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?

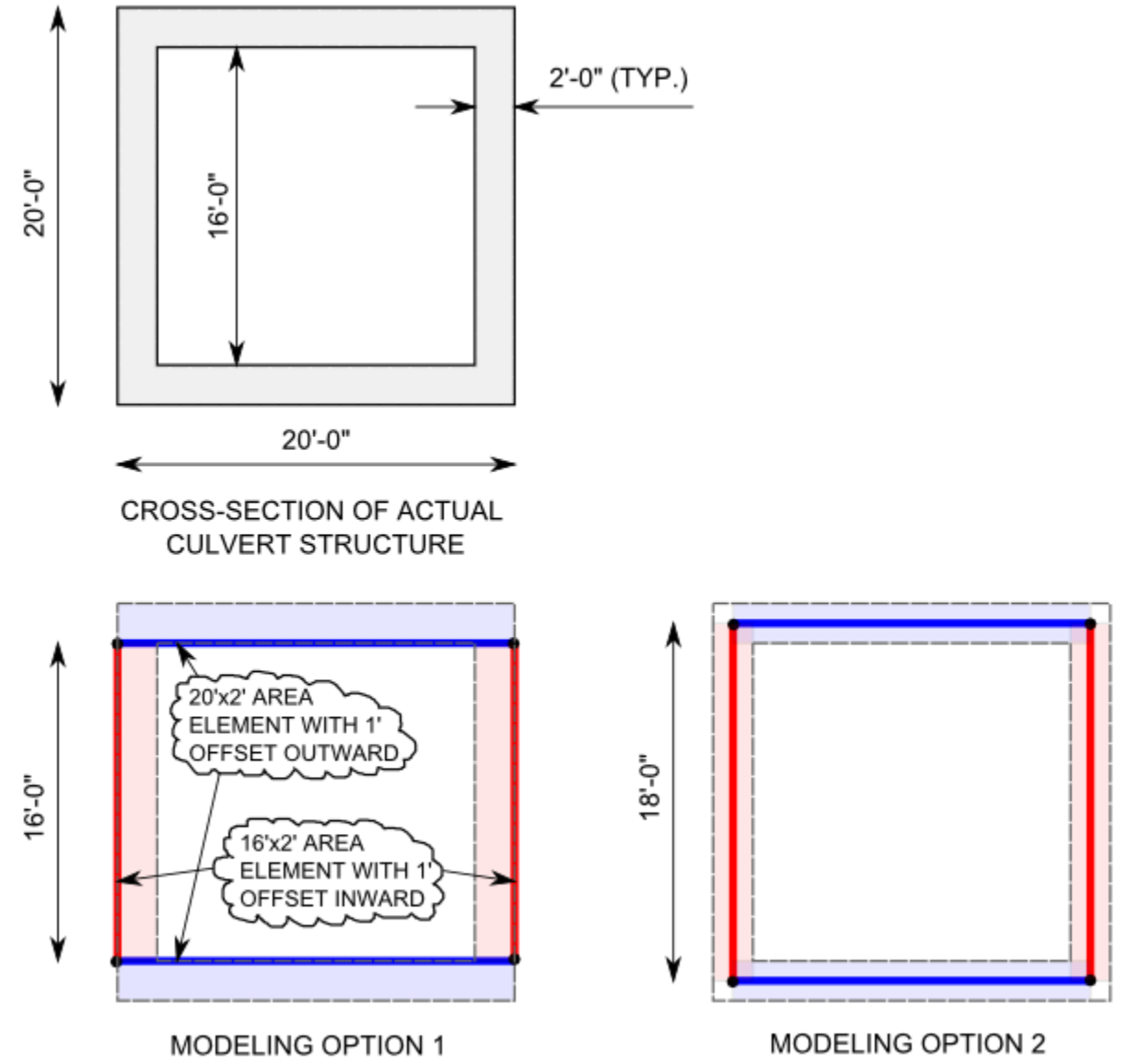

Figure 1 - Elevation views

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.