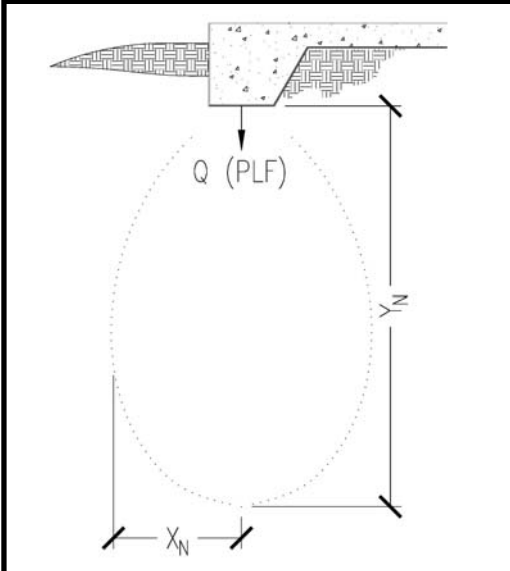


## Determining the Extent of Foundation Zones of Influence

The following table is designed to accompany the schematic included within the white paper entitled “Establishing and Investigating Foundation Zones of Influence.” This table is intended to function as a tool in on-going analysis efforts directed at determining whether post-construction events or activities have occurred within the zone of soil responsible for supporting a given structure. The table below is a quick reference tool used to determine the extent of the influence zone based on the structure type and subgrade loading.

		Structure Type		
		One-story wood-framed structure <sup>1</sup>	One-story masonry structure <sup>2</sup>	Two-story masonry structure <sup>3</sup>
Percentage of Applied Surface Load	$X_N/Y_N$			
	N = 20%	1.0' / 3.2'	1.6' / 4.8'	2.1' / 6.4'
	N = 15%	1.4' / 4.3'	2.1' / 6.4'	2.8' / 8.5'
	N = 10%	2.1' / 6.4'	3.1' / 9.5'	4.1' / 12.7'



- Soil is perfectly elastic, homogeneous and isotropic
- Subgrade loading assumed as follows
  1. 800 psf applied to subgrade by 12-inch wide foundation (800 plf structural load)
  2. 1,000 psf applied to subgrade by 18-inch wide foundation (1,500 plf structural load)
  3. 1,150 psf applied to subgrade by 24-inch wide foundation (2,300 plf structural load)
- Bottom of footing is in full contact with soil and distributes load evenly over entire area
- Footing is properly designed and constructed to adequately distribute structural loads