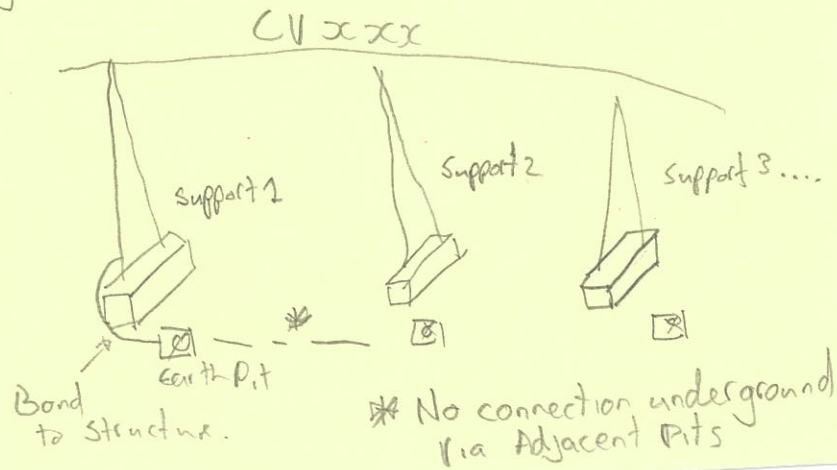


Figure 1

Nearest in ground grid
@ buildings or switchrooms



ENA - EGI

Resistance of single Rod

$$R_R = \frac{\rho}{2\pi L} \left(\ln \left[\frac{8L}{d} \right] - 1 \right)$$

ρ - resistivity

L - Rod length
 $\approx 9m$

d - Rod diameter

Various Values

$\rho = 1000$ $R_R = 139 \Omega$

$\rho = 100$ $R_R = 13.9 \Omega$

$\rho = 250$ $R_R = 34.8 \Omega$

Figure 2 equivalent Circuit

With short between supports 1 & 2 Phase to Earth
Equipotential Bond Back to switchroom

