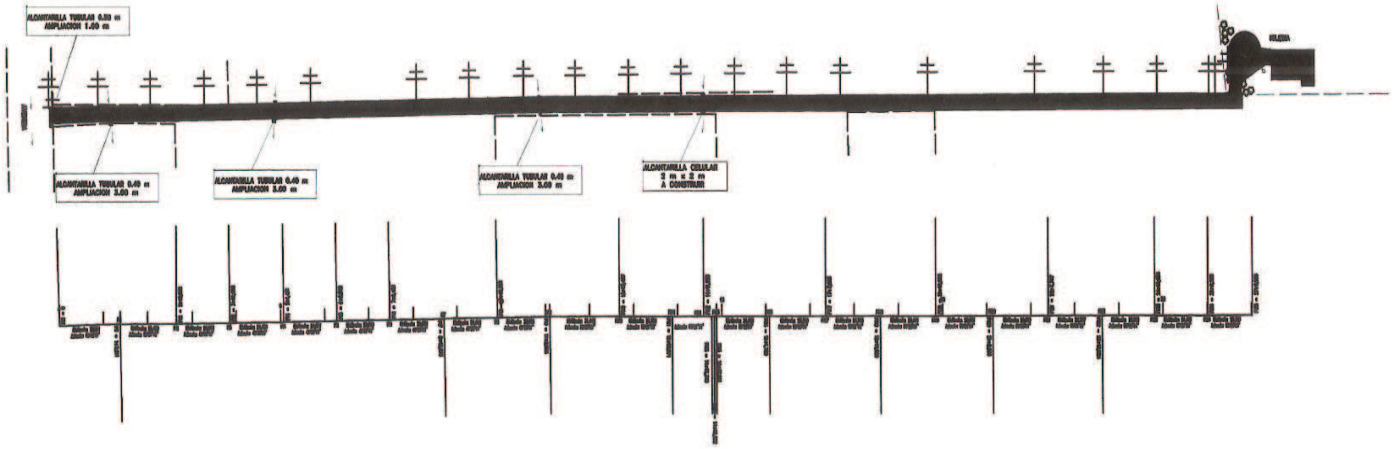
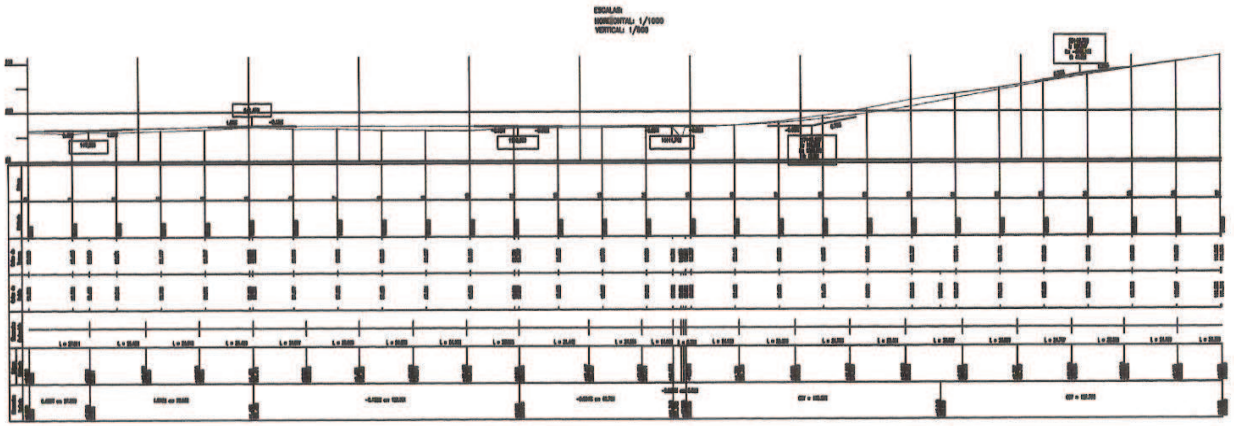
# TRAZADO



REFERENCIAS
- EMPEDRADO A CONSTRUIR
- CAMINERO
- BADEN
- ALCANTARILLA
- ARBOL
- TENDIDO ELECTRICO
- ALAMBRADO

# PERFIL LONGITUDINAL




| COMPUTO METRICO | |
|---|---|
| EMPEDRADO A CONSTRUIR (m2) | |
| CALZADA | 2433,75 m2 |
| IGLESIA | 252,18 m2 |
| TOTAL | 2685,96 m2 |
| CORDON CUNETA A CONSTRUIR (m/l) | 532,10 m |
| BADEN A CONSTRUIR (m/l) | 7,20 m |
| CORDON ESCONDIDO (m/l) | 688,30 m |
| CAMINERO (ACCESO PEATONAL- m2) | |
| CALLE | 536,20 m2 |
| IGLESIA | 20,61 m2 |
| TOTAL | 556,81 m2 |
| ALCANTARILLA CELULAR 2,00 X 2,00 (ml) | 6,00 m |
| MOVIMIENTO DE SUELO (m3) | |
| VOLUMEN DE CORTE | 1020 m3 |
| VOLUMEN DE CARGA | 1366 m3 |

**DIMENSIONAMIENTO DE ALCANTARILLAS**
**Metodo Racional para cuencas < a 2 km?**

| ARROYO | A (Ha) | L (m) | Dh (m) | s (%) | ts (min) | tc (hs) | I (mm/min) 10 años | I (mm/min) 25 años | Q (M3/Seg) 10 años | OBRA EXIST. | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| S/ NOMBRE | 240 | 2010.00 | 71.02 | 3.50 | 47.05 | 0.79 | 1.35 | 1.75 | 10.04 | PUENTE | ALCANTARILLA CELULAR 2,00 x 2,00 |

PROYECTO DE EMPEDRADO

MUNICIPALIDAD DE SANTISIMA TRINIDAD

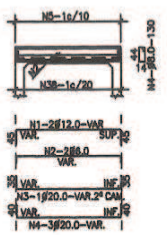
ACCESO A IGLESIA – VILLA SANTA MARIA

FIRMA DEL PROFESIONAL

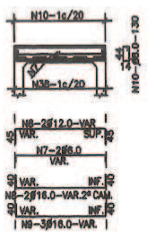
FECHA : 10 / SEPTIEMBRE / 2.011

## VIGAS DE BORDE DE LA LOSA SUPERIOR – ∝ = 30° A 45°

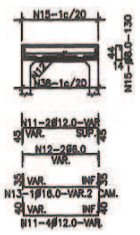
L=300 (2x)



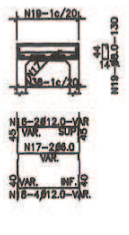

L=250 (2x)




L=200 (2x)

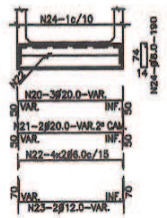



L=150 (2x)

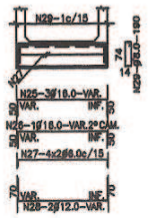



## VIGAS DE BORDE DE LA LOSA INFERIOR – ∝ = 30° A 45°

L=300 (2x)




L=250 (2x)




L=200 (2x)

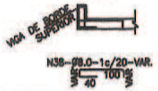
L=150 (2x)

MENSULA

VISTA

VIGA DE BORDE SUPERIOR

CORTE




# ALCANTARILLAS SIMPLES

## VIGAS DE BORDE

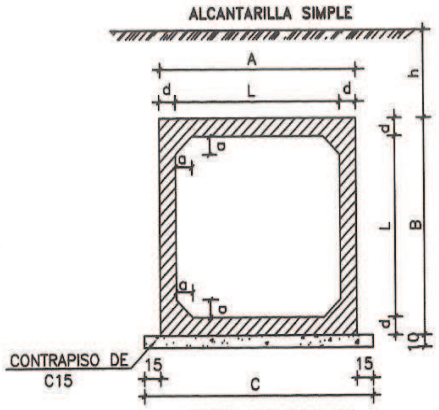
**TABLA DE ARMADURAS PARA VIGAS DE BORDE DE LOSA SUPERIOR E INFERIOR – CELULAR SIMPLE**

| No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ø | 12.0 | 6.0 | 20.0 | 20.0 | 12.0 | 6.0 | 16.0 | 8.0 | 12.0 | 6.0 | 12.0 | 8.0 | 12.0 | 6.0 | 12.0 | 8.0 | 20.0 | 6.0 | 12.0 | 8.0 | 16.0 | 6.0 | 12.0 | 8.0 | 16.0 | 6.0 | 10.0 | 8.0 | 12.0 | | 6.0 | 10.0 | 6.0 | 12.0 | 6.0 | 10.0 | 6.0 | 8.0 |
| C | 4 | 4 | 2 | | 4 | 4 | 6 | | 4 | 4 | 8 | | 4 | 4 | 6 | | 8 | 16 | 4 | | 6 | 16 | 4 | | 4 | 16 | 4 | | 4 | | 16 | 4 | | 6 | 16 | 4 | | |
| LONG | VAR. | VAR. | VAR. | 130 | VAR. | VAR. | VAR. | 130 | VAR. | VAR. | VAR. | 130 | VAR. | VAR. | VAR. | 130 | VAR. | VAR. | VAR. | 190 | VAR. | VAR. | VAR. | 190 | VAR. | VAR. | VAR. | 190 | VAR. | | VAR. | VAR. | 190 | VAR. | VAR. | VAR. | 190 | VAR. |

| | | | | | |
|---|---|---|---|---|---|
| | | MUNICIPALIDAD DE TRINIDAD | | ALCANTARILLAS CELULARES Y DETALLES | |
| | | | | SIN ESCALAS | Lamina N° |

# ALCANTARILLA SIMPLE

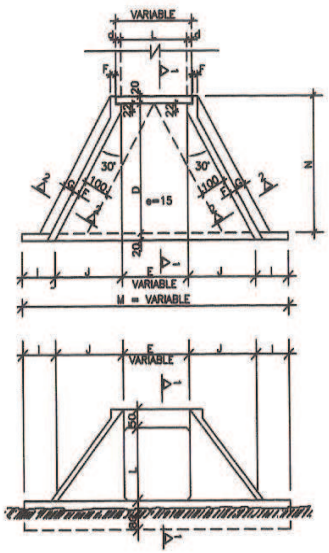
## ALCANTARILLA SIMPLE




ALCANTARILLA CELULAR DE 2.00 x 2.00

| fs ≥ MPa | | 0.09 | 0.13 | 0.13 |
|---|---|---|---|---|
| MEDIDAS | UNID. | SIMPLE | DOBLE | TRIPLE |
| A | cm. | 220 | 445 | 660 |
| B | cm. | 220 | 220 | 220 |
| C | cm. | 200 | 475 | 690 |
| a | cm. | 10 | 10 | 10 |
| b | cm. | — | 30 | 30 |
| d | cm. | 15 | 15 | 15 |
| CONTRAPISO | m² | 0.55 | 0.48 | 0.69 |
| ENCOFRADO | m² | 10.85 | 15.60 | 22.00 |
| HORMIGON | m³ | 1.31 | 2.32 | 3.32 |

## PLANTA

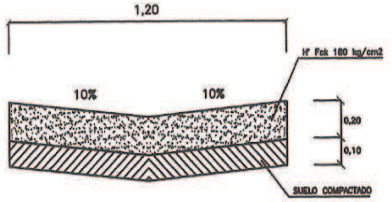



| MEDIDAS (cm) | ALCANTARILLA SIMPLE | | | |
|---|---|---|---|---|
| | 1.50x1.50m. fs > 0.09 MPa | 2.00x2.00m. fs > 0.09 MPa | 2.50x2.50m. fs > 0.10 MPa | 3.00x3.00m. fs > 0.12 MPa |
| D | 280.0 | 355.0 | 430.0 | 605.0 |
| E | 150.0 | 200.0 | 250.0 | 300.0 |
| F | 15.0 | 20.0 | 20.0 | 25.0 |
| G | 30.0 | 30.0 | 50.0 | 50.0 |
| I | 100.0 | 100.0 | 100.0 | 100.0 |
| J | 160.5 | 204.0 | 247.0 | 290.5 |
| L | 150.0 | 200.0 | 250.0 | 300.0 |
| M | 671.0 | 808.0 | 944.0 | 1081.0 |
| N | 320.0 | 395.0 | 470.0 | 545.0 |

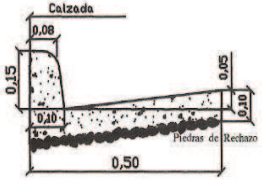
| DESCRIPCION | UNID | ALCANTARILLA SIMPLE | | | |
|---|---|---|---|---|---|
| | | 1.50x1.50m. | 2.00x2.00m. | 2.50x2.50m. | 3.00x3.00m. |
| CONTRAPISO | m² | 2.46 | 4.35 | 6.30 | 8.70 |
| ENCOFRADO | m² | 83.50 | 113.00 | 144.00 | 161.00 |
| HORMIGON | m³ | 10.65 | 17.66 | 24.35 | 36.53 |

## VISTA FRONTAL

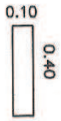
## DETALLE BADEN DE HORMIGÓN




## DETALLE DE CORDON CUNETA




## CORDON DE H°




| | | | | | |
|---|---|---|---|---|---|
| | | MUNICIPALIDAD DE TRINIDAD | | ALCANTARILLAS CELULARES Y DETALLES | |
| | | | | SIN ESCALAS | Lamina N° |