

4.- LOSA DEL TABLERO

$$5" \text{ SPAN, } = l = 2.30 + 1.40/2 = 3.0 \text{ m}$$

$$e^+ = 0.20 \text{ m}$$

$$PP \text{ LOSA } .20 \times 2.5 = 0.500 \text{ T/m}^2$$

$$e^- = 0.375 \text{ m}$$

$$PP \text{ PAV. MAX } .09 \times 2.4 = 0.216 \checkmark$$

$$\text{TOTAL PP TABLERO } p = 0.716 \text{ T/m}^2 \quad M_{pp} = \frac{p l^2}{10} = \frac{0.716 \times 3^2}{10} = 0.644 \frac{\text{Tm}}{\text{m}}$$

$$\text{VOLADO EN PAJILLOS } x = 1.60 \text{ m}$$

$$p_v = 1.56 \text{ T/m}$$

$$M_{pv} = 1.212 \frac{\text{Tm}}{\text{m}}$$

$$a = 0.777 \text{ m}$$

$$\text{SOPRECARGA DE RUEDA } P_d = 11.322 \text{ TON}$$

$$H920-44+20\% +30\% \text{ IMPACTO}$$

$$16 \text{ kN} \times 1.20 \times 1.3$$

$$M_{sc} = 0.80 \times P_d \left(\frac{l+0.61}{9.75} \right) = \frac{+3.352 \text{ Tm}}{\text{m}}$$

MOMENTOS DE DISEÑO

$$M_D^+ = 1.3 (0.644 + 3.352/0.6) = 8.70 \text{ Tm/m}$$

$$e^+ = 0.20 \quad d = 0.167$$

$$9 \phi 12 @ 20 \quad A_s = 15.7 \text{ cm}^2/\text{m} \quad \phi M_{Mu} = 9.0 \text{ Tm/m}$$

$$+ 7 \phi 16 @ 20 \quad a = 3.1 \text{ cm}$$

$$\text{REF. } \phi 10 @ 20 + 75 \phi 12 @ 20 = 9.6 \text{ cm}^2/\text{m} \quad \text{O.K.}$$

$$M_{sc \text{ vol}}^- = \frac{P_d \times (x=1.0)}{0.8x+1.14} = -5.827 \text{ Tm/m}$$

$$M_{D \text{ vol}}^- = -1.3 (1.212 + 5.827) = -9.157 \text{ Tm/m}$$

$$e^- = 0.375 \quad d = 0.327$$

$$9 \phi 12 @ 20 \quad A_s = 15.7 \text{ cm}^2/\text{m} \quad \phi M_{Mu} = 18.5 \frac{\text{Tm}}{\text{m}}$$

$$+ 7 \phi 16 @ 20 \quad a = 3.1 \text{ cm}$$