

MANHOLES CONSTRUCTED WITHIN 100 YEAR FLOOD PLAIN SHALL HAVE WATERTIGHT RING AND LID.

40" O.D. X 30" I.D. GRADE RINGS/RISERS AS LISTED ON THE APPROVED PRODUCT LISTINGS WITH MANUFACTURERS APPROVED SEALANT.

USE DOUBLE RING OF MANUFACTURERS APPROVED SEALANT TO SEAL FRAME TO CONCRETE AND BETWEEN GRADE RINGS/RISERS. (SEE NOTE 11)

CONCENTRIC MANHOLE CONE (SEE NOTE 8)

EXTERIOR COATING MIN. 2 COATS SEE NOTE 11

PER ASTM C478, CLASS III WALL B

O-RING RUBBER GASKET JOINT SEE DETAIL (TYP.)

RESILIENT CONNECTOR AT ALL PIPE PENETRATIONS

MANHOLE FRAME AND COVER

PLASTER EXTERIOR AND INTERIOR SURFACE WITH COATS OF NON-SHRINK HYDRAULIC CEMENT GROUT INCLUDING JOINT BETWEEN MANHOLE TOP AND CONCRETE PAD.

CONCRETE PAD (SEE NOTE 4)

VARIABLE, BUT NOT TO EXCEED 2'-6" (SEE NOTE 1.)

END OF TRANSITION

VARIES

NOTES:

1. GRADE RINGS/RISERS MAY BE USED TO ADJUST NECK 12" OR LESS. WHEN ADJUSTMENT IS GREATER THAN 12", CONTRACTOR SHALL USE SONO TUBE AND PLACE CONCRETE FOR NECK ADJUSTMENT. GRADE RINGS/RISERS CONSTRUCTED BY MANUFACTURER IN STANDARD 2", 3", 6", 8" AND 12" HEIGHTS.
2. USE 60" INSIDE DIAMETER MANHOLES UNDER ANY OF THE FOLLOWING:
  - A. DEPTH FROM TOP OF COVER TO FLOWLINE IS 10' OR GREATER
  - B. PIPES INTO MANHOLE ARE 15" DIAMETER OR LARGER
3. ALL MANHOLE INVERTS SHALL BE FULL DEPTH OF SEWER PIPES. ALL INVERTS SHALL EXTEND THROUGHOUT MANHOLE BOTTOM AND PROVIDE SMOOTH FLOW TRANSITIONS.
4. ALL MANHOLES WITHIN HMA PAVING OR OUTSIDE PAVED AREAS REQUIRE A 5'X5' CONCRETE PAD WITH MANHOLE COVERS IN CENTER OF PAD. MANHOLES WITHIN CONCRETE PAVING DO NOT REQUIRE PAD. THE CONCRETE PAD SHALL MATCH EXISTING PAVEMENT THICKNESS OR BE MINIMUM 6" THICK. PADS SHALL BE REINFORCED WITH FOUR NO. 4 REBARS.
5. MANHOLES SHALL BE INSTALLED IN CENTER OF LANES AND OUTSIDE NORMAL TIRE PATH OF LANE WHEN IN PAVED ROADWAYS.
6. INSTALL CITY FURNISHED FIBERGLASS MH MARKER WITHIN 12" OF PAD IN UNDEVELOPED AREAS.
7. ALL BENCHES SHALL BE SLIGHTLY HIGHER THAN TOP OF PIPES AND SLOPE GENTLY DOWN TO INVERTS.
8. ECCENTRIC CONES AND FLAT TOPS MAY BE USED IF REQUIRED BY OWNER.
9. SEE CAST IN PLACE MANHOLE DETAIL FOR BENCH AND CHANNEL (INVERT) REQUIREMENTS.
10. CONCRETE FOOTER TO EXTEND 6" FROM EXTERIOR MANHOLE WALL.
11. ALL PRODUCTS SHALL BE APPROVED BY THE CITY OF ARLINGTON WATER UTILITIES. SEE APPROVED PRODUCTS LISTING.

30"

48" OR 60" DIAMETER

RISER

SEE NOTE 10

CHANNEL (INVERT)

BENCH

8" MIN. HEIGHT CONC. FOOTER

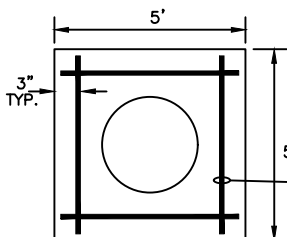
### MANHOLE ELEVATION

USE 6" MIN. LAYER OF 1" WASHED CRUSHED STONE BENEATH MANHOLE.

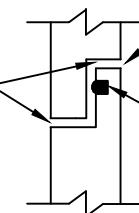
PRECAST CONCRETE SEALANT (SEE NOTE 11)

WIPE INTERIOR JOINT WITH NON-SHRINK HYDRAULIC CEMENT GROUT

O-RING RUBBER GASKET



**MANHOLE PAD PLAN**



**JOINT DETAIL**



CITY OF ARLINGTON, TEXAS

**PRECAST CONCRETE  
SANITARY SEWER MANHOLE**

DATE: 6/25/2023