

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?

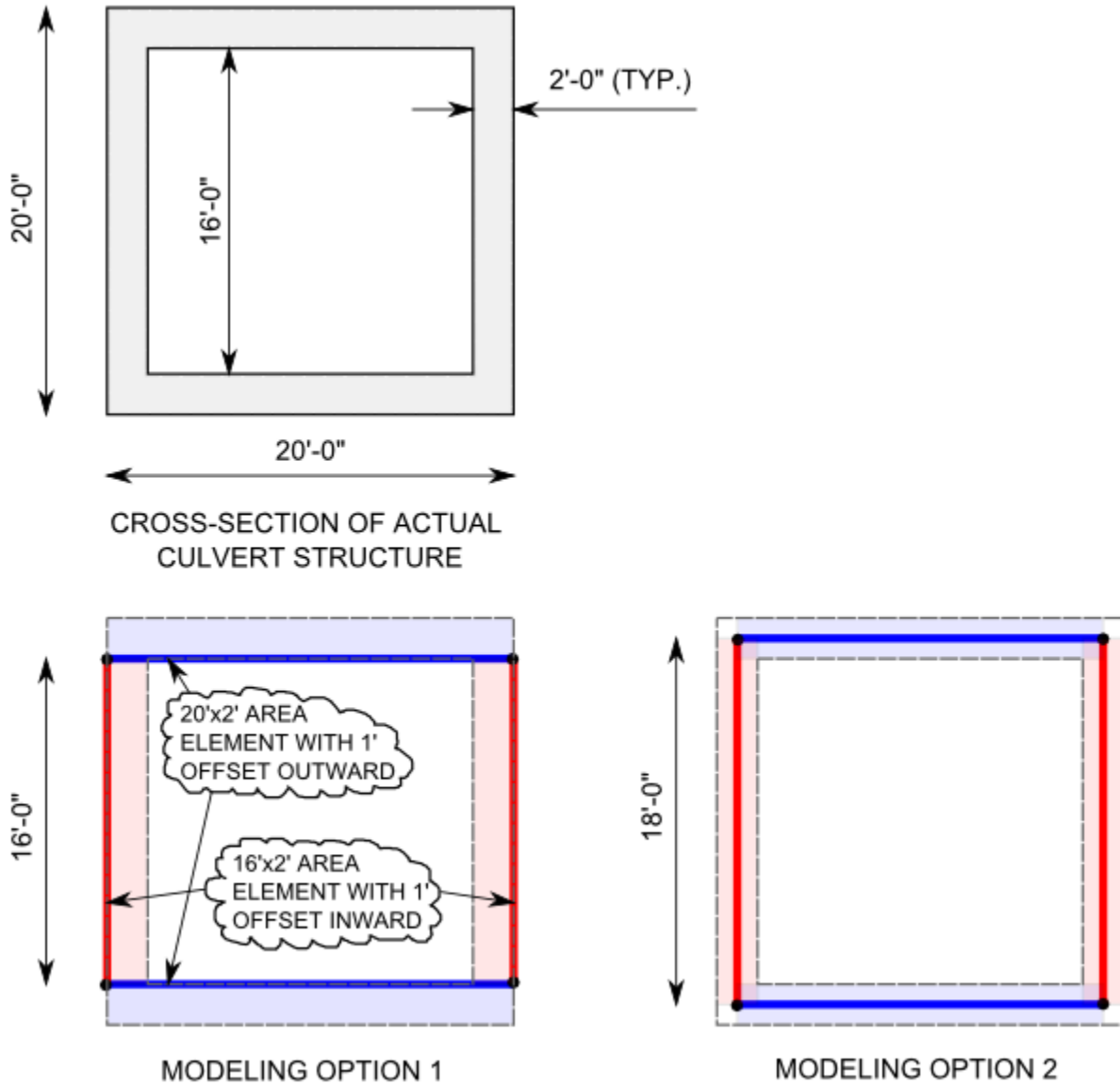


Figure 1 - Elevation views

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.