

$$D-33) V_{uq} = \left(7 \left(\frac{l_e}{d_o} \right)^2 \cdot \sqrt{d_o} \right) \cdot \lambda_g \cdot \sqrt{f_c'} \cdot (C_{91})^{1.5}$$

$$l_e = 2d_o = 2.0$$

$$d_o = 1.0$$

$\lambda_g = 1$ STRAWLIGHT
CONCRETE

$$l_e \leq 8d_o \quad 8 \text{ OK}$$

$$V_{uq} = \left(7 \left(\frac{2}{1} \right)^2 \cdot \sqrt{1} \right) \cdot 1 \cdot \sqrt{5000} \cdot (4)^{1.5}$$

$$V_{uq} = 4,5480 \text{ Lbf} \quad \text{USE THE SAME RC}$$

$$V_{br} = 9 \lambda_g \sqrt{5000} (C_{91})^{1.5}$$

$$V_{br} = 9 \cdot 1 \cdot \sqrt{5000} \cdot 4^{1.5}$$

$$V_{br} = 5,091 \text{ Lbf}$$

$$V_{cbg} = \frac{A_{cv}}{A_{vco}} \cdot \sqrt{f_{ccv}} \cdot \sqrt{f_{cdv}} \cdot \sqrt{f_{cv}} \cdot \sqrt{V_D}$$

$$V_{cbg} = \frac{103}{72} \cdot 1 \cdot (.9) \cdot (1.4) \cdot 4,548$$

$$V_{cbg} = 1,8197 \text{ Lbf}$$

$$V_{cbg} \geq V_{uq}$$

$$(1.65) 8197 \geq V_{uq}$$

$$5328 \text{ Lbf} \geq V_{uq}$$

V_{uq} WILL BE LESS
THAN 610 Lbf
IT PASSES

PG-12