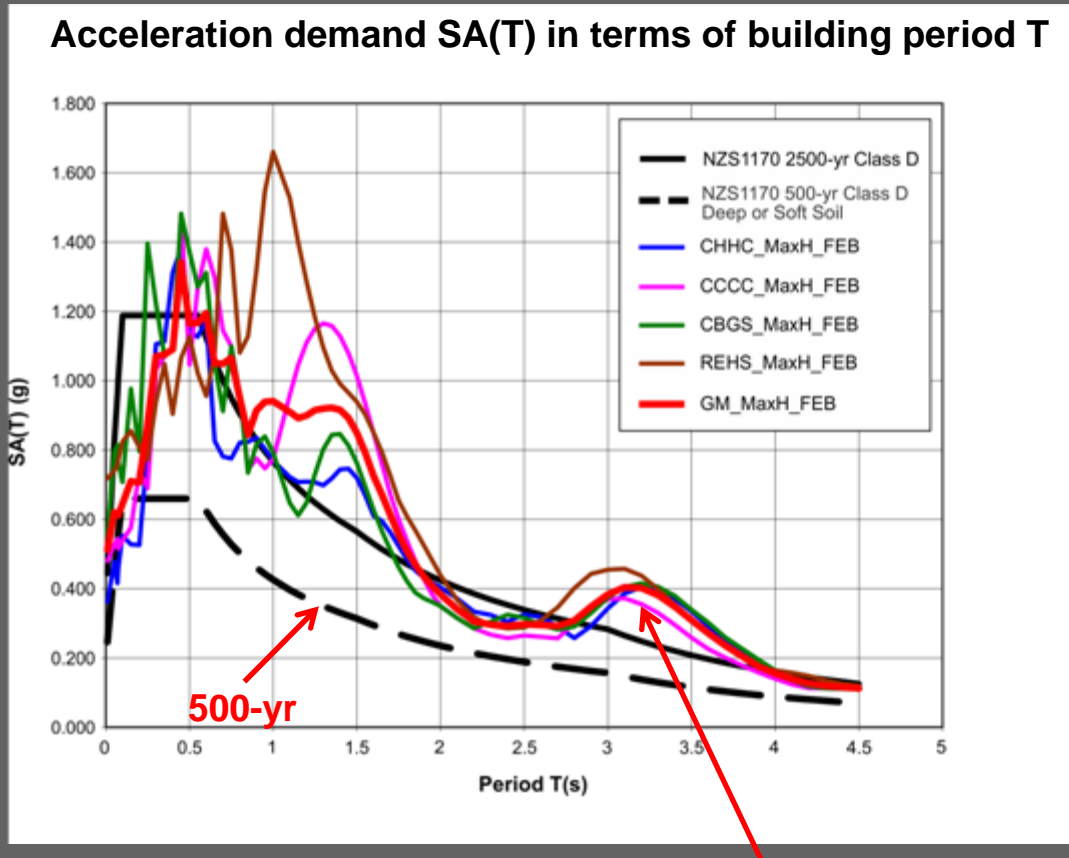


# February spectra and NZS1170 design levels - four Geonet sites closest to CBD



500yr = Design-level for  
normal-use structures

$$Z=0.22$$

2500yr = Design-level for  
post-disaster  
essential facilities

$$RZ=1.8*0.22=0.40$$

Red curve = geometric mean  
for the four sites

Peak around 3s close to site period

-several hundred metres of sediments over volcanic rocks

-controls maximum displacement demands for long-period structures (next slide)