CONFEDERACION HIDROGRAFICA
DEL
GUADALQUIVIR

SEGUNDA SECCION
DELEGACION DE JAEN

HOJA Nº 7-IV

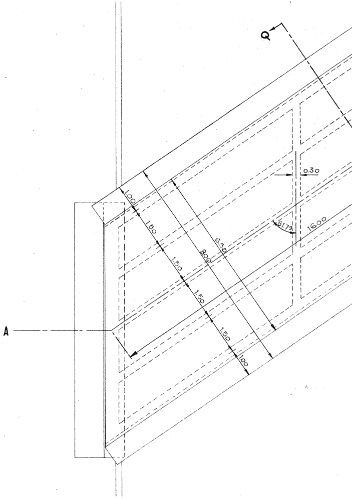
Obras especiales

EN LA DESVIACION DE LOS ARROYOS TOBILLAS SAN AGUSTIN Y PALOMARES

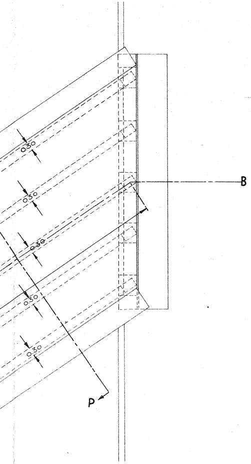
PROYECTO de defensas
de Beas de Segura (Jaén)
OBRAS DEFINITIVAS

PLANTA

ESCALA 1:100

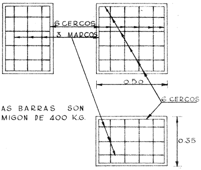

Q
A
0.30
61.79
16.00
1.00
1.50
1.50
1.50
1.50
1.00
6.50
8.00

PASO OB


0.30
0.30
0.30
0.30
0.30
B
P

ARMADURAS DE LOS PENDULOS

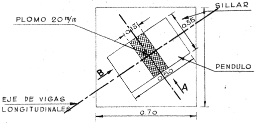
ESCALA 1:20


6 CERCOS
3 MARCOS
0.50
6 CERCOS
0.35

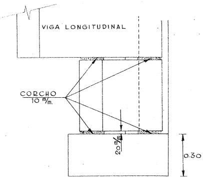
TODAS LAS BARRAS SON
Φ 12 HORMIGON DE 400 K.G.

PLANTA DE PENDULO Y SILLAR

ESCALA 1:20


SILLAR
PLOMO 20 m/m
0.13
0.35
PENDULO
B
0.50
A
EJE DE VIGAS LONGITUDINALES
0.70

PLANTA

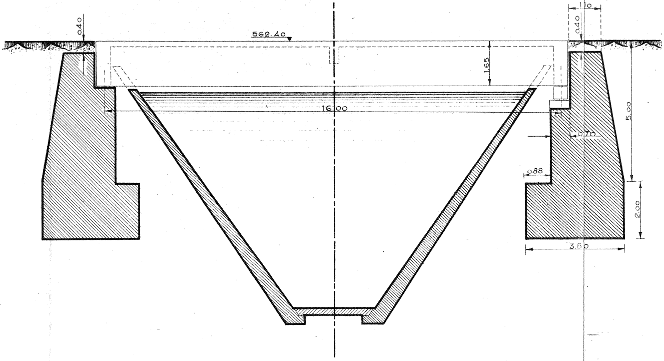

VIGA LONGITUDINAL
CORCHO 10 m/m.
20 m/m
0.30

LICUO DE LA CARRETERA SOBRE EL

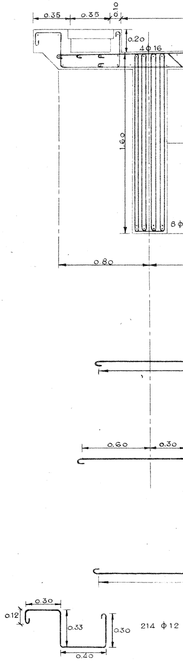
PERFILES 12 Y 13

SECCION LONGITUDINAL A-B

(EN LOS ESTRIBOS SECCION NORMAL)


0.40
562.40
1.65
16.00
1.10
0.40
5.00
0.70
0.88
2.00
3.50

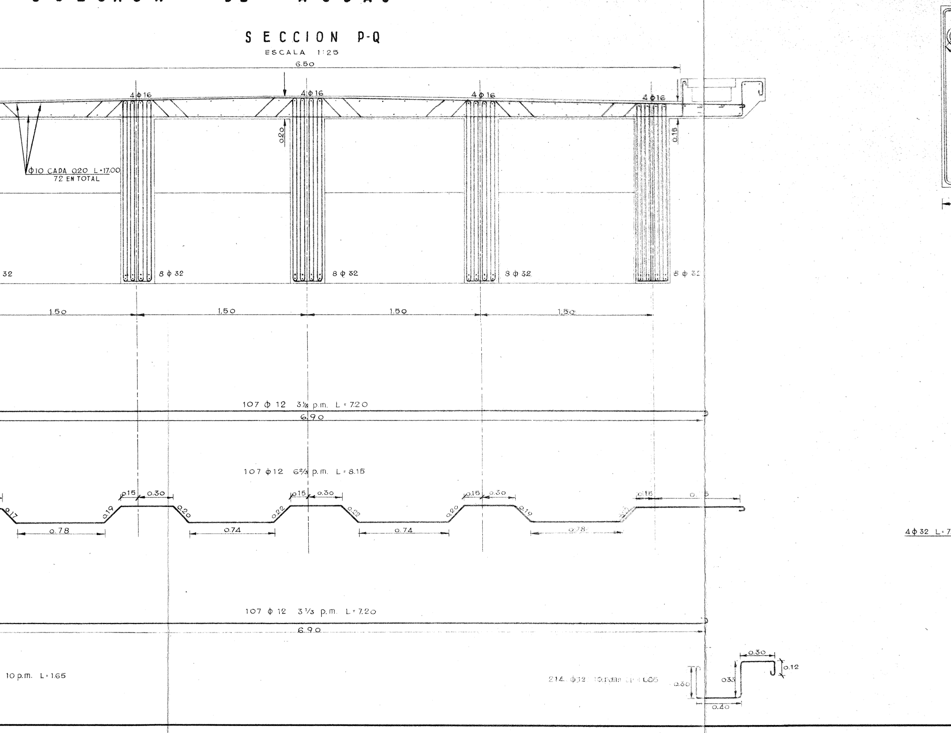
ESCALA 1:100


0.35
0.35
0.10
0.20
4 φ 16
1.60
8 φ
0.80
0.60
0.30
0.30
0.12
0.33
0.30
0.40
214 φ 12

COLCHON DE AGUAS

SECCION P-Q

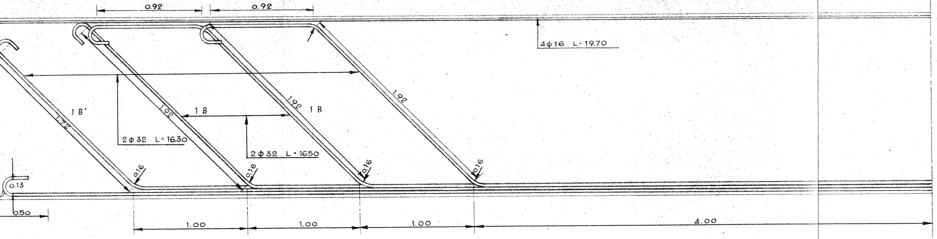
ESCALA 1:25



6.50
4 φ 16
4 φ 16
4 φ 16
4 φ 16
0.20
0.15
φ10 CADA 0.20 L=17.00
72 EN TOTAL
32
8 φ 32
8 φ 32
8 φ 32
8 φ 3
1.50
1.50
1.50
1.50
107 φ 12 3⅓ p.m. L=7.20
6.90
107 φ12 6⅔ p.m. L=8.15
0.17
0.78
0.19
0.15
0.30
0.20
0.74
0.22
0.15
0.30
0.22
0.74
0.20
0.15
0.30
0.19
0.78
0.15
0.
4 φ 32 L=7
107 φ 12 3⅓ p.m. L=7.20
6.90
10 p.m. L=1.65
214 φ12 10 p.m. L=1.65
0.30
0.33
0.30
0.12
0.40

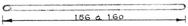
SEMI-SECCION DE LA VIGA LONGITUDINAL

ESCALA 1:25


0.92
0.92
4φ16 L=19.70
1 B'
1.72
1.92
1 B
1.92
1 B
1.92
2φ32 L=16.30
2φ32 L=16.50
0.16
0.16
0.16
0.16
0.13
0.50
1.00
1.00
1.00
4.00

ESTRIBO EN VIGAS LONGITUDINALES

4 φ 10 CADA 0.80

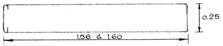


80 φ 10 L=3.30 POR VIGA

ESCALA 1:25

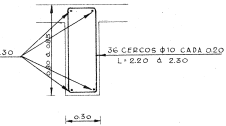
CERCO EN VIGAS LONGITUDINALES

1 φ 10 CADA 0.50


0.25
1.56 a 1.60

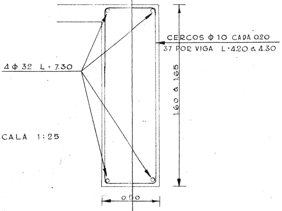
32 φ 10 L=3.80 POR VIGA

CENTRAL


.30
0.80 a 0.85
36 CERCOS φ10 CADA 0.20
L=2.20 a 2.30
0.30

ESCALA 1:25

VIGAS TRANSVERSAL

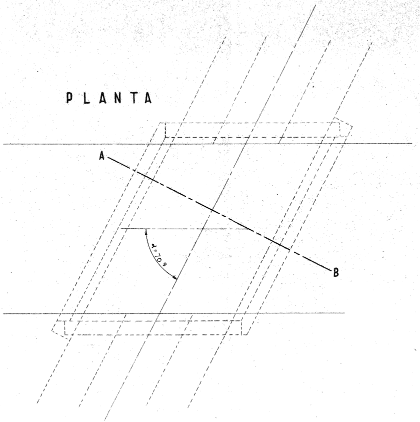

CERCOS φ 10 CADA 0.20
37 POR VIGA L=4.20 a 4.30
4 φ 32 L=7.30
1.60 a 1.65
0.50

ESCALA 1:25

PASO DE CARRETERA

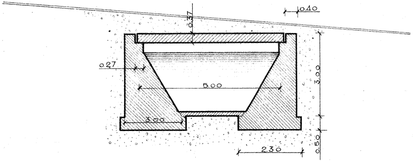
PERFILES 3 Y 4

PLANTA



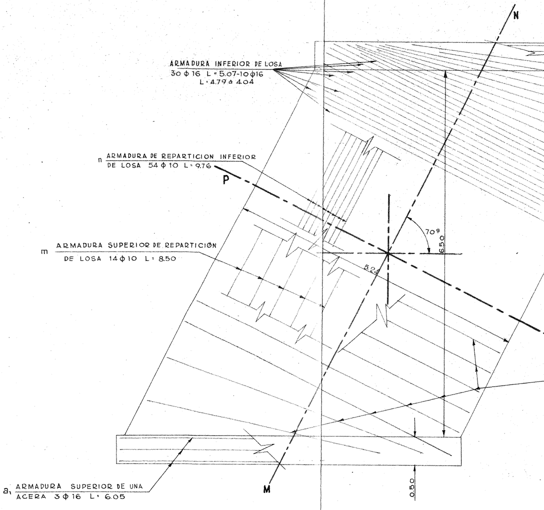
ESCALA 1:100

SECCION A-B


0.37
0.40
0.27
5.00
3.00
3.00
0.50
2.30

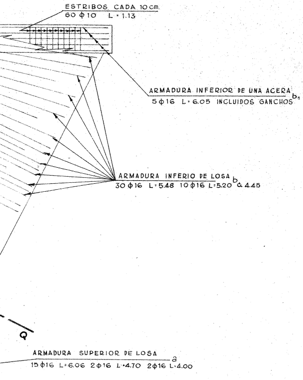
PLANTA DE LAS A

ESCALA 1:50

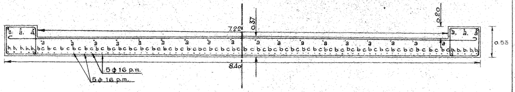

N
ARMADURA INFERIOR DE LOSA
30 ϕ 16 L = 5.07-10ϕ16
L = 4.79 a 4.04
n ARMADURA DE REPARTICION INFERIOR
DE LOSA 54 ϕ 10 L = 9.76
P
m ARMADURA SUPERIOR DE REPARTICIÓN
DE LOSA 14 ϕ 10 L = 8.50
70g
6.50
5.24
a1 ARMADURA SUPERIOR DE UNA
ACERA 3 ϕ 16 L = 6.05
M
0.50

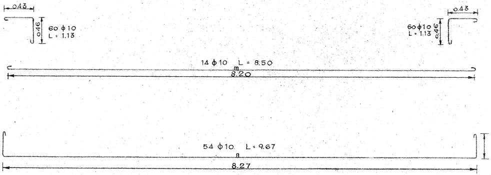
SOBRE CANAL Nº3

RMADURAS

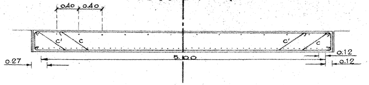

ESTRIBOS CADA 10cm.
60 φ 10 L = 1.13
ARMADURA INFERIOR DE UNA ACERA b₁
5φ16 L = 6.05 INCLUIDOS GANCHOS
ARMADURA INFERIO DE LOSA b
30 φ16 L = 5.48 10 φ16 L = 5.20 a 4.45
Q
ARMADURA SUPERIOR DE LOSA a
15φ16 L = 6.06 2φ16 L = 4.70 2φ16 L = 4.00

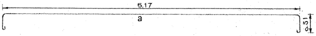
SECCION M-N


7.22
0.37
0.20
0.53
a
b
c
8.40
5φ16 p.m.
5φ16 p.m.

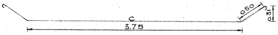

0.43
0.46
60 φ10
L = 1.13
0.43
60φ10
L = 1.13
0.46
14 φ10 L = 8.50
m
8.20
54 φ10 L = 9.67
n
8.27

SECCION P-Q

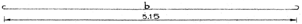

0.40
0.40
c'
c
c'
c
0.27
5.00
0.12
0.12



2½ φ POR M.L.
15φ16 L = 6.06
2 φ 16 L = 4.70
2 φ 16 L = 4.00


0.50
0.31
c
3.75

5 φ POR M.L.
30φ16 L = 5.07
10 φ 16 L = 4.79 a 4.04



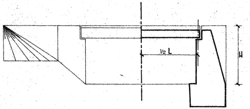
5 φ POR M.L.
30 φ 16 L = 5.48
10 φ 16 L = 5.20 a 4.45

LAS BARRAS C' SON LAS MISMAS C GIRADAS 200º

LOSA DE 4.50 m. DE LUZ PARA PASOS DE CAMINOS

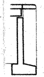
EN EL PERFIL Nº 3 DEL CANAL Nº1 Y EL PERFIL Nº 38 DE LA DESVIACION DEL ARROYO VALPARAISO

SEMIALZADO



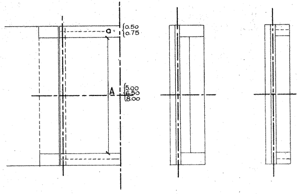
ESTRIBO DE FABRICA

SEMISECIONES

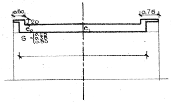


ESTRIBO DE H. ARMADO

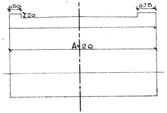
PLANTAS


a {0.50 0.75
A {5.00 6.50 8.00

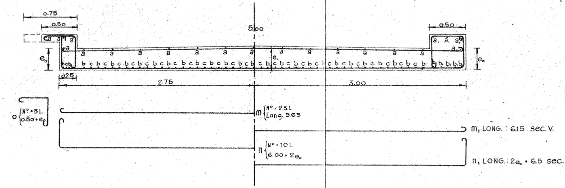
SECCION TRANSVERSAL


0.50
20
0.75
e₀
e₁
S = {0.25 0.35 0.50

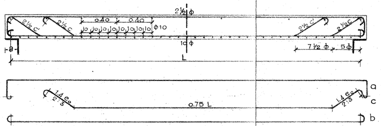
ALZADO ESTRIBOS


0.50
20
0.75
A+20

SECCIONES TRANSVERSALES


0.75
0.50
5.00
0.50
a
a₁
e₀
e₁
b c b c
0.25
2.75
3.00
o {Nº = 5L 0.80+e₀
m {Nº = 2.5L Long. 5.65
m₁ LONG. : 6.15 sec. V.
n {Nº = 10L 6.00+2e₀
n₁ LONG. : 2e₀ + 6.5 sec.

SECCIONES LONGITUDINALES


2½ Φ
2½ c'
2½ c
0.40
0.40
10 10 10 10 10 10 10 10
Φ10
10 Φ
a
L
7½ Φ
5 Φ
1.4 e₀
2:3
0.75 L
a
c
b

LAS BARRAS c' SON LAS MISMAS c GIRADAS 180° RESPECTO A LA VERTICAL DEL EJE

ARMADURAS

LOCALES	Luz	φ*	Entreg.	ESPESORES		a 21	b 29	c		Nº = 28	m 5.65	n		o	
	L		a	e_0	e_1	L+a+2e+10φ	L+a+15φ	0.15 L + 2βe_0+25φ	α = 0.75L	β = 1.4e_0	Nº = 2.5 L	Nº = 10L	6.0+2e_0	Nº = 10L	0.8+e_0
	5	16	24	33	37	6.06	5.48	5.07	3.75	0.46	12	50	6.66	50	1.15
COMARCALES					+1	Nº = 25	Nº = 39	Nº = 44			L = 7.35		+1.70	EN ACERA 0.50	

*LAS a m n y o SON φ10

EXAMINADO:

EL INGENIERO JEFE DE LA 2ª SECCIÓN

DEL GUADALQUIVIR

JAEN, DICIEMBRE DE 1954

EL INGENIERO AUTOR DEL PROYECTO