# 1. PÉSIMOS DE PILARES, PANTALLAS Y MUROS

## 1.1. Pilares

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| A1 | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q, V | 0.61 | 0.73 | -0.03 | -0.20 | -1.16 | $PM_xM_yV_xV_yT$ | 10.5 | Cumple |
| | | | | G, Q, V | 0.43 | 0.17 | -0.06 | -0.34 | -0.92 | $M_y$ | 2.7 | Cumple |
| | | | | G, Q, S | 0.36 | -0.09 | -0.03 | -0.19 | -1.22 | $V_y$ | 4.5 | Cumple |
| | | | Pie | G, Q, V | 0.73 | -2.51 | -0.59 | -0.20 | -1.16 | $P_c$ | 1.1 | Cumple |
| | | | | G, Q, S | 0.48 | -3.48 | -0.55 | -0.19 | -1.22 | $M_x$ | 36.2 | Cumple |
| | | | | G, Q, V | 0.55 | -2.39 | -0.99 | -0.34 | -0.92 | $M_y$ | 44.7 | Cumple |
| | | | | G, Q, S | 0.48 | -3.48 | -0.55 | -0.19 | -1.22 | $V_y$ | 4.5 | Cumple |
| | | | | G, Q, V | 0.56 | -2.40 | -0.99 | -0.34 | -0.94 | $PM_xM_yV_xV_yT$ | 94.8 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 12.98 | 4.60 | 1.33 | -0.81 | -2.70 | $P_c$ | 18.4 | Cumple |
| | | | | G, Q, S | 11.12 | 6.36 | 0.50 | -0.14 | -4.82 | $M_x$ | 65.0 | Cumple |
| | | | | G, Q, S | 11.21 | 4.15 | 3.04 | -2.38 | -2.60 | $M_y$ | 136.7 | Cumple |
| | | | | G, Q, S | 11.22 | 4.15 | 3.04 | -2.38 | -2.60 | $PM_xM_yV_xV_yT$ | 735.6 | Cumple |
| | | | | G, Q, S | 11.12 | 6.36 | 0.50 | -0.14 | -4.82 | $V_y$ | 17.7 | Cumple |
| | | | Pie | G, Q | 13.09 | -2.46 | -0.78 | -0.81 | -2.70 | $P_c$ | 18.5 | Cumple |
| | | | | G, Q, S | 11.23 | -6.27 | -0.12 | -0.14 | -4.82 | $M_x$ | 64.1 | Cumple |
| | | | | G, Q, S | 11.34 | -2.65 | -3.19 | -2.38 | -2.60 | $PM_xM_yV_xV_yT$ | 709.2 | Cumple |
| | | | | G, Q, S | 11.34 | -2.65 | -3.19 | -2.38 | -2.60 | $V_x$ | 6.3 | Cumple |
| | | | | G, Q, S | 11.23 | -6.27 | -0.12 | -0.14 | -4.82 | $V_y$ | 17.7 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 15.10 | -0.25 | 0.31 | -2.60 | 0.63 | Q S. | 16.3 | Cumple |
| | | | | G, Q, S | 16.64 | -1.81 | 0.65 | -0.69 | 1.89 | N,M S. | 10.6 | Cumple |
| | | | Pie | G, Q, S | 15.77 | 0.44 | -1.47 | -2.60 | 0.63 | Q S. | 16.2 | Cumple |
| | | | | G, Q, S | 16.47 | 0.45 | -1.71 | -2.29 | 0.63 | N,M S. | 9.8 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 16.47 | 0.45 | -1.71 | -2.29 | 0.63 | N,M S. | 9.8 | Cumple |
| B1 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 8.60 | 1.25 | -0.19 | 0.62 | -3.72 | Q S. | 23.9 | Cumple |
| | | | | G, Q, S | 8.17 | 1.01 | -0.68 | 2.36 | -2.41 | N,M S. | 6.8 | Cumple |
| | | | Pie | G, Q, S | 9.25 | -2.87 | 0.10 | 0.14 | -3.75 | Q S. | 37.4 | Cumple |
| | | | | G, Q, S | 8.83 | -1.64 | 1.92 | 2.36 | -2.41 | N,M S. | 13.9 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 8.83 | -1.64 | 1.92 | 2.36 | -2.41 | N,M S. | 13.9 | Cumple |
| C1 | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q | 0.95 | 0.32 | 0.01 | 0.03 | -2.36 | $PM_xM_yV_xV_yT$ | 11.3 | Cumple |
| | | | | G, Q, V | 0.84 | 0.72 | 0.01 | 0.02 | -2.18 | $M_x$ | 7.5 | Cumple |
| | | | | G, Q, V | 0.69 | 0.25 | 0.03 | 0.13 | -1.92 | $M_y$ | 1.3 | Cumple |
| | | | Pie | G, Q | 1.07 | -6.25 | 0.08 | 0.03 | -2.36 | $M_x$ | 65.1 | Cumple |
| | | | | G, Q, V | 0.81 | -5.10 | 0.39 | 0.13 | -1.92 | $PM_xM_yV_xV_yT$ | 80.4 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 31.61 | 9.91 | -0.15 | 0.09 | -5.80 | $P_c$ | 44.7 | Cumple |
| | | | | G, Q, S | 26.68 | 11.03 | -0.30 | 0.24 | -7.55 | $M_x$ | 112.6 | Cumple |
| | | | | G, Q, S | 26.11 | 8.92 | -1.69 | 1.56 | -5.49 | $PM_xM_yV_xV_yT$ | 605.1 | Cumple |
| | | | | G, Q, S | 25.99 | 8.55 | -1.69 | 1.56 | -5.14 | $V_x$ | 4.1 | Cumple |
| | | | | G, Q, S | 26.67 | 11.02 | -0.22 | 0.16 | -7.55 | $V_y$ | 27.7 | Cumple |
| | | | Pie | G, Q | 31.73 | -5.28 | 0.09 | 0.09 | -5.80 | $P_c$ | 44.9 | Cumple |
| | | | | G, Q, S | 26.77 | -8.75 | 0.12 | 0.10 | -7.55 | $M_x$ | 89.4 | Cumple |
| | | | | G, Q, S | 25.70 | -3.35 | 2.39 | 1.56 | -4.12 | $M_y$ | 107.5 | Cumple |
| | | | | G, Q, S | 26.10 | -4.92 | 2.39 | 1.56 | -5.14 | $PM_xM_yV_xV_yT$ | 647.1 | Cumple |
| | | | | G, Q, S | 26.78 | -8.75 | 0.20 | 0.16 | -7.55 | $V_y$ | 27.7 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 34.72 | -2.13 | 0.11 | -0.20 | 2.91 | Q S. | 16.0 | Cumple |
| | | | | G, Q | 40.87 | -0.87 | 0.08 | -0.16 | 1.26 | N,M | 16.4 | Cumple |
| | | | Pie | G, Q, S | 35.38 | 1.07 | -0.10 | -0.20 | 2.91 | Q S. | 16.0 | Cumple |
| | | | | G, Q | 41.53 | 0.52 | -0.09 | -0.16 | 1.26 | N,M | 16.7 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q | 41.53 | 0.52 | -0.09 | -0.16 | 1.26 | N,M | 16.7 | Cumple |
| D1 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 8.36 | 1.20 | 0.08 | -0.28 | -3.57 | Q S. | 22.7 | Cumple |

# Esfuerzos y armados de pilares, pantallas y muros

Reforzamiento Bloque Administracion Sena

Fecha: 07/02/26

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| | | | | G, Q, S | 7.50 | 0.79 | 0.73 | -2.68 | -1.35 | N,M S. | 6.1 | Cumple |
| | | | Pie | G, Q, S | 9.02 | -2.73 | 0.06 | 0.07 | -3.57 | Q S. | 35.6 | Cumple |
| | | | | G, Q, S | 9.00 | -2.68 | 0.31 | 0.39 | -3.52 | N,M S. | 12.1 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 9.00 | -2.68 | 0.31 | 0.39 | -3.52 | N,M S. | 12.1 | Cumple |
| E1 | | | | G, Q | 0.94 | 0.31 | 0.00 | 0.01 | -2.19 | $PM_xM_yV_xV_yT$ | 10.5 | Cumple |
| | | | Cabeza | G, Q, V | 0.81 | 0.65 | 0.00 | 0.01 | -2.00 | $M_x$ | 6.8 | Cumple |
| | Cubierta (4.6 - 7.6 m) | IPE 270 | | G, Q, V | 0.68 | 0.23 | 0.04 | 0.17 | -1.76 | $M_y$ | 1.6 | Cumple |
| | | | Pie | G, Q | 1.06 | -5.77 | 0.02 | 0.01 | -2.19 | $M_x$ | 60.0 | Cumple |
| | | | | G, Q, V | 0.80 | -4.67 | 0.50 | 0.17 | -1.76 | $PM_xM_yV_xV_yT$ | 83.6 | Cumple |
| | | | | G, Q | 28.50 | 9.14 | -0.03 | 0.02 | -5.35 | $P_c$ | 40.3 | Cumple |
| | | | | G, Q, S | 24.06 | 10.42 | 0.39 | -0.33 | -7.20 | $M_x$ | 106.4 | Cumple |
| | | | Cabeza | G, Q, S | 22.64 | 6.60 | -2.41 | 2.00 | -3.58 | $M_y$ | 108.4 | Cumple |
| | | | | G, Q, S | 22.64 | 6.60 | -2.41 | 2.00 | -3.58 | $V_x$ | 5.3 | Cumple |
| | | | | G, Q, S | 24.06 | 10.42 | 0.28 | -0.24 | -7.20 | $V_y$ | 26.4 | Cumple |
| | | | | G, Q, S | 23.20 | 8.15 | -2.41 | 1.99 | -5.05 | $PM_xM_yV_xV_yT$ | 808.5 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | | G, Q | 28.61 | -4.88 | 0.02 | 0.02 | -5.35 | $P_c$ | 40.4 | Cumple |
| | | | | G, Q, S | 24.17 | -8.45 | -0.24 | -0.16 | -7.20 | $M_x$ | 86.3 | Cumple |
| | | | Pie | G, Q, S | 22.75 | -2.77 | 2.82 | 2.00 | -3.57 | $M_y$ | 126.6 | Cumple |
| | | | | G, Q, S | 22.75 | -2.77 | 2.82 | 2.00 | -3.58 | $V_x$ | 5.3 | Cumple |
| | | | | G, Q, S | 24.17 | -8.45 | -0.35 | -0.24 | -7.20 | $V_y$ | 26.4 | Cumple |
| | | | | G, Q, S | 23.31 | -5.09 | 2.81 | 1.99 | -5.06 | $PM_xM_yV_xV_yT$ | 793.8 | Cumple |
| | | | Cabeza | G, Q, S | 32.48 | -1.95 | 0.01 | -0.24 | 2.53 | Q S. | 14.1 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | | G, Q | 37.92 | -0.61 | 0.07 | -0.13 | 0.89 | N,M | 15.2 | Cumple |
| | | | Pie | G, Q, S | 33.14 | 0.84 | -0.26 | -0.24 | 2.53 | Q S. | 14.1 | Cumple |
| | | | | G, Q | 38.59 | 0.37 | -0.08 | -0.13 | 0.89 | N,M | 15.5 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q | 38.59 | 0.37 | -0.08 | -0.13 | 0.89 | N,M | 15.5 | Cumple |
| F1 | | | Cabeza | G, Q, S | 9.49 | 1.70 | 0.16 | -0.57 | -4.49 | Q S. | 28.5 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | | G, Q, S | 8.87 | 1.38 | 0.75 | -2.73 | -2.53 | N,M S. | 8.6 | Cumple |
| | | | Pie | G, Q, S | 10.15 | -3.24 | 0.32 | 0.40 | -4.49 | Q S. | 44.8 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 10.15 | -3.24 | 0.32 | 0.40 | -4.49 | N,M S. | 14.4 | Cumple |
| G1 | | | | G, Q | 0.94 | 0.31 | 0.00 | 0.02 | -2.15 | $PM_xM_yV_xV_yT$ | 10.3 | Cumple |
| | | | Cabeza | G, Q, V | 0.82 | 0.65 | 0.00 | 0.01 | -1.98 | $M_x$ | 6.8 | Cumple |
| | Cubierta (4.6 - 7.6 m) | IPE 270 | | G, Q, V | 0.67 | 0.22 | 0.05 | 0.21 | -1.73 | $M_y$ | 2.1 | Cumple |
| | | | Pie | G, Q | 1.06 | -5.67 | 0.06 | 0.02 | -2.15 | $M_x$ | 59.1 | Cumple |
| | | | | G, Q, V | 0.79 | -4.60 | 0.62 | 0.21 | -1.73 | $PM_xM_yV_xV_yT$ | 91.6 | Cumple |
| | | | | G, Q | 28.31 | 9.01 | -0.11 | 0.06 | -5.29 | $P_c$ | 40.0 | Cumple |
| | | | | G, Q, S | 24.00 | 10.38 | -0.13 | 0.09 | -7.21 | $M_x$ | 106.0 | Cumple |
| | | | Cabeza | G, Q, S | 22.64 | 6.34 | -2.93 | 2.31 | -3.36 | $M_y$ | 131.8 | Cumple |
| | | | | G, Q, S | 22.64 | 6.34 | -2.93 | 2.31 | -3.36 | $V_x$ | 6.1 | Cumple |
| | | | | G, Q, S | 24.00 | 10.38 | -0.15 | 0.11 | -7.21 | $V_y$ | 26.5 | Cumple |
| | | | | G, Q, S | 23.25 | 8.16 | -2.93 | 2.31 | -5.09 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | | G, Q | 28.42 | -4.84 | 0.06 | 0.06 | -5.29 | $P_c$ | 40.2 | Cumple |
| | | | | G, Q, S | 24.12 | -8.51 | 0.14 | 0.12 | -7.21 | $M_x$ | 86.9 | Cumple |
| | | | Pie | G, Q, S | 22.75 | -2.46 | 3.12 | 2.31 | -3.36 | $M_y$ | 140.3 | Cumple |
| | | | | G, Q, S | 22.75 | -2.46 | 3.12 | 2.31 | -3.36 | $V_x$ | 6.1 | Cumple |
| | | | | G, Q, S | 24.12 | -8.51 | 0.12 | 0.11 | -7.21 | $V_y$ | 26.5 | Cumple |
| | | | | G, Q, S | 23.36 | -5.18 | 3.12 | 2.31 | -5.09 | $PM_xM_yV_xV_yT$ | 924.2 | Cumple |
| | | | Cabeza | G, S | 19.95 | 1.90 | -0.07 | 0.09 | -2.21 | Q S. | 13.1 | Cumple |
| | | | | G, Q | 39.04 | 0.23 | 0.06 | -0.12 | -0.31 | N,M | 15.7 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Pie | G, S | 20.45 | -0.53 | 0.02 | 0.09 | -2.21 | Q S. | 13.1 | Cumple |
| | | | | G, Q | 39.71 | -0.12 | -0.07 | -0.12 | -0.31 | N,M | 15.9 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q | 39.71 | -0.12 | -0.07 | -0.12 | -0.31 | N,M | 15.9 | Cumple |
| H1 | | | Cabeza | G, Q, S | 9.25 | 1.58 | 0.03 | -0.09 | -4.23 | Q S. | 26.7 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | | G, Q, S | 8.64 | 1.27 | 0.76 | -2.75 | -2.35 | N,M S. | 8.2 | Cumple |
| | | | Pie | G, Q, S | 9.92 | -3.07 | -0.05 | -0.06 | -4.23 | Q S. | 42.1 | Cumple |

# Esfuerzos y armados de pilares, pantallas y muros

Reforzamiento Bloque Administracion Sena

Fecha: 07/02/26

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| | | | | G, Q, S | 9.30 | -1.30 | -2.26 | -2.75 | -2.34 | N,M S. | 13.9 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 9.30 | -1.30 | -2.26 | -2.75 | -2.34 | N,M S. | 13.9 | Cumple |
| I1 | | | | G, Q | 0.95 | 0.32 | -0.01 | -0.06 | -2.31 | $PM_xM_yV_xV_yT$ | 11.1 | Cumple |
| | | | Cabeza | G, Q, V | 0.85 | 0.73 | -0.01 | -0.06 | -2.15 | $M_x$ | 7.6 | Cumple |
| | Cubierta (4.6 - 7.6 m) | IPE 270 | | G, Q, V | 0.69 | 0.25 | -0.05 | -0.25 | -1.88 | $M_y$ | 2.4 | Cumple |
| | | | Pie | G, Q | 1.07 | -6.11 | -0.19 | -0.06 | -2.31 | $M_x$ | 63.6 | Cumple |
| | | | | G, Q, V | 0.81 | -4.98 | -0.74 | -0.25 | -1.88 | $PM_xM_yV_xV_yT$ | 108.1 | Cumple |
| | | | | G, Q | 31.60 | 9.72 | 0.36 | -0.22 | -5.70 | $P_c$ | 44.7 | Cumple |
| | | | | G, Q, S | 26.76 | 11.06 | 0.50 | -0.34 | -7.65 | $M_x$ | 113.0 | Cumple |
| | | | Cabeza | G, Q, S | 26.19 | 8.85 | 3.19 | -2.47 | -5.51 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | | G, Q, S | 26.18 | 8.84 | 3.19 | -2.47 | -5.50 | $V_x$ | 6.5 | Cumple |
| | | | | G, Q, S | 26.75 | 11.06 | 0.38 | -0.25 | -7.65 | $V_y$ | 28.1 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | | G, Q | 31.71 | -5.22 | -0.21 | -0.22 | -5.70 | $P_c$ | 44.8 | Cumple |
| | | | | G, Q, S | 26.86 | -8.97 | -0.18 | -0.19 | -7.65 | $M_x$ | 91.6 | Cumple |
| | | | Pie | G, Q, S | 26.29 | -5.55 | -3.27 | -2.47 | -5.49 | $M_y$ | 147.1 | Cumple |
| | | | | G, Q, S | 26.30 | -5.57 | -3.27 | -2.47 | -5.50 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | | G, Q, S | 26.86 | -8.97 | -0.27 | -0.25 | -7.65 | $V_y$ | 28.1 | Cumple |
| | | | Cabeza | G, S | 22.69 | 0.10 | -0.87 | 2.10 | -0.30 | Q S. | 12.4 | Cumple |
| | | | | G, Q | 42.24 | -0.02 | -0.08 | 0.08 | 0.04 | N,M | 16.9 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Pie | G, S | 23.19 | -0.23 | 1.44 | 2.10 | -0.30 | Q S. | 12.3 | Cumple |
| | | | | G, Q | 42.90 | 0.03 | 0.01 | 0.08 | 0.04 | N,M | 17.2 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q | 42.90 | 0.03 | 0.01 | 0.08 | 0.04 | N,M | 17.2 | Cumple |
| J1 | | | Cabeza | G, Q, S | 9.54 | 1.63 | 0.24 | -0.79 | -4.28 | Q S. | 27.4 | Cumple |
| | | | | G, Q, S | 9.24 | 1.45 | 0.72 | -2.50 | -3.21 | N,M S. | 8.8 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Pie | G, Q, S | 10.20 | -3.07 | -0.63 | -0.79 | -4.28 | Q S. | 42.9 | Cumple |
| | | | | G, Q, S | 9.91 | -2.08 | -2.03 | -2.50 | -3.21 | N,M S. | 16.1 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 9.91 | -2.08 | -2.03 | -2.50 | -3.21 | N,M S. | 16.1 | Cumple |
| K1 | | | | G, Q, V | 0.61 | 0.74 | 0.04 | 0.24 | -1.10 | $PM_xM_yV_xV_yT$ | 11.2 | Cumple |
| | | | Cabeza | G, Q, V | 0.42 | 0.15 | 0.08 | 0.40 | -0.85 | $M_y$ | 3.4 | Cumple |
| | | | | G, Q, S | 0.35 | -0.14 | 0.04 | 0.24 | -1.18 | $V_y$ | 4.3 | Cumple |
| | Cubierta (4.6 - 7.6 m) | IPE 270 | | G, Q, V | 0.73 | -2.32 | 0.70 | 0.24 | -1.10 | $P_c$ | 1.1 | Cumple |
| | | | Pie | G, Q, S | 0.47 | -3.43 | 0.70 | 0.24 | -1.18 | $M_x$ | 35.8 | Cumple |
| | | | | G, Q, V | 0.54 | -2.21 | 1.20 | 0.40 | -0.85 | $PM_xM_yV_xV_yT$ | 114.7 | Cumple |
| | | | | G, Q, S | 0.47 | -3.43 | 0.69 | 0.24 | -1.18 | $V_y$ | 4.3 | Cumple |
| | | | | G, Q | 12.81 | 4.33 | -1.61 | 0.98 | -2.55 | $P_c$ | 18.1 | Cumple |
| | | | | G, Q, S | 10.95 | 6.28 | -0.59 | 0.19 | -4.89 | $M_x$ | 64.2 | Cumple |
| | | | Cabeza | G, Q, S | 10.93 | 2.40 | -3.67 | 2.76 | -0.92 | $M_y$ | 164.9 | Cumple |
| | | | | G, Q, S | 10.93 | 2.40 | -3.67 | 2.76 | -0.92 | $V_x$ | 7.3 | Cumple |
| | | | | G, Q, S | 10.95 | 6.28 | -0.59 | 0.19 | -4.89 | $V_y$ | 17.9 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | | G, Q, S | 11.38 | 3.99 | -3.66 | 2.75 | -2.55 | $PM_xM_yV_xV_yT$ | 978.8 | Cumple |
| | | | | G, Q | 12.92 | -2.35 | 0.95 | 0.98 | -2.55 | $P_c$ | 18.3 | Cumple |
| | | | | G, Q, S | 11.07 | -6.53 | 0.08 | 0.19 | -4.89 | $M_x$ | 66.7 | Cumple |
| | | | Pie | G, Q, S | 11.04 | -0.02 | 3.55 | 2.76 | -0.92 | $M_y$ | 159.7 | Cumple |
| | | | | G, Q, S | 11.04 | -0.02 | 3.55 | 2.76 | -0.92 | $V_x$ | 7.3 | Cumple |
| | | | | G, Q, S | 11.07 | -6.53 | 0.08 | 0.19 | -4.89 | $V_y$ | 17.9 | Cumple |
| | | | | G, Q, S | 11.49 | -2.69 | 3.54 | 2.75 | -2.55 | $PM_xM_yV_xV_yT$ | 852.0 | Cumple |
| | | | Cabeza | G, S | 9.15 | 1.94 | -0.11 | 0.69 | -2.04 | Q S. | 20.8 | Cumple |
| | | | | G, Q, S | 13.56 | 1.90 | -0.86 | 0.46 | -1.75 | N,M S. | 11.4 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Pie | G, Q, S | 16.02 | -0.22 | 1.30 | 2.47 | -0.43 | Q S. | 15.2 | Cumple |
| | | | | G, Q, S | 16.95 | -0.22 | 1.57 | 2.11 | -0.40 | N,M S. | 9.1 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 16.95 | -0.22 | 1.57 | 2.11 | -0.40 | N,M S. | 9.1 | Cumple |
| K2 | | | Cabeza | G, S | 6.03 | -0.39 | -1.16 | 3.46 | 1.07 | Q S. | 35.1 | Cumple |
| | | | | G, Q, S | 7.83 | -1.03 | -1.36 | 2.99 | 3.08 | N,M S. | 9.4 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Pie | G, Q, S | 9.17 | 0.88 | 3.11 | 4.25 | 1.21 | Q S. | 43.6 | Cumple |
| | | | | G, Q, S | 8.49 | 2.36 | 1.93 | 2.99 | 3.08 | N,M S. | 16.9 | Cumple |

# Esfuerzos y armados de pilares, pantallas y muros

Reforzamiento Bloque Administracion Sena

Fecha: 07/02/26

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| | Cimentación | 45x45 | Arranque | G, Q, S | 8.49 | 2.36 | 1.93 | 2.99 | 3.08 | N,M S. | 16.9 | Cumple |
| K3 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, S | 4.24 | -0.92 | -0.67 | 1.28 | 2.90 | Q S. | 30.1 | Cumple |
| | | | | G, Q, S | 8.49 | 0.87 | -1.06 | 2.40 | -2.70 | N,M S. | 7.7 | Cumple |
| | | | Pie | G, Q, S | 8.30 | 0.41 | 2.72 | 3.60 | 0.51 | Q S. | 36.4 | Cumple |
| | | | | G, Q, S | 7.45 | 2.16 | 1.58 | 2.39 | 2.75 | N,M S. | 14.8 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 7.45 | 2.16 | 1.58 | 2.39 | 2.75 | N,M S. | 14.8 | Cumple |
| K4 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, S | 6.34 | 0.25 | -1.22 | 3.57 | -0.67 | Q S. | 35.8 | Cumple |
| | | | | G, Q, S | 8.40 | 0.92 | -1.43 | 3.13 | -2.80 | N,M S. | 9.3 | Cumple |
| | | | Pie | G, Q, S | 9.60 | 0.00 | 3.22 | 4.43 | -0.10 | Q S. | 44.6 | Cumple |
| | | | | G, Q, S | 9.06 | -2.16 | 2.02 | 3.13 | -2.80 | N,M S. | 16.4 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 9.06 | -2.16 | 2.02 | 3.13 | -2.80 | N,M S. | 16.4 | Cumple |
| K5 | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q, V | 0.61 | -0.73 | 0.03 | 0.20 | 1.19 | $PM_xM_yV_xV_yT$ | 10.4 | Cumple |
| | | | | G, Q, V | 0.43 | -0.15 | 0.06 | 0.34 | 0.94 | $M_y$ | 2.7 | Cumple |
| | | | | G, Q, S | 0.35 | 0.13 | 0.03 | 0.21 | 1.25 | $V_y$ | 4.6 | Cumple |
| | | | Pie | G, Q, V | 0.73 | 2.58 | 0.59 | 0.20 | 1.19 | $P_c$ | 1.1 | Cumple |
| | | | | G, Q, S | 0.48 | 3.61 | 0.61 | 0.21 | 1.25 | $M_x$ | 37.6 | Cumple |
| | | | | G, Q, V | 0.55 | 2.45 | 1.00 | 0.34 | 0.94 | $M_y$ | 44.8 | Cumple |
| | | | | G, Q, S | 0.48 | 3.61 | 0.61 | 0.21 | 1.25 | $V_y$ | 4.6 | Cumple |
| | | | | G, Q, V | 0.56 | 2.46 | 0.99 | 0.34 | 0.96 | $PM_xM_yV_xV_yT$ | 95.6 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 13.00 | -4.70 | -1.33 | 0.81 | 2.74 | $P_c$ | 18.4 | Cumple |
| | | | | G, Q, S | 11.37 | -6.66 | -1.00 | 0.58 | 5.09 | $M_x$ | 68.0 | Cumple |
| | | | | G, Q, S | 10.80 | -3.02 | -3.05 | 2.38 | 1.42 | $M_y$ | 137.0 | Cumple |
| | | | | G, Q, S | 10.80 | -3.03 | -3.05 | 2.38 | 1.43 | $V_x$ | 6.3 | Cumple |
| | | | | G, Q, S | 11.37 | -6.66 | -1.00 | 0.58 | 5.09 | $V_y$ | 18.7 | Cumple |
| | | | | G, Q, S | 11.24 | -4.54 | -3.04 | 2.38 | 2.95 | $PM_xM_yV_xV_yT$ | 757.8 | Cumple |
| | | | Pie | G, Q | 13.11 | 2.47 | 0.78 | 0.81 | 2.74 | $P_c$ | 18.5 | Cumple |
| | | | | G, Q, S | 11.48 | 6.68 | 0.53 | 0.58 | 5.09 | $M_x$ | 68.2 | Cumple |
| | | | | G, Q, S | 10.91 | 0.72 | 3.19 | 2.38 | 1.43 | $M_y$ | 143.6 | Cumple |
| | | | | G, Q, S | 10.91 | 0.71 | 3.19 | 2.38 | 1.43 | $V_x$ | 6.3 | Cumple |
| | | | | G, Q, S | 11.48 | 6.68 | 0.52 | 0.58 | 5.09 | $V_y$ | 18.7 | Cumple |
| | | | | G, Q, S | 11.35 | 3.17 | 3.19 | 2.38 | 2.94 | $PM_xM_yV_xV_yT$ | 738.4 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, S | 8.81 | -1.95 | -0.45 | 0.37 | 2.07 | Q S. | 20.8 | Cumple |
| | | | | G, Q, S | 13.86 | -1.91 | -0.93 | 0.67 | 1.77 | N,M S. | 11.6 | Cumple |
| | | | Pie | G, Q, S | 16.56 | 0.26 | 1.42 | 2.58 | 0.40 | Q S. | 15.8 | Cumple |
| | | | | G, Q, S | 17.11 | 0.27 | 1.66 | 2.28 | 0.43 | N,M S. | 9.4 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 17.11 | 0.27 | 1.66 | 2.28 | 0.43 | N,M S. | 9.4 | Cumple |
| J5 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 9.46 | -1.57 | 0.07 | -0.18 | 4.20 | Q S. | 26.5 | Cumple |
| | | | | G, Q, S | 9.27 | -1.35 | 0.74 | -2.59 | 2.90 | N,M S. | 8.5 | Cumple |
| | | | Pie | G, Q, S | 10.13 | 3.05 | -0.12 | -0.17 | 4.20 | Q S. | 41.8 | Cumple |
| | | | | G, Q, S | 9.94 | 1.84 | -2.10 | -2.59 | 2.90 | N,M S. | 15.4 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 9.94 | 1.84 | -2.10 | -2.59 | 2.90 | N,M S. | 15.4 | Cumple |
| I5 | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q | 0.95 | -0.31 | -0.01 | -0.03 | 2.43 | $PM_xM_yV_xV_yT$ | 11.6 | Cumple |
| | | | | G, Q, V | 0.84 | -0.71 | -0.01 | -0.02 | 2.24 | $M_x$ | 7.4 | Cumple |
| | | | | G, Q, S | 0.71 | -0.31 | -0.03 | -0.14 | 1.87 | $M_y$ | 1.3 | Cumple |
| | | | Pie | G, Q | 1.07 | 6.46 | -0.08 | -0.03 | 2.43 | $M_x$ | 67.2 | Cumple |
| | | | | G, Q, S | 0.82 | 4.89 | -0.41 | -0.14 | 1.87 | $M_y$ | 18.2 | Cumple |
| | | | | G, Q, S | 0.78 | 5.40 | -0.40 | -0.13 | 1.99 | $PM_xM_yV_xV_yT$ | 84.3 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 32.04 | -10.22 | 0.14 | -0.09 | 5.96 | $P_c$ | 45.3 | Cumple |
| | | | | G, Q, S | 26.95 | -11.43 | 0.32 | -0.29 | 7.84 | $M_x$ | 116.7 | Cumple |
| | | | | G, Q, S | 26.51 | -8.95 | 1.62 | -1.52 | 5.48 | $PM_xM_yV_xV_yT$ | 586.7 | Cumple |
| | | | | G, Q, S | 26.51 | -8.95 | 1.62 | -1.52 | 5.48 | $V_x$ | 4.0 | Cumple |
| | | | | G, Q, S | 26.95 | -11.43 | 0.29 | -0.24 | 7.84 | $V_y$ | 28.8 | Cumple |
| | | | Pie | G, Q | 32.15 | 5.41 | -0.08 | -0.09 | 5.96 | $P_c$ | 45.5 | Cumple |
| | | | | G, Q, S | 27.06 | 9.11 | -0.27 | -0.20 | 7.84 | $M_x$ | 93.0 | Cumple |
| | | | | G, Q, S | 26.62 | 5.41 | -2.36 | -1.52 | 5.48 | $PM_xM_yV_xV_yT$ | 664.5 | Cumple |

# Esfuerzos y armados de pilares, pantallas y muros

Reforzamiento Bloque Administracion Sena

Fecha: 07/02/26

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| | | | | G, Q, S | 26.62 | 5.41 | -2.36 | -1.52 | 5.48 | $V_x$ | 4.0 | Cumple |
| | | | | G, Q, S | 27.06 | 9.11 | -0.33 | -0.24 | 7.84 | $V_y$ | 28.8 | Cumple |
| | | | Cabeza | G, S | 23.56 | 0.15 | 0.71 | -2.09 | -0.37 | Q S. | 12.3 | Cumple |
| | | | | G, Q | 42.46 | 0.26 | -0.01 | -0.03 | -0.36 | N,M | 17.0 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | | G, S | 24.06 | -0.25 | -1.59 | -2.09 | -0.37 | Q S. | 12.3 | Cumple |
| | | | Pie | G, Q | 43.13 | -0.13 | -0.04 | -0.03 | -0.36 | N,M | 17.3 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q | 43.13 | -0.13 | -0.04 | -0.03 | -0.36 | N,M | 17.3 | Cumple |
| G5 | | | | G, Q | 0.94 | -0.30 | 0.00 | -0.01 | 2.24 | $PM_xM_yV_xV_yT$ | 10.7 | Cumple |
| | | | Cabeza | G, Q, V | 0.81 | -0.64 | 0.00 | -0.01 | 2.04 | $M_x$ | 6.6 | Cumple |
| | Cubierta (4.6 - 7.6 m) | IPE 270 | | G, Q, V | 0.68 | -0.23 | -0.04 | -0.17 | 1.81 | $M_y$ | 1.7 | Cumple |
| | | | Pie | G, Q | 1.06 | 5.92 | -0.04 | -0.01 | 2.24 | $M_x$ | 61.6 | Cumple |
| | | | | G, Q, V | 0.80 | 4.79 | -0.51 | -0.17 | 1.81 | $PM_xM_yV_xV_yT$ | 85.6 | Cumple |
| | | | | G, Q | 28.64 | -9.35 | 0.07 | -0.04 | 5.46 | $P_c$ | 40.5 | Cumple |
| | | | | G, Q, S | 24.24 | -10.61 | -0.16 | 0.14 | 7.32 | $M_x$ | 108.4 | Cumple |
| | | | Cabeza | G, Q, S | 23.41 | -8.41 | 2.41 | -1.99 | 5.23 | $PM_xM_yV_xV_yT$ | 825.8 | Cumple |
| | | | | G, Q, S | 23.40 | -8.40 | 2.41 | -1.99 | 5.22 | $V_x$ | 5.3 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | | G, Q, S | 24.23 | -10.61 | -0.03 | 0.04 | 7.33 | $V_y$ | 26.9 | Cumple |
| | | | | G, Q | 28.76 | 4.96 | -0.04 | -0.04 | 5.46 | $P_c$ | 40.7 | Cumple |
| | | | | G, Q, S | 24.34 | 8.58 | -0.03 | -0.03 | 7.33 | $M_x$ | 87.6 | Cumple |
| | | | Pie | G, Q, S | 23.51 | 5.26 | -2.82 | -1.99 | 5.21 | $M_y$ | 126.6 | Cumple |
| | | | | G, Q, S | 23.52 | 5.27 | -2.82 | -1.99 | 5.22 | $PM_xM_yV_xV_yT$ | 808.1 | Cumple |
| | | | | G, Q, S | 24.34 | 8.58 | 0.07 | 0.04 | 7.33 | $V_y$ | 26.9 | Cumple |
| | | | Cabeza | G, S | 21.68 | 0.03 | 0.79 | -2.11 | -0.21 | Q S. | 12.4 | Cumple |
| | | | | G, Q | 39.07 | 0.00 | 0.03 | -0.08 | 0.01 | N,M | 15.7 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | | G, S | 22.18 | -0.20 | -1.53 | -2.11 | -0.21 | Q S. | 12.4 | Cumple |
| | | | Pie | G, Q | 39.73 | 0.01 | -0.06 | -0.08 | 0.01 | N,M | 15.9 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q | 39.73 | 0.01 | -0.06 | -0.08 | 0.01 | N,M | 15.9 | Cumple |
| H5 | | | Cabeza | G, Q, S | 9.11 | -1.51 | -0.11 | 0.40 | 4.10 | Q S. | 26.0 | Cumple |
| | | | | G, Q, S | 8.44 | -1.20 | 0.75 | -2.74 | 2.22 | N,M S. | 7.9 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Pie | G, Q, S | 9.77 | 3.01 | -0.08 | -0.11 | 4.11 | Q S. | 41.0 | Cumple |
| | | | | G, Q, S | 9.11 | 1.25 | -2.27 | -2.75 | 2.22 | N,M S. | 13.7 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 9.11 | 1.25 | -2.27 | -2.75 | 2.22 | N,M S. | 13.7 | Cumple |
| F5 | | | Cabeza | G, Q, S | 9.30 | -1.60 | 0.09 | -0.35 | 4.31 | Q S. | 27.3 | Cumple |
| | | | | G, Q, S | 8.64 | -1.27 | 0.75 | -2.74 | 2.33 | N,M S. | 8.1 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Pie | G, Q, S | 9.97 | 3.14 | -0.29 | -0.35 | 4.31 | Q S. | 43.0 | Cumple |
| | | | | G, Q, S | 9.31 | 1.29 | -2.27 | -2.74 | 2.33 | N,M S. | 13.9 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 9.31 | 1.29 | -2.27 | -2.74 | 2.33 | N,M S. | 13.9 | Cumple |
| A5 | | | | G, Q, V | 0.61 | -0.72 | -0.03 | -0.20 | 1.18 | $PM_xM_yV_xV_yT$ | 10.4 | Cumple |
| | | | Cabeza | G, Q, V | 0.43 | -0.16 | -0.06 | -0.34 | 0.94 | $M_y$ | 2.8 | Cumple |
| | | | | G, Q, S | 0.37 | 0.09 | -0.03 | -0.21 | 1.24 | $V_y$ | 4.6 | Cumple |
| | | | | G, Q, V | 0.73 | 2.56 | -0.60 | -0.20 | 1.18 | $P_c$ | 1.1 | Cumple |
| | Cubierta (4.6 - 7.6 m) | IPE 270 | | G, Q, S | 0.49 | 3.54 | -0.62 | -0.21 | 1.24 | $M_x$ | 36.9 | Cumple |
| | | | Pie | G, Q, V | 0.55 | 2.45 | -1.02 | -0.34 | 0.94 | $M_y$ | 45.7 | Cumple |
| | | | | G, Q, S | 0.49 | 3.54 | -0.62 | -0.21 | 1.24 | $V_y$ | 4.6 | Cumple |
| | | | | G, Q, V | 0.56 | 2.46 | -1.01 | -0.34 | 0.96 | $PM_xM_yV_xV_yT$ | 96.9 | Cumple |
| | | | | G, Q | 13.08 | -4.70 | 1.36 | -0.82 | 2.74 | $P_c$ | 18.5 | Cumple |
| | | | | G, Q, S | 11.34 | -6.44 | 1.02 | -0.59 | 4.86 | $M_x$ | 65.7 | Cumple |
| | | | Cabeza | G, Q, S | 11.24 | -4.23 | 3.11 | -2.42 | 2.64 | $M_y$ | 139.8 | Cumple |
| | | | | G, Q, S | 11.26 | -4.32 | 3.11 | -2.42 | 2.73 | $PM_xM_yV_xV_yT$ | 771.9 | Cumple |
| | | | | G, Q, S | 11.34 | -6.44 | 1.03 | -0.60 | 4.86 | $V_y$ | 17.8 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | | G, Q | 13.19 | 2.48 | -0.80 | -0.82 | 2.74 | $P_c$ | 18.7 | Cumple |
| | | | | G, Q, S | 11.46 | 6.29 | -0.55 | -0.60 | 4.86 | $M_x$ | 64.2 | Cumple |
| | | | Pie | G, Q, S | 11.39 | 2.91 | -3.23 | -2.42 | 2.78 | $M_y$ | 145.2 | Cumple |
| | | | | G, Q, S | 11.37 | 2.83 | -3.23 | -2.42 | 2.73 | $V_x$ | 6.4 | Cumple |
| | | | | G, Q, S | 11.46 | 6.29 | -0.55 | -0.60 | 4.86 | $V_y$ | 17.8 | Cumple |

# Esfuerzos y armados de pilares, pantallas y muros

Reforzamiento Bloque Administracion Sena

Fecha: 07/02/26

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| | | | | G, Q, S | 11.44 | 3.29 | -3.18 | -2.38 | 3.01 | $PM_xM_yV_xV_yT$ | 740.5 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 15.08 | 0.30 | 0.38 | -2.54 | -0.72 | Q S. | 16.0 | Cumple |
| | | | | G, Q, S | 16.73 | 1.88 | 0.36 | -0.99 | -1.98 | N,M S. | 10.2 | Cumple |
| | | | Pie | G, Q, S | 15.75 | -0.46 | -1.44 | -2.54 | -0.72 | Q S. | 16.0 | Cumple |
| | | | | G, Q, S | 16.46 | -0.46 | -1.69 | -2.22 | -0.72 | N,M S. | 9.7 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 16.46 | -0.46 | -1.69 | -2.22 | -0.72 | N,M S. | 9.7 | Cumple |
| B5 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 8.63 | -1.29 | -0.06 | 0.18 | 3.82 | Q S. | 24.2 | Cumple |
| | | | | G, Q, S | 8.29 | -1.00 | -0.67 | 2.33 | 2.25 | N,M S. | 6.8 | Cumple |
| | | | Pie | G, Q, S | 9.30 | 2.91 | 0.11 | 0.15 | 3.82 | Q S. | 38.2 | Cumple |
| | | | | G, Q, S | 8.67 | 1.55 | -1.90 | -2.30 | 2.33 | N,M S. | 13.5 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 8.67 | 1.55 | -1.90 | -2.30 | 2.33 | N,M S. | 13.5 | Cumple |
| C5 | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q | 0.95 | -0.32 | 0.01 | 0.02 | 2.42 | $PM_xM_yV_xV_yT$ | 11.6 | Cumple |
| | | | | G, Q, V | 0.84 | -0.71 | 0.00 | 0.02 | 2.21 | $M_x$ | 7.4 | Cumple |
| | | | | G, Q, V | 0.69 | -0.25 | 0.03 | 0.13 | 1.97 | $M_y$ | 1.3 | Cumple |
| | | | Pie | G, Q | 1.07 | 6.41 | 0.07 | 0.02 | 2.42 | $M_x$ | 66.7 | Cumple |
| | | | | G, Q, S | 0.82 | 4.84 | 0.38 | 0.13 | 1.86 | $M_y$ | 17.3 | Cumple |
| | | | | G, Q, S | 0.78 | 5.36 | 0.38 | 0.13 | 1.98 | $PM_xM_yV_xV_yT$ | 82.3 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 31.75 | -10.14 | -0.14 | 0.08 | 5.91 | $P_c$ | 44.9 | Cumple |
| | | | | G, Q, S | 26.64 | -11.19 | -0.35 | 0.29 | 7.63 | $M_x$ | 114.3 | Cumple |
| | | | | G, Q, S | 26.24 | -8.82 | -1.65 | 1.54 | 5.39 | $PM_xM_yV_xV_yT$ | 589.3 | Cumple |
| | | | | G, Q, S | 25.74 | -7.10 | -1.65 | 1.54 | 3.74 | $V_x$ | 4.1 | Cumple |
| | | | | G, Q, S | 26.64 | -11.19 | -0.29 | 0.23 | 7.63 | $V_y$ | 28.0 | Cumple |
| | | | Pie | G, Q | 31.87 | 5.36 | 0.08 | 0.08 | 5.91 | $P_c$ | 45.1 | Cumple |
| | | | | G, Q, S | 26.75 | 8.81 | 0.25 | 0.19 | 7.63 | $M_x$ | 90.0 | Cumple |
| | | | | G, Q, S | 25.85 | 2.68 | 2.38 | 1.54 | 3.74 | $M_y$ | 106.8 | Cumple |
| | | | | G, Q, S | 25.85 | 2.68 | 2.37 | 1.54 | 3.74 | $V_x$ | 4.1 | Cumple |
| | | | | G, Q, S | 26.75 | 8.81 | 0.32 | 0.23 | 7.63 | $V_y$ | 28.0 | Cumple |
| | | | | G, Q, S | 26.22 | 4.93 | 2.37 | 1.54 | 5.20 | $PM_xM_yV_xV_yT$ | 642.1 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 34.95 | 2.10 | 0.16 | -0.20 | -2.85 | Q S. | 15.7 | Cumple |
| | | | | G, Q | 41.15 | 0.82 | 0.09 | -0.17 | -1.17 | N,M | 16.5 | Cumple |
| | | | Pie | G, Q, S | 35.62 | -1.04 | -0.05 | -0.20 | -2.85 | Q S. | 15.6 | Cumple |
| | | | | G, Q | 41.82 | -0.48 | -0.10 | -0.17 | -1.17 | N,M | 16.8 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q | 41.82 | -0.48 | -0.10 | -0.17 | -1.17 | N,M | 16.8 | Cumple |
| D5 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 8.50 | -1.24 | 0.10 | -0.34 | 3.66 | Q S. | 23.3 | Cumple |
| | | | | G, Q, S | 7.68 | -0.84 | 0.73 | -2.71 | 1.47 | N,M S. | 6.3 | Cumple |
| | | | Pie | G, Q, S | 9.16 | 2.79 | 0.03 | 0.04 | 3.67 | Q S. | 36.5 | Cumple |
| | | | | G, Q, S | 9.17 | 2.78 | -0.28 | -0.34 | 3.66 | N,M S. | 12.4 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 9.17 | 2.78 | -0.28 | -0.34 | 3.66 | N,M S. | 12.4 | Cumple |
| E5 | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q | 0.95 | -0.31 | 0.00 | 0.01 | 2.26 | $PM_xM_yV_xV_yT$ | 10.8 | Cumple |
| | | | | G, Q, V | 0.81 | -0.64 | 0.00 | 0.01 | 2.05 | $M_x$ | 6.6 | Cumple |
| | | | | G, Q, V | 0.68 | -0.23 | 0.04 | 0.16 | 1.82 | $M_y$ | 1.6 | Cumple |
| | | | Pie | G, Q | 1.07 | 5.98 | 0.02 | 0.01 | 2.26 | $M_x$ | 62.2 | Cumple |
| | | | | G, Q, V | 0.80 | 4.84 | 0.49 | 0.16 | 1.82 | $PM_xM_yV_xV_yT$ | 84.8 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 28.83 | -9.44 | -0.04 | 0.03 | 5.51 | $P_c$ | 40.8 | Cumple |
| | | | | G, Q, S | 24.37 | -10.63 | 0.16 | -0.14 | 7.31 | $M_x$ | 108.6 | Cumple |
| | | | | G, Q, S | 23.00 | -6.71 | -2.35 | 1.96 | 3.56 | $M_y$ | 105.8 | Cumple |
| | | | | G, Q, S | 23.00 | -6.71 | -2.35 | 1.96 | 3.56 | $V_x$ | 5.2 | Cumple |
| | | | | G, Q, S | 24.36 | -10.63 | 0.06 | -0.06 | 7.31 | $V_y$ | 26.8 | Cumple |
| | | | | G, Q, S | 23.52 | -8.36 | -2.35 | 1.96 | 5.15 | $PM_xM_yV_xV_yT$ | 800.9 | Cumple |
| | | | Pie | G, Q | 28.95 | 4.99 | 0.03 | 0.03 | 5.51 | $P_c$ | 40.9 | Cumple |
| | | | | G, Q, S | 24.47 | 8.53 | -0.01 | 0.00 | 7.31 | $M_x$ | 87.1 | Cumple |
| | | | | G, Q, S | 23.11 | 2.61 | 2.79 | 1.96 | 3.56 | $M_y$ | 125.3 | Cumple |
| | | | | G, Q, S | 23.11 | 2.61 | 2.79 | 1.96 | 3.56 | $V_x$ | 5.2 | Cumple |
| | | | | G, Q, S | 24.48 | 8.53 | -0.09 | -0.06 | 7.31 | $V_y$ | 26.8 | Cumple |
| | | | | G, Q, S | 23.64 | 5.16 | 2.78 | 1.96 | 5.17 | $PM_xM_yV_xV_yT$ | 788.6 | Cumple |

# Esfuerzos y armados de pilares, pantallas y muros

Reforzamiento Bloque Administracion Sena

Fecha: 07/02/26

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 32.85 | 1.93 | 0.06 | -0.21 | -2.49 | Q S. | 13.9 | Cumple |
| | | | | G, Q | 38.44 | 0.58 | 0.06 | -0.14 | -0.83 | N,M | 15.4 | Cumple |
| | | | Pie | G, Q, S | 33.52 | -0.80 | -0.18 | -0.21 | -2.49 | Q S. | 13.8 | Cumple |
| | | | | G, Q | 39.11 | -0.33 | -0.09 | -0.14 | -0.83 | N,M | 15.7 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q | 39.11 | -0.33 | -0.09 | -0.14 | -0.83 | N,M | 15.7 | Cumple |
| J2 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 18.07 | -0.43 | 0.90 | -2.99 | 1.08 | Q S. | 19.0 | Cumple |
| | | | | G, Q | 21.29 | -0.38 | 0.33 | -0.70 | 0.77 | N,M | 8.5 | Cumple |
| | | | Pie | G, Q, S | 18.73 | 0.76 | -2.39 | -2.99 | 1.08 | Q S. | 18.9 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 18.73 | 0.76 | -2.39 | -2.99 | 1.08 | N,M S. | 13.5 | Cumple |
| I2 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 14.49 | -1.21 | -0.04 | 0.03 | 3.50 | Q S. | 21.4 | Cumple |
| | | | | G, Q, S | 14.49 | -1.21 | -0.04 | 0.04 | 3.50 | N,M S. | 7.1 | Cumple |
| | | | Pie | G, S | 13.89 | 2.60 | -0.01 | 0.02 | 3.44 | Q S. | 34.2 | Cumple |
| | | | | G, Q, S | 15.16 | 2.62 | -0.26 | -0.27 | 3.48 | N,M S. | 12.8 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 15.16 | 2.62 | -0.26 | -0.27 | 3.48 | N,M S. | 12.8 | Cumple |
| H2 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 16.94 | -0.86 | 0.18 | -0.71 | 2.79 | Q S. | 17.3 | Cumple |
| | | | | G, Q | 19.98 | -0.36 | 0.03 | -0.10 | 0.72 | N,M | 8.0 | Cumple |
| | | | Pie | G, Q, S | 17.61 | 2.21 | -0.60 | -0.71 | 2.79 | Q S. | 17.3 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 17.61 | 2.21 | -0.60 | -0.71 | 2.79 | N,M S. | 12.2 | Cumple |
| G2 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 14.51 | -1.23 | 0.22 | -0.79 | 3.55 | Q S. | 22.2 | Cumple |
| | | | Pie | G, S | 13.92 | 2.66 | -0.23 | -0.30 | 3.52 | Q S. | 35.1 | Cumple |
| | | | | G, Q, S | 15.18 | 2.67 | -0.65 | -0.79 | 3.55 | N,M S. | 13.9 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 15.18 | 2.67 | -0.65 | -0.79 | 3.55 | N,M S. | 13.9 | Cumple |
| F2 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 16.61 | -1.23 | -0.39 | 1.07 | 3.58 | Q S. | 22.5 | Cumple |
| | | | Pie | G, S | 11.83 | 2.47 | 0.71 | 0.92 | 3.19 | Q S. | 32.3 | Cumple |
| | | | | G, Q, S | 17.28 | 2.70 | 0.79 | 1.07 | 3.58 | N,M S. | 14.7 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 17.28 | 2.70 | 0.79 | 1.07 | 3.58 | N,M S. | 14.7 | Cumple |
| J4 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 18.07 | 0.41 | 0.93 | -3.06 | -1.11 | Q S. | 19.5 | Cumple |
| | | | | G, Q | 21.28 | 0.29 | 0.38 | -0.79 | -0.56 | N,M | 8.5 | Cumple |
| | | | Pie | G, Q, S | 18.73 | -0.81 | -2.44 | -3.06 | -1.11 | Q S. | 19.4 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 18.73 | -0.81 | -2.44 | -3.06 | -1.11 | N,M S. | 13.8 | Cumple |
| J3 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 16.14 | 0.12 | 0.82 | -2.86 | -0.53 | Q S. | 17.6 | Cumple |
| | | | | G, Q | 19.01 | -0.02 | 0.20 | -0.43 | 0.06 | N,M | 7.6 | Cumple |
| | | | Pie | G, S | 11.61 | -0.47 | -2.25 | -2.74 | -0.55 | Q S. | 27.5 | Cumple |
| | | | | G, Q, S | 16.80 | -0.46 | -2.32 | -2.86 | -0.53 | N,M S. | 12.3 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 16.80 | -0.46 | -2.32 | -2.86 | -0.53 | N,M S. | 12.3 | Cumple |
| I3 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, S | 12.30 | 0.95 | -0.01 | 0.01 | -2.97 | Q S. | 18.4 | Cumple |
| | | | | G, Q | 20.54 | 0.04 | -0.01 | -0.03 | -0.07 | N,M | 8.2 | Cumple |
| | | | Pie | G, S | 11.11 | 2.28 | -0.05 | -0.05 | 2.90 | Q S. | 28.9 | Cumple |
| | | | | G, Q, S | 18.49 | -2.28 | -0.51 | -0.57 | -2.93 | N,M S. | 12.4 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 18.49 | -2.28 | -0.51 | -0.57 | -2.93 | N,M S. | 12.4 | Cumple |
| H3 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, S | 10.53 | 0.14 | 0.63 | -2.47 | -0.60 | Q S. | 15.9 | Cumple |
| | | | | G, Q | 18.18 | -0.01 | 0.02 | -0.08 | 0.03 | N,M | 7.3 | Cumple |
| | | | Pie | G, S | 11.03 | -0.51 | -2.08 | -2.47 | -0.60 | Q S. | 24.8 | Cumple |
| | | | | G, Q, S | 16.01 | -0.51 | -2.10 | -2.49 | -0.59 | N,M S. | 11.4 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 16.01 | -0.51 | -2.10 | -2.49 | -0.59 | N,M S. | 11.4 | Cumple |
| G3 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, S | 11.40 | 0.95 | 0.20 | -0.76 | -2.98 | Q S. | 19.2 | Cumple |
| | | | | G, Q | 18.95 | 0.04 | 0.10 | -0.24 | -0.06 | N,M | 7.6 | Cumple |
| | | | Pie | G, S | 11.90 | -2.33 | -0.64 | -0.76 | -2.98 | Q S. | 30.1 | Cumple |
| | | | | G, Q, S | 17.10 | -2.33 | -0.68 | -0.82 | -3.00 | N,M S. | 12.9 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 17.10 | -2.33 | -0.68 | -0.82 | -3.00 | N,M S. | 12.9 | Cumple |
| F4 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 16.81 | 1.04 | -0.30 | 0.84 | -3.19 | Q S. | 19.9 | Cumple |
| | | | | G, Q | 20.11 | 0.52 | -0.22 | 0.39 | -1.01 | N,M | 8.1 | Cumple |
| | | | Pie | G, S | 12.00 | -2.31 | -0.23 | -0.18 | -2.93 | Q S. | 29.2 | Cumple |
| | | | | G, Q, S | 17.53 | -2.46 | 0.33 | 0.25 | -3.19 | N,M S. | 12.7 | Cumple |

# Esfuerzos y armados de pilares, pantallas y muros

Reforzamiento Bloque Administracion Sena

Fecha: 07/02/26

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| | Cimentación | 45x45 | Arranque | G, Q, S | 17.53 | -2.46 | 0.33 | 0.25 | -3.19 | N,M S. | 12.7 | Cumple |
| G4 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 15.19 | 1.11 | 0.21 | -0.78 | -3.27 | Q S. | 20.5 | Cumple |
| | | | | G, Q | 18.26 | 0.33 | 0.07 | -0.18 | -0.64 | N,M | 7.3 | Cumple |
| | | | Pie | G, S | 10.87 | -2.43 | -0.04 | -0.06 | -3.14 | Q S. | 31.3 | Cumple |
| | | | | G, Q, S | 15.86 | -2.49 | -0.64 | -0.78 | -3.27 | N,M S. | 13.3 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 15.86 | -2.49 | -0.64 | -0.78 | -3.27 | N,M S. | 13.3 | Cumple |
| H4 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 17.20 | 0.82 | 0.18 | -0.71 | -2.71 | Q S. | 16.8 | Cumple |
| | | | | G, Q | 20.29 | 0.29 | 0.04 | -0.12 | -0.56 | N,M | 8.1 | Cumple |
| | | | Pie | G, Q, S | 17.87 | -2.16 | -0.60 | -0.71 | -2.71 | Q S. | 16.8 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 17.87 | -2.16 | -0.60 | -0.71 | -2.71 | N,M S. | 12.0 | Cumple |
| I4 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 15.11 | 1.08 | -0.07 | 0.13 | -3.22 | Q S. | 19.6 | Cumple |
| | | | | G, Q | 18.15 | 0.30 | -0.07 | 0.10 | -0.57 | N,M | 7.3 | Cumple |
| | | | Pie | G, S | 10.81 | -2.37 | 0.06 | 0.10 | -3.07 | Q S. | 30.6 | Cumple |
| | | | | G, Q, S | 15.78 | -2.42 | -0.46 | -0.49 | -3.18 | N,M S. | 12.6 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 15.78 | -2.42 | -0.46 | -0.49 | -3.18 | N,M S. | 12.6 | Cumple |
| A3´´ | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q, V | 1.62 | -1.37 | -0.06 | -0.31 | 0.42 | $P_c$ | 2.4 | Cumple |
| | | | | G, Q, V | -0.80 | 1.94 | -0.06 | -0.31 | -1.86 | $PM_xM_yV_xV_yT$ | 24.3 | Cumple |
| | | | | G, Q, V | 0.35 | 0.36 | -0.09 | -0.49 | -0.78 | $M_y$ | 4.2 | Cumple |
| | | | Pie | G, Q, V | 1.74 | -0.22 | -0.93 | -0.31 | 0.42 | $P_c$ | 2.6 | Cumple |
| | | | | G, Q, V | -0.68 | -3.25 | -0.93 | -0.31 | -1.86 | $M_x$ | 33.8 | Cumple |
| | | | | G, Q, V | 0.47 | -1.80 | -1.47 | -0.49 | -0.78 | $PM_xM_yV_xV_yT$ | 148.0 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q, V | 19.10 | -0.21 | 1.70 | -1.03 | 0.91 | $P_c$ | 27.0 | Cumple |
| | | | | G, Q, S | 10.83 | 6.98 | 0.91 | -0.39 | -5.20 | $M_x$ | 71.3 | Cumple |
| | | | | G, Q, S | 16.78 | 0.74 | 4.35 | -3.17 | -0.04 | $M_y$ | 195.6 | Cumple |
| | | | | G, Q, S | 16.77 | 0.74 | 4.35 | -3.17 | -0.04 | $V_x$ | 8.4 | Cumple |
| | | | | G, Q, S | 10.83 | 6.98 | 0.91 | -0.39 | -5.20 | $V_y$ | 19.1 | Cumple |
| | | | | G, Q, S | 14.59 | 3.26 | 4.35 | -3.17 | -2.08 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | Pie | G, Q, V | 19.21 | 2.18 | -1.00 | -1.03 | 0.91 | $P_c$ | 27.2 | Cumple |
| | | | | G, Q, S | 10.94 | -6.64 | -0.11 | -0.39 | -5.20 | $M_x$ | 67.9 | Cumple |
| | | | | G, Q, S | 16.87 | -0.04 | -3.95 | -3.17 | -0.04 | $M_y$ | 177.8 | Cumple |
| | | | | G, Q, S | 16.88 | -0.02 | -3.95 | -3.17 | -0.04 | $V_x$ | 8.4 | Cumple |
| | | | | G, Q, S | 10.94 | -6.64 | -0.11 | -0.39 | -5.20 | $V_y$ | 19.1 | Cumple |
| | | | | G, Q, S | 14.72 | -2.18 | -3.95 | -3.17 | -2.08 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 15.29 | -1.24 | 0.70 | -1.42 | 2.84 | Q S. | 19.3 | Cumple |
| | | | | G, Q, S | 21.82 | -0.06 | 2.23 | -0.13 | 0.48 | N,M S. | 12.4 | Cumple |
| | | | Pie | G, S | 8.88 | 1.83 | -0.46 | -0.94 | 2.72 | Q S. | 27.7 | Cumple |
| | | | | G, Q, S | 27.58 | 1.62 | -0.93 | -2.03 | 2.13 | N,M S. | 12.8 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 27.58 | 1.62 | -0.93 | -2.03 | 2.13 | N,M S. | 12.8 | Cumple |
| A3´ | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q, V | 1.64 | 1.41 | -0.06 | -0.31 | -0.45 | $P_c$ | 2.4 | Cumple |
| | | | | G, Q, V | -0.77 | -1.91 | -0.05 | -0.31 | 1.83 | $PM_xM_yV_xV_yT$ | 24.0 | Cumple |
| | | | | G, Q, V | 0.50 | -0.16 | -0.09 | -0.49 | 0.63 | $M_y$ | 4.2 | Cumple |
| | | | Pie | G, Q, V | 1.76 | 0.15 | -0.93 | -0.31 | -0.45 | $P_c$ | 2.6 | Cumple |
| | | | | G, Q, V | -0.65 | 3.19 | -0.92 | -0.31 | 1.83 | $M_x$ | 33.2 | Cumple |
| | | | | G, Q, V | 0.62 | 1.57 | -1.46 | -0.49 | 0.63 | $M_y$ | 65.6 | Cumple |
| | | | | G, Q, V | 0.52 | 1.70 | -1.46 | -0.49 | 0.72 | $PM_xM_yV_xV_yT$ | 144.7 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q, V | 18.99 | 0.30 | 1.70 | -1.03 | -0.98 | $P_c$ | 26.9 | Cumple |
| | | | | G, Q, S | 10.79 | -6.89 | 1.48 | -0.85 | 5.14 | $M_x$ | 70.4 | Cumple |
| | | | | G, Q, S | 16.95 | -1.08 | 4.34 | -3.17 | 0.29 | $M_y$ | 195.2 | Cumple |
| | | | | G, Q, S | 16.95 | -1.08 | 4.34 | -3.17 | 0.29 | $V_x$ | 8.4 | Cumple |
| | | | | G, Q, S | 10.80 | -6.89 | 1.51 | -0.88 | 5.14 | $V_y$ | 18.9 | Cumple |
| | | | | G, Q, S | 14.67 | -3.60 | 4.34 | -3.16 | 2.40 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | Pie | G, Q, V | 19.11 | -2.26 | -1.00 | -1.03 | -0.98 | $P_c$ | 27.0 | Cumple |
| | | | | G, Q, S | 10.92 | 6.57 | -0.83 | -0.90 | 5.14 | $M_x$ | 67.1 | Cumple |
| | | | | G, Q, S | 17.06 | -0.32 | -3.95 | -3.17 | 0.29 | $M_y$ | 177.6 | Cumple |
| | | | | G, Q, S | 17.07 | -0.32 | -3.95 | -3.17 | 0.29 | $V_x$ | 8.4 | Cumple |

# Esfuerzos y armados de pilares, pantallas y muros

Reforzamiento Bloque Administracion Sena

Fecha: 07/02/26

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 10.91 | 6.57 | -0.80 | -0.88 | 5.14 | $V_y$ | 18.9 | Cumple |
| | | | | G, Q, S | 14.79 | 2.69 | -3.95 | -3.16 | 2.40 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | | G, Q, S | 19.08 | 0.14 | 0.16 | -3.19 | 0.18 | Q S. | 19.0 | Cumple |
| | | | Pie | G, Q, S | 21.36 | 0.17 | 2.20 | -0.16 | -0.33 | N,M S. | 12.0 | Cumple |
| | | | | G, S | 7.68 | -1.84 | -0.06 | -0.57 | -2.74 | Q S. | 27.5 | Cumple |
| | | | | G, Q, S | 27.79 | -1.70 | -0.91 | -1.99 | -2.17 | N,M S. | 13.0 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 27.79 | -1.70 | -0.91 | -1.99 | -2.17 | N,M S. | 13.0 | Cumple |
| B3´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 10.27 | -1.06 | 0.19 | -0.71 | 3.34 | Q S. | 21.4 | Cumple |
| | | | Pie | G, Q, S | 10.94 | 2.65 | -0.04 | -0.03 | 3.37 | Q S. | 33.6 | Cumple |
| | | | | G, Q, S | 10.94 | 2.62 | -0.59 | -0.71 | 3.34 | N,M S. | 13.0 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 10.94 | 2.62 | -0.59 | -0.71 | 3.34 | N,M S. | 13.0 | Cumple |
| C3´ | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q, V | 1.69 | 1.14 | 0.01 | 0.06 | 0.18 | $P_c$ | 2.5 | Cumple |
| | | | | G, Q, V | -0.49 | -1.85 | 0.01 | 0.06 | 2.30 | $PM_xM_yV_xV_yT$ | 20.1 | Cumple |
| | | | | G, Q, V | 0.62 | -0.32 | 0.06 | 0.26 | 1.22 | $M_y$ | 2.6 | Cumple |
| | | | Pie | G, Q, V | 1.81 | 1.65 | 0.18 | 0.06 | 0.18 | $P_c$ | 2.7 | Cumple |
| | | | | G, Q, V | -0.37 | 4.56 | 0.18 | 0.06 | 2.30 | $M_x$ | 47.5 | Cumple |
| | | | | G, Q, V | 0.74 | 3.07 | 0.78 | 0.26 | 1.22 | $M_y$ | 35.2 | Cumple |
| | | | | G, Q, V | 0.68 | 3.16 | 0.78 | 0.26 | 1.28 | $PM_xM_yV_xV_yT$ | 88.0 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 46.00 | -5.83 | -0.40 | 0.24 | 3.40 | $P_c$ | 65.0 | Cumple |
| | | | | G, Q, S | 33.59 | -9.36 | -0.49 | 0.33 | 6.58 | $M_x$ | 95.5 | Cumple |
| | | | | G, Q, S | 36.61 | -5.71 | -3.34 | 2.56 | 3.56 | $M_y$ | 149.9 | Cumple |
| | | | | G, Q, S | 36.62 | -5.71 | -3.34 | 2.56 | 3.56 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | | G, Q, S | 33.59 | -9.36 | -0.47 | 0.31 | 6.58 | $V_y$ | 24.2 | Cumple |
| | | | Pie | G, Q | 46.11 | 3.07 | 0.23 | 0.24 | 3.40 | $P_c$ | 65.2 | Cumple |
| | | | | G, Q, S | 33.70 | 7.89 | 0.33 | 0.30 | 6.58 | $M_x$ | 80.5 | Cumple |
| | | | | G, Q, S | 36.74 | 3.63 | 3.36 | 2.56 | 3.56 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | | G, Q, S | 36.73 | 3.63 | 3.36 | 2.56 | 3.56 | $V_x$ | 6.7 | Cumple |
| | | | | G, Q, S | 33.70 | 7.89 | 0.35 | 0.31 | 6.58 | $V_y$ | 24.2 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 41.36 | 1.40 | 0.35 | -0.78 | -2.90 | Q S. | 16.0 | Cumple |
| | | | | G, Q | 58.65 | 0.57 | 0.13 | -0.23 | -0.82 | N,M | 23.5 | Cumple |
| | | | Pie | G, Q, S | 42.03 | -1.79 | -0.51 | -0.78 | -2.90 | Q S. | 16.0 | Cumple |
| | | | | G, Q | 59.31 | -0.33 | -0.12 | -0.23 | -0.82 | N,M | 23.8 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q | 59.31 | -0.33 | -0.12 | -0.23 | -0.82 | N,M | 23.8 | Cumple |
| D3´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 10.37 | -1.01 | 0.25 | -0.86 | 3.18 | Q S. | 20.6 | Cumple |
| | | | Pie | G, Q, S | 11.00 | 2.53 | -0.11 | -0.15 | 3.23 | Q S. | 32.2 | Cumple |
| | | | | G, Q, S | 11.04 | 2.49 | -0.69 | -0.86 | 3.18 | N,M S. | 12.8 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 11.04 | 2.49 | -0.69 | -0.86 | 3.18 | N,M S. | 12.8 | Cumple |
| E3´ | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q, V | 1.55 | 0.97 | 0.00 | -0.02 | 0.22 | $P_c$ | 2.3 | Cumple |
| | | | | G, Q, V | -0.33 | -1.62 | 0.00 | -0.02 | 2.07 | $PM_xM_yV_xV_yT$ | 17.1 | Cumple |
| | | | | G, Q, V | 0.60 | -0.34 | -0.05 | -0.22 | 1.16 | $M_y$ | 2.1 | Cumple |
| | | | Pie | G, Q, V | 1.67 | 1.58 | -0.05 | -0.02 | 0.22 | $P_c$ | 2.5 | Cumple |
| | | | | G, Q, V | -0.21 | 4.13 | -0.05 | -0.02 | 2.07 | $M_x$ | 43.0 | Cumple |
| | | | | G, Q, V | 0.72 | 2.87 | -0.65 | -0.22 | 1.16 | $PM_xM_yV_xV_yT$ | 75.7 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 40.95 | -5.36 | 0.11 | -0.06 | 3.12 | $P_c$ | 57.9 | Cumple |
| | | | | G, Q, S | 29.44 | -9.02 | 0.13 | -0.09 | 6.39 | $M_x$ | 92.1 | Cumple |
| | | | | G, Q, S | 34.15 | -3.10 | 3.06 | -2.39 | 1.50 | $M_y$ | 137.5 | Cumple |
| | | | | G, Q, S | 34.24 | -3.10 | 3.06 | -2.39 | 1.50 | $V_x$ | 6.3 | Cumple |
| | | | | G, Q, S | 29.44 | -9.02 | 0.09 | -0.06 | 6.39 | $V_y$ | 23.4 | Cumple |
| | | | | G, Q, S | 32.29 | -5.42 | 3.06 | -2.38 | 3.41 | $PM_xM_yV_xV_yT$ | 992.0 | Cumple |
| | | | Pie | G, Q | 41.07 | 2.82 | -0.06 | -0.06 | 3.12 | $P_c$ | 58.1 | Cumple |
| | | | | G, Q, S | 29.55 | 7.71 | -0.02 | -0.03 | 6.39 | $M_x$ | 78.8 | Cumple |
| | | | | G, Q, S | 34.41 | 0.83 | -3.19 | -2.39 | 1.50 | $M_y$ | 143.5 | Cumple |
| | | | | G, Q, S | 34.35 | 0.83 | -3.19 | -2.39 | 1.50 | $V_x$ | 6.3 | Cumple |
| | | | | G, Q, S | 29.55 | 7.71 | -0.06 | -0.06 | 6.39 | $V_y$ | 23.4 | Cumple |
| | | | | G, Q, S | 32.40 | 3.60 | -3.19 | -2.38 | 3.47 | $PM_xM_yV_xV_yT$ | 936.4 | Cumple |

# Esfuerzos y armados de pilares, pantallas y muros

Reforzamiento Bloque Administracion Sena

Fecha: 07/02/26

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 41.82 | 0.65 | -0.44 | 2.81 | -0.90 | Q S. | 15.7 | Cumple |
| | | | | G, Q | 52.94 | 0.48 | -0.87 | 1.22 | -0.69 | N,M | 21.2 | Cumple |
| | | | Pie | G, Q, S | 42.49 | -0.34 | 1.44 | 2.81 | -0.90 | Q S. | 15.6 | Cumple |
| | | | | G, Q | 53.61 | -0.27 | 0.47 | 1.22 | -0.69 | N,M | 21.5 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q | 53.61 | -0.27 | 0.47 | 1.22 | -0.69 | N,M | 21.5 | Cumple |
| F3´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 4.25 | -0.86 | 0.00 | 0.32 | 2.84 | Q S. | 28.3 | Cumple |
| | | | | G, Q, S | 4.28 | -0.86 | -0.09 | -0.20 | 2.84 | N,M S. | 4.0 | Cumple |
| | | | Pie | G, Q, S | 4.92 | 2.27 | 0.35 | 0.32 | 2.84 | Q S. | 30.3 | Cumple |
| | | | | G, S | 2.92 | 2.22 | 0.34 | 0.30 | 2.76 | N,M S. | 12.8 | Cumple |
| | Cimentación | 45x45 | Arranque | G, S | 2.92 | 2.22 | 0.34 | 0.30 | 2.76 | N,M S. | 12.8 | Cumple |
| F3´´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 4.46 | 0.91 | 0.00 | 0.32 | -2.92 | Q S. | 29.2 | Cumple |
| | | | | G, Q, S | 4.49 | 0.90 | -0.09 | -0.20 | -2.91 | N,M S. | 4.2 | Cumple |
| | | | Pie | G, Q, S | 5.13 | -2.31 | 0.35 | 0.32 | -2.92 | Q S. | 31.1 | Cumple |
| | | | | G, S | 2.88 | -2.25 | 0.34 | 0.30 | -2.82 | N,M S. | 13.0 | Cumple |
| | Cimentación | 45x45 | Arranque | G, S | 2.88 | -2.25 | 0.34 | 0.30 | -2.82 | N,M S. | 13.0 | Cumple |
| F3 | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, S | 3.68 | -0.82 | -0.32 | 0.96 | 2.75 | Q S. | 28.1 | Cumple |
| | | | | G, Q, S | 5.58 | -0.82 | -0.40 | 1.10 | 2.77 | N,M S. | 5.0 | Cumple |
| | | | Pie | G, S | 4.18 | 2.21 | 0.74 | 0.96 | 2.75 | Q S. | 30.3 | Cumple |
| | Cimentación | 45x45 | Arranque | G, S | 4.18 | 2.21 | 0.74 | 0.96 | 2.75 | N,M S. | 12.9 | Cumple |
| E3´´ | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q, V | 1.51 | -0.91 | 0.00 | -0.02 | -0.27 | $P_c$ | 2.2 | Cumple |
| | | | | G, Q, V | -0.39 | 1.66 | 0.00 | -0.02 | -2.11 | $PM_xM_yV_xV_yT$ | 17.5 | Cumple |
| | | | | G, Q, V | 0.55 | 0.39 | -0.05 | -0.22 | -1.21 | $M_y$ | 2.1 | Cumple |
| | | | Pie | G, Q, V | 1.63 | -1.67 | -0.05 | -0.02 | -0.27 | $P_c$ | 2.4 | Cumple |
| | | | | G, Q, V | -0.27 | -4.21 | -0.05 | -0.02 | -2.11 | $M_x$ | 43.8 | Cumple |
| | | | | G, Q, V | 0.67 | -2.96 | -0.65 | -0.22 | -1.21 | $PM_xM_yV_xV_yT$ | 76.6 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 42.04 | 5.52 | 0.11 | -0.07 | -3.23 | $P_c$ | 59.4 | Cumple |
| | | | | G, Q, S | 30.27 | 9.15 | 0.37 | -0.27 | -6.48 | $M_x$ | 93.4 | Cumple |
| | | | | G, Q, S | 33.12 | 5.72 | 3.06 | -2.39 | -3.64 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | | G, Q, S | 33.12 | 5.48 | 3.06 | -2.39 | -3.44 | $V_x$ | 6.3 | Cumple |
| | | | | G, Q, S | 30.27 | 9.15 | 0.32 | -0.23 | -6.48 | $V_y$ | 23.8 | Cumple |
| | | | Pie | G, Q | 42.15 | -2.95 | -0.06 | -0.07 | -3.23 | $P_c$ | 59.6 | Cumple |
| | | | | G, Q, S | 30.39 | -7.82 | -0.24 | -0.19 | -6.48 | $M_x$ | 79.9 | Cumple |
| | | | | G, Q, S | 34.05 | -0.63 | -3.19 | -2.39 | -1.37 | $M_y$ | 143.6 | Cumple |
| | | | | G, Q, S | 33.24 | -3.54 | -3.19 | -2.39 | -3.44 | $PM_xM_yV_xV_yT$ | 940.9 | Cumple |
| | | | | G, Q, S | 30.39 | -7.82 | -0.29 | -0.23 | -6.48 | $V_y$ | 23.8 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 42.98 | -0.68 | -0.40 | 2.85 | 1.09 | Q S. | 16.2 | Cumple |
| | | | | G, Q | 54.34 | -0.48 | -0.91 | 1.27 | 0.71 | N,M | 21.8 | Cumple |
| | | | Pie | G, Q, S | 43.65 | 0.53 | 1.46 | 2.85 | 1.09 | Q S. | 16.1 | Cumple |
| | | | | G, Q | 55.00 | 0.29 | 0.49 | 1.27 | 0.71 | N,M | 22.1 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q | 55.00 | 0.29 | 0.49 | 1.27 | 0.71 | N,M | 22.1 | Cumple |
| D3´´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 10.66 | 1.02 | 0.25 | -0.85 | -3.19 | Q S. | 20.6 | Cumple |
| | | | Pie | G, Q, S | 11.28 | -2.54 | -0.08 | -0.11 | -3.26 | Q S. | 32.4 | Cumple |
| | | | | G, Q, S | 11.33 | -2.48 | -0.68 | -0.85 | -3.19 | N,M S. | 12.7 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 11.33 | -2.48 | -0.68 | -0.85 | -3.19 | N,M S. | 12.7 | Cumple |
| C3´´ | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q, V | 1.65 | -1.10 | 0.01 | 0.06 | -0.23 | $P_c$ | 2.5 | Cumple |
| | | | | G, Q, V | -0.54 | 1.88 | 0.01 | 0.06 | -2.34 | $PM_xM_yV_xV_yT$ | 20.5 | Cumple |
| | | | | G, Q, V | 0.59 | 0.35 | 0.06 | 0.26 | -1.25 | $M_y$ | 2.6 | Cumple |
| | | | Pie | G, Q, V | 1.77 | -1.72 | 0.18 | 0.06 | -0.23 | $P_c$ | 2.6 | Cumple |
| | | | | G, Q, V | -0.42 | -4.63 | 0.17 | 0.06 | -2.34 | $M_x$ | 48.2 | Cumple |
| | | | | G, Q, V | 0.71 | -3.13 | 0.78 | 0.26 | -1.25 | $M_y$ | 35.2 | Cumple |
| | | | | G, Q, V | 0.65 | -3.22 | 0.78 | 0.26 | -1.31 | $PM_xM_yV_xV_yT$ | 88.5 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 46.91 | 5.97 | -0.40 | 0.24 | -3.49 | $P_c$ | 66.3 | Cumple |
| | | | | G, Q, S | 34.33 | 9.46 | -0.32 | 0.19 | -6.66 | $M_x$ | 96.6 | Cumple |
| | | | | G, Q, S | 37.43 | 6.10 | -3.33 | 2.55 | -3.86 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | | G, Q, S | 37.45 | 6.08 | -3.33 | 2.55 | -3.85 | $V_x$ | 6.7 | Cumple |

# Esfuerzos y armados de pilares, pantallas y muros

Reforzamiento Bloque Administracion Sena

Fecha: 07/02/26

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| | | | | G, Q, S | 34.33 | 9.46 | -0.29 | 0.17 | -6.66 | $V_y$ | 24.4 | Cumple |
| | | | Pie | G, Q | 47.03 | -3.19 | 0.23 | 0.24 | -3.49 | $P_c$ | 66.5 | Cumple |
| | | | | G, Q, S | 34.44 | -7.97 | 0.13 | 0.15 | -6.66 | $M_x$ | 81.4 | Cumple |
| | | | | G, Q, S | 37.57 | -3.98 | 3.36 | 2.55 | -3.83 | $M_y$ | 150.9 | Cumple |
| | | | | G, Q, S | 37.56 | -4.00 | 3.36 | 2.55 | -3.85 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | | G, Q, S | 34.44 | -7.97 | 0.15 | 0.17 | -6.66 | $V_y$ | 24.4 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 42.65 | -1.38 | 0.41 | -0.67 | 2.83 | Q S. | 15.4 | Cumple |
| | | | | G, Q | 59.83 | -0.53 | 0.13 | -0.23 | 0.77 | N,M | 24.0 | Cumple |
| | | | Pie | G, Q, S | 43.32 | 1.67 | -0.51 | -0.78 | 2.80 | Q S. | 15.4 | Cumple |
| | | | | G, Q | 60.50 | 0.32 | -0.12 | -0.23 | 0.77 | N,M | 24.3 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q | 60.50 | 0.32 | -0.12 | -0.23 | 0.77 | N,M | 24.3 | Cumple |
| B3´´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 10.62 | 1.09 | -0.01 | -0.02 | -3.42 | Q S. | 21.4 | Cumple |
| | | | | G, Q, S | 10.68 | 1.06 | -0.20 | 0.66 | -3.31 | N,M S. | 6.0 | Cumple |
| | | | Pie | G, Q, S | 11.29 | -2.67 | -0.04 | -0.03 | -3.42 | Q S. | 34.0 | Cumple |
| | | | | G, Q, S | 11.27 | -2.55 | -0.59 | -0.70 | -3.28 | N,M S. | 12.7 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 11.27 | -2.55 | -0.59 | -0.70 | -3.28 | N,M S. | 12.7 | Cumple |
| A4´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 8.54 | 0.21 | 1.60 | -4.41 | -0.70 | Q S. | 44.1 | Cumple |
| | | | | G, Q, S | 8.45 | 0.88 | 1.37 | -3.06 | -2.96 | N,M S. | 9.0 | Cumple |
| | | | Pie | G, Q, S | 9.21 | -0.50 | -3.25 | -4.41 | -0.63 | Q S. | 45.1 | Cumple |
| | | | | G, Q, S | 8.60 | 2.38 | -2.02 | -3.08 | 2.95 | N,M S. | 17.4 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 8.60 | 2.38 | -2.02 | -3.08 | 2.95 | N,M S. | 17.4 | Cumple |
| B4´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 16.57 | 0.83 | -0.41 | 1.10 | -2.88 | Q S. | 18.6 | Cumple |
| | | | | G, Q | 19.34 | 0.20 | -0.29 | 0.53 | -0.39 | N,M | 7.8 | Cumple |
| | | | Pie | G, S | 11.95 | -2.27 | 0.72 | 0.96 | -2.78 | Q S. | 28.3 | Cumple |
| | | | | G, Q, S | 17.23 | -2.34 | 0.80 | 1.10 | -2.88 | N,M S. | 13.2 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 17.23 | -2.34 | 0.80 | 1.10 | -2.88 | N,M S. | 13.2 | Cumple |
| C4´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, S | 10.08 | 0.91 | 0.14 | -0.53 | -3.00 | Q S. | 19.1 | Cumple |
| | | | | G, Q | 16.94 | 0.04 | 0.06 | -0.17 | -0.06 | N,M | 6.8 | Cumple |
| | | | Pie | G, S | 10.58 | -2.42 | -0.13 | -0.17 | -3.02 | Q S. | 30.1 | Cumple |
| | | | | G, Q, S | 15.22 | -2.40 | -0.47 | -0.57 | -3.02 | N,M S. | 12.5 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 15.22 | -2.40 | -0.47 | -0.57 | -3.02 | N,M S. | 12.5 | Cumple |
| D4´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 15.85 | 0.78 | 0.25 | -0.83 | -2.69 | Q S. | 17.1 | Cumple |
| | | | | G, Q | 18.50 | 0.17 | 0.10 | -0.24 | -0.34 | N,M | 7.4 | Cumple |
| | | | Pie | G, S | 11.41 | -2.19 | -0.14 | -0.19 | -2.67 | Q S. | 26.6 | Cumple |
| | | | | G, Q, S | 16.52 | -2.19 | -0.67 | -0.83 | -2.69 | N,M S. | 12.2 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 16.52 | -2.19 | -0.67 | -0.83 | -2.69 | N,M S. | 12.2 | Cumple |
| E4´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 13.72 | -0.88 | -0.63 | 1.52 | 2.89 | Q S. | 20.0 | Cumple |
| | | | | G, Q, S | 14.29 | 0.83 | -0.63 | 1.56 | -2.76 | N,M S. | 6.9 | Cumple |
| | | | Pie | G, S | 9.86 | 2.28 | 0.86 | 1.20 | 2.87 | Q S. | 29.6 | Cumple |
| | | | | G, Q, S | 14.39 | 2.29 | 1.04 | 1.52 | 2.89 | N,M S. | 13.5 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 14.39 | 2.29 | 1.04 | 1.52 | 2.89 | N,M S. | 13.5 | Cumple |
| A2´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 8.52 | -0.14 | 1.61 | -4.41 | 0.52 | Q S. | 44.1 | Cumple |
| | | | | G, Q, S | 8.41 | -0.92 | 1.37 | -3.06 | 3.08 | N,M S. | 9.2 | Cumple |
| | | | Pie | G, Q, S | 9.19 | 0.43 | -3.25 | -4.41 | 0.52 | Q S. | 45.1 | Cumple |
| | | | | G, Q, S | 9.08 | 2.47 | -1.99 | -3.06 | 3.08 | N,M S. | 17.6 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 9.08 | 2.47 | -1.99 | -3.06 | 3.08 | N,M S. | 17.6 | Cumple |
| B2´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 16.60 | -0.83 | -0.40 | 1.08 | 2.84 | Q S. | 18.3 | Cumple |
| | | | | G, Q | 19.39 | -0.21 | -0.28 | 0.51 | 0.41 | N,M | 7.8 | Cumple |
| | | | Pie | G, S | 11.88 | 2.34 | 0.09 | 0.21 | 2.86 | Q S. | 28.5 | Cumple |
| | | | | G, Q, S | 17.27 | 2.29 | 0.79 | 1.08 | 2.84 | N,M S. | 13.1 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 17.27 | 2.29 | 0.79 | 1.08 | 2.84 | N,M S. | 13.1 | Cumple |
| C2´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, S | 10.10 | -0.92 | 0.13 | -0.49 | 3.04 | Q S. | 19.3 | Cumple |
| | | | | G, Q | 16.99 | -0.04 | 0.05 | -0.14 | 0.09 | N,M | 6.8 | Cumple |
| | | | Pie | G, S | 10.60 | 2.44 | -0.12 | -0.15 | 3.06 | Q S. | 30.5 | Cumple |

# Esfuerzos y armados de pilares, pantallas y muros

Reforzamiento Bloque Administracion Sena

Fecha: 07/02/26

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| | | | | G, Q, S | 15.26 | 2.44 | -0.44 | -0.53 | 3.06 | N,M S. | 12.6 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 15.26 | 2.44 | -0.44 | -0.53 | 3.06 | N,M S. | 12.6 | Cumple |
| D2´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 15.97 | -0.80 | 0.27 | -0.88 | 2.77 | Q S. | 17.6 | Cumple |
| | | | | G, Q | 18.64 | -0.18 | 0.13 | -0.29 | 0.37 | N,M | 7.5 | Cumple |
| | | | Pie | G, S | 11.55 | 2.19 | -0.64 | -0.80 | 2.68 | Q S. | 27.1 | Cumple |
| | | | | G, Q, S | 16.54 | 0.82 | -2.17 | -2.62 | 1.06 | N,M S. | 12.6 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 16.54 | 0.82 | -2.17 | -2.62 | 1.06 | N,M S. | 12.6 | Cumple |
| E2´ | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 13.30 | 0.89 | -0.79 | 1.83 | -2.88 | Q S. | 21.0 | Cumple |
| | | | Pie | G, S | 9.58 | -2.28 | 0.99 | 1.41 | -2.87 | Q S. | 29.9 | Cumple |
| | | | | G, Q, S | 14.53 | 2.24 | 1.27 | 1.87 | 2.81 | N,M S. | 14.1 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 14.53 | 2.24 | 1.27 | 1.87 | 2.81 | N,M S. | 14.1 | Cumple |
| CN1 | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q, V | 1.51 | -0.92 | 0.00 | 0.01 | -0.25 | $P_c$ | 2.2 | Cumple |
| | | | | G, Q, V | -0.40 | 1.68 | 0.00 | 0.02 | -2.11 | $PM_xM_yV_xV_yT$ | 17.7 | Cumple |
| | | | | G, Q, V | 0.54 | 0.40 | 0.05 | 0.22 | -1.20 | $M_y$ | 2.1 | Cumple |
| | | | Pie | G, Q, V | 1.63 | -1.63 | 0.04 | 0.01 | -0.25 | $P_c$ | 2.4 | Cumple |
| | | | | G, Q, V | -0.28 | -4.19 | 0.05 | 0.02 | -2.11 | $M_x$ | 43.6 | Cumple |
| | | | | G, Q, V | 0.66 | -2.93 | 0.65 | 0.22 | -1.20 | $PM_xM_yV_xV_yT$ | 76.1 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 41.84 | 5.48 | -0.10 | 0.06 | -3.23 | $P_c$ | 59.2 | Cumple |
| | | | | G, Q, S | 30.05 | 9.20 | -0.42 | 0.31 | -6.54 | $M_x$ | 94.0 | Cumple |
| | | | | G, Q, S | 32.95 | 5.74 | -3.06 | 2.39 | -3.68 | $M_y$ | 137.6 | Cumple |
| | | | | G, Q, S | 32.95 | 5.74 | -3.06 | 2.39 | -3.68 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | | G, Q, S | 30.05 | 9.20 | -0.36 | 0.27 | -6.54 | $V_y$ | 24.0 | Cumple |
| | | | Pie | G, Q | 41.96 | -2.97 | 0.06 | 0.06 | -3.23 | $P_c$ | 59.3 | Cumple |
| | | | | G, Q, S | 30.16 | -7.94 | 0.29 | 0.23 | -6.54 | $M_x$ | 81.1 | Cumple |
| | | | | G, Q, S | 33.07 | -3.91 | 3.20 | 2.39 | -3.68 | $PM_xM_yV_xV_yT$ | 963.7 | Cumple |
| | | | | G, Q, S | 33.07 | -3.91 | 3.20 | 2.39 | -3.68 | $V_x$ | 6.3 | Cumple |
| | | | | G, Q, S | 30.16 | -7.94 | 0.35 | 0.27 | -6.54 | $V_y$ | 24.0 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 29.10 | 1.23 | 0.14 | -0.36 | -2.70 | Q S. | 15.4 | Cumple |
| | | | | G, Q, S | 42.83 | 0.24 | 0.28 | -0.34 | 0.71 | N,M S. | 17.2 | Cumple |
| | | | Pie | G, Q, S | 29.77 | -1.74 | -0.22 | -0.36 | -2.70 | Q S. | 15.4 | Cumple |
| | | | | G, Q, S | 43.50 | 1.02 | -0.09 | -0.34 | 0.71 | N,M S. | 17.5 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 43.50 | 1.02 | -0.09 | -0.34 | 0.71 | N,M S. | 17.5 | Cumple |
| NC2 | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q, V | 1.56 | 0.99 | 0.00 | 0.01 | 0.19 | $P_c$ | 2.3 | Cumple |
| | | | | G, Q, V | -0.33 | -1.62 | 0.00 | 0.02 | 2.05 | $PM_xM_yV_xV_yT$ | 17.1 | Cumple |
| | | | | G, Q, V | 0.61 | -0.33 | 0.05 | 0.22 | 1.13 | $M_y$ | 2.1 | Cumple |
| | | | Pie | G, Q, V | 1.68 | 1.51 | 0.04 | 0.01 | 0.19 | $P_c$ | 2.5 | Cumple |
| | | | | G, Q, V | -0.21 | 4.08 | 0.05 | 0.02 | 2.05 | $M_x$ | 42.5 | Cumple |
| | | | | G, Q, V | 0.73 | 2.81 | 0.65 | 0.22 | 1.13 | $PM_xM_yV_xV_yT$ | 74.9 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 40.42 | -5.25 | -0.10 | 0.06 | 3.07 | $P_c$ | 57.1 | Cumple |
| | | | | G, Q, S | 28.95 | -9.02 | 0.01 | -0.02 | 6.41 | $M_x$ | 92.1 | Cumple |
| | | | | G, Q, S | 31.52 | -5.58 | -3.06 | 2.39 | 3.57 | $PM_xM_yV_xV_yT$ | 997.0 | Cumple |
| | | | | G, Q, S | 31.52 | -5.57 | -3.06 | 2.39 | 3.56 | $V_x$ | 6.3 | Cumple |
| | | | | G, Q, S | 28.95 | -9.02 | 0.02 | -0.03 | 6.41 | $V_y$ | 23.5 | Cumple |
| | | | Pie | G, Q | 40.53 | 2.78 | 0.06 | 0.06 | 3.07 | $P_c$ | 57.3 | Cumple |
| | | | | G, Q, S | 29.06 | 7.79 | -0.07 | -0.04 | 6.41 | $M_x$ | 79.6 | Cumple |
| | | | | G, Q, S | 31.63 | 3.75 | 3.19 | 2.39 | 3.55 | $M_y$ | 143.6 | Cumple |
| | | | | G, Q, S | 31.63 | 3.77 | 3.19 | 2.39 | 3.56 | $PM_xM_yV_xV_yT$ | 941.7 | Cumple |
| | | | | G, Q, S | 29.06 | 7.79 | -0.06 | -0.03 | 6.41 | $V_y$ | 23.5 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, S | 18.91 | -0.93 | 0.23 | -0.44 | 2.26 | Q S. | 13.7 | Cumple |
| | | | | G, Q, S | 41.65 | -0.15 | 0.29 | -0.33 | -0.81 | N,M S. | 16.7 | Cumple |
| | | | Pie | G, S | 19.41 | 1.56 | -0.23 | -0.44 | 2.26 | Q S. | 13.7 | Cumple |
| | | | | G, Q, S | 42.32 | -1.04 | -0.06 | -0.33 | -0.81 | N,M S. | 17.0 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 42.32 | -1.04 | -0.06 | -0.33 | -0.81 | N,M S. | 17.0 | Cumple |
| CN4 | Cubierta (4.6 - 7.6 m) | IPE 270 | Cabeza | G, Q, V | 1.72 | 1.19 | -0.02 | -0.06 | 0.13 | $P_c$ | 2.6 | Cumple |
| | | | | G, Q, V | -0.49 | -1.86 | -0.01 | -0.06 | 2.29 | $PM_xM_yV_xV_yT$ | 20.0 | Cumple |

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| | | | | G, Q, V | 0.64 | -0.29 | -0.06 | -0.26 | 1.19 | $M_y$ | 2.7 | Cumple |
| | | | Pie | G, Q, V | 1.84 | 1.55 | -0.18 | -0.06 | 0.13 | $P_c$ | 2.7 | Cumple |
| | | | | G, Q, V | -0.37 | 4.52 | -0.18 | -0.06 | 2.29 | $M_x$ | 47.0 | Cumple |
| | | | | G, Q, V | 0.76 | 3.00 | -0.79 | -0.26 | 1.19 | $M_y$ | 35.4 | Cumple |
| | | | | G, Q, V | 0.69 | 3.09 | -0.79 | -0.26 | 1.25 | $PM_xM_yV_xV_yT$ | 87.6 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 45.55 | -5.71 | 0.41 | -0.25 | 3.33 | $P_c$ | 64.4 | Cumple |
| | | | | G, Q, S | 33.02 | -9.52 | 0.49 | -0.32 | 6.75 | $M_x$ | 97.2 | Cumple |
| | | | | G, Q, S | 37.97 | -2.84 | 3.34 | -2.55 | 1.22 | $M_y$ | 149.9 | Cumple |
| | | | | G, Q, S | 38.05 | -2.84 | 3.34 | -2.55 | 1.22 | $V_x$ | 6.7 | Cumple |
| | | | | G, Q, S | 33.02 | -9.52 | 0.48 | -0.32 | 6.75 | $V_y$ | 24.8 | Cumple |
| | | | | G, Q, S | 36.19 | -5.70 | 3.34 | -2.55 | 3.59 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | Pie | G, Q | 45.66 | 3.02 | -0.24 | -0.25 | 3.33 | $P_c$ | 64.6 | Cumple |
| | | | | G, Q, S | 33.14 | 8.16 | -0.34 | -0.31 | 6.75 | $M_x$ | 83.3 | Cumple |
| | | | | G, Q, S | 38.22 | 0.35 | -3.35 | -2.55 | 1.22 | $M_y$ | 150.8 | Cumple |
| | | | | G, Q, S | 38.16 | 0.35 | -3.35 | -2.55 | 1.22 | $V_x$ | 6.7 | Cumple |
| | | | | G, Q, S | 33.14 | 8.16 | -0.35 | -0.32 | 6.75 | $V_y$ | 24.8 | Cumple |
| | | | | G, Q, S | 36.30 | 3.69 | -3.35 | -2.55 | 3.59 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, S | 23.52 | -0.09 | -1.79 | 2.14 | 0.40 | Q S. | 12.7 | Cumple |
| | | | | G, Q | 46.19 | -0.24 | -0.14 | 0.16 | 0.36 | N,M | 18.5 | Cumple |
| | | | Pie | G, S | 24.02 | 0.41 | 0.57 | 2.14 | 0.40 | Q S. | 12.6 | Cumple |
| | | | | G, Q | 46.86 | 0.16 | 0.04 | 0.16 | 0.36 | N,M | 18.8 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q | 46.86 | 0.16 | 0.04 | 0.16 | 0.36 | N,M | 18.8 | Cumple |
| CN3 | | | Cabeza | G, Q, V | 1.65 | -1.11 | -0.02 | -0.06 | -0.21 | $P_c$ | 2.5 | Cumple |
| | | | | G, Q, V | -0.57 | 1.92 | -0.01 | -0.06 | -2.36 | $PM_xM_yV_xV_yT$ | 20.5 | Cumple |
| | | | | G, Q, V | 0.58 | 0.35 | -0.06 | -0.26 | -1.25 | $M_y$ | 2.6 | Cumple |
| | Cubierta (4.6 - 7.6 m) | IPE 270 | Pie | G, Q, V | 1.77 | -1.70 | -0.18 | -0.06 | -0.21 | $P_c$ | 2.6 | Cumple |
| | | | | G, Q, V | -0.45 | -4.65 | -0.18 | -0.06 | -2.36 | $M_x$ | 48.4 | Cumple |
| | | | | G, Q, V | 0.70 | -3.13 | -0.79 | -0.26 | -1.25 | $M_y$ | 35.5 | Cumple |
| | | | | G, Q, V | 0.64 | -3.22 | -0.79 | -0.26 | -1.31 | $PM_xM_yV_xV_yT$ | 89.0 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q | 47.21 | 6.00 | 0.42 | -0.25 | -3.53 | $P_c$ | 66.7 | Cumple |
| | | | | G, Q, S | 34.32 | 9.74 | 0.32 | -0.19 | -6.90 | $M_x$ | 99.5 | Cumple |
| | | | | G, Q, S | 37.62 | 5.72 | 3.34 | -2.56 | -3.56 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | | G, Q, S | 38.37 | 3.81 | 3.34 | -2.56 | -1.99 | $V_x$ | 6.7 | Cumple |
| | | | | G, Q, S | 34.32 | 9.74 | 0.29 | -0.17 | -6.90 | $V_y$ | 25.3 | Cumple |
| | | | Pie | G, Q | 47.32 | -3.25 | -0.24 | -0.25 | -3.53 | $P_c$ | 66.9 | Cumple |
| | | | | G, Q, S | 34.43 | -8.34 | -0.12 | -0.15 | -6.90 | $M_x$ | 85.2 | Cumple |
| | | | | G, Q, S | 39.04 | -1.40 | -3.36 | -2.56 | -1.99 | $M_y$ | 151.0 | Cumple |
| | | | | G, Q, S | 38.49 | -1.40 | -3.36 | -2.56 | -1.99 | $V_x$ | 6.7 | Cumple |
| | | | | G, Q, S | 34.43 | -8.34 | -0.15 | -0.17 | -6.90 | $V_y$ | 25.3 | Cumple |
| | | | | G, Q, S | 37.73 | -2.97 | -3.36 | -2.56 | -3.11 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Cabeza | G, Q, S | 32.44 | 1.11 | -0.37 | 0.39 | -2.51 | Q S. | 14.1 | Cumple |
| | | | | G, Q, S | 46.69 | 0.33 | -0.31 | 0.36 | 0.58 | N,M S. | 18.7 | Cumple |
| | | | Pie | G, Q, S | 33.11 | -1.65 | 0.06 | 0.39 | -2.51 | Q S. | 14.0 | Cumple |
| | | | | G, Q, S | 47.36 | 0.96 | 0.08 | 0.36 | 0.58 | N,M S. | 19.0 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 47.36 | 0.96 | 0.08 | 0.36 | 0.58 | N,M S. | 19.0 | Cumple |
| CN5 | | | Cabeza | G, Q, V | 1.59 | -1.36 | 0.05 | 0.32 | 0.36 | $P_c$ | 2.4 | Cumple |
| | | | | G, Q, V | -0.83 | 1.97 | 0.06 | 0.31 | -1.88 | $PM_xM_yV_xV_yT$ | 25.2 | Cumple |
| | | | | G, Q, V | 0.31 | 0.39 | 0.09 | 0.50 | -0.81 | $M_y$ | 4.3 | Cumple |
| | Cubierta (4.6 - 7.6 m) | IPE 270 | | G, Q, V | 0.41 | 0.26 | 0.09 | 0.50 | -0.72 | $V_x$ | 1.3 | Cumple |
| | | | Pie | G, Q, V | 1.71 | -0.35 | 0.94 | 0.32 | 0.36 | $P_c$ | 2.5 | Cumple |
| | | | | G, Q, V | -0.71 | -3.24 | 0.93 | 0.31 | -1.88 | $M_x$ | 33.8 | Cumple |
| | | | | G, Q, V | 0.53 | -1.75 | 1.47 | 0.50 | -0.72 | $M_y$ | 66.2 | Cumple |
| | | | | G, Q, V | 0.43 | -1.87 | 1.47 | 0.50 | -0.81 | $PM_xM_yV_xV_yT$ | 150.9 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | Cabeza | G, Q, S | 19.01 | -1.82 | -2.38 | 1.58 | 2.25 | $P_c$ | 26.9 | Cumple |
| | | | | G, Q, S | 10.90 | 7.31 | -0.92 | 0.40 | -5.52 | $M_x$ | 74.7 | Cumple |

Resumen de las comprobaciones

| Pilares | Tramo | Dimensión (cm) | Posición | Esfuerzos pésimos | | | | | | Pésima | Aprov. (%) | Estado |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Naturaleza | N (t) | Mxx (t·m) | Myy (t·m) | Qx (t) | Qy (t) | | | |
| | | | | G, Q, S | 16.81 | 0.81 | -4.36 | 3.17 | -0.02 | $M_y$ | 195.9 | Cumple |
| | | | | G, Q, S | 16.81 | 0.81 | -4.36 | 3.17 | -0.02 | $V_x$ | 8.4 | Cumple |
| | | | | G, Q, S | 10.90 | 7.31 | -0.92 | 0.40 | -5.52 | $V_y$ | 20.2 | Cumple |
| | | | | G, Q, S | 14.54 | 3.47 | -4.35 | 3.17 | -2.25 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | | G, Q, S | 19.12 | 4.08 | 1.74 | 1.58 | 2.25 | $P_c$ | 27.0 | Cumple |
| | | | | G, Q, S | 11.02 | -7.14 | 0.12 | 0.40 | -5.52 | $M_x$ | 72.9 | Cumple |
| | | | | G, Q, S | 16.91 | 0.06 | 3.96 | 3.17 | -0.02 | $M_y$ | 177.8 | Cumple |
| | | | Pie | G, Q, S | 16.92 | 0.07 | 3.96 | 3.17 | -0.02 | $V_x$ | 8.4 | Cumple |
| | | | | G, Q, S | 11.02 | -7.14 | 0.12 | 0.40 | -5.52 | $V_y$ | 20.2 | Cumple |
| | | | | G, Q, S | 14.66 | -2.41 | 3.95 | 3.17 | -2.25 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | Cabeza | G, S | 9.02 | 0.09 | 1.80 | -2.18 | -0.44 | Q S. | 21.9 | Cumple |
| | | | | G, Q, S | 19.28 | 0.01 | 2.01 | -2.06 | 0.30 | N,M S. | 10.7 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Pie | G, S | 5.36 | -1.29 | -0.10 | -0.04 | -1.76 | Q S. | 17.6 | Cumple |
| | | | | G, Q, S | 25.54 | 1.15 | -0.13 | -0.54 | 1.04 | N,M S. | 10.3 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 25.54 | 1.15 | -0.13 | -0.54 | 1.04 | N,M S. | 10.3 | Cumple |
| CN6 | | | | G, Q, V | 1.67 | 1.45 | 0.04 | 0.30 | -0.47 | $P_c$ | 2.5 | Cumple |
| | | | | G, Q, V | -0.73 | -1.89 | 0.05 | 0.29 | 1.74 | $PM_xM_yV_xV_yT$ | 23.6 | Cumple |
| | | | Cabeza | G, Q, V | 0.44 | -0.28 | 0.09 | 0.46 | 0.66 | $M_y$ | 3.9 | Cumple |
| | | | | G, Q, V | 0.54 | -0.14 | 0.09 | 0.46 | 0.57 | $V_x$ | 1.2 | Cumple |
| | Cubierta (4.6 - 7.6 m) | IPE 270 | | G, Q, V | 1.79 | 0.15 | 0.88 | 0.30 | -0.47 | $P_c$ | 2.7 | Cumple |
| | | | | G, Q, V | -0.61 | 2.96 | 0.85 | 0.29 | 1.74 | $M_x$ | 30.8 | Cumple |
| | | | Pie | G, Q, V | 0.66 | 1.46 | 1.36 | 0.46 | 0.57 | $M_y$ | 61.3 | Cumple |
| | | | | G, Q, V | 0.56 | 1.57 | 1.36 | 0.46 | 0.66 | $PM_xM_yV_xV_yT$ | 126.2 | Cumple |
| | | | | G, Q, S | 18.39 | 1.86 | -2.26 | 1.51 | -2.23 | $P_c$ | 26.0 | Cumple |
| | | | | G, Q, S | 10.18 | -6.84 | -1.31 | 0.74 | 5.22 | $M_x$ | 69.9 | Cumple |
| | | | Cabeza | G, Q, S | 16.36 | -0.83 | -4.05 | 2.99 | 0.10 | $M_y$ | 182.1 | Cumple |
| | | | | G, Q, S | 16.36 | -0.83 | -4.05 | 2.99 | 0.10 | $V_x$ | 7.9 | Cumple |
| | | | | G, Q, S | 10.20 | -6.84 | -1.36 | 0.78 | 5.22 | $V_y$ | 19.1 | Cumple |
| | Piso 2 (1.6 - 4.6 m) | IPE 270 | | G, Q, S | 14.06 | -3.44 | -4.03 | 2.98 | 2.34 | $PM_xM_yV_xV_yT$ | > 1000.0 | Cumple |
| | | | | G, Q, S | 18.51 | -3.99 | 1.70 | 1.51 | -2.23 | $P_c$ | 26.2 | Cumple |
| | | | | G, Q, S | 10.32 | 6.83 | 0.73 | 0.81 | 5.22 | $M_x$ | 69.7 | Cumple |
| | | | Pie | G, Q, S | 16.47 | -0.29 | 3.77 | 2.99 | 0.10 | $M_y$ | 169.7 | Cumple |
| | | | | G, Q, S | 16.47 | -0.29 | 3.77 | 2.99 | 0.10 | $V_x$ | 7.9 | Cumple |
| | | | | G, Q, S | 10.31 | 6.83 | 0.69 | 0.78 | 5.22 | $V_y$ | 19.1 | Cumple |
| | | | | G, Q, S | 14.18 | 2.68 | 3.76 | 2.98 | 2.34 | $PM_xM_yV_xV_yT$ | 967.9 | Cumple |
| | | | Cabeza | G, S | 6.84 | 0.17 | -1.58 | 1.83 | -0.46 | Q S. | 18.5 | Cumple |
| | | | | G, Q, S | 18.93 | -0.09 | 1.87 | -1.86 | -0.16 | N,M S. | 10.5 | Cumple |
| | Palafito (0 - 1.6 m) | 45x45 | Pie | G, S | 3.10 | 1.30 | -0.02 | 0.02 | 1.54 | Q S. | 16.3 | Cumple |
| | | | | G, Q, S | 24.30 | -1.03 | -0.09 | -0.51 | -0.82 | N,M S. | 9.8 | Cumple |
| | Cimentación | 45x45 | Arranque | G, Q, S | 24.30 | -1.03 | -0.09 | -0.51 | -0.82 | N,M S. | 9.8 | Cumple |

*Notas:*

*$PM_xM_yV_xV_yT$: Esfuerzos combinados y torsión*
*$M_y$: Resistencia a flexión eje Y*
*$V_y$: Resistencia a corte Y*
*$P_c$: Resistencia a compresión*
*$M_x$: Resistencia a flexión eje X*
*$V_x$: Resistencia a corte X*
*Q S.: Estado límite de agotamiento frente a cortante (combinaciones sísmicas)*
*N,M S.: Estado límite de agotamiento frente a solicitaciones normales (combinaciones sísmicas)*
*N,M: Estado límite de agotamiento frente a solicitaciones normales (combinaciones no sísmicas)*