Balancing the fores in the horizontal and votral directions true, x = F cos & + F cos & - FN sint = 0 = Fs Cost+MsFncost-Fnsint=0 $= \sum_{N=1}^{\infty} \frac{1}{\mu_{s} \cos \theta - \sin \theta}$ thet, y= Fs sin + Fx sin + Fx cos + -Fg = 0 = Fs sint + FN (Ms sint + cost) -mg = 0 = ksmm sin & - LOS & - SIN & (US SIN & + CUS B) -mg=0 => | Smin = mg K[sint - cost Mscost-sint]