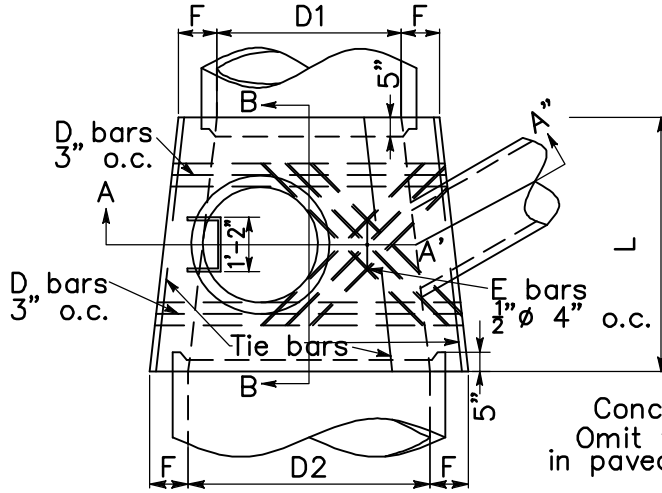
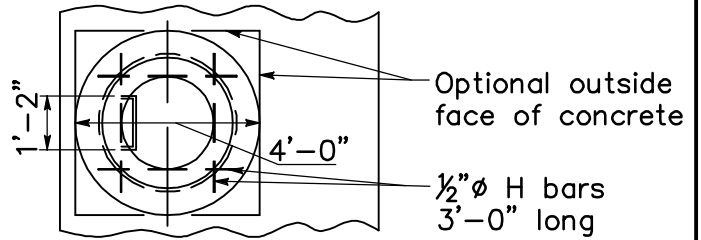


For use when inlet diameter of main line is 36" or more.



**PLAN**  
(Shaft not shown)

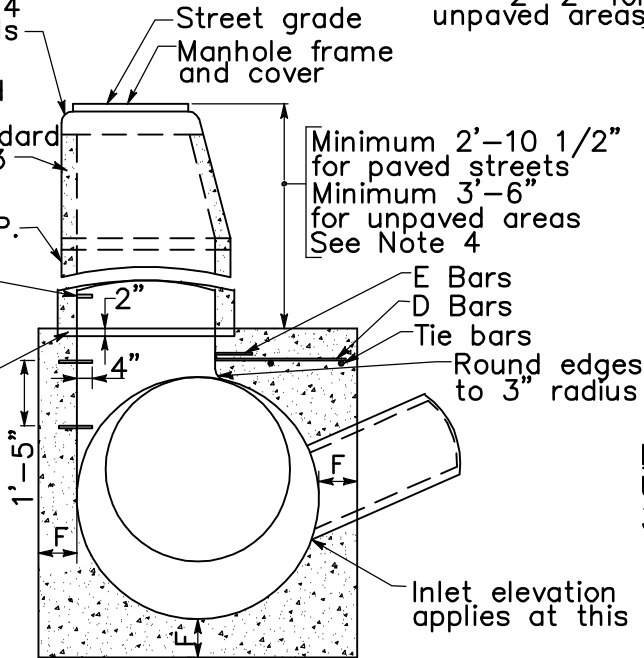


**PLAN**

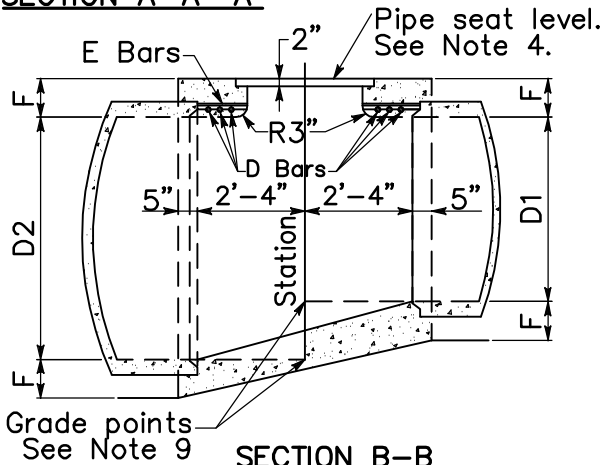
(Rings and cover not shown)

See S-3 & S-4 for details  
Concrete rings and reducer see Standard Plan S-3

36" R.C.P.  
Steps See Note 7  
5"x2" Pipe seat

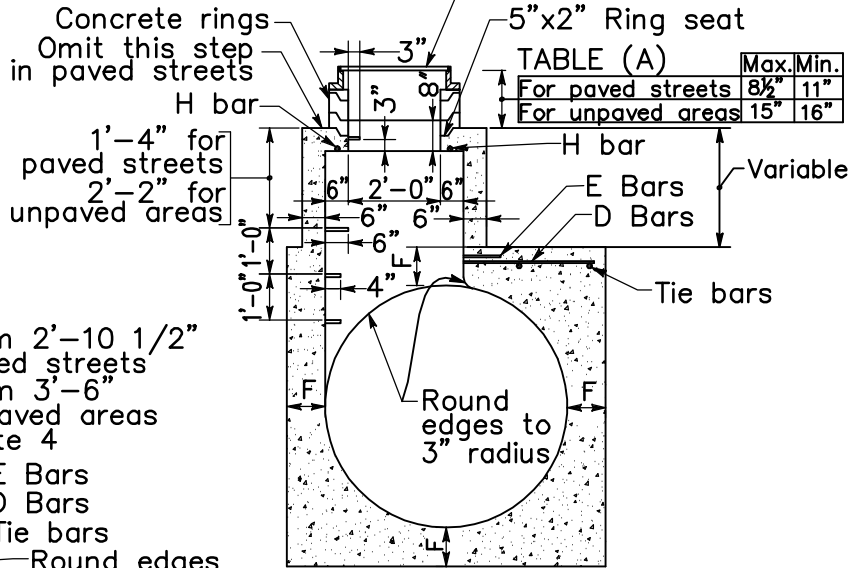


**SECTION A-A'-A"**



**SECTION B-B**

See sheet 2 for notes. See sheet 3 for steel table.



**DETAIL M**  
(See Note 3)

**NOTE:**

Use when inlet diameter of main line is 36" or more.

**TABLE OF VALUES FOR (F)**

D2	F
36"	6 1/2"
39"	7"
42"	7 1/4"
45"	7 1/2"
48"	8"
51"	8 1/2"
54"	9"
57"	9 1/4"
60"	9 1/2"
63"	10"
66"	10 1/4"
69"	10 1/2"
72"	11"
78"	11 1/2"
84"	12 1/2"
90"	13 1/2"
96"	14"

F is minimum thickness allowed.

Not to scale



*Not Person*  
City Engineer

10/07/05  
Date

SHEET  
1 of 3

STANDARD  
STORM DRAIN  
MANHOLE TYPE 2

S-2

STEEL TABLE FOR MANHOLE						
DIAM D2	D BARS			E BARS		
	NO REQ'D	SIZE	LENGTH	NO REQ'D	SIZE	LENGTH
36"	6	1/2"	3'-10"	4	1/2"	2'-9"
39"	6	1/2"	4'-2"	4	1/2"	2'-11"
42"	6	5/8"	4'-6"	4	1/2"	3'-2"
45"	6	5/8"	4'-10"	4	1/2"	3'-5"
48"	6	5/8"	5'-1"	4	1/2"	3'-7"
51"	6	5/8"	5'-5"	6	1/2"	4'-9"
54"	6	5/8"	5'-9"	6	1/2"	5'-1"
57"	6	5/8"	6'-1"	6	1/2"	5'-6"
60"	6	5/8"	6'-4"	6	1/2"	5'-11"
63"	6	5/8"	6'-8"	6	1/2"	6'-3"
66"	6	5/8"	7'-0"	8	1/2"	6'-8"
69"	6	5/8"	7'-4"	8	1/2"	6'-8"
72"	6	5/8"	7'-7"	8	1/2"	6'-8"
78"	6	5/8"	8'-3"	8	1/2"	6'-8"
84"	6	5/8"	8'-10"	10	1/2"	6'-8"
90"	6	3/4"	9'-6"	10	1/2"	6'-8"
96"	6	3/4"	10'-1"	10	1/2"	6'-8"

D bars shall be spaced 3" o.c. E bars shall be spaced 4" o.c.  
Tie bars shall be 3/8"  $\phi$ , spaced 18" o.c. or closer.

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

H bars shall be 1/2"  $\phi$ , 3'-0" long (4 total)

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



*Neil Parsons*  
City Engineer

10/07/05  
Date

SHEET  
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STANDARD  
STORM DRAIN  
MANHOLE TYPE 2

S-2

NOTES:

1. Center of manhole shaft shall be located over center line of storm drain when diameter D1 is 48" or less, in which case place E-bars symmetrically around shaft at 45" with center line.
2. Length (L) shall be 5'-6" unless shown otherwise on improvement plan. Any change of manhole location requires City Engineer approval.
3. Detail (M): when depth of manhole from street grade to top of box is less than 2'-10½" for paved streets or 3'-6" for unpaved areas, construct monolithic shaft as per detail M. The contractor shall have the option of constructing shaft as per detail M for any depth of manhole. When diameter D1 is 48" or less, center 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 tabular values for F shown on this plan.
5. Reinforcing steel shall be round deformed bars placed 1 ½" clear from face of concrete unless shown otherwise. sizes and lengths are shown in table on page 3. wall reinforcing not required when H = 8'-0" or less and the unsupported width or length equals 7'-0" or less. Walls exceeding these limits shall be reinforced with #4 bars @ 18± centers placed 1 ½" clear to inside of box unless otherwise shown.
6. Concrete shall be class "A".
7. Steps shall be ¾" round galvanized steel and anchored not less than 6" in the walls of structure. Unless otherwise shown the spacing shall be 12" o.c. The lowest step shall not be more than 2'-6" above the invert. Steps may be ½" steel with polypropylene plastic coating conforming to State Standard Plan D74C. All steps shall be cast-in-place.
8. Rings, reducer and pipe for access shaft shall be seated in mortar and neatly pointed or wiped inside the shaft.
9. Stations of manholes shown on improvement plan apply at center of shaft. Elevations shown at stations refer to prolonged invert grade lines.
10. Floor of manhole shall be steel-troweled to spring line.
11. Body of manhole shall be poured in one continuous operation, except that the contractor may place a construction joint with a longitudinal keyway at the spring line.



*Neil Parsons*  
City Engineer

10/07/05  
Date

SHEET  
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STANDARD  
STORM DRAIN  
MANHOLE TYPE 2

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