$$\overline{s}_u = \frac{d_c}{\sum_{i=1}^{k} \frac{d_i}{s_{ui}}} \qquad (20.4\text{-}4)$$

where

$\sum_{i=1}^{k} d_i = d_c$

$d_c$ = the total thickness of cohesive soil layers in the top 100 ft (30 m)

$PI$ = the plasticity index as determined in accordance with ASTM D4318

$w$ = the moisture content in percent as determined in accordance with ASTM D2216

$s_{ui}$ = the undrained shear strength in psf (kPa), not to exceed 5,000 psf (240 kPa) as determined in accordance with ASTM D2166 or ASTM D2850