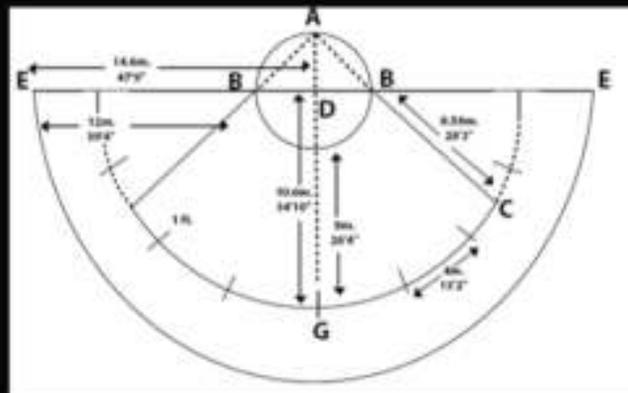


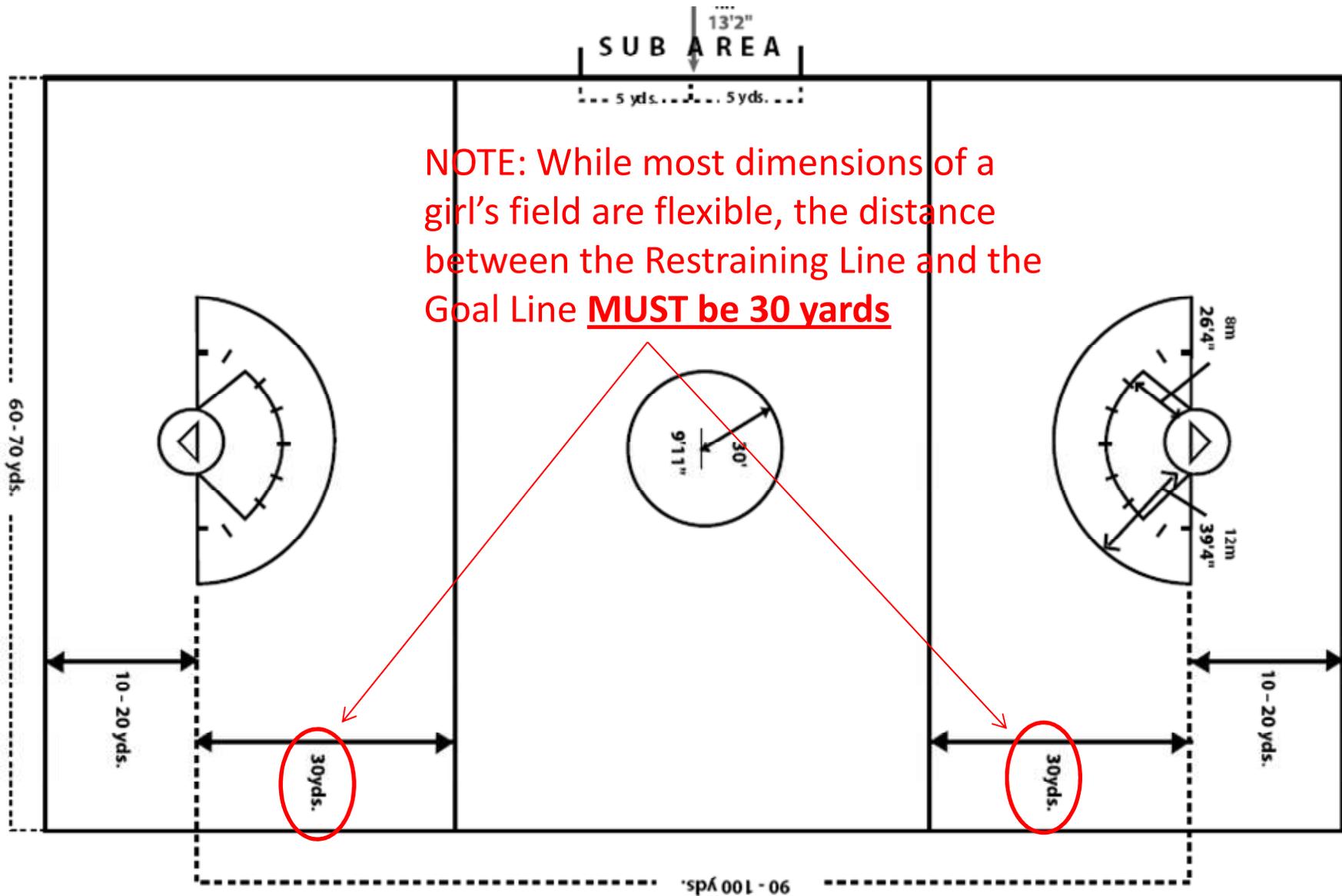
C. Dittmer  
Sept. 2012

# *Lining the Arc & Fan for Girl's Lacrosse Fields*

FOR  
**DUMMIES**



# Girl's Lacrosse Field Dimensions





# Written Summary

(Detailed Step-by-Step with diagrams is on the following pages)

1. Determining the “Goal Line Extended”. This line runs through the goal line and extends left and right across the field to meet the corners of the 12 meter fan at Points “E” on the diagram. It must be 30 yards from the Restraining line (and 10-20 yrds from the end line). Mark these dimensions on each sideline with a large nail or spike and stretch a string across the full width of the field between the two spikes. Do not paint this line at this time. Leave the string in-place until step 4 is completed.
2. Painting the Goal Circle: Find the mid-point of the Goal Line Extended in the center of the field (equal distance from each sideline) and place a large nail or spike at this point. (Point D on the drawing). Tie the end of a new string to the center spike and measure outward in any direction 8.5 feet. Place a spray paint can at the 8.5’ mark and paint the Goal Circle by walking around the center spike in a circle while keeping the string taught. (Don’t remove the spike or string as you will need this on future steps)
3. Painting the 12 meter Fan. Keep the string tied to the center spike from step 2 and measure out 47 feet 9 inches down the Goal Line Extended (the string you laid out in Step 1) in either direction (Points E on the drawing). Place a spray paint can at the 47’9” mark on the string and paint the Fan by walking around the center spike to the other side of the Goal Line Extended (while keeping the string taught). (Don’t remove the spike or string as you will need it on future steps)
4. Painting the “Goal Line Extended”. Now that you have completed the 12 meter fan, use a paint sprayer and paint a straight line over the string you positioned in Step 1. The Goal Line Extended runs between the 2 corners of the 12 meter fan (Points E on the diagram). (Leave the string in-place as you can reposition it for use in Step 5)

## Written Summary

5. Determining the 8 meter Arc: Add a new spike at the center of the rear edge of the Goal Circle (Point A on the drawing). With a different set of string, attach the one end to this new spike and walk the other end out towards the center of the field at approximately a 45 degree angle out to the 12m fan line. While keeping the string taught, make your final 45 degree adjustment by moving left and right along to the 12m fan line so that the string intersects the junction where the left or right side of the Goal Circle meets the Goal line extended (Points B on the drawing). Tie down the loose end of the string with another spike along the 12 m fan. Place an additional string on the other side of the Goal Circle to mark the other side of the Arc.

**NOTE: You can save yourself time (and string) by re-positioning the string from Step 1 that was used to define the Goal Line Extended. Place the spike at Point A and pull back the string so it is behind this spike (you may wish to wrap it around the spike a couple of times). Pull up the spikes on each end of the string (on each side line) and reposition them to the 12 Meter Fan at 45 degree angles as indicated.**

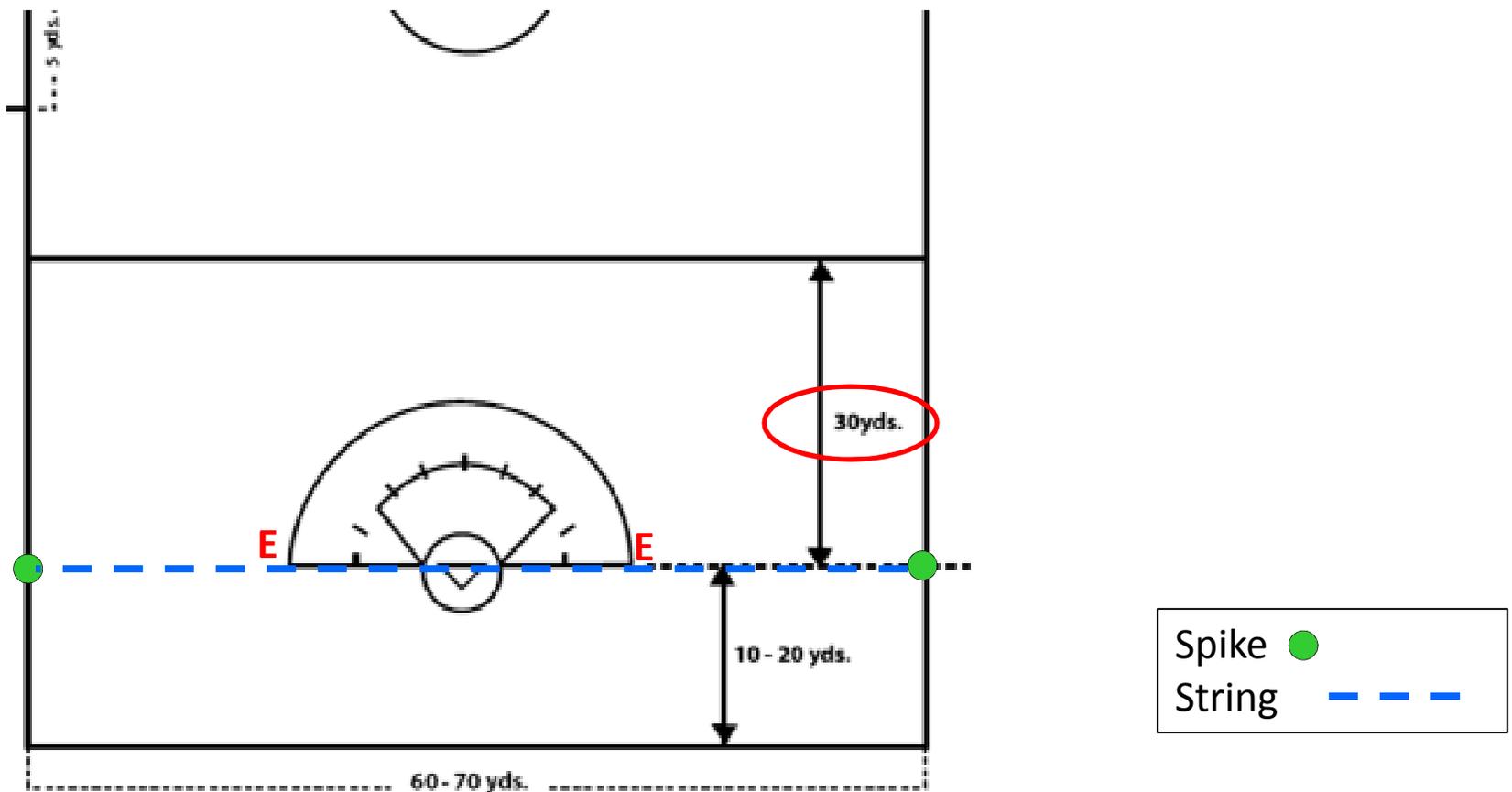
6. Painting the 8 meter Arc: With the string used in Step 2 & 3 that is attached to the spike in the center of the Goal Circle, measure down the Goal Line Extended from the center of the Goal Circle (in either direction) a distance of 34 feet, 10 inches. Place a spray paint can at the 34' 10" mark on the string and paint a short line or "Hash" (approximately 18" inches long) from the Goal Line Extended towards the center of the field. With the Spray can still at the 34'10' mark on the string, walk outward toward the middle of the field until you come to the 45 degree string you put in place in Step 5. (Point C) Keeping the string taught, start painting the 8 meter Arc across the front of the goal circle until you meet the 45 degree string on the other side. Stop painting there. Continuing walking with your line until you meet the Goal Line Extended on the far side and place your 18" Hash mark from the Goal Line Extended outward. (At this time you can remove this string but keep the spike in-place that is in the center of the Goal Circle).

## Written Summary

7. Painting the 45 Degree sides of the 8 Meter Arc: The final step to completing the 8 Meter Arc is to paint the angled sides. Using the paint sprayer, start at Point B on the diagram (intersection of the Goal Circle with the 45 degree line) and paint over the strings you laid out in Step 5. Paint the line from Point B at the Goal Circle and continue it out down the 45 degree string until you reach the corner of the 8 Meter Arc at point C. Repeat this on the other side of the Arc. (Keep the 45 degree strings in-place as you will need one of them during Step 8).
  
8. Painting the Hash Marks on the 8 Meter Arc: Using one of the strings from Step 5 that is attached to center rear point on the Goal Circle (Point A), unhook the far end of the string that is at the 12 meter Arc. With this end of the string in-hand, walk to the center of the field so that the line runs from point A through the middle of the Goal Circle at point D. This will determine the center of the 8 meter Arc at Point G. Paint a Hash mark that is perpendicular to the 8 Meter Arc (extending ~12 inches on each side of the 8 Meter Arc). Measure 13 feet 2 inches from Point G along the 8 Meter Arc in one direction to determine the next Hash mark. Repeat this measurement again to the next Hash Mark location until all 3 Hash marks on a side are completed. Repeat this procedure on the other side of the 8 Meter Arc. {Note: The 3<sup>rd</sup> and final Hash Mark on each side (that is furthest away from Point G) does not actually cross the 8 Meter Arc. This is called the “Flying Hash” by some folks and is indeed correct.}

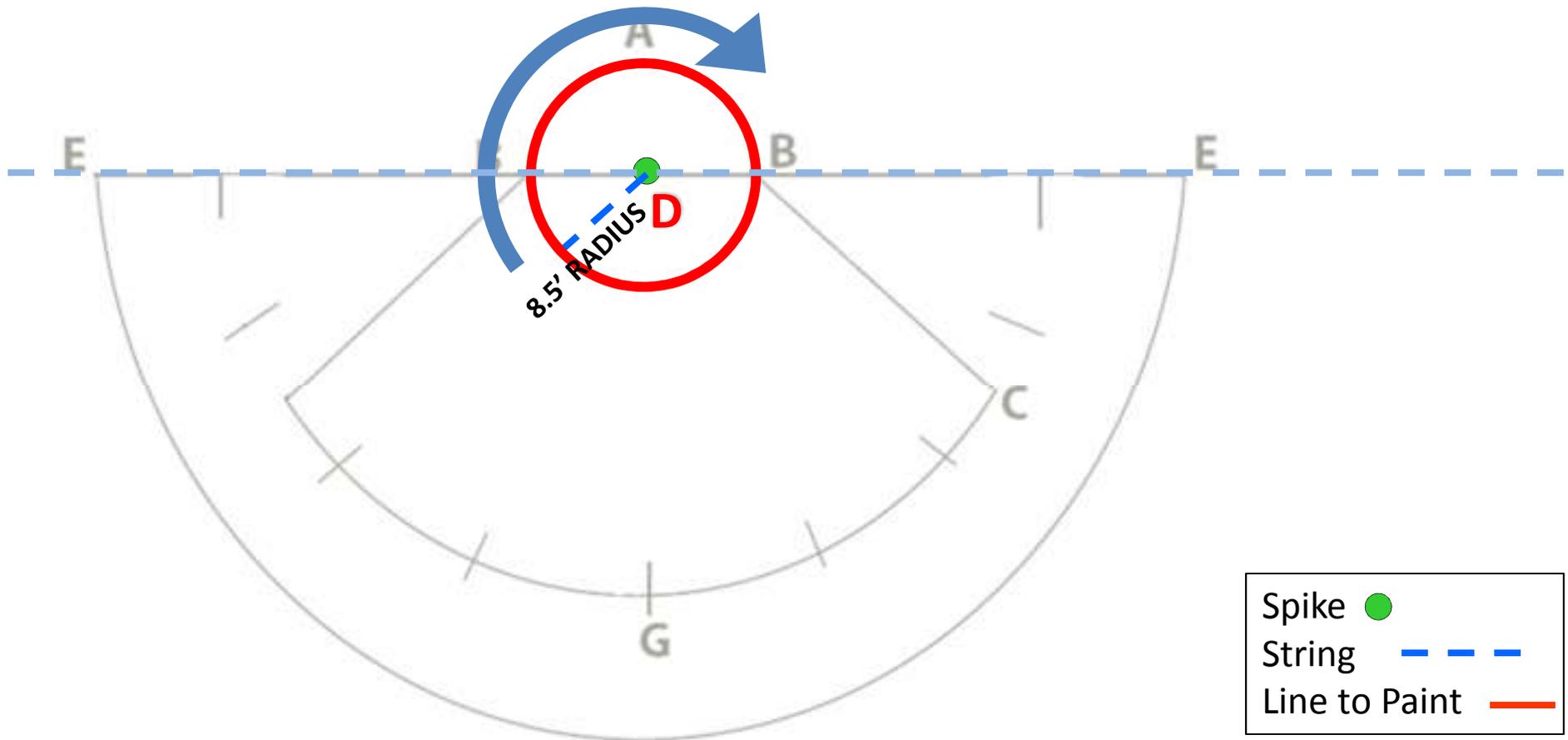
## Detailed Summary with Diagrams

1). Determining the "Goal Line Extended". This line runs through the goal line and extends left and right across the field to meet the corners of the 12 meter fan at Points "E" on the diagram. It must be 30 yards from the Restraining line, and 10-20 yds from the end line. Mark these dimensions on each sideline with a large nail or spike and stretch a string across the full width of the field between the two spikes. Do not paint this line at this time. Leave the string in-place until step 4 is completed.



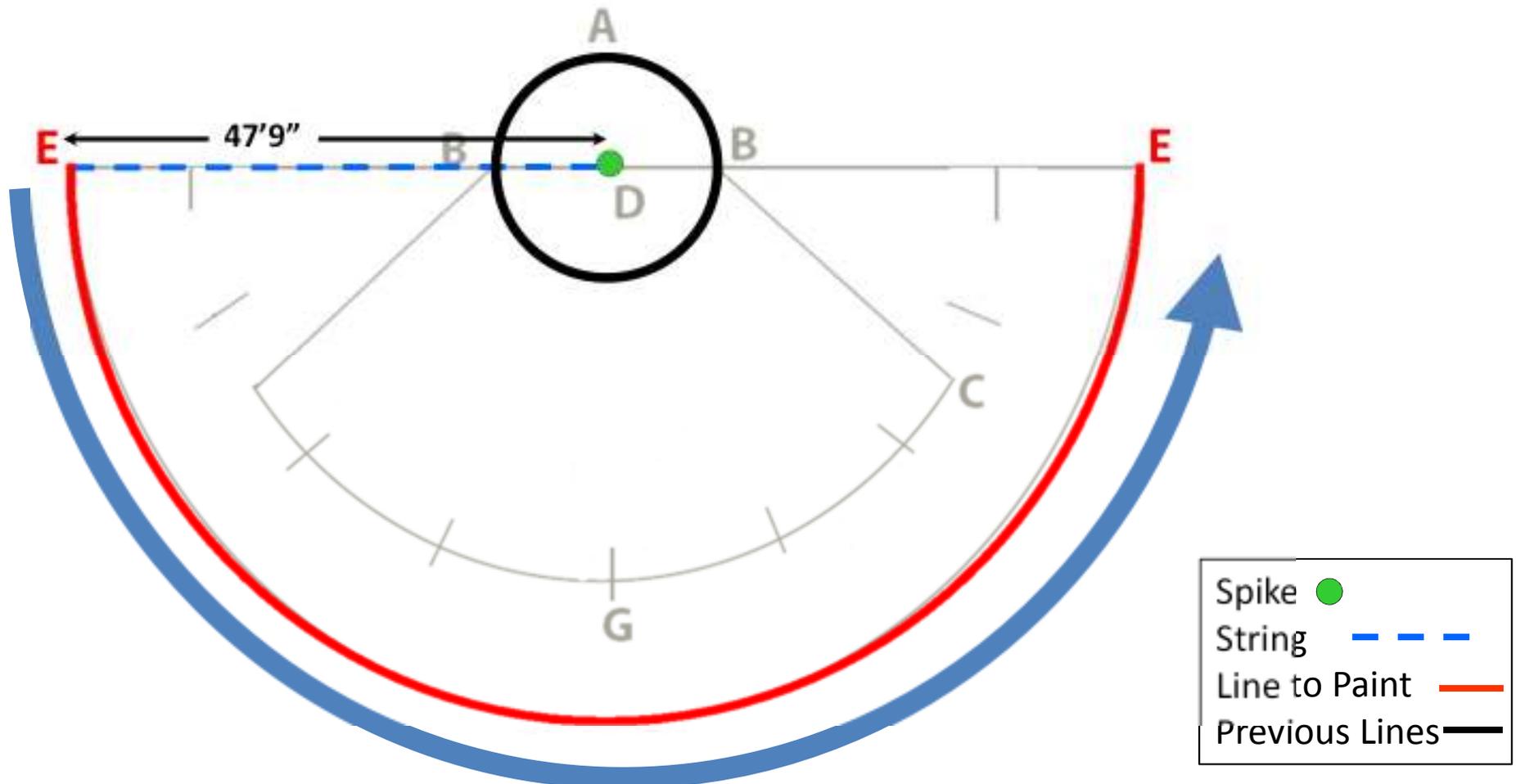
## Detailed Summary with Diagrams

2). Painting the Goal Circle: Find the mid-point of the Goal Line Extended in the center of the field (equal distance from each sideline) and place a large nail or spike at this point. (Point D on the drawing). Tie the end of a new string to the center spike and measure outward in any direction **8.5 feet**. Place a spray paint can at the 8.5' mark and paint the Goal Circle by walking around the center spike in a circle while keeping the string taut. (Don't remove the spike or string as you will need this on future steps)



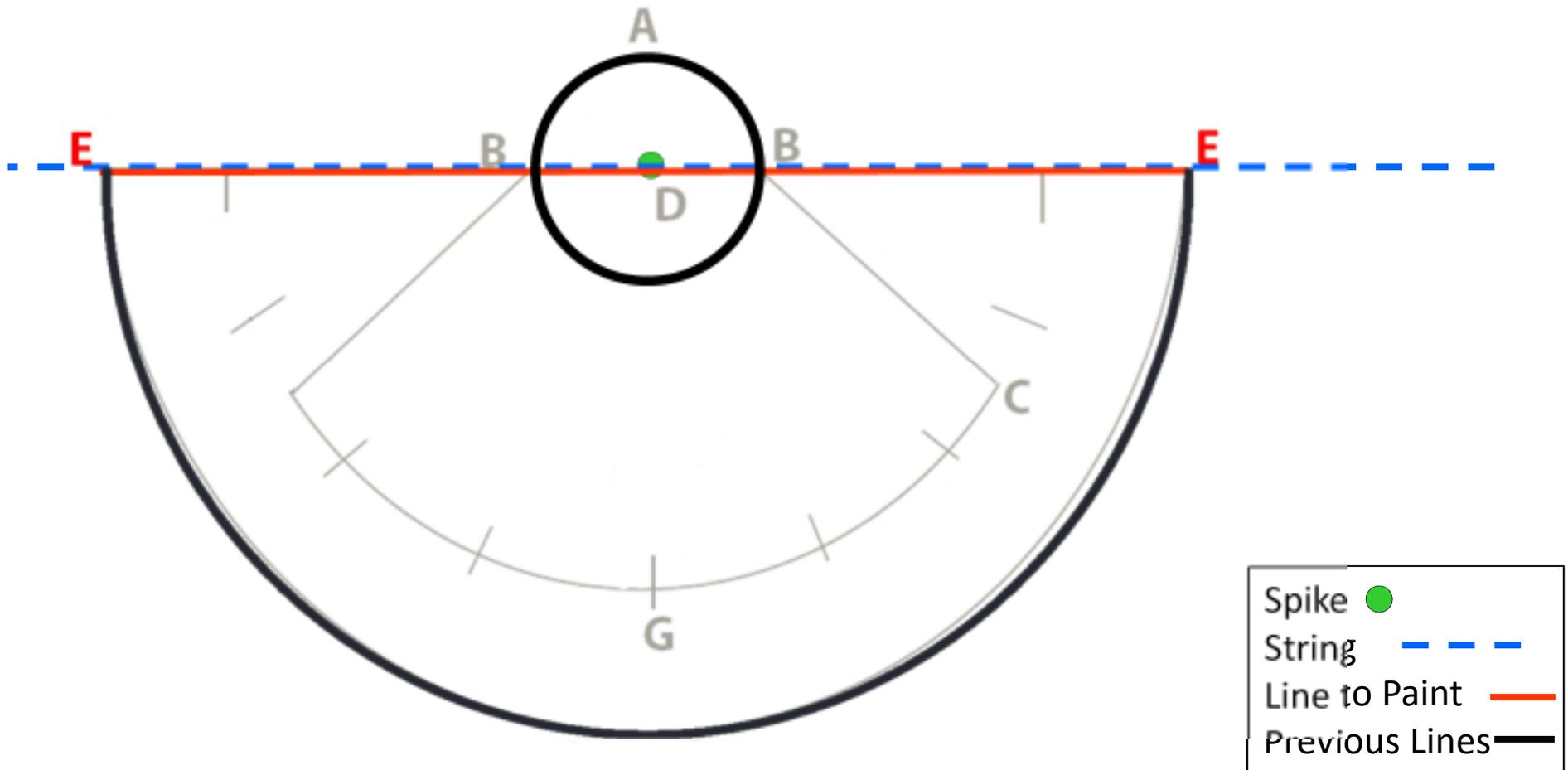
## Detailed Summary with Diagrams

3). Painting the 12 Meter Fan. Keep the string tied to the center spike from step 2 and measure out 47 feet 9 inches down the Goal Line Extended (the string you laid out in Step 1) in either direction (Points E on the drawing). Place a spray paint can at the **47'9"** mark on the string and paint the Fan by walking around the center spike to the other side of the Goal Line Extended (while keeping the string taut). (Don't remove the spike or string as you will need it on future steps)



## Detailed Summary with Diagrams

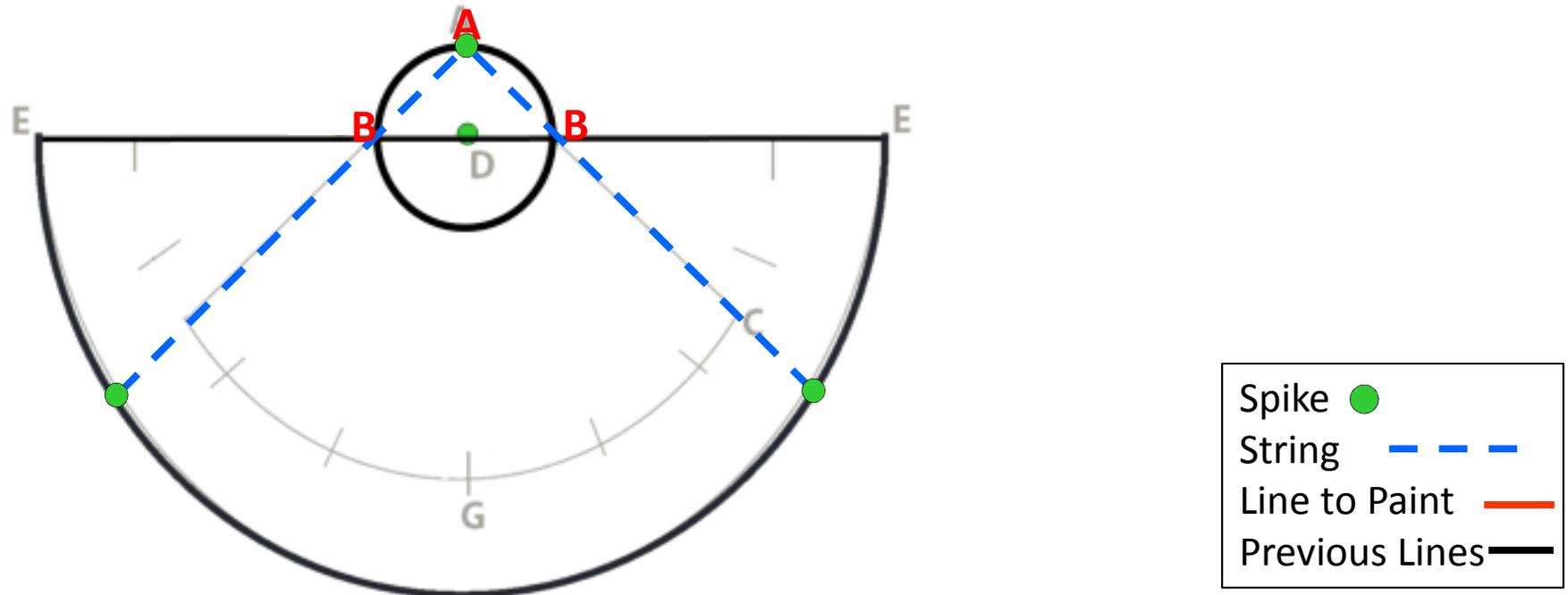
4). Painting the “Goal Line Extended”. Now that you have completed the 12 meter fan, use a paint sprayer and paint a straight line over the string you positioned in Step 1. The Goal Line Extended runs between the 2 corners of the 12 meter fan (Points E on the diagram). (Leave the string in-place as you can reposition it for use in Step 5)



## Detailed Summary with Diagrams

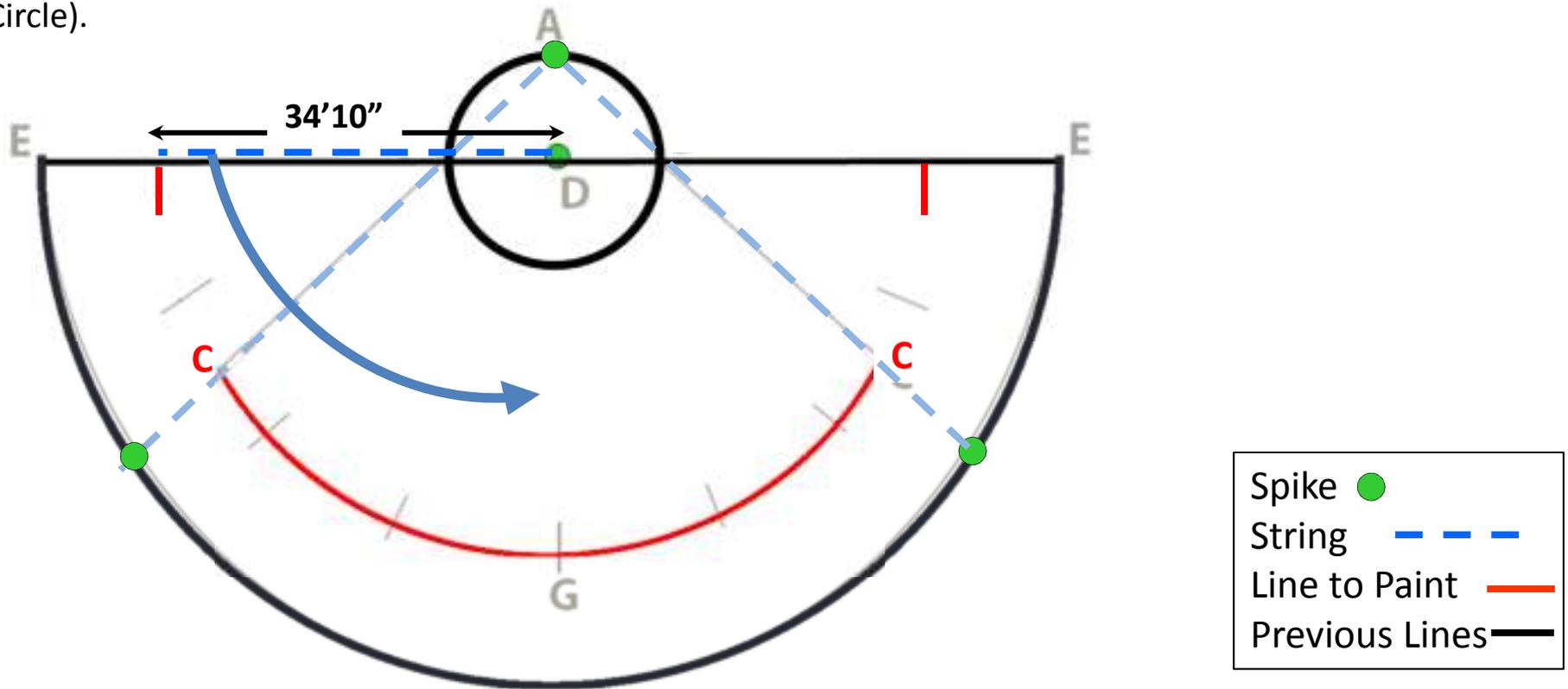
5). Determining the 8 meter Arc: Add a new spike at the center of the rear edge of the Goal Circle (Point A on the drawing). With a different set of string, attach the one end to this new spike and walk the other end out towards the center of the field at approximately a 45 degree angle out to the 12m fan line. While keeping the string taught, make your final 45 degree adjustment by moving left and right along to the 12m fan line so that the string intersects the junction where the left or right side of the Goal Circle meets the Goal line extended (Points B on the drawing). Tie down the loose end of the string with another spike along the 12 m fan. Place an additional string on the other side of the Goal Circle to mark the other side of the Arc.

**NOTE:** You can save yourself time (and string) by re-positioning the string from Step 1 that was used to define the Goal Line Extended. Place the spike at Point A and pull back the string so it is behind this spike (you may wish to wrap it around the spike a couple of times). Pull up the spikes on each end of the string (on each side line) and reposition them to the 12 Meter Fan at 45 degree angles as indicated.



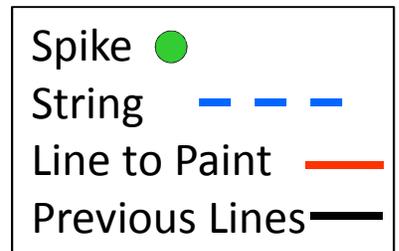
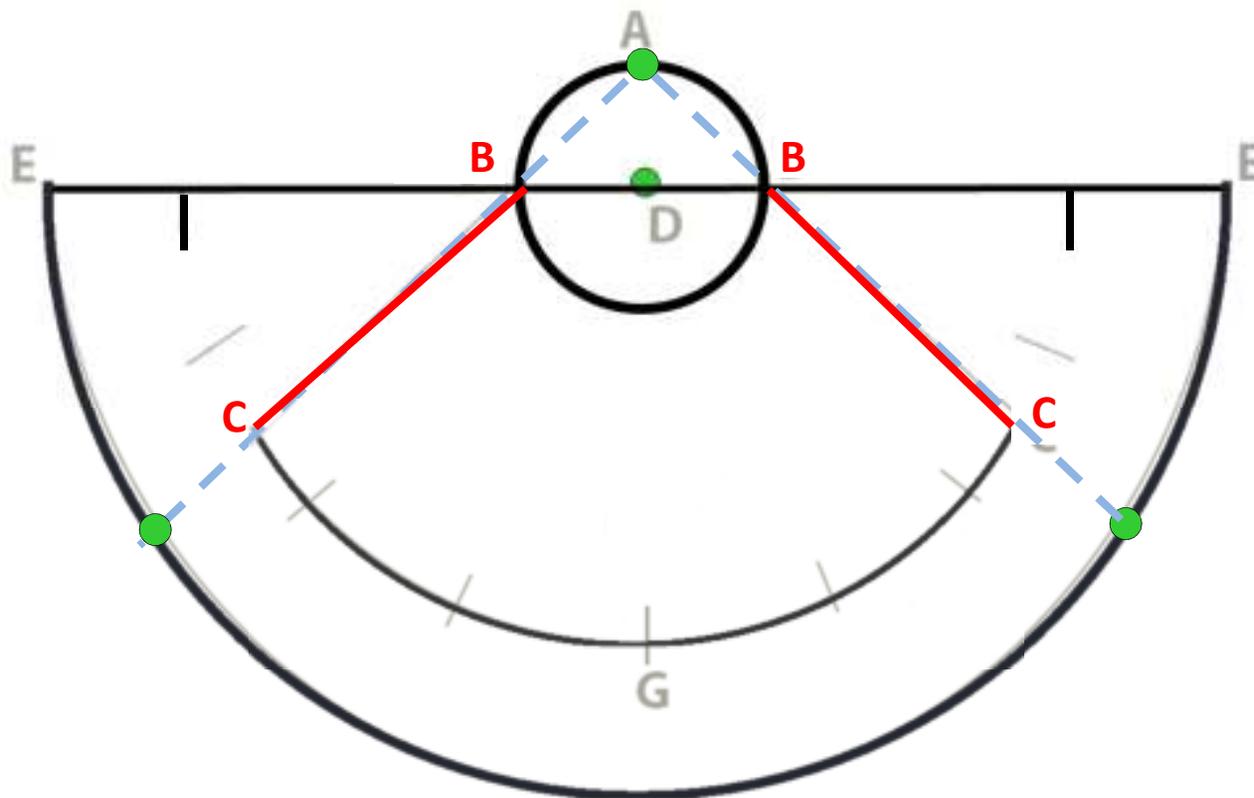
## Detailed Summary with Diagrams

6). Painting the 8 meter Arc: With the string used in Step 2 & 3 that is attached to the spike in the center of the Goal Circle, measure down the Goal Line Extended from the center of the Goal Circle (in either direction) a distance of **34 feet, 10 inches**. Place a spray paint can at the 34' 10" mark on the string and paint a short line or "Hash" (approximately 18" inches long) from the Goal Line Extended towards the center of the field. With the Spray can still at the 34'10' mark on the string, walk outward toward the middle of the field until you come to the 45 degree string you put in place in Step 5. (Point C) Keeping the string taught, start painting the 8 meter Arc across the front of the goal circle until you meet the 45 degree string on the other side. Stop painting there. Continuing walking with your line until you meet the Goal Line Extended on the far side and place your 18" Hash mark from the Goal Line Extended outward. (At this time you can remove this string but keep the spike in-place that is in the center of the Goal Circle).



## Detailed Summary with Diagrams

7). Painting the 45 Degree sides of the 8 Meter Arc: The final step to completing the 8 Meter Arc is to paint the angled sides. Using the paint sprayer, start at Point B on the diagram (intersection of the Goal Circle with the 45 degree line) and paint over the strings you laid out in Step 5. Paint the line from Point B at the Goal Circle and continue it out down the 45 degree string until you reach the corner of the 8 Meter Arc at point C. Repeat this on the other side of the Arc. (Keep the 45 degree strings in-place as you will need one of them during Step 8).



## Detailed Summary with Diagrams

8). Painting the Hash Marks on the 8 Meter Arc: Using one of the strings from Step 5 that is attached to center rear point on the Goal Circle (Point A), unhook the far end of the string that is at the 12 meter Arc. With this end of the string in-hand, walk to the center of the field so that the line runs from **Point A** through the middle of the Goal Circle at **Point D**. This will determine the center of the 8 meter Arc at **Point G**. Paint a Hash mark that is perpendicular to the 8 Meter Arc (extending ~12 inches on each side of the 8 Meter Arc). Measure 13 feet 2 inches from Point G along the 8 Meter Arc in one direction to determine the next Hash mark. Repeat this measurement again to the next Hash Mark location until all 3 Hash marks on a side are completed. Repeat this procedure on the other side of the 8 Meter Arc. {Note: The 3<sup>rd</sup> and final Hash Mark on each side (that is furthest away from Point G) does not actually cross the 8 Meter Arc. This is called the “Flying Hash” by some folks and is indeed correct.}

