## **Painting** women's lacrosse fields **quickly and accurately**



Silhouette images courtesy of istockphoto.com

"When the lacrosse women's club president gave me a hand-drawn diagram of the field I was expected to layout, I thought I was in [deep trouble]."

SEVERAL YEARS AGO, when the president of the lacrosse women's club at Texas A&M gave me a hand-drawn diagram of the field I was expected to layout, I thought I was pretty much screwed. The field was made up of two creases (goal areas) formed of circles, half circles, and quarter circles, hash marks along the quarter circle with the end two hash marks hanging out in empty space not crossing any line and a center circle, with hardly a straight line anywhere and no cross lines or boundary lines of any kind.

I couldn't make heads or tails of it, and I could hardly believe that a bunch of college kids could lay this out without any professional help. It took hours to lay out one field the first time, and we were called back to make corrections the first three times we painted their field. I began to doubt whether I had a future in this business.

But with practice and developing a couple of tricks, I learned to lay out these fields quickly and accurately. Here is a step-by-step process that, with practice, will allow you to paint a women's lacrosse field accurately and in the shortest time possible. This assumes that the reader is experienced at laying out and painting football and/or soccer fields:

Gather your tools. First, you need a diagram, obviously. I use one provided by the NCAA at http://www.ncaa publications.com/Uploads/PDF/W\_L ax\_Rules\_11\_25fb0f2e8d-40e0-4668a519-00e488777ada.pdf. You also need string, stakes, landscape flags, and quality aerosol field marking paint, as well as three good 100-meter tape measures with metal end rings.

**Lay out the perimeters**. Do it just like you would for a football field.

Lay out the North Crease. The crease is the most complex and most important part of the field lay out. It must be centered in the field and the dimensions are set in stone. When I first did this, the field had no boundaries whatsoever; it was what I call an "inside out field" because all field elements really radiate out from the cen-



THIS AND OTHER DIAGRAMS are available on the NCAA website.



www.sportsturfonline.com

## Facility&Operations

MARCOTTE USES THIS ISOSCELES TRIAN-GLE as a giant "speed square."



ters of the creases. We used to stretch a string line directly down the full length of the center of the field. Then we measured and marked the center of the field and the center point of each crease and worked outward from there. As we

added boundaries, we just measured out from the centers to get two parallel side lines. Pull a tape across the width of the field at the sideline marks indicating the location of the crease (these should have been marked when you laid out the sidelines). Mark the center of the crease, then using an

aerosol paint can, mark the start and stop points of the 6 foot line where the goal will sit and dot the line between the two points.

Speed square

Everyone knows how to paint a straight line. You just pull a string from point to point and follow it with a painter. You can't do that with a circle. You start out with a tape staked to the center of the circle, stretching it tight you mark the distance of the radius with your thumb. Taking a can of paint in your other hand, you place your forefinger on the nozzle and line it up with your thumb on the hand holding the tape. Bend over and walk a circle, keeping the tape taut, and spray a dotted line to form the circle. Keep the dots close together to help the paint crew when they follow up to paint the lines. Using this method, paint the 2.6-meter radius inner circle. Next mark the start and stop points on the 12-meter lines, the only real straight lines in the crease.

We found an easier way to lay out the 45 degree angles from the center circle to each end of the quarter circle. One of my students (a construction science major) built an isosceles triangle out of scrap wood strips to use as a sort of giant "speed square." Ten years later we still use it each time we lay out Women's Lacrosse and have found many additional uses for it. Take the giant speed square and place it at the intersection of the inner circle and the straight line with the hypotenuse of the triangle forming 45 degrees away from the center. Measure along the hypotenuse for 8.58 meters

> and mark one end of the quarter circle. Repeat on the other side of the inner circle.

Take the tape that is staked to the center and pull it out to the 10.6meter line. Mark the quarter circle as described earlier, starting and stopping at the points

marked in the last step. Then, move out to the 14.6-meter line and repeat the process for the half circle.

Finally, we need to mark those strange hash marks. Locate and mark the center hash mark on the quarter circle. Then, laying your tape measure along the quarter circle, mark a hash mark at 4 meters in either direction, continuing until you have marked three hash marks in each direction. Note that the last hash mark on each end is just hanging out in the open. You locate this hash mark by laying your tape out mimicking the curve until you reach the point for the end hash mark.

Lay out the Center Circle and South Crease. Having completely laid out the north crease, move with one tape to the center of the field and lay out the 9-meter center circle. Next, move to the south end of the field and repeat the process to lay out the south crease.

**Start painting.** Most of you have experienced paint crews that can stretch a string from point to point and paint a straight line. When you get to the crease just follow the dotted lines like you would a string. The closer together the dots are, the better the curve will look. Don't walk too fast or too slow or you will get a poor curve. A little practice and your paint job will look perfect.

## Facility&Operations

The last trick is to always carry a couple of cans of green aerosol field paint to paint over or "erase" your mistakes!

The Native Americans that originated lacrosse along the eastern seaboard were great astronomers with tremendous geometry skills. They built huge cities laid out in perfect circles with great earth mounds that marked the exact spot on the horizon where the sun or moon rose at the equinox or solstices. Other mounds marked true north, south, east, and west. When I see a Women's Lacrosse field I believe that the women have stayed more true to the history of the game and the people that originated it then the men. The field is so much more artistic and beautiful than the men's version that I really enjoy getting a chance to lay one out.

This spring, in support of the Intramural and Sport Club Programs at A & M, my crew laid out 22 fields for seven



different sports in 16 8-hour days. While accuracy is critical to quality of play, speed is essential in order to have fields ready on time. Using and training our employees on systematic processes for field painting like the one described in this article is how we get the job done.

Bob Marcotte is turf foreman for the Penberthy Intramural Sports Center at Texas A&M University.



click on "E-newsletter" to register quickly

<section-header><section-header><text><text>