  
if you can't play the game.**



**pro'schoice.**  
SPORTS FIELD PRODUCTS

**Don't let a rain soaked field prevent you from playing.**

Pro's Choice® soil conditioners eliminate rain outs, saving you time, money, and cancellation headaches. Make winning simple – let Pro's Choice sports field products be a part of your regular field maintenance program. Never again be at the mercy of Mother Nature.

Call Tri State today to learn how we can help your field stand up to the pounding rain-866-474-6777

Pro's Choice Sports Field Products • 410 N. Michigan Avenue, Suite 400, Chicago, IL 60611 • [www.prochoice1.com](http://www.prochoice1.com) • [prochoice@alltr.com](mailto:prochoice@alltr.com)

building **BETTER**  
SOFTBALL **fields**



**pro'schoice.**  
SPORTS FIELD PRODUCTS

**The Choice of Champions**

Softball fields deserve the championship quality that Pro's Choice soil conditioners deliver. Eliminate rainouts and improve your field's resiliency for truer bounces and safer play with Pro's Choice. A proud sponsor of ASA and USA softball Associations.

Phone (866)474-6777

or (201)760-9700

[www.tristateathletic.com](http://www.tristateathletic.com)