

14 15 16 17 18 19 20 21 22 23 24 25 26

28 29 30 31 32 33 34 35

37 38 39 40 41 42 43 44 45 46 47 48 49

1957

ORANGE COUNTY HIGHWAY DEPARTMENT

BY: R.W. DATE: 7-6-57 SUBJECT: Culvert over Channel C-1 SHEET NO. 1 OF 1
CHKD. BY: DATE: 7-6-57 Cerritos Ave. JOB NO.

SKew of $\frac{1}{2}$ culvert relative to $\frac{1}{2}$ survey: Cerritos Ave. from Volande of Boyle Engr.:
 $42^{\circ}30'10''$ Sin $42^{\circ}30'10'' = 0.76042745$

Right of way of box (Normal to $\frac{1}{2}$ survey):

Our plans	on skew	O.C.F.D.	on skew
30' S	32.4510	42' S	52.6013
40' N	52.6013	40' N	52.6013
70' Tot.	82.0523	80' Tot.	105.2026

Exist. pt. of ditch slope (interpolated) = 32' on skew = 42.0810

Ult. section:

S. R/W to $\frac{1}{2}$ survey	40.0
$\frac{1}{2}$ survey to $\frac{1}{2}$ N. road	28.0
0.5 roadway width	12.0
Shoulder	11.0
Slope (15:1)	13.5
	103.5 ft
	On skew = 142.6810 ft

142.6810
105.2026
37.4784 = 37'-5 3/4"

O.C.F.D. will pay for 112.88 ft. Want OCHD to pay for 42.30
Total length = 155.18 ft

0.5 from $\frac{1}{2}$ survey to next road $\frac{1}{2}$:

134 + 67.00
131 + 42.68
3 + 24.32
Tan $112.88 = 15.12$
 $\times (134.68 \times 0.02316884)$
= 7.5109 ft

L along $\frac{1}{2}$ line = $\frac{7.5109}{0.02316884} = 3.8771$

142.6810
112.88
29.8010 = 29'-9 5/8"

Sin $\phi = \frac{105.50}{155.18} = 0.69471123$
 $\phi = 44^{\circ}00'15''$

At this skew $\frac{115.1552}{0.76042745} = 151.552$ ft = 151'-1 3/8" by O.C.F.D.

150.1800
115.1552
41.0248 = 41'-0 3/8" by O.C.H.D.

Structure #0-1-1
Cerritos Ave Bridge
over Channel #1 w/o Los Alamitos
Sheet 1 of 4
Red 22.5" / No Scale
Pencil Sketch

JUL 3 1957

L = 142'
Skew 42°20'

#14542
CERRITOS AV. BR. 1957
S-1
Thomas 796-J2