TOOLS & EQUIPMENT



ew elements of successful sports fields are as important as the finished grade. No matter how you prep, no matter your soil conditions, no matter your turf quality, nothing can overcome the effect of a poorly graded surface.

Whether you hire a contractor or handle this duty in-house, it's vital to get it right. Former Sports Turf Managers Association president Mike Trigg, CSFM, hires a contractor to grade his fields at the Waukegan (IL) Park District.

"The main reason is timing and staffing," Trigg says. "We are specifically staffed for field maintenance operations that run March to November. Staff is not trained nor experienced to conduct major field renovations that would require laser grading.

"I have successfully budgeted contractual services for field improvements. If feasible, I have utilized in-house equipment or labor to assist the contractor and reduce some of the cost of the renovation. We have worked with some great contractors over the years who work with our schedules; but more importantly, are very efficient and pay attention to details of our field renovations." Trigg said.

Chris Calcaterra, CSFM, the sports facilities manager for the City of Peoria, AZ, says he used to hire out all grading to a contractor, but realized the need to bring it in-house to be more efficient and maintain the fields on a more regular basis.

"The ability to save on materials by laser grading more frequently and keeping the field standards up to a higher level made it the method of choice," Calcaterra said. "The payoff has been multiplied by the labor savings and use survey responses."

How it works

Grading specialists from Laser Leveling, a company that sells precision grading systems, say

that doing it yourself is not difficult. Their sports turf grading systems consist of three parts, the grading system, the laser, and machine control.

According to the company's website, place the laser at the center of your sports field, whether it is the pitcher's mound, the 50-yard line, or center field. Dial in the amount of grade you desire.

Position your grading system's cutting edge in an area that you consider to be close to grade. This is simply a reference point, it does not have to be exact.

Lower the cutting edge so that it is barely resting on the ground. Adjust your blade's sensor until it reads "On Grade." You are now ready to grade.

You need 5 additional horsepower for every added foot of scraper.

Hydraulics work with any tractor but you do need remote hydraulic hookups. One person can grade 50,000 square feet in 8 hours (ballpark figure).

Above: Alpine Services, Gaithersburg, MD, uses this machine to laser grade their field construction sites.