NOMBRE DEL ALUMNO: BELVERI ELIAS ESCALANTE PEREZ

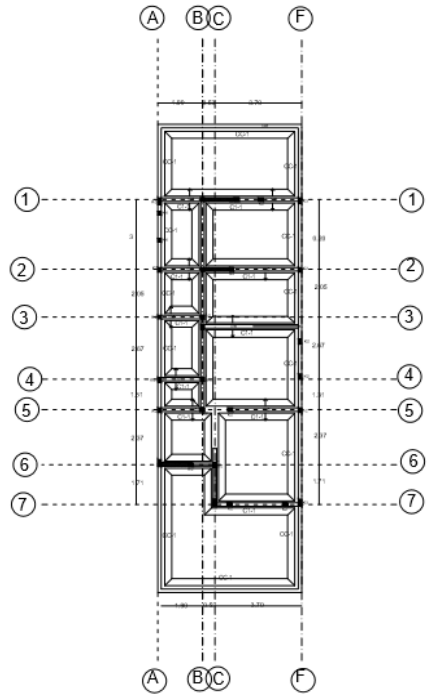
NOMBRE DEL PROFESOR: ARQ. PEDRO ALBERTO GARCIA LOPEZ

NOMBRE DE LA MATERIA: ANALISIS ESTRUCTURAL

NOMBRE DEL TRABAJO: EVALUACION

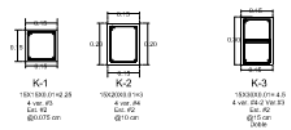
LICENCIATURA EN ARQUITECTURA

13/04/2021

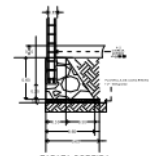


PLANTA DE CIMENTACION

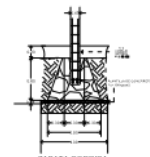
REPRESENTACION DE CASTILLOS



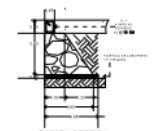
REPRESENTACION DE ANCLAJE DE CASTILLOS



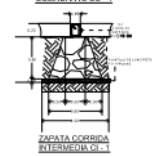
ZAPATA CORRIDA
COLINDANTE CC - 1
ANCLAJE DE CASTILLOS



ZAPATA CORRIDA
INTERMEDIA CI - 1
ANCLAJE DE CASTILLOS



ZAPATA CORRIDA
COLINDANTE CC - 1



ZAPATA CORRIDA
INTERMEDIA CI - 1

Calculo de Cimentacion

C) c 1

LA = 3.786 m² (0.658 t/m²) = 2.491 t/m²
LC = 3.786 m² (0.628 t/m²) = 2.377 t/m² > 4.868 t/m² / 4.23 m = 1.508 t/m

AM = 2.60 (0.27 t/m) = 0.702
BM = 2.60 (0.27 t/m) = 0.702 > 1.404 t/m

CA = 0.15 (0.25) 2.4 = 0.09 t/m
CE = 0.15 (0.25) 2.4 = 0.09 t/m > 0.18 t/m

Long. 4.23

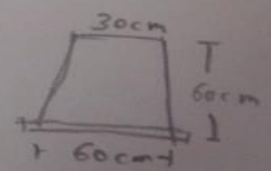
Σ = 1.1508 t/m + 1.404 t/m + 0.18 t/m = 2.692 t/m

2.692 t/m × 1.3 = 3.4996 t/m / 8 t/m² = 0.499 m / 1m = 0.499 = 50 cm

B = 60 cm

T = 0.60 m − 0.30 m / 2 = 0.15

A = tan 60° × 15 cm = 25.98 = 30 = 60 cm



Eje A

Calculo de Cimentacion

LA = 1.6930 m² (0.658 t/m²) = 1.1139 t/m²

LB = 1.6930 m² (0.628 t/m²) = 1.0632 t/m²

2.1771 t/m² / 3 m = 0.725 t/m

MPA = 2.60 (0.27 t/m) = 0.702

MPB = 2.60 (0.27 t/m) = 0.702

1.404 t/m

CPA = 0.15 (0.25) 2.4 = 0.09

CPB = 0.15 (0.25) 2.4 = 0.09

0.18 t/m

Long. 3m

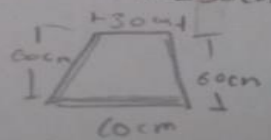
E = 0.725 t/m + 1.404 t/m + 0.18 t/m = 2.299 × 1.3 = 2.988 t/m = 8 t/m

B = 60cm

T = (0.60 m − 0.30 m) / 2 = 0.15

0.3735 / 1m = 0.37 = 0.4

H = tan 60° × 15cm = 25.98 = 30cm = 60cm



Eje 7 Calculo de Cimentacion

LA = 3.0314 (0.608 t/m²) = 1.994 t/m² → 3.897 t/m² / 3.70 m = 1.053 t/m
LC = 3.0314 (0.628 t/m²) = 1.903 t/m²

MPA = 2.60 (0.27 t/m) = 0.702 → 1.404 t/m
MPB = 2.60 (0.27 t/m) = 0.702

CPA = 0.15 (0.25) 2.4 = 0.09 t/m → 0.18 t/m
CPB = 0.15 (0.25) 2.4 = 0.09 t/m

Long: 3.70m

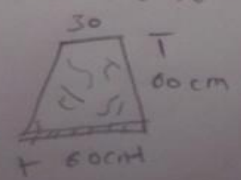
Σ = 1.053 t/m + 1.404 t/m + 0.18 t/m = 2.637 t/m

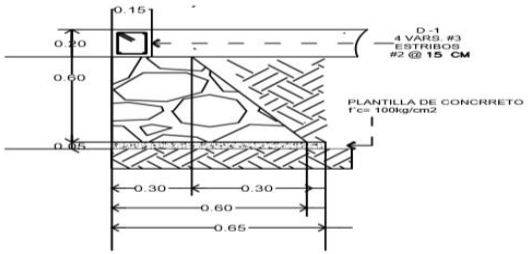
2.637 t/m × 1.3 = 3.4281 t/m / 8 t/m = 0.4285 / 1m = 0.42 = 0.60

B = 0.60cm

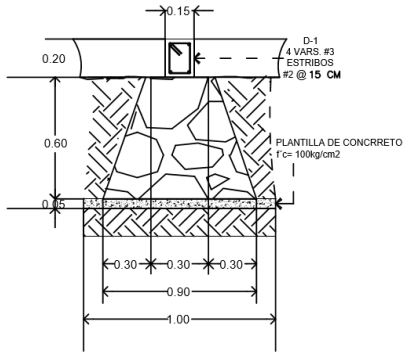
T = 0.60m − 0.30 / 2 = 0.15

H = tan 60 × 0.15 = 25.98 = 30 = 60cm





ZAPATA CORRIDA
COLINDANTE CC - 1



ZAPATA CORRIDA
INTERMEDIA CI - 1

Al terminar los cálculos decidí proponer una zapata de 90 de base x 60 de altura para el interior, y para las colindancias propuse zapatas de 60 x 60