CITY MONUMENT

Recessed Area
For Lifting Bolt
1/2" Machined

Non-Skid Tread

Solid Brass Monument Marker 2"
Diameter Cap 2 3/4" Shank Lietz
No. 525 Or Approved Equal. Top
Of Monument To Be 5 1/2" Below
Street Surface. For Marking See
Note Below.

PLAN

1/64"
10 1/2"
1/2" x
1 1/2"
1/2"
3/4"
1/2"
6 3/4"
1/2"

Street Surface

Machined On 6
Surfaces

Concrete Monument Shall Be
 Constructed Using 8" And 6" PVC
 Which May Be Left In Place

SECTION

6" Diameter x 36"
Concrete Monument

SURVEYOR'S NOTE:
Exact point to be determined by
accurate survey and clearly punched
in top of brass marker together with
Engineer's R.E. number in 1/8" high numerals.
Install Marker Post

Standard City Of Redwood City Brass Monument Plate

Class "A" Concrete
30" No.4 Reinforcing Bar
8" V.C.P.
Backfill Around VCP With Sand

4"x4"x5' Redwood Post

CITY OF REDWOOD CITY
ENGINEERING AND TRANSPORTATION

SURVEY MONUMENT
(INSTALLATION IN MARSH OR UNSTABLE SOIL)

NOT TO SCALE

DATE: 06/23/14

STANDARD DETAIL
M - 2
SHT 1 OF 1
NOTES:

1. Modify or increase drop (min. of 0.10') across manhole when line bends and/or pipe diameter changes.
2. Concrete shall be Class A per Caltrans Standards.
3. All joints shall be made water-tight with neoprene gaskets or Ram-neck.
4. Minimum crown elevation of smaller diameter inlet pipe shall be no less than the crown elevation of the outlet pipe without approval of City Engineer. Maximum drop from invert of inlet pipe to crown of outlet pipe shall be 1'-0".
5. Lay cut pipe through manhole and conform to contour of base.
6. Top of pipe to be removed within manhole. Trim to neat line and finish off with grout to leave a smooth finish.
7. Provide two joints within 24" at all entry points to manholes.
8. Reinforced concrete manhole sections shall be precast, and shall conform to ASTM C-478.
9. Apply Concrete Sealant "Xycomp" Concentrate" 2 coats to manhole base and 1 coat to inside and outside of barrels.

SECTION A-A

ELEVATION

CITY OF REDWOOD CITY
ENGINEERING AND TRANSPORTATION

TYPE I MANHOLE
(Pipes 6" to 21")

STANDARD DETAIL
M - 3
SHT 1 OF 1
CITY OF REDWOOD CITY
ENGINEERING AND TRANSPORTATION

TYPE II MANHOLE
(PIPES 24" TO 48"

NOT TO SCALE

$\text{DIA: | A | B | C | D | E | F | Min G}$

| 24" | 40" | 24" | 9" | 3" | 56" | 16" | 3" |
| 27" | 43" | 27" | 9" | 3" | 56" | 14.5" | 3" |
| 30" | 46" | 30" | 9" | 3" | 56" | 13" | 3" |
| 36" | 53" | 36" | 9.5" | 3.5" | 56" | 10" | 3.5" |
| 42" | 60" | 42" | 10" | 4" | 60" | 9" | 4" |
| 48" | 68" | 48" | 11" | 5" | 66" | 9" | 5" |

NOTES:
1. Modify or increase drop (min. of 0.10") across manhole when line bends and/or pipe diameter changes.
2. Concrete shall be Class A per Caltrans Standards.
3. All joints shall be made water-tight with neoprene gaskets or Ram—neck.
4. Minimum crown elevation of smaller diameter inlet pipe shall be no less than the crown elevation of the outlet pipe without approval of City Engineer. Maximum drop from invert of inlet pipe to crown of outlet pipe shall be 1"—0".
5. Lay cut pipe through manhole and conform to contour of base.
6. Top of pipe to be removed within manhole. Trim to neat line and finish off with grout to leave a smooth finish.
7. Provide two joints within 24" at all entry points to manholes.
8. Reinforced concrete manhole sections shall be precast, and shall conform to ASTM C-478.
9. Apply Concrete Sealant "Xypex Concentrate" 2 coats to manhole base and 1 coat to inside and outside of barrels.
NOTES:

1. Modify or increase drop (min. of 0.10”) across manhole when line bends and/or pipe diameter changes.
2. Concrete shall be Class A per Caltrans Standards.
3. All joints shall be made water-tight with neoprene gaskets or Ram-neck.
4. Minimum crown elevation of smaller diameter inlet pipe shall be no less than the crown elevation of the outlet pipe without approval of City Engineer. Maximum drop from invert of inlet pipe to crown of outlet pipe shall be 1”-0”.
5. Lay cut pipe through manhole and conform to contour of base.
6. Top of pipe to be removed within manhole. Trim to neat line and finish off with grout to leave a smooth finish.
7. Provide two joints within 24” at all entry points to manholes.
8. Reinforced concrete manhole sections shall be precast, and shall conform to ASTM C-478.
9. Apply Concrete Sealant “Xypex Concentrate” 2 coats to manhole base and 1 coat to inside and outside of barrel.

CITY OF REDWOOD CITY
ENGINEERING AND TRANSPORTATION

TYPE III MANHOLE
(PIPES LARGER THAN 48”)

DATE: 11/25/19

STANDARD DETAIL
M - 5
SHT 1 OF 1
**NOTES:**

1. All material used in manufacturing shall conform to A.S.T.M. A48, Class 30.
2. All castings to be completely cleaned and painted with asphaltic varnish, after manufacture.
3. Use Phoenix P-1090, D&L Supply A-1024, or equal.
4. Emboss "STORM DRAIN" for storm drainage system in lieu of "SANITARY SEWER".

CITY OF REDWOOD CITY
ENGINEERING AND TRANSPORTATION

MANHOLE FRAME
AND COVER

DATE: 11/25/19
1. Steps to be cast in place during manufacture of precast pipe rings.
2. Insert steps through formwork prior to pouring cast-in-place structures.
3. Steps are as manufactured by M.A. INDUSTRIES, INC. or equal.