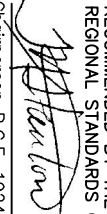


Revision	By	Approved	Date
ORIGINAL		Kercheval	12/75
Add Metric		T. Stanton	03/03
Reviewed		T. Stanton	04/06
Edited		T. Stanton	02/09
Edited	S.S.	T. Regallo	03/11

SAN DIEGO REGIONAL STANDARD DRAWING

**TRIPLE BOX CULVERT
DETAILS No. 1**

DRAWING NUMBER	D-78A
Chairperson R.C.E. 19246	Date
	7/26/2012
RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE	

SPAN 4' (all measurements in feet and/or inches)

SPAN		4'									
HEIGHT		2'			3'			4'			
STRENGTH CLASSIFICATION		A	B	C	A	B	C	A	B	C	
MAX FILL OVER TOP		10	24	38	10	24	38	10	24	38	
Conc.	Top Slab T ₁	6 1/4	6 1/4	7 1/4	6 1/4	6 1/4	7 1/4	6 1/4	6 1/4	7 1/4	
	Bottom Slab T ₂	6	7	8 1/4	6	7	8 1/4	6	7	8 1/4	
	Sidewalls T ₃	6	6	6	6	6	6	6	6	6	
Reinforcing Steel	"a" ┌───┐ Spacing Length	Size Bar#	5	4	5	5	4	5	5	4	5
		Spacing	11	11 1/2	13	11	11 1/2	13	11	11 1/2	13
		Length	14-9	14-8	14-9	14-9	14-8	14-9	14-9	14-8	14-9
	"b" ┌───┐ or "b1" ┌───┐ Length "b" Length "b1"	Size Bar#	5	5	6	5	5	6	5	5	6
		Spacing	11	11 1/2	13	11	11 1/2	13	11	11 1/2	13
		Length	14-2	14-2	14-3	14-2	14-2	14-3	14-2	14-2	14-3
	"c" ┌───┐ Spacing Length	Size Bar#	4	5	6	4	5	6	4	5	6
		Spacing	11	11 1/2	13	11	11 1/2	13	11	11 1/2	13
		Length	9	9	9	9	9	9	9	9	9
	"d" Dist Bars	Top Slab-Tot. No.	15	9	9	15	9	9	15	9	9
		Bottom Slab-Tot. No.	9	9	9	9	9	9	9	9	9
	"e" Bars	Size Bar#	4	4	4	4	4	4	4	4	5
		Spacing	18	18	18	18	18	13	18	11 1/2	13
	Spacers Number		34			38			42		
	Quan.	Concrete: C.Y. per lin. ft.	0.67	0.71	0.81	0.75	0.79	0.89	0.82	0.86	0.96
Reinf :lbs per lin. ft.		122	110	133	127	115	138	131	122	147	

NOTE

For boxes of height less than that shown in table, use next greater table height slabs, wall dimensions and reinforcing steel, and make necessary changes in bar lengths, number of spacers and quantities. Number of "d" bars in table is slab total for all cells.