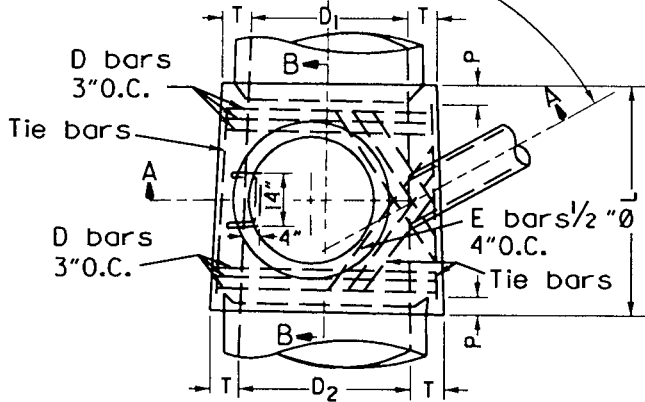
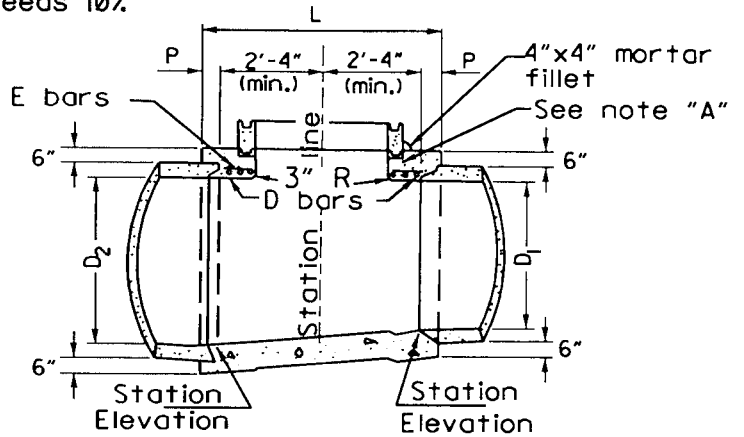


Angle shall not exceed 45°
when side flow exceeds 10%
of main line flow.



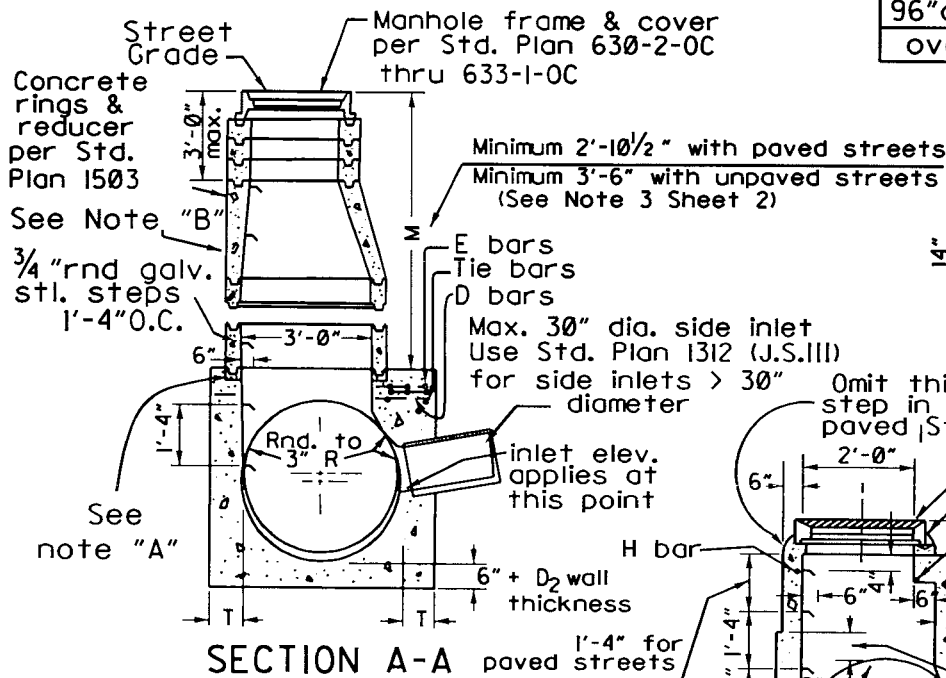
PLAN

(shaft not shown)



SECTION B-B

D	L (Min.)	P (Min.)
96" or less	5'-6"	5"
over 96"	6'-0"	8"



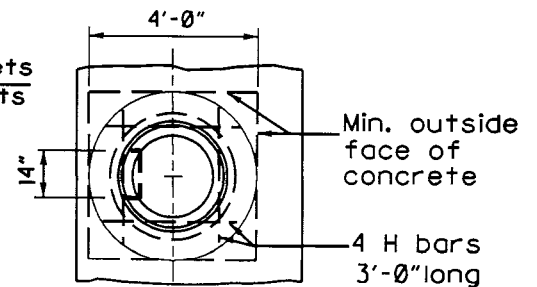
SECTION A-A

NOTE "A"

Two (2) inch deep seat to correspond to manhole shaft, grout between shaft and seal.

NOTE "B"

Construct Deep Manhole Landings(s) per Std. Plan 1508 and increase junction structure bottom width to 4'-0" minimum when the combined depth of the pipe diameter and manhole shaft (M) is 20' or greater and the manhole shaft is greater than 12', or as directed by the Engineer.



DETAIL M

NOTE:

Use Junction Structure Type II for D2 pipe diameters of 42" or greater and inlet pipe diameters of 30" or less.

ORANGE COUNTY RESOURCES & DEVELOPMENT MANAGEMENT DEPARTMENT

STD. PLAN

Approved

H. I. Nakasone
H. I. Nakasone, Chief Engineer

Adopted: Res. 77-92

Revised: Res. 82-718; 86-1141; 96-546; 06-010

1311

JUNCTION STRUCTURE - TYPE II

SHT. 1 OF 3

TABLE OF VALUES FOR T	
D ₂	T
42"	8"
45"	8"
48"	8"
51"	8½"
54"	9"
57"	9¼"
60"	9½"
63"	10"
66"	10¼"
69"	10¾"
72"	11"
78"	11¾"
84"	12½"
90"	13¼"
96"	14"
102"	15½"
108"	16"
114"	16½"
120"	17"
126"	17"
132"	17½"
138"	17½"
144"	18"

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

NOTES:

D bars shall be placed 3" oc. E bars shall be placed 4" oc. Tie bars shall be #4 spaced 18" oc. or closer.

When L greater than 5'-6" is specified on improvement plan, continue D bars at 6" oc.

Lengths shown in table are for longest bars. Where shorter bars are required, bend or cut to meet field requirements.

ORANGE COUNTY RESOURCES & DEVELOPMENT MANAGEMENT DEPARTMENT

Approved

H. I. Nakasone
H. I. Nakasone, Chief Engineer

Adopted: Res. 77-92

Revised: Res. 82-718; 86-1141; 96-546; 06-010

STD. PLAN

1311

JUNCTION STRUCTURE - TYPE II

SHT. 2 OF 3

GENERAL NOTES:

1. CENTER OF MANHOLE SHAFT shall be located over center line of storm drain when diameter D 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 (1) foot max. at each end to meet pipe ends. Continue D bars at 3" oc.
3. DETAIL M: when depth of manhole from street grade to top of box is less than 2'-10¹/₂" 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 2.
4. THICKNESS OF DECK shall vary when necessary to provide level pipe seat, but shall not be less than 6" + D₂ wall thickness.
5. REINFORCING STEEL shall be round, deformed bars, 1/2" clear from face of concrete unless otherwise shown. Sizes and lengths are shown in above table.
6. Construct steps per Standard Plan 1307.
7. RINGS, REDUCER, AND PIPE for access shall be seated in 1:2 mortar and neatly pointed or wiped inside the shaft.
8. STATIONS of manhole shown on improvement plan apply at center of shaft.
9. FLOOR of manhole shall be steel-troweled to spring line.
10. BODY of manhole shall be constructed in one continuous operation, except that Contractor has the option of placing a construction joint with a longitudinal keyway at the spring line.
11. For pipe sizes not shown, use tabled values for next larger pipe.

ORANGE COUNTY RESOURCES & DEVELOPMENT MANAGEMENT DEPARTMENT

Approved

H. I. Nakasone
H. I. Nakasone, Chief Engineer

Adopted: Res. 77-92

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STD. PLAN

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JUNCTION STRUCTURE - TYPE II

SHT. 3 OF 3