When the City of Surprise, AZ, announced plans to build one of the most ambitious pro training sites to date, it came as, well, a surprise. After all, this farming community located 25 miles on the outskirts of Phoenix has a modest population of about 50,000. Astonishment soon turned to shock, however, when the city managed to woo not one but two major league teams, the Texas Rangers and the Kansas City Royals, to hold spring training there. But late last February, all that was felt was pure joy as the crowd witnessed the opening pitch in the West's shiny new stadium.

Surprise may be small, but it obviously thinks big. Not only has the city managed to build this 15-field sports complex, but also plans are to spur growth by surrounding it with a 200-acre downtown center. Slated for completion this summer, the municipal hub will be graced with 58 acres of parks, a 5-acre lake, an aquatic center, library, and city administrative offices. Furthermore, city officials envision this downtown, with its centerpiece sports complex, as being as significant as Phoenix is now by the year 2040.

Surprise officials also think smart. Cream-of-the-crop sports-field architects and engineers HOK Design Build and Charlotte Engineering Sports Group were hired to design and build the complex. After gleaning the premiere features from stadiums throughout the states, they came up with a 10,500-seat, stadium/amphitheater that's upscale yet fan-friendly, the way spring training games ought to be.

For example, baseball fans traditionally enter stadiums behind home plate, but in Surprise fans enter through center field for a closer feeling with the teams. To accomplish this, a 14-foot below-grade bowl and stadium were built. Players enter the stadium through both the right and left field tunnels, instead of just down a right field line, also making them feel more accessible to fans.

Maintenance matters
The engineers created an equally high-tech playing field. They had planned an extensive hard-pipe drainage system, but after consulting area farmers, dry wells hard-punched into the soil became the solution. Adding to the wells, they dug deep and laid drainage tiles on the soil, covered it with pea gravel and topped it with USDA-certified sand as root-zone soil for the advanced hybrid bermudagrass sod. All this adds up to a playing field that makes a quick comeback after heavy stress and rainfall.

"Over a 2-day span early in the spring training games, we had 3-3/8 inches of rain, which is more than..."
Arizona gets in over half the year, says Joe Kennedy, head groundskeeper. “But we didn’t miss any practices because our fields, including the infields, drained tremendously.”

The big job remains daily for Kennedy and his 30-man crew, many of whom are new to him and to baseball. The 15 ballfields are in constant use and the drills and practices can really take a toll on the grass. But Kennedy and his supervisors, Joey Brazil and Carl Hulston, already had 8 years of maintenance experience at nearby Peoria Sports Complex, another two-team training facility home to the Seattle Mariners and San Diego Padres.

“Our routine is to prep each field three times a day for about 20 minutes each time,” says Kennedy. “Then at the end of the day, we go back to reconstruct any damaged areas, irrigate, and fertilize. Basically, our crews are going from 6 a.m. through 9 p.m.”

Aside from the 15 fields, Kennedy oversees: 12 acres of common fields; the 5-acre lake, which is also the reservoir for the irrigation system; three soccer fields that serve as over-fill parking; two practice fields used for warm-ups; and a landscaped aquatic center across the street along with the pools (crew members are also certified pool operators). If there were a partridge in a pear tree, his crew would surely be there for any needed care.

“The toughest part of my job is coordination between my new employees and my supervisors,” says Kennedy. “I’m here to keep the coaches and teams happy. I’m a bit of a perfectionist so we’re all getting along well. These coaches are some of the toughest to please from a head groundskeeper’s point of view.”

Patricia and David Fletcher are copywriters specializing in the green industry in Santa Rosa, CA, 707-546-8262.
Irrigation system hinders demands

Of all the aspects of maintaining the 15 sports fields at the Surprise Sports Complex, perhaps the most challenging is irrigation. It's obvious that the sheer size of a site like this is demanding on an irrigation system. Add to that the constant public use of the venues beyond spring training with fall ball, college games, fantasy camps, and more. In fact, there will only be about two weekends per year when the fields are not in use. And finally, there's the added curve ball of high ETrates in the desert landscape.

Charlotte Engineering Sports Group, of Phoenix, saw the challenge as two-pronged: to water as close to ET as possible for conservation purposes—up to 2-1/2 inches of water per week, and in the short windows of time available. About half a million gallons are put down daily, and at build-out, including the 57-acre park, as much as one million gallons will be used.

"We obviously have a short water window and so we break the watering down on each field and often change the schedule on a daily basis," says Joe Kennedy, head groundskeeper at Surprise.

To help make scheduling efficient, Charlotte Engineering specified Hunter's Genesis Central Control System with an ET weather station, handheld radio remotes, and a flow sensor on each ball field. The central determines the most efficient watering schedule based on ET, flow data (water already applied) and the available watering time as determined by the managers.

"The central is so important because it tells me how much water we've put down and how much more the fields needs," says Kennedy. "And I can schedule watering around events. I do whatever my scheduling requires and I can still maintain ET."

Hand-held remotes allow managers in the field control to provide extra water for hot spots without affecting the schedule. For the sprinklers, Hunter Irrigation 1-40-0N rotors were specified for all the turf on the ball fields. Senior designer Bill McBride liked the coverage, range, and high flow rate these rotors provide.

Kennedy agrees. "The 1-40 puts more water down in less time, which helps tremendously with scheduling," he says. "Plus, these rotors have great uniformity, especially close to the head."

"The turf looks phenomenal," says McBride. "In fact, it's exceeded everyone's expectations."