TABLE OF VALUES FOR T	
D_2	T
42"	8"
45"	8"
48"	8"
51"	8 1/2"
54"	9"
57"	9 1/4"
60"	9 1/2"
63"	10"
66"	10 1/4"
69"	10 3/4"
72"	11"
78"	11 3/4"
84"	12 1/2"
90"	13 1/4"
96"	14"
102"	15 1/2"
108"	16"
114"	16 1/2"
120"	17"
126"	17"
132"	17 1/2"
138"	17 1/2"
144"	18"

STEEL TABLE FOR JUNCTION STRUCTURE - TYPE II						
	D Bars			E Bars		
Diam. D_2	Min. No. Req'd	Size	Length	Min. No. Req'd	Size	Length
42"*	6	#5	4'-6"	4	#4	3'-2"
45"*	6	#5	4'-10"	4	#4	3'-5"
48"	6	#5	5'-1"	4	#4	3'-7"
51"	6	#5	5'-5"	6	#4	4'-9"
54"	6	#5	5'-9"	6	#4	5'-1"
57"	6	#5	6'-1"	6	#4	5'-6"
60"	6	#5	6'-4"	6	#4	5'-11"
63"	6	#5	6'-8"	6	#4	6'-3"
66"	6	#5	7'-0"	8	#4	6'-8"
69"	6	#5	7'-4"	8	#4	6'-8"
72"	6	#5	7'-7"	8	#4	6'-8"
78"	6	#5	8'-3"	8	#4	6'-8"
84"	6	#5	8'-10"	10	#4	6'-8"
90"	6	#6	9'-6"	10	#4	6'-8"
96"	6	#6	10'-1"	10	#4	6'-8"
102"	6	#6	10'-10"	11	#4	6'-8"
108"	6	#6	11'-5"	11	#4	6'-8"
114"	6	#6	12'-0"	12	#4	6'-8"
120"	6	#6	12'-7"	12	#4	6'-8"
126"	6	#6	13'-1"	13	#4	6'-8"
132"	6	#6	13'-8"	13	#4	6'-8"
138"	6	#6	14'-2"	14	#4	6'-8"
144"	6	#6	14'-7"	14	#4	6'-8"

*Manhole shaft shall be 4'-0" and Junction Structure bottom width shall be increased to 4'-0" minimum when M>15'. Use Standard Drawing 330 with 6" thick rings when M>15'.

D bars shall be placed 3" o.c. E bars shall be placed 4" o.c. Tie bars shall be #4 spaced 18" o.c. or closer. When L greater than 5'-6" is specified on improvement plan, continue D bars at 6" o.c. Lengths shown on table are for longest bars. Where shorter bars are required, bend or cut to meet field requirements.

NOTES

1. Center of manhole shaft shall be located over center line of storm drain when diameter D_1 is 48" or less, in which case place E bar symmetrically around shaft at 45° with center line.
2. Length L may be increased one foot maximum at each end to meet pipe ends. Continue D bars at 3" o.c.
3. Detail M: when depth of manhole from street grade to top of box is less than 2'-10 1/2" for paved streets or 3'-6" for unpaved streets, construct monolithic shaft as per Detail M. When diameter d is 48" or less, center of shaft shall be located as per Note 1.
4. Thickness of deck shall vary when necessary to provide level pipe seat, but shall not be less than tabular values for T, as shown in above table.
5. Reinforcing steel shall be round, deformed bars, 1 1/2" clear from face of concrete unless otherwise shown. Sizes and lengths are shown in above tables.
6. Steps shall be 3/4" round, galvanized steel and anchored not less than 6" in the walls of the structure. If H+M is 3'-6" or less, none required. If H+M is greater than 3'-6", the top step shall be located 6"-12" below the top of the manhole lid. The remaining steps shall be evenly spaced 12" to 17" with the bottom step a minimum of 7" to 12" above the floor. The top step shall project 2 1/2" from the wall. All other steps shall project 4" out from the wall.
7. Rings, reducer, and pipe for access shaft shall be seated in 1:2 mortar and neatly pointed or wiped inside the shaft.
8. Floor of manhole shall be steel-troweled to springing line.
9. Body of manhole shall be constructed in one continuous operation, except that Contractor shall have the option of placing a construction joint with a longitudinal keyway at the springing line.
10. For pipe sizes not shown, use tabled values for next larger pipe.

Note: Use Junction Structure Type II for D_2 pipe diameters of 42" or greater, and inlet diameters of 30" or less.

REVISED	CITY OF FULLERTON ENGINEERING DEPARTMENT	DRAWN P.L.S.
DATE		DATE 8/1/95
	JUNCTION STRUCTURE TYPE II	STD. NO. 322
	APPROVED Robert Hadan DIRECTOR OF ENGINEERING DATE 8/16/95	2 of 2