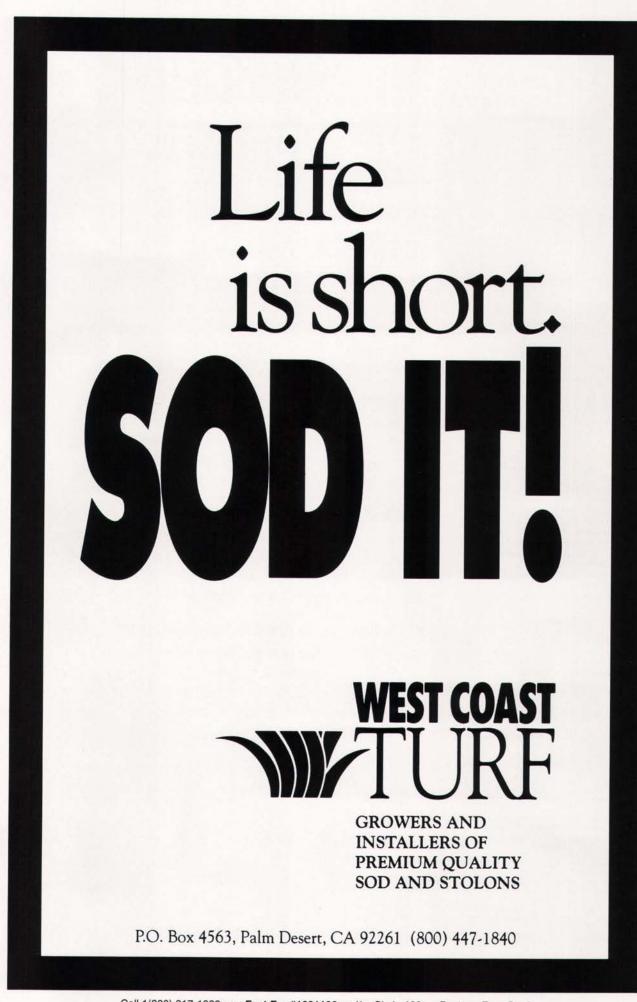


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NOVEMBER/DECEMBER 1996

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Rain has always been a problem at University of Delaware Stadium, sometimes turning the field into muck so deep that the school's marching band couldn't perform its half-time show. All that's changed now, thanks to the wonders of modern sports field construction.

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The grass grows green at Desert Mountain's Sonoran Clubhouse. Photo courtesy: Desert Mountain Properties.

STMA MESSAGE

Past, Present and Future





By Mike Schiller, STMA president

TMA is seeing increased activity among the "old-timers," members who, like me, got on-board at the beginning or early in the formation of STMA. Some have, like me, remained active. Others, for one reason or another,

have backed off a bit in the past. Some weren't sure they were still remembered, or - if they were remembered - that they were as welcome today as they were "way back when."

Because we have to know where we've been to get where we want to go, former STMA executive directors - Dr. Kent Kurtz and Mark Hodnick - are beginning a historical committee to document our past. They're in the process of putting all that together and welcome any input you want to give.

Because we need objectively to assess where we stand, both as related to our original goals and objectives and as related to our present and our future, the past-presidents of STMA have agreed to serve as an advisory committee to the president and the current board. Who better to keep this organization on the straight and narrow than those who have been there - done that?

So - in an open message to all you old-timers still wondering if STMA wants you - we sure do! The welcome mat is out!

And - to all you potential new members who have been wondering if there's a place in STMA for you - that welcome mat is plenty wide for you, too!

If you haven't already noticed, there's a special bonus for new STMA members (including those who have let their membership lapse). Those who sign up between September 1 and

December 1 will receive membership through December 31, 1997.

Final details are being wrapped up for our 1997 Conference and Exhibition in Colorado Springs, January 15-19. This jam-packed program offers something for everyone, no matter what role you play in sports turf management.

Again and again we hear the very best thing about the STMA conference is the opportunity to meet and greet your peers, to find out who is doing what and how it's working, to have some questions answered and provide some answers, and put some faces to those voices you've already talked to by phone - and to those names you've heard for years - including the "and then some master," George Toma.

To make it easier for you to join this vibrant organization and reap the benefits - you can sign up as a member of National, join your regional chapter, register for the 1997 Conference and Exhibition and the conference tours, and pay for it with one check. Full chapter membership fees will be returned to the regional chapter along with your sign-up information.

Do you have questions about STMA? About the conference? About this network of contacts? You can talk with me, any of our board members, or Steve, Suz or Steph at headquarters. Call (800) 323-3875, fax to (712) 366-9119 or e-mail TrustyTips@aol.com for answers to your questions.

The welcome mat is out, and there'll be a whole bunch of friendly faces (including mine) just waiting to greet you in Colorado Springs.



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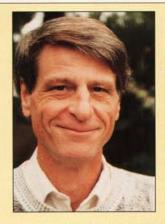
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THE FRONT OFFICE

OPINION PAGE



Unparalleled Opportunities

I f you haven't signed up for STMA's 8th Conference & Exhibition, in Colorado Springs January 15-19, you owe it to yourself to call STMA toll free (800/323-3875), ask for the conference's brochure, and check it out. You'll likely be inspired to attend, and if you act quickly, by December 2, you'll be eligible for all the earlybird discounts, not only for the conference, exhibition and educational sessions but for airplane fares, rental car rates and hotel accommodations. The STMA has gone out of its way to make attending as economical as possible.

At the conference, you will enjoy unparalleled

opportunities to study athletic fields from many of the pioneers and their students whose discoveries over the past 20 years have taken the "artificial" out of turf and put players back on the surface they prefer — grass. Those turf masters will lead seminars and round table discussions in all phases of management from the root zone up, and some will accompany the conference's field trips to professional and amateur facilities.

You will have a chance to query the turf masters before, during and after those sessions. What they don't know, other turf managers attending the conference probably will. If you have a problem and it has a solution, STMA's conference is the place to learn.

Dedicated Pros

Last month, *sportsTURF* lost a friend and gained a buddy. Helen Stone, editorial director of the magazine for almost two years, resigned the position to launch her own publication. She is being replaced by Jerry Roche, a writer and editor in the green industry for 14 years and a founder of Turf & Ornamental Communicators Association (TOCA).

Like last year, both will attend this year's annual STMA conference and, dedicated to their profession, enjoy hearing the views of others. If you see them in Colorado Springs or one of the other conventions this winter, don't hesitate to introduce yourself.

D.E. Et Al.

If you would like to learn more about diatomaceous earth (d.e.), mentioned in the Delaware article this issue, you will find an excellent article about it and the other two "miracle" inorganic soil amendments (clay and zeolite) at the following Internet site: **http://www.aip.com/Green/CF/archives/topdressingjuly.html**. Written by Bill Mannion for the July/August 1996 *California Fairways* magazine, it clearly and thoroughly explains how adding any of those three amendments to a soil mix can improve drought resistance and nutrient retention. (If you don't have access to the Internet, send a self-addressed envelope affixed with 32 cents postage to me at the Perez Road address shown on page 4 of this magazine, and I'll send you a photo copy of the article.)

If you're on the "Net," check out STMA's site — http://www.aip.com/STMA — for any late breaking news about the 8th Conference and other information. Lately the site, in its "Newsletter" section, has carried tips about quick repairs to football fields from four esteemed authorities: Bill Antons, Boone (Iowa) School District; Bucky Trotter, University of Kentucky; Vince Patterozzi, Baltimore Ravens; and Ken Mrock, Chicago Bears.

2. Ki

Jim Williams

EVENTS

CALENDAR

November

17-21 Green Industry Expo. Cincinnati, OH. Contact: (770) 973-2019, fax (770) 578-6071.

December

3-5 Second Annual Rhode Island Turfgrass Show and Conference. Rhode Island Convention Center, Providence, RI. Contact: Rhode Island Turfgrass Foundation, (401) 847-7666. Fax: (401) 846-5600.

4-6 Rocky Mountain Turf Conference. Currigan Hall, Denver, CO. Contact: Julia Marie, (719) 489-3222.

10-12 EXPO 1996. Sponsored by the New Jersey Turfgrass Association. For registration and information, call (908) 821-7134 or (609) 853-5973.

10-13 ¹⁹⁹⁶ Ohio Turfgrass Foundation Regional Conference and Show. Greater Columbus Convention Center, Columbus, OH. Contact: Ohio Turfgrass Foundation, (614) 261-6750. Fax: (614) 261-1242.

January 1997

6-17 Turfgrass Management Short Course. Cornell University, Ithaca, NY. Contact: Dr. Frank Rossi, (607) 255-1629.

7-9 Eastern Pennsylvania Turf Conference and Trade Show. Valley Forge Convention Center, King of Prussia, PA. Contact: Scott Guiser, Bucks Co. Cooperative Extension, (814) 863-3475. Fax: (814) 863-3479.

13-15 Massachusetts Turf Conference. Boston, MA. Contact: Denise Ruszala, (413) 592-0120.

15 Professional Turf & Landscape Conference. Westchester County Center, White Plains, NY. Contact: Carol Mueller, (914) 636-2875.

Send announcements of your events two months in advance to: Editor, **sportsTURF,** 68-860 Perez Road, Suite J, Cathedral City, CA 92234. Fax: (619) 770-8019.

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CONFERENCE HIGHLIGHTS

Two optional Seminar on Wheels Tours - One on Wednesday to Colorado Springs sites the Olympic Training Center, Sky Sox Stadium and the US Air Force Academy. One on Sunday to Denver sites - Coors Field, Mile High Stadium and the Denver Broncos Training Facility.

Optional Friday Night Fun Excursion back to the Old West at Cripple Creek.

Silent Auction and Raffle of valuable sports memorabilia.

New Indoor Exhibition Format - Share an evening reception with exhibitors in the exhibit hall. Then follow up with a second opportunity to view exhibits and connect with suppliers the next day.

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GEORGE TOMA

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Wysocki Keeps It Green for the Minnesota Vikings



Dale Wysocki (left) visits with Jim McMahan of the Green Bay Packers. Photo courtesy: Dale Wysocki.

pound rate with a blend containing 30 percent of the perennial ryegrass mix and 70 percent Kentucky bluegrasses (Nomad, Touchdown and Derby). This was followed by deep-tine aeration to a depth of nine inches using 3/4-inch tines. After dragging in the plugs, the fields were topdressed with 72 cubic yards of 70 percent micro-sand and 30 percent milled hypnum peat.

A week later a Tupersan preemergence application was made for crabgrass control.

On May 20, Milorganite (6-2-0) was applied "between the numbers" at the one pound of N rate. On May 27, a 15-0-30 fertilizer was applied at the rate of 0.5 pound of N per M.

In June, more of the overseeding mix was used to strengthen the fields, this time at the five pound per M rate, followed by a 22-cubic-yard-per-field topdressing. On June 6, the micro-nutrient supplement Ironite was applied at the rate of 18 pounds per M. Milorganite was again applied between the numbers on June 10, at one lb. of N per M, followed on the 17th by the regular full-field fertilization of 17-3-17 at the one lb. of N per M rate.

On July 1, another between the numbers Milorganite application was made. The fields were again overseeded with a 70-30 mix at the five pound per M rate on July 8 and topdressed with 22 cubic yards per field of the 70 percent microsand and 30 percent milled hypnum peat on July 9. Another between-the-numbers Milorganite application was made on July 22, followed by the full-field fertilization with 17-3-17 at the one lb. of N per M rate on July 23.

A two lb. per M overseeding of the 70-30 mix on August 6 helped build up turf strength. This was followed by another 22 cubic yards of 70-30 top-

By Bob Tracinski

t's not easy being green when fall's first freeze hits on September first and spring rarely arrives before May's football mini-camp. Yet Dale Wysocki, facility supervisor for the Minnesota Vikings Football Club, consistently maintains an upbeat attitude. What else would you expect from a man who describes snow as slow-release water?

The Viking's 15-acre Winter Park is in Eden Prairie, MN, 17 miles southwest of Minneapolis. The facility was developed in 1981 under the team's founder, Max Winter. Wysocki notes, "Max Winter passed away this fall. He was a great man, a great person. He established and maintained a truly first class, truly professional organization in the Vikings.

"For example, Dennis Ryan, team equipment manager, will go out of his way to make sure everything is ready for everyone all the time. We strive to carry that attitude and philosophy over for the outside as well."

On-site are two natural turf, sandbased football fields. In 1991, the Vikings added the field house, a specifically built rigid steel structure that fully encloses the AstroTurf field, and they expanded the parking area. The team offices are on the upper floor of the field house. The building also contains the weight room where players work out following the remarkable program coordinated by strength and conditioning coach Steve Wetzel.

The facilities also are used yearround for the varied program of events other than football that were added last year. The marketing department uses the field house for entertaining clients. Corporate sponsors use it for such special activities as sales meetings and new product roll-outs. There was a punt, pass and kick competition on October 5, and the Warren Moon Sports Games on the 26th. In November, 200 people converge on the field for a Jazzercise workout. The players sponsor a Christmas party for underprivileged kids in December. These activities aren't revenueproducers as such, but are related to organizations important to the business.

Dale

Wysocki and his facilities assistant, Jerry Riley, form the two-man crew that handles maintenance. Wysocki is quick to credit Riley for his dedication to the program. Says Wysocki, "As well as the fields, we're responsible for the facility, including such basics as the heating and air conditioning systems. And yes, we do windows — once a month."

Wysocki calls the Minnesota environment "unique" and winter a "nice blessing" in some respects. There are no mole crickets, chinch bugs or chafers. And though the climate is unfriendly to azaleas and dogwoods, it's ideal for some of the country's most spectacular fall color and beautiful, white winters. Variety in the weather has its own special charm.

Wysocki's natural turf maintenance program makes the best of that variety.

Rigorous Schedule

The 1996 program kicked off on April 8 with an application of a 50-50 perennial ryegrass mix of Nomad and Manhattan II at the rate of eight pounds per thousand square feet to get the natural turf fields ready for mini-camp. On May 1, five days prior to the camp, 13-13-13 fertilizer was applied at the rate of one pound of nitrogen (N) per thousand square feet (M).

Following mini-camp, intensive restoration took place on both natural turf fields in preparation for the regular heavy schedule starting in August. The fields were overseeded at the eight-

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dressing mix on August 7 to firm and level the practice fields. On August 9 came an 18 lb. per M micro-nutrient application of Ironite. On August 10, a slowrelease 0-0-57 fertilizer was applied at the rate of 1.5 lb. of potassium (K) per M to increase grass plant survival and stress resistance. More Milorganite went down between the numbers on August 12. A general full-field fertilization of 13-13-13 at the one lb. of N per M rate was made on August 19.

Milorganite was applied between the numbers at the one lb. of N per M rate on September 3 and 24. A 12-1-12 general field fertilization was made at the rate of one lb. of N per M on September 10 and again on October 15. A dormant, full-field application of Milorganite at the rate of 1.5 lb. of N per M was scheduled for early November.

Wysocki adds, "This maintenance schedule was supplemented by midseason aerification and bye-week aerification, seeding and topdressing. Normally, after each Friday's practice, the end of the field where the team practices will be aerified, seeded and fertilized. The fields are also sliced and rolled weekly.

"Most fungicide applications are made on an as-needed basis. It makes no sense to spray for turf disease when the disease is not there. The 1996 season was much more humid than usual here. Dew points in excess of 70 were common, and in July the dew point surpassed 78. We faced nearly constant disease pressure.

"After an April 15 preventive application of 26019 at the rate of four oz. per M, and a June 3 application of Pace at 6.4 oz. per M to prevent turf diseases such as root pythium, we fought back with an aggressive multiple-fungicide program. Using one oz. of Banner, one oz. of Banol and four oz. of Daconil Ultrex per M, we made applications on June 18, July 2, 16 and 30, and August 13 and 27. We wrapped up the season with an application of PCNB in late October at the rate of 12 oz. per M for prevention of winter turf diseases."

Wysocki also launched an aggressive attack for *Poa annua* seed head suppression on the west practice field, applying four oz. of Aqua-Gro L per M on May 16 and 30, June 13 and 27, July 10 and 24, August 8 and 21, and September 4 and 18.

And drought hit the area hard. Wysocki says, "From June 22nd through early October we received only 1 1/2 inches of rain. Obviously, our irrigation system got lots of use." Viking coach Dennis Green shares the belief that natural turf is a player benefit, so Wysocki's goal is to keep the natural fields going as late into the season as possible, allowing the team to practice outside on a "supple surface." Management practices include "liberal" tarping and use of pre-germinated seed, switching the seed blend to 70 percent perennial ryegrasses and 30 percent Kentucky bluegrasses after September 1. Still, as winter approaches, Mother Nature calls the shots.

Maintenance on the artificial surface is less complex. "We sweep the AstroTurf with a four-foot-wide, ride-on sweeper immediately following each indoor practice," notes Wysocki. "The surface is cleaned once a year. We hire it done by a company which uses a special, truck-mounted device."

The artificial surface is a definite step up from the situation the Vikings sometimes faced before Winter Park, while they shared Met Stadium with baseball's Twins. When scheduling wouldn't allow for practices to be held on the natural turf fields of area high schools or colleges, they took place on the parking lot at the Met.

Best of Both Worlds

Wysocki started his business career on golf courses, working first as a caddie in 1973, then moving to the golf shop, and then to the grounds crew, which also allowed him to hold down the night shift cooking. He paid for his first car at age 18. With his eye on a golf course superintendent position, he majored in agronomy at the University of Maryland, earning his degree in 1979.

He worked at Congressional Country Club for two years, then went to Shakopee, MN, to serve as landscape mechanic for a major amusement park. In 1984, he moved on to the Fairbault Golf and Country Club, in Fairbault, MN, 40 miles south of Minneapolis. He joined the Vikings on April 1, 1995.

Wysocki says, "I really wanted the Vikings position. I'd been talking with Ken Mrock (grounds superintendent for the Bears), another Chicago 'Polish kid,' about the special challenges of sports turf management and how he ran his two-man operation. I've loved the green industry since those early mornings sharing the golf course with deer, ducks and other wild critters while striving for the ideal environment for the golfers. The Vikings give me the best of both worlds." Winter Park was built down in a hollow. It's surrounded by a 50-foot hill, green "berming," native woodlands and native wetlands. Deer, foxes, squirrels, "lots of" birds, including red-tail hawks, are as much at home there as the native plants. Wysocki is documenting species and enhancing the site, making it even more "critter friendly" with such touches as bluebird houses. He's working toward the first Audubon Cooperative Sanctuary designation for a professional football facility.

Wysocki is quick to credit his "home" team support group. His wife, Twila, has a real understanding of the demands of the job and the long hours. She's a horticulturist who has faced her own challenges in such roles as head gardener for the Congressional Country Club and her current position as manager of greenhouses for Little Six Inc.

At eight, son Steven is getting his first taste of tackle football, defining his defensive tackle position as the "best ever." Daughter Annalyse is "busy being a three year old." Even with two demanding jobs, the family routine includes baseball and Cub Scouts, as well as football.

Despite all this, Wysocki still finds time for photography. He's had photos published, including in the USGA Green Section Report, and he supplied the shot for this article. In addition, he's serving his third run as editor of Hole Notes, the official publication of the Minnesota Chapter of GCSAA. He even used to fit in a little hockey, "until my knees gave out."

With a December 22nd away game scheduled with the Green Bay Packers, Wysocki will likely find it necessary to plow away some of that "beautiful snow." The team traditionally practices on the outdoor surface prior to a late-season, open-stadium game in northern regions.

"In 1995, we moved snow from the turf fields twice," Wysocki says. "Players hustling through a full workout on the frozen, dormant turf obviously creates a few problems. Thus the field restoration early this past season. But, we are the problem solvers. They come to us with many requests. Our job is to make things happen. We live for 'em."

Bob Tracinski is manager of public relations for the John Deere Company in Raleigh, NC, and public relations co-chair for the national Sports Turf Managers Association.

SportSTURF http://www.aip.com

Wimbledon Never Looked Like This!

Skillfully camouflaged against its desert backdrop, the Sonoran Clubhouse is barely visible from the outside. Part of the exclusive Desert Mountain community, the clubhouse appears as unobtrusive as the rest of the gated, residential area that includes four Jack Nicklaus golf courses. Here, native earth tones and stone architectural features that blend with nature are required, and street and tennis court lighting is prohibited.

Yet, once inside, visitors catch their breath as they are led to the outdoor dining patio. Cascading out before them is revealed one of the most magnificent jewels of the Southwestern desert — a spacious, three-tiered emerald green grass terrace surrounding an exquisitely manicured sunken grass championship tennis court, hard and clay tennis courts, an upper terrace nine-wicket croquet lawn, and panoramic views of the city lights of Scottsdale and Phoenix, AZ.

Many of the members-only Sonoran Clubhouse's upscale clients have played tennis all over the world, and even they can't believe their eyes at the meticulous care that has been given to every detail.

"Our director of tennis, Ward Phelps, said Jimmy Connors took one look at how nice our grass court is and remarked, "Wimbledon never looked like this," says Sonoran's environmental manager, Wally Camp. "All the people that work here take extreme pride in the appearance of this facility."

As well they should. Constructed in the spring of 1993, the Sonoran Clubhouse and tennis complex measures more than 20,000 square feet (the spacious grass tennis court itself measures 95 by 120 feet), and the grounds were constructed to meet exacting USGA putting green specifications — identical to those used for premium golf courses. This meant installing a complex herringbone-patterned drainage system 18 inches below the surface, followed by six inches of pea gravel, followed by 12 inches of a highly specific custom blend of sand and peat moss that, prior to installation, was tested at a Georgia soil laboratory to verify percolation and water retention rates. All turfgrass areas are a hybrid dwarf Tifgreen bermuda, PD102, mowed to 0.150 (thousandths) of an inch.

Beyond adhering to stringent soil preparation and turfgrass requirements, the project utilizes Netafim's state-ofthe-art Techline subsurface drip irrigation technology to ensure top performance of the world-class grass tennis court, croquet lawn and surrounding seating terraces. In addition, a heating system was installed beneath the grass tennis court itself in order to prevent winter dormancy.

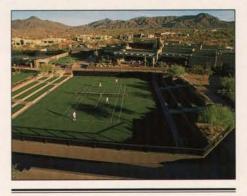
Since its opening, the clubhouse has hosted a number of member events featuring various legends of tennis, as well as the A2 Open Croquet Championship Tournament for the past three years.

Reasons for Drip

"As far as I know, this was the second grass tennis court built in Arizona," says Camp. "The first one was also part of a project that I was intimately involved with, so I had a good basis of comparison for certain things we wanted to improve upon."

"First, we wanted improved safety and playability, including a longer window of time in which the court is playable. Because we use subsurface drip irrigation versus overhead spray, we can open the courts for playing between 7 and 7:30 a.m. without worrying about morning dew — or frost in the winter. Subsurface drip allows us to water whenever we want, even while people are playing, and they never know it. The ground never feels soggy or develops puddles because the water is drawn by capillary action to the root zone where it's needed and never floods the surface.

"Secondly, we wanted to avoid overspray. With traditional sprinklers, you always need to go right to the edge of your hardscapes, especially with our hot, dry climate and prevailing southwest winds,



Meticulous care has been given to every detail of the Sonoran Clubhouse's emerald green complex. Photo courtesy: Desert Mountain Properties.

so you always have overspray. Our water here in the Southwest is high in ph (calcium carbonate), and overspray turns concrete and other surfaces white. The custom pleko finish we have on our concrete walls is an extremely attractive elastomer type finish, but if it stains you have to wash it with a mild acid, which also breaks down the concrete. Our net posts are made of oak and brass, and our wind-screen frames are custom made. Plus, we paint our court lines on with turf-quality liquified chalk using custom-made stencils that give us extremely precise, straight lines. Even one-quarter inch off is unacceptable. With all this, you can see why we simply didn't want the additional maintenance and expense involved with managing an overspray problem."

In addition, Camp is very conscious about conserving water and planning for maintenance efficiency. With subsurface drip irrigation, there's no water lost to evaporation or wind drift. Each emitter in the tubing meters water at a precise rate. Compared with the other grass court he managed, it appears he's saving a substantial amount of water and labor, greatly reducing long term maintenance and improving the aesthetics at the same time.

"The fact that we have been able to utilize subsurface drip irrigation to successfully maintain extremely large spans of turf with the kind of rigorous requirements demanded by Desert Mountain has been a source of amazement to many visitors, including professionals in the field," says landscape architect Don Teal, Teal Design Group, Las Vegas, who was the chief landscape and irrigation designer for the project.

Seven Miles of Tubing

The soils beneath the courts, threetiered stadium court and croquet field