

# Area object offset

How are area objects drawn and offset?

**Extended Question:** I am using area objects to model an underground vault subjected to soil pressure. Which of the elevation sketches provided is the best approach to modeling?

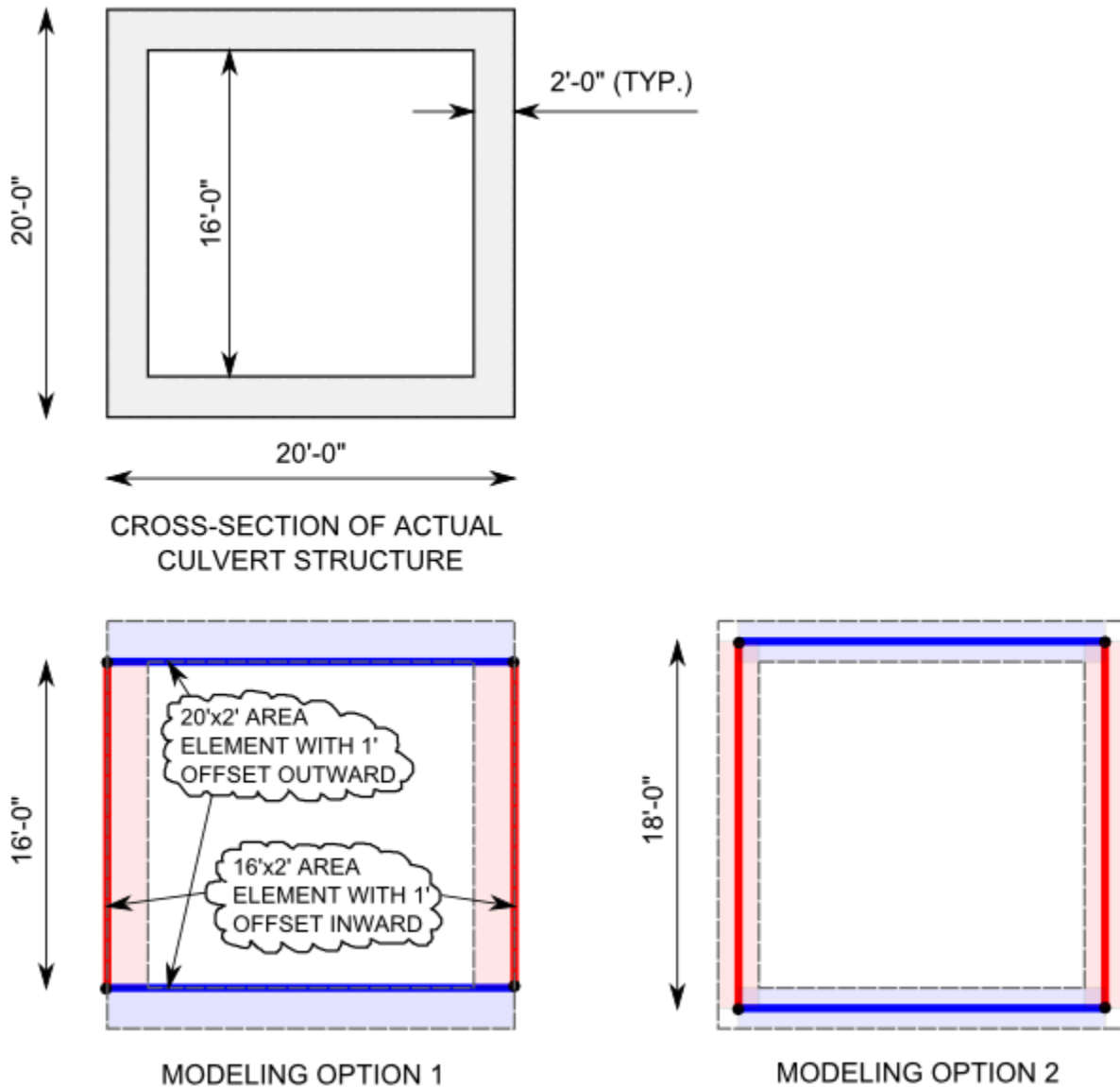


Figure 1 - Elevation views

**Answer:** It would be reasonable to model the vault according to either of the sketches provided. Another option would be to model all area objects at their midplanes such that a slight overlap occurs at the corners. While useful for obtaining global response, any of these modeling techniques will be approximate, given that [shell](#) formulation is a special 3D-elasticity case which itself is inherently approximate.

It may be best to use 3D [solid](#) objects if the wall thickness becomes sufficiently large relative to overall dimensions, or if detailed results at the corners are of interest.