

## How Chief Architect Interprets Terrain Lines

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Reference Number: **KB-00574**

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The information in this article applies to:



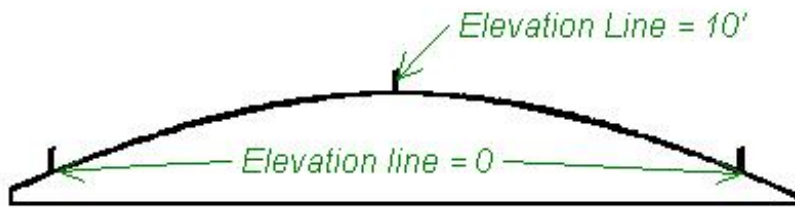
### QUESTION

I have noticed that sometimes when I place terrain elevation lines on my terrain that I get unexpected hills or valleys.

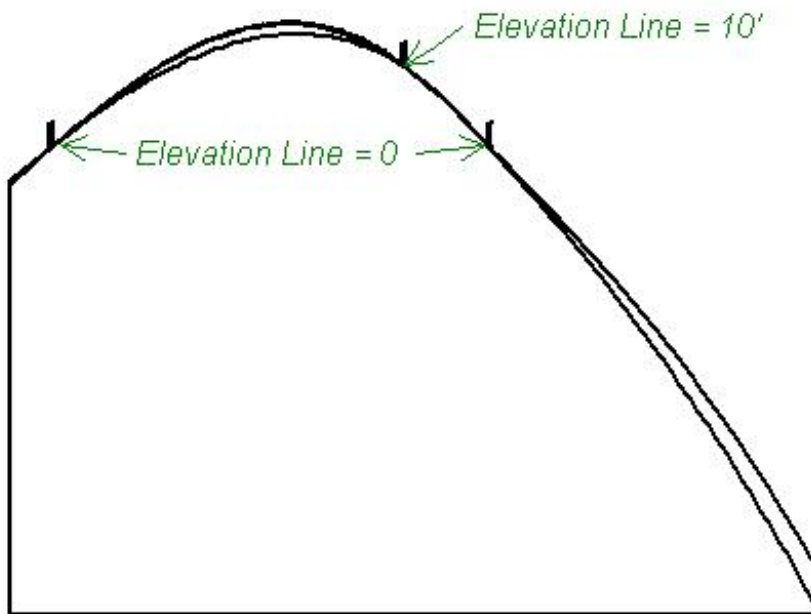
### ANSWER

In the following images you will see how changing the placement of a few terrain lines changes the terrain.

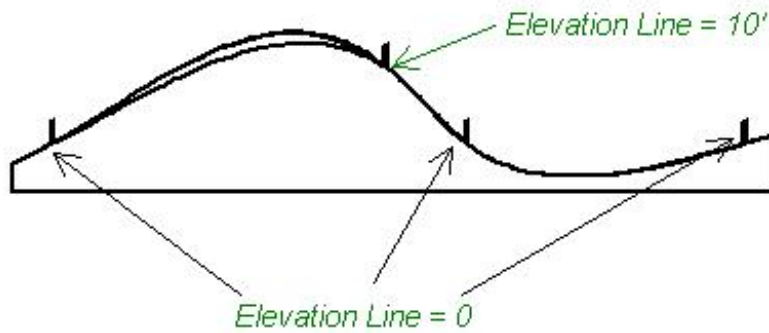
In the first image below, you see a cross section view showing evenly spaced terrain lines. Note that the curve created is gentle, but past the ends where the terrain lines are at 0, the slope continues to drop until it reaches the terrain perimeter.



In the second image below, you see what happens as you move one of the outer terrain lines closer to the middle. Notice now how the terrain really dives down past the line 0 and continues down at an increasing rate. Also note that the high point in the terrain is not the 10' line as you might expect. What happens here is that Chief is trying to fit a smooth curve through the three points in the terrain.

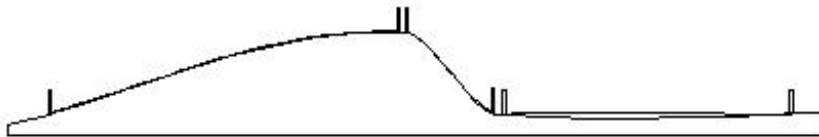


As we look at the next picture, notice that we have added a third 0 line out near the edge. Notice now how the terrain dips and comes back up to meet this line.



Suppose we want to create even slopes from the 10' mark, and make the terrain flat between the two 0 level terrain lines. We can do this by adding two more lines. One will be at 10' and one at 0. We will place them in close proximity to the two middle lines. Note the effect below on the terrain.

*Placing similar elevation lines close to each other allows the terrain to be built with fewer unwanted elevation changes.*



So by using careful placement of a few terrain lines, you can achieve various terrain situations.