



THE 1994-1995

BEAM CLAY COLLEGE

DIAMOND OF THE YEAR:

TRINITY UNIVERSITY'S E.M. STEVENS FIELD

By Bob Tracinski

E.M. Stevens Field was "as old as dirt" prior to its 1991 reconstruction, according to Mike Schweitzer, assistant director of physical plant/director of grounds for San Antonio's Trinity University. The field reworking was part of a major renovation of the student-recreation center and athletic-department facilities.

Schweitzer says, "Support from the administration and the athletic department was great. Even though the field reconstruction was the last thing on the total project, they didn't cut corners."

"After analysis of the existing materials, it was decided to retain the soil of the skinned portion of the original field and to modify it to attain an improved surface. Soil was excavated around all skinned portions of the infield, including basepaths, the mound and home plate area, and was replaced by a ten-inch layer of a native sandy loam from fields south of San Antonio. The same material was utilized to replace all existing soil in the outfield. After the final grade was achieved, 18 tons of calcined clay were added and tilled into the top six inches of the skinned area to create the desired playing surface."

Once the new soil was placed and graded, the field was sprigged with Tifway 419 Bermudagrass in May 1991 using a tractor-type sprigging machine. The final topdressing was made just prior to the start of the fall baseball

season using 175 tons of washed green sand to finalize the grade, and final cuts were made around the infield. The Bermudagrass was overseeded with perennial ryegrass about October 21.

"Because the field gradually slopes from left field toward the first base line, all surface runoff moves toward the first base corner of the infield. In an effort to minimize runoff, the field was intersected with a graveled and geotextiled French drain. The warning track along the entire right side of the field, from home plate to the right field foul pole, is equipped with surface drainage inlets to handle additional surface runoff."

"Trinity University is fortunate to have licensed irrigation technician Ted Morales on staff. He did the layout for the irrigation system, supervised installation and handles the maintenance of the automatic system. It incorporates Rain Bird R-50 and R-70 heads. The controllers and valves are by Weather-matic."

"The field was equipped with new fencing, seating, dugouts and metal halide lighting, and by November 1991 was essentially a new ballpark. Additional funds were wisely expended to rebuild the front portion of the mound with Beam clay. This upfront investment has cut the time and expense of rebuilding the mound every day. Only light reworking is needed."

Schweitzer wasn't attracted to sports turf care as a youngster. In fact, he hadn't decided on a major when he

entered Texas Tech University. A friend suggested park administration, a combination of horticulture and landscape architecture. Schweitzer found he liked the courses and his job at a retail nursery, and he soon developed a real love for this field of study.

In 1984, he took a position as one of two superintendents of grounds for Texas Tech. After seven years in that position, he applied for the opening at Trinity University and came on board during the renovation of the NCAA Division III baseball field and surrounding facilities.

Schweitzer says, "I feel like I've died and gone to heaven. This is the best place in the world to work. Over the last three to four years, under the direction of Athletic Director Bob King, the various athletic programs have steadily grown in participation and popularity. We're a land-locked school with an enrollment of approximately 2,400, a large percentage of whom participate in sports at either the team or club level."

For the past three years Schweitzer has served as a volunteer assistant baseball coach, working practices around his duties as director of grounds, so his love for the field is twofold. Schweitzer oversees the grounds of the entire campus, including the outdoor sports facilities: the E.M. Stevens Baseball Field, the varsity football field, a softball field, soccer field and an intramural field that serves all sports.



"Changing the baselines to grass is one of the best moves we've made," says Schweitzer.

Schweitzer develops and monitors the budgets, develops and coordinates the maintenance programs for a staff of 34 employees, prepares a horticulturally related campus newsletter and spends about 75 percent of his time on the grounds with the staff. In addition, he participates in the Texas Turfgrass Association, the Master Nurseryman program of the Texas Association of Nurserymen, the national Sports Turf Managers Association and the Texas College and University Grounds Managers Conference.

Schweitzer is very impressed with his staff. "The three full-time physical plant grounds maintenance employees who maintain the athletic fields do a super job," he relates. "Joe Rincon is our detail person. Eighty percent of his time is spent on E.M. Stevens Field. He mows the infield, does the daily dragging, lip washing, mound and plate preparation, skinned-area work, marking and safety checks. He also polices the stands, including litter pickup. Supervisor Pete Vasquez Jr. and assistant Juan Avila do the mowing on this and all other athletic fields. On game days, they all pitch in to prepare the mound, batter's box, bases and the skinned portion of the infield."

Schweitzer adds, "My good friend, Mel Lanford, head groundskeeper for the Yankees A team in Greensboro, NC, met with me during the renovation period. He said, 'Make your field *your* field. Make the changes, add the details that fit your needs and your maintenance program and that make the field unique. I took that to heart."

"We made straight cuts at the corners — rather than rounded — to coordinate with the untraditional straight lines utilized in both the fungo and

on-deck circles. The straight lines also can be seen along the warning track behind home plate. They coincide with the angles and point of home plate to create a striking effect.

"The warning track has a four-inch depth of very fine crushed granite from a Marble Falls, TX, quarry. The rose color is distinctive; there's no dust and no mud; and the surface provides an audible crunch when stepped on with steel spikes. The crushed granite is also used inside the bullpen and batting cage, which allows for usage even during periods of wet weather."

In another untraditional move, Schweitzer has changed to grassed baselines from home plate to first base and from third base to home plate. "I hear that



Mike Schweitzer (in cowboy hat) is at home on this range with crew members Pete Vasquez Jr. (kneeling), Joe Rincon (standing, left) and Juan Avila.

LSU did it, and won the College World Series a year later, so our hopes are up for 1995," he relates. "We made this change in the fall of 1993, so we've played two fall seasons and one spring season on it. We made the cuts, leveled the surface, sodded with Tifway 419 Bermudagrass and then topdressed with washed green sand to assure no surface transitions. The only other change needed was adjusting the irrigation heads from 180 degrees to 360 degrees.

"Changing the baselines to grass is one of the best moves we've made. When Floyd Perry conducted his Grounds Maintenance Seminar for Baseball Fields here in the fall of 1994, he said that grassed baselines with cutouts only for

bases could be especially beneficial at the Little League level, allowing personnel with limited time to concentrate on maintenance of areas other than the skinned surfaces.

"By grassing our baselines, we eliminate approximately 240 feet of lip maintenance from our daily program. Because this grass is painted just like the outfield foul lines, chalking is reduced to only the batter's box and the remaining skinned portion of the infield.

"Floyd Perry also recommended the artificial turf hitting mats we now use at home plate and in the bullpens. The mats are heavy and lay flat over home plate and the area that is used by right- and left-handed hitters. The mats are thick enough so players can dig in with their spikes. We use the mats for all daily practices except scrimmages.

"We've also buried a rubber mat 1.5 inches below the surface at the right side of the batter's box. We've gone just to the right side because currently we have far less traffic in the left-handed batter's box. This mat is the same color as the infield material. Even when hitters really dig in, they can't go beyond the mat, so we have only the top 1.5 inches of soil to repair.

"Our dugouts were initially flush with the brick wall, almost inviting players and coaches to pour onto the warning track in front of it. Three years ago, we paved the area in front of the dugouts and covered it with indoor/outdoor carpeting, and have been extremely pleased with the results.

"In recent years E.M. Stevens Field has been utilized for a variety of functions in addition to baseball that further increase maintenance requirements. Since 1991, Trinity University has been the summer training facility for the NFL's Houston Oilers. To better facilitate the Oilers' needs, it has become necessary to use the outfield portion of Stevens baseball field as a second practice location. Immediately following the Oilers' departure in August, the Trinity varsity football team begins two-a-day practices on this same outfield. In an effort to minimize wear on the varsity football game field, these practices are allowed to continue until October 1.

"At this time we aerify and begin the overseeding procedures in order to restore the playing surface for the fall and spring baseball seasons. We verticut on three-inch centers in four directions, in effect, chopping the Bermudagrass into one-inch squares. Then we sweep down nearly to the crown. We overseed with a blend of perennial ryegrasses at a rate

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of 10 to 12 pounds per thousand square feet in the outfield, 12 to 15 pounds per thousand square feet in the infield. We then topdress with washed green sand.

"Because most of the fields are overseeded with perennial ryegrass and the transition back to Bermudagrass generally doesn't occur until early summer, play actually takes place on the perennial ryegrass with an underlying Bermudagrass cushion. We've only had one year — the spring of 1993 — when cool temperatures and rainy weather hampered the transition. Temperatures would spike into the 80- and 90-degree range for a week, reviving the Bermudagrass and stressing the perennial ryegrass. Then temperatures dropped, the Bermudagrass slacked off, and the ryegrass took off again. That pattern continued into the summer. It's the only time we've lost good turf cover, and we did have to do some resprigging in spots. On the baseball field there was some obvious damage, but no resprigging was needed.

"For general maintenance we aerify with the 'Aerovator' on all our athletic fields. As is often the case on sand-based fields, we have found it necessary to do some deep-tine aeration to alleviate the subsurface compaction in heavy use areas.

"Pete and I are licensed, non-commercial applicators, along with three other grounds-staff members. Pete generally applies the granular fertilizer, while Richard Martinez handles all fertilizer and pesticide applications that require the large spray rig. We follow an IPM program, only treating problems as necessary. We were able to eliminate a severe nutgrass problem during the first summer with a combination of MSMA and Image and, aside from treating occasional minor fire ant invasions, we apply very few herbicides or pesticides to the fields."

All five of Trinity's athletic fields are constructed with Tifway 419 Bermuda. Schweitzer believes that no better athletic turf is available in the South. He says, "We reel-mow the fields three times a week during the spring and summer, keeping the Tifway 419 at approximately a 7/8-inch height. Anything above a one-inch cut on the 419 develops a thatchy-looking, uneven growth that detracts from the appearance and playability of the turf. Fall mowing of the overseeded turf drops to twice weekly with the outfield cut at one inch, the infield at 3/4 inch.

"Because sand-based fields differ in makeup from traditional soils, we have found it necessary to make adjustments to both our irrigation and fertilization practices. Our prime fertilization is with slow-release granular materials, which we supplement with lots of micronutrients and liquid iron in foliar sprays. We've found that half-rate applications, one-half pound of nitrogen per thousand square feet, made every two to three weeks throughout the spring and summer months work well.

"With our erratic weather conditions, scheduled irrigation programs are often subject to modification. We monitor conditions closely and work with the coaches to coordinate schedules.

"Actually, on sand-based fields it's easy to create part of our own problems. Sprigging into a sand-based field requires keeping the surface moist, but that encourages horizontal root development. Consequently, deep watering to force deep root growth leaves us in danger of baking the top layer of soil. When we wet it down to compensate, the roots stay near the surface. If we don't wet it down, the plants face desiccation. The deep-tine aeration is helping to push deep root development. It's a constant adjustment that is "a trade-off for the great playability of a sand-based field.

"In addition to accommodating the Houston Oilers and the Trinity varsity football team, E.M. Stevens Baseball Field is also occasionally utilized for the purpose of playing baseball. Approximately 20 home games as well as daily practices occur on this field from November through April. In addition, the field is prized by other schools that may be experiencing rainouts on their home fields.

"During the spring of 1992, heavy rainfall in the San Antonio area had local fields unplayable. The high school bi-district playoffs were in danger of being settled by a coin toss, and preparations were being made to bus four teams to the nearest dry field 100 miles away.

"Early on a Sunday morning we were approached concerning the playability of our field. Naturally it was wet, but within three hours we had it prepared and ready. Two games were played that day, keeping those four teams from a 200-mile round-trip bus ride.

"Texas weather is either feast or famine. We have downpours and droughts and, throughout them all, the renovated field has been highly playable."

The challenges keep Schweitzer and his staff on their toes — and call for added support from their families.

Schweitzer credits wife Sharon for more than her share of support and adds that as director of public relations for Trinity University she also has a professional interest in the quality of the grounds.

More challenges are to come. "Trinity University is the host site of the 1995 U.S. National Senior Games. Their 'Alamo Village' will be set up on the intramural field. On the final Saturday morning of the event, from half to two-thirds of the baseball outfield will be covered by large tents. Up to 5,500 participants will enjoy a celebration breakfast under the tents. A mariachi band will perform, and left field will become a dance floor." Schweitzer sometimes cringes at this prospect but realizes that "it's only a part of what groundskeepers everywhere are experiencing as the use of natural grass fields continues to diversify and increase."

Schweitzer says, "The baseball field that we have established at Trinity University has become a source of great pride for the entire university community. We've provided a field with a distinct personality, and with a little imagination, we find that its personality is altered somewhat each season. This field was well planned and properly constructed. That, I believe, is the ultimate key to any successful endeavor. However, equally important is the dedication of the people who maintain this field."

That top-notch combination has made E. M. Stevens Baseball Field an outstanding sports facility — and the 1994-1995 College Diamond of the Year. □

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The Beam Clay Baseball Diamond of the Year Award is sponsored jointly by Beam Clay, the STMA, and sportsTURF Magazine in recognition of excellence and professionalism in maintaining safe, high-quality diamonds. Winning diamonds are named in the professional, college, and high school/municipal/park categories.

Judges for the 1994-1995 Beam Clay Baseball Diamond of the Year Awards are Bob Wilkinson, stadium superintendent, New York Yankees, Yankee Stadium; Brandon Koehnke, manager of field maintenance, Cleveland Indians; Pete Flynn, head groundskeeper, New York Mets, Shea Stadium; and Steve Wightman, stadium field manager, San Diego Padres, Jack Murphy Stadium.