Stretching Elements

AccuDraw
X -17793.4406
Y 4732.2267
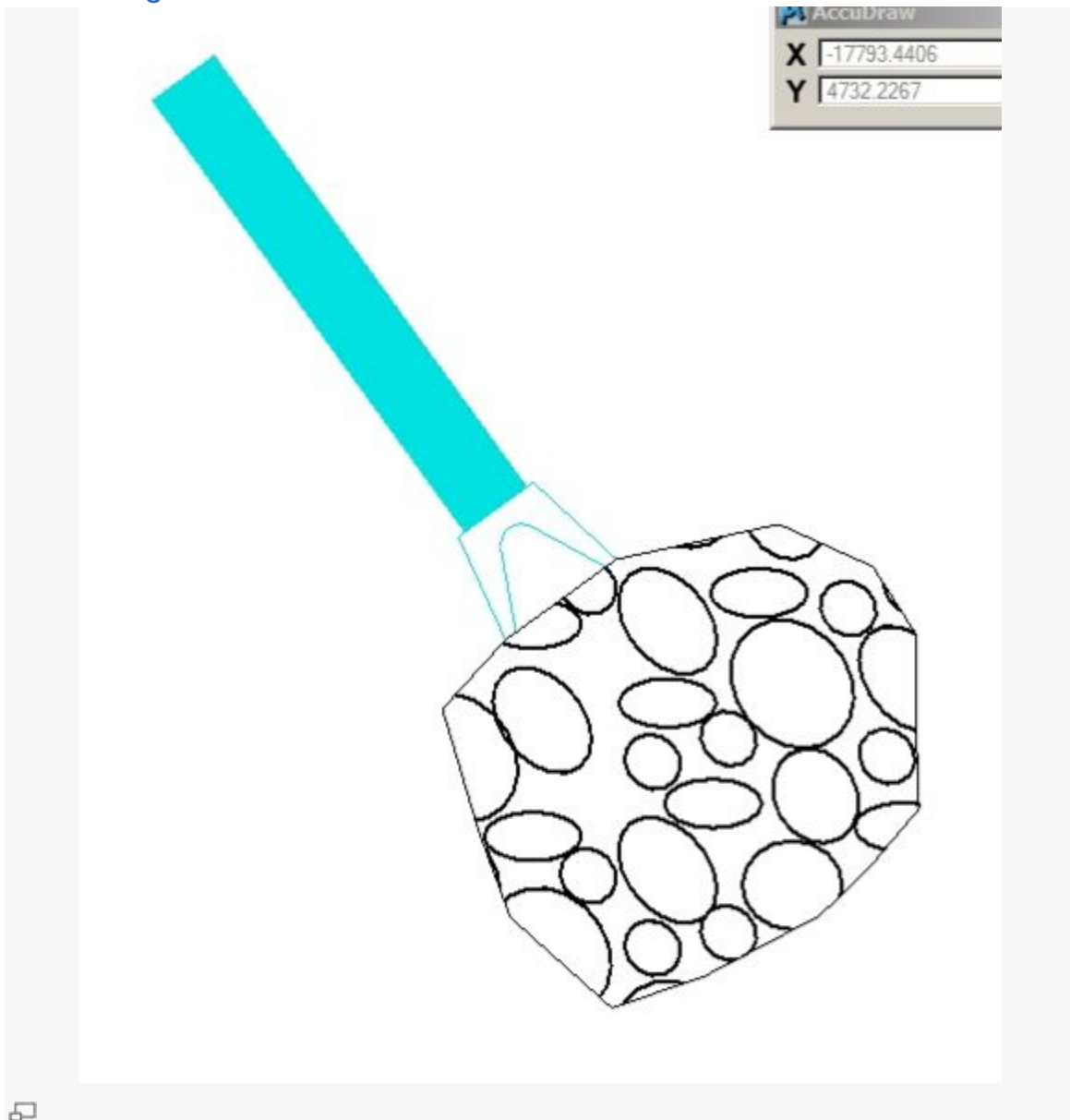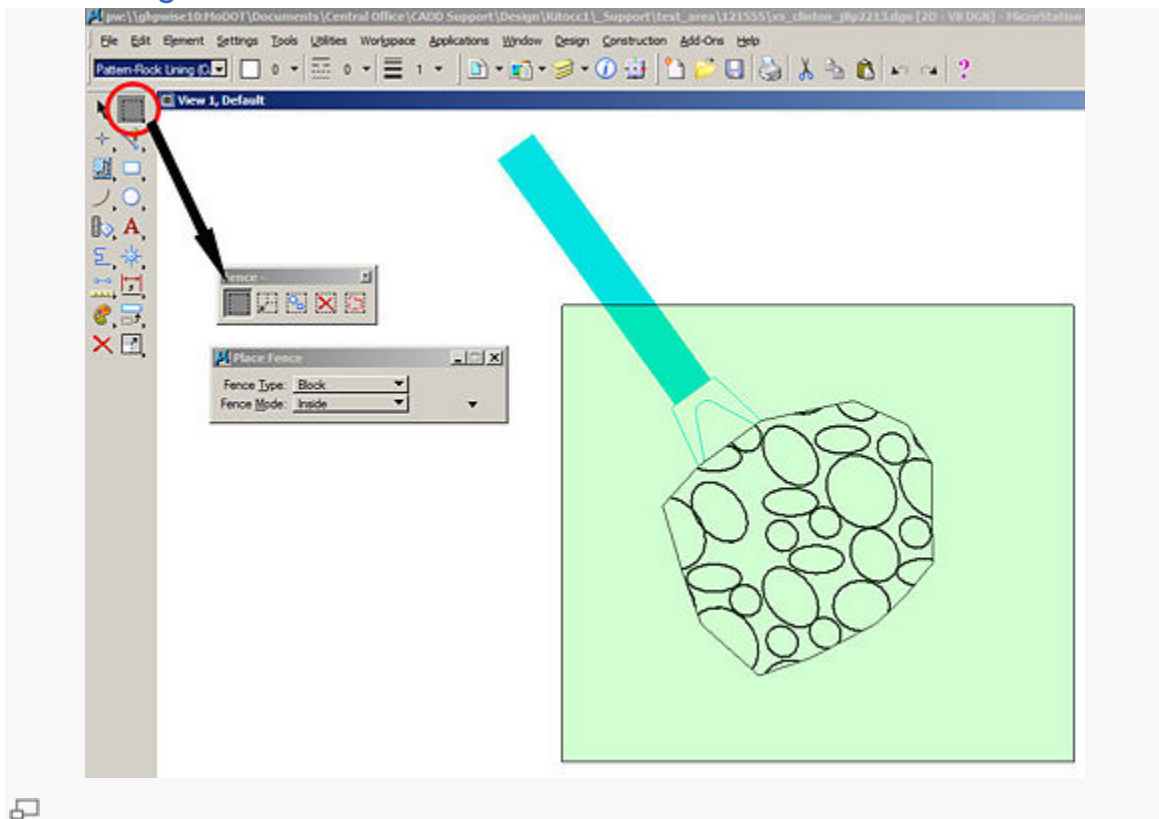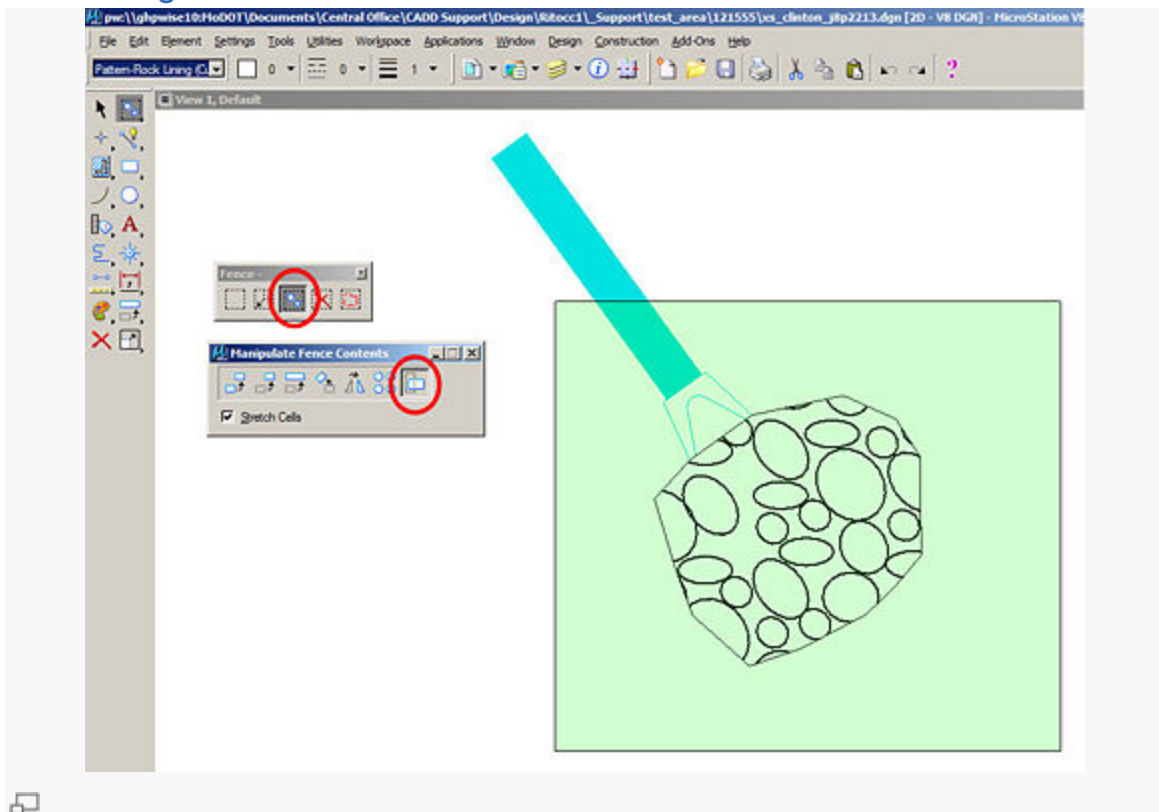
The image above shows a 24" Reinforced Concrete Pipe with a 24" Flared End Section and Rock Blanket. I was just informed that the pipe needs to be lengthened by 10'. Normally, I would just delete the rock blanket, delete my flared end section, lengthen my pipe and redraw everything. In MicroStation, we have methods of stretching the pipe so that all of the other elements attached will move as well. I am using 10' in this example, but any value will work, even negative values in the case we would need to shorten it.
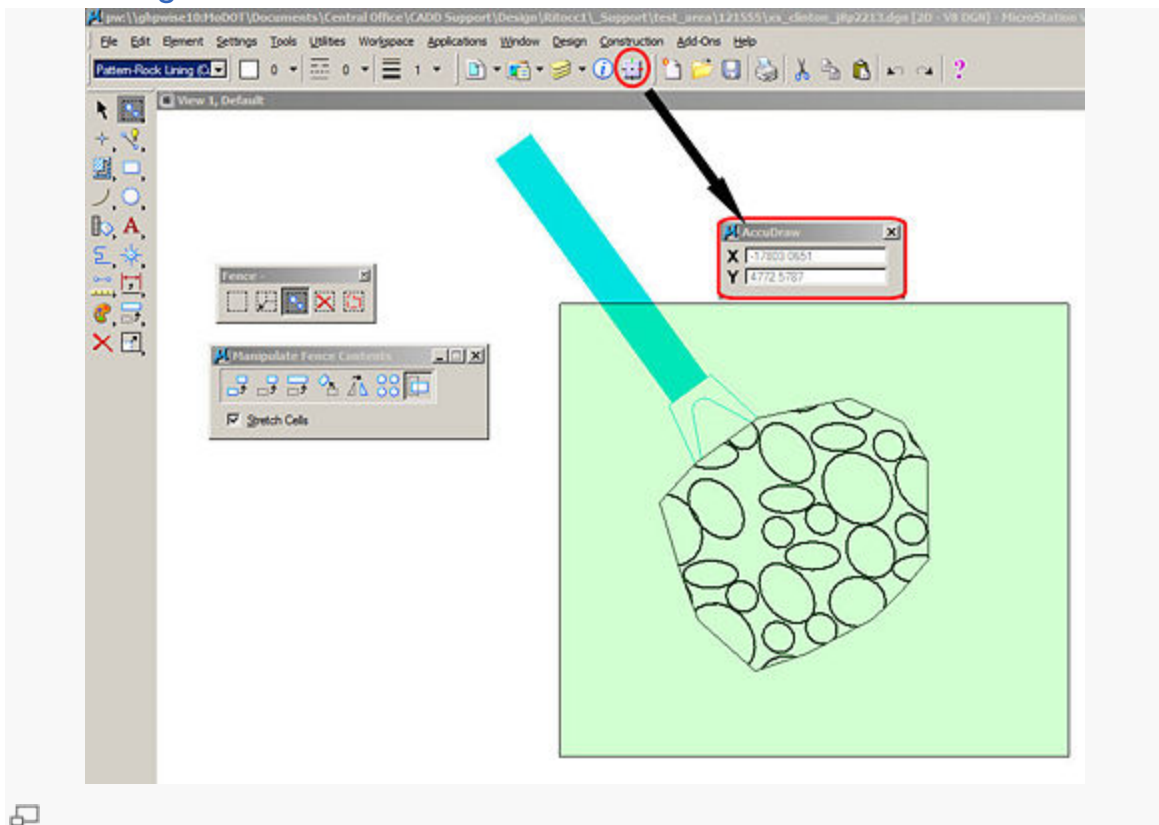
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The first step in this process is to draw a fence, using our **Place Fence** tool, around the element to be stretched, leaving part of it outside the fence, and totally enclosing any elements that would need to move. We want the **Fence Mode** option to be set to **inside**. Being we want the pipe to stretch 10', we want the pipe to remain overlapping the fence, as shown in the image above.
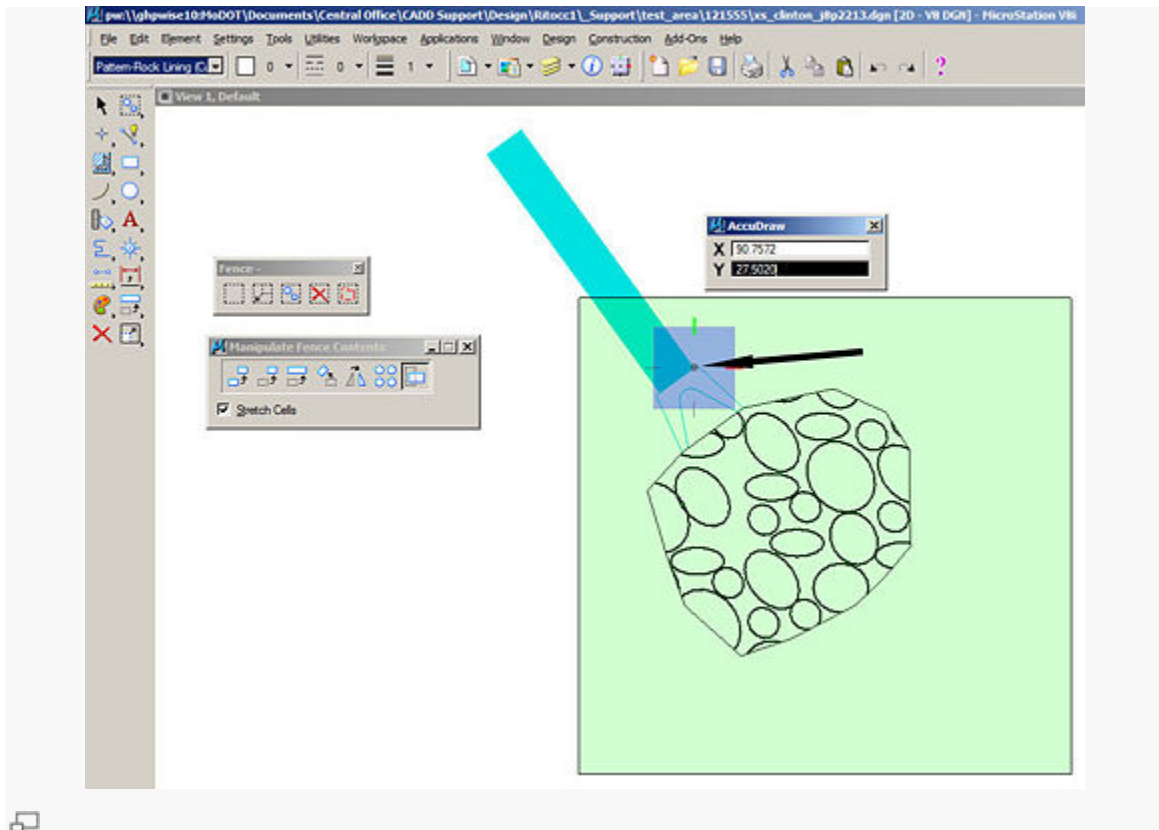
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Next, we want to choose the **Manipulate Fence Contents** tool, located in the **Fence** toolbar. The methods we want to choose within that tool are **Operation: Stretch**, and we want to make sure the **Stretch Cells** box is checked.
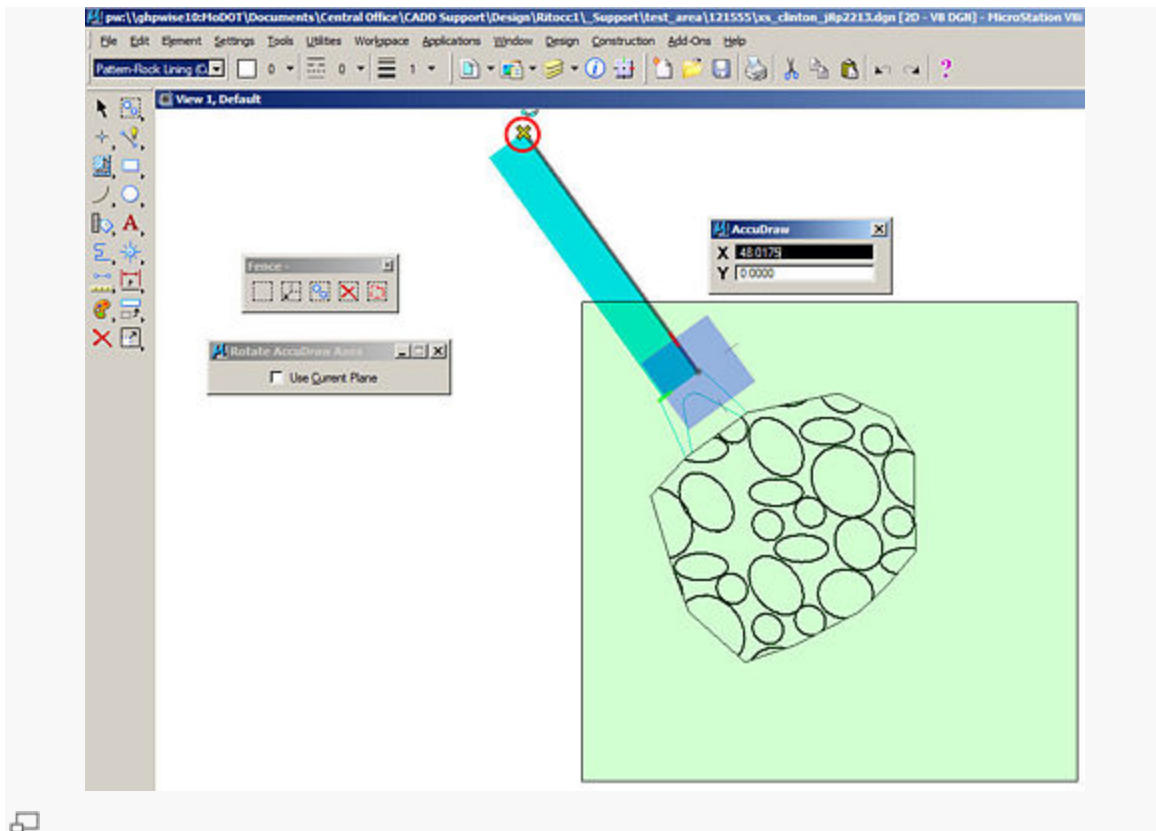
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We now need to activate AccuDraw, and then left click on the AccuDraw
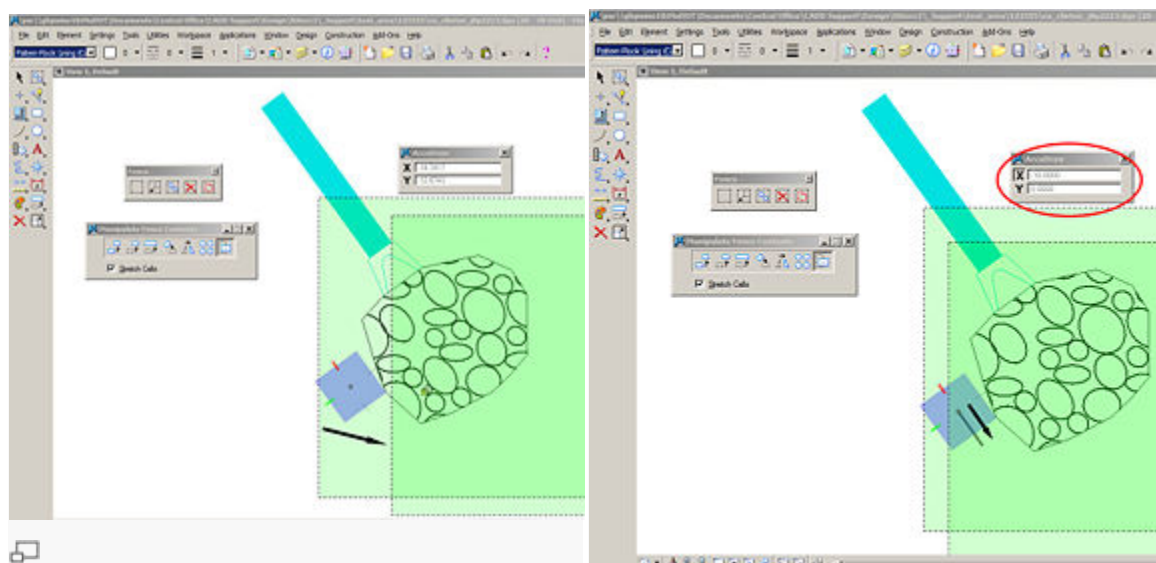window to highlight it.

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We want to stretch the pipe along its alignment. We do this by rotating AccuDraw so that the x-axis is along the pipe. With AccuDraw highlighted, we need to click on an endpoint of the pipe with our **middle mouse button**.
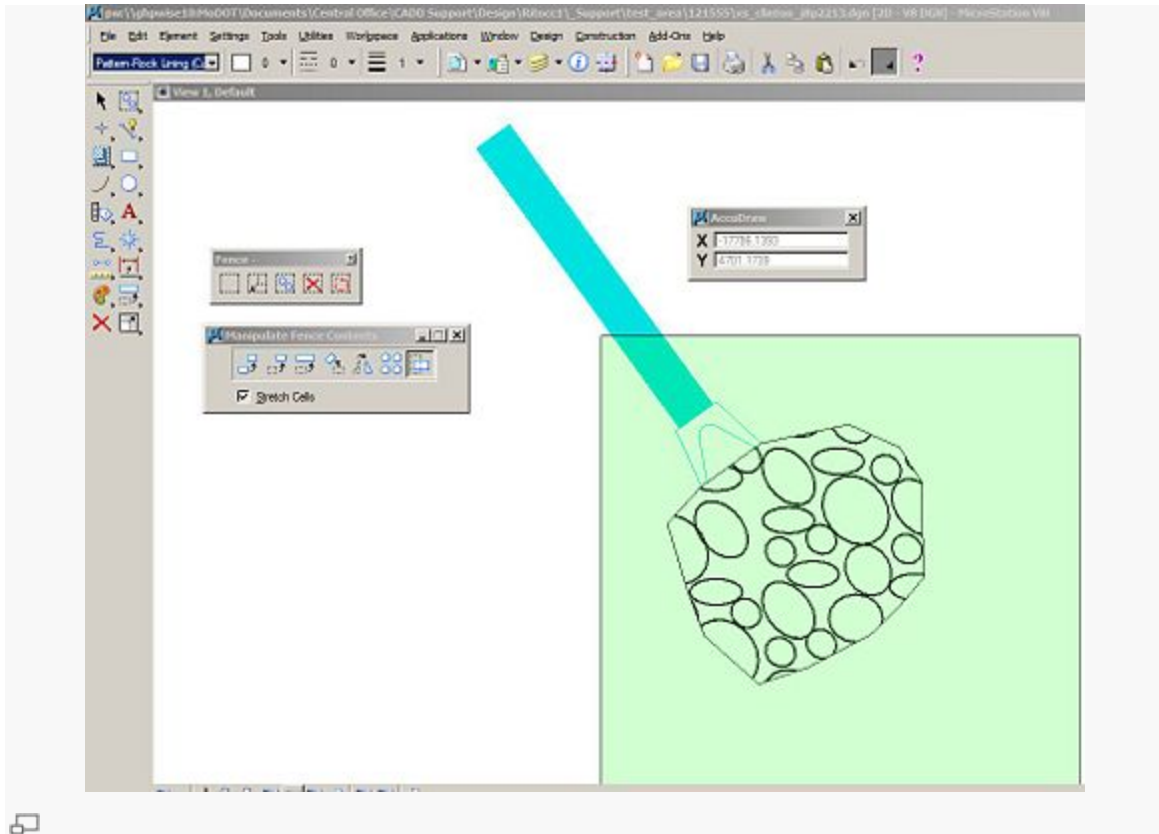

Next we will hit the **O** key to Set the Origin, and **RQ** to Rotate the axis. We will then **left click** on another point along the pipe to establish an axis along the edge of the pipe.

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We will now left click inside the fence, and begin moving the mouse in the direstion we want it to stretch in. This is now set as the x-axis. As we move, you will notice that the x-value in AccuDraw is increasing. At this point, we will type **10**, and it will automatically populate the x-axis box in AccuDraw.

Just **left click** and your geometry will be stretched and moved. As you see, you will have to refresh your screen. You are now finished. You have lengthened, or stretched the pipe by 10', and moved all of the elements attached to it.