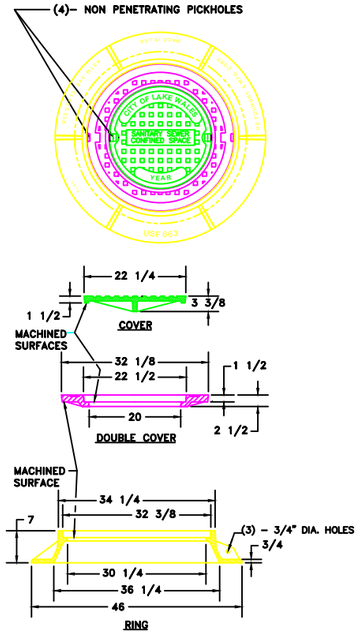
USF # 663 RING & AB/M COVERS



NOTES:

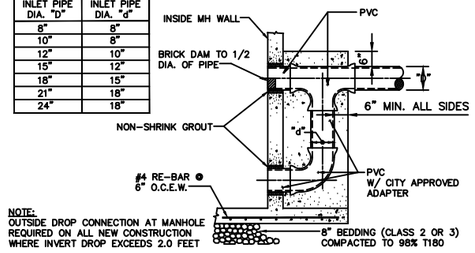
PAVED AREAS – SET FRAMES AT FINISH GRADE.
UNPAVED AREAS – SET FRAMES AT FINISH GRADE + 0.5'.

U.S. FOUNDARY & MFG. CORP. REF. CAT. NO. 663-AB-M MAT'L – CAST IRON, ONE COAT OF ASPHALTIC PAINT (OR CITY APPROVED EQUAL)

MANHOLE COVER SHALL BE IMPRINTED WITH "SANITARY SEWER" AND WITH NOTE "CONFINED SPACE".

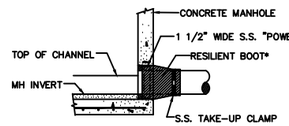
MANHOLE DROP AND RESILIENT CONNECTION

DROP MANHOLE SCHEDULE	
INLET PIPE DIA. "D"	INLET PIPE DIA. "d"
8"	8"
10"	8"
12"	10"
15"	12"
18"	15"
21"	18"
24"	18"



NOTE:
OUTSIDE DROP CONNECTION AT MANHOLE REQUIRED ON ALL NEW CONSTRUCTION WHERE INVERT DROP EXCEEDS 2.0 FEET

MANHOLE OUTSIDE DROP CONNECTION



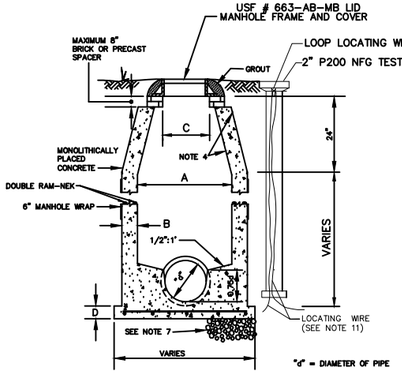
*RESILIENT BOOT SHALL BE PSX MANUFACTURED BY PRESS SEAL GASKET CORP., 6935 LINCOLN PARKWAY, FT. WAYNE, IN., OR CITY APPROVED EQUAL, MEETING ASTM C923.

MANHOLE RESILIENT BOOT CONNECTION

NOTE:

1. BOOT SHALL BE INSTALLED STRICTLY IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS.
2. FOR USE ON PRECAST MANHOLES. ALSO APPLICABLE ON CAST-IN-PLACE MANHOLES WHEN USED WITH A HOLE FORMER.
3. THE VOID BETWEEN BOOT AND PIPE SHALL BE FILLED WITH GROUT AND COATED AS SPECIFIED FOR THE MANHOLE.

SANITARY SEWER MANHOLE



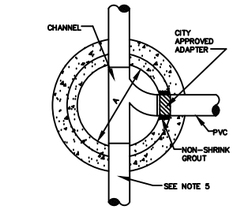
N.T.S.

MH DEPTH	A	B	C	D
UP TO 12'	60"	8"	36"	8"
>12' AND DEEPER	72"	8"	36"	10"

NOTE:
MANHOLE COVERS SHALL BE OF WATERTIGHT DESIGN.

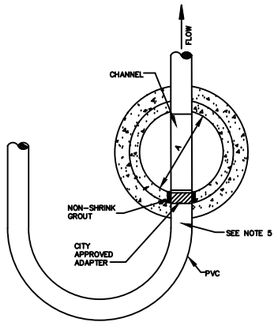
NOTES:

1. CONCRETE SHALL BE 4000 PSI, USING ASTM C150 CEMENT, TYPE 2.
2. CONE SECTION SHALL BE EITHER CONCENTRIC (PREFERRED) OR ECCENTRIC.
3. FLOOR SHALL CONTAIN #4 REINFORCEMENT AT 6" CENTERS WITHIN THE CENTER 1/3, AS A MINIMUM.
4. INSIDE AND OUTSIDE TO BE COATED WITH CONSEAL CS-55 OF 4MM THICKNESS BLACK, OR EQUAL.
5. MANHOLE CONNECTIONS TO CLAY PIPE MAY BE DIRECTLY CAST IN PLACE. CITY APPROVED ADAPTER RINGS MUST BE USED WITH PVC PIPE.
6. REINFORCE STEEL PER ASTM C478-88a.
7. 8" BEDDING (CLASS 2 OR 3) COMPACTED TO 98% AASHTO T180.
8. ALL PROVISIONS OF THE CITY'S "STANDARDS FOR WASTEWATER SYSTEM CONSTRUCTION" SHALL APPLY.
9. FOR MANHOLE OF DEPTH GREATER THAN 15' A CERTIFIED CONSTRUCTION DRAWING SHOWING DETAILED DESIGN FEATURES WILL BE REQUIRED.
10. MANHOLE SHALL BE COATED INSIDE AND OUTSIDE WITH A CITY APPROVED COATING EPOXY MARTIAL.
11. A TRACER WIRE SHALL BE A GREEN-COATED #10 COPPER HEAD HIGH STRENGTH (HS) SOLID TRACER AND JOINT SEAL SHALL BE INSTALLED ALONG ALL PIPE AND SERVICE. TRACER WIRE SHALL BE TAPED TO THE PIPE AND STUBBED UP AT ALL MANHOLES AND VALVES.



STANDARD MANHOLE CONNECTION DETAIL

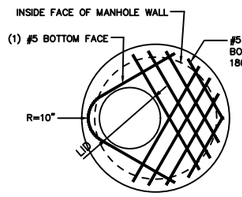
N.T.S.



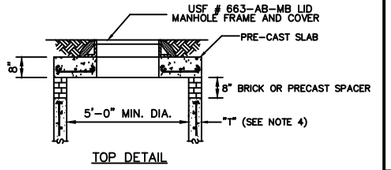
TERMINAL MANHOLE CONNECTION DETAIL

N.T.S.

SHALLOW MANHOLE DESIGN



SHALLOW MANHOLE TOP

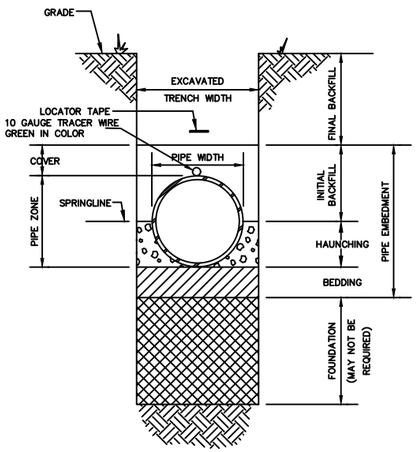


TOP DETAIL

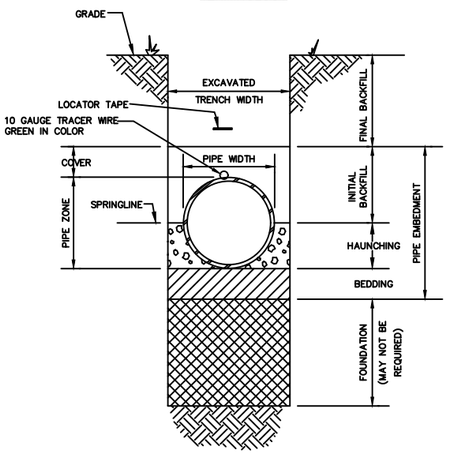
NOTES:

1. STANDARD MANHOLE SPECIFICATIONS EXCEPT WHERE OTHERWISE NOTED.
2. PRECAST TOP SLAB SHALL CONFORM TO DETAIL AND D.O.T. MINIMUM STANDARDS. REF. D.O.T. INDEX #201, SHEET 1 OF 5. OPENING MAY BE CONCENTRIC (PREFERRED) OR ECCENTRIC.
3. SHALLOW DESIGN MANHOLE SHALL BE LIMITED TO DEPTHS NOT GREATER THAN 6 FEET. SEE ALSO MANHOLE FOR AIR RELEASE VALVE.
4. MINIMUM WALL THICKNESS OF 8".

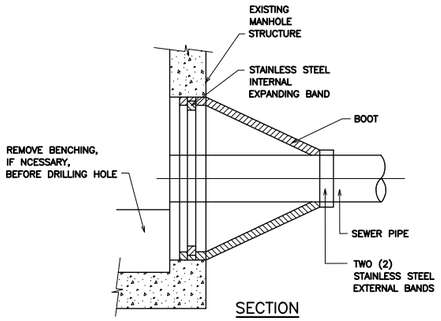
GRAVITY TRENCH CROSS-SECTION TERMINOLOGY



FORCE MAIN TRENCH CROSS-SECTION TERMINOLOGY



SANITARY SEWER CONNECTION TO EXISTING MANHOLE

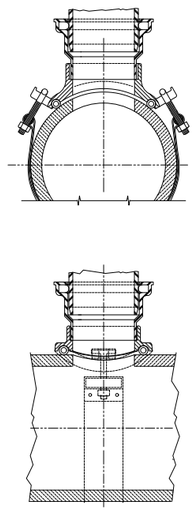


SECTION

NOTES:

1. CORE-DRILL CIRCULAR OPENING IN MANHOLE WALL OF DIAMETER TO FIT THE REQUIRED BOOT SIZE.
2. KOR-N SEAL FLEXIBLE RUBBER BOOT (MANUFACTURED BY NATIONAL POLLUTION CONTROL SYSTEMS, INC. OR AS APPROVED BY THE ENGINEERING DEPARTMENT) SHALL BE USED FOR WATERTIGHT CONNECTION.
3. CUT, SHAPE AND SLOPE NEW INVERT CHANNEL IN THE EXISTING CONCRETE BENCH FOR SMOOTH FLOW FROM NEW SANITARY SEWER CONNECTION.
4. CLEAN EXISTING MANHOLE OF ANY DIRT, CONCRETE OR DEBRIS WHICH MAY ACCUMULATE DURING THE CONSTRUCTION PROCESS.

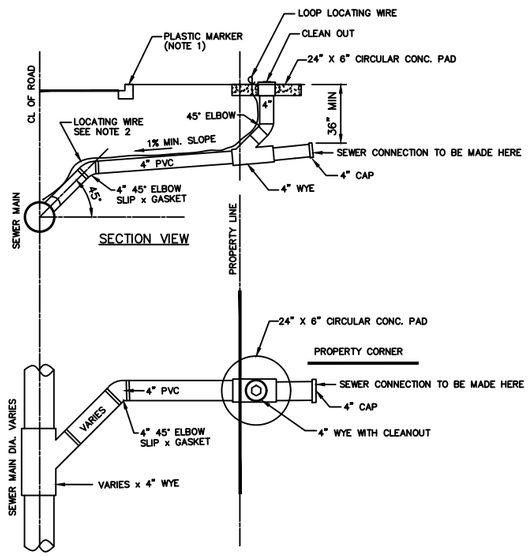
SANITARY SEWER PIPE SADDLE FOR GRAVITY SEWER



NOTES:

1. USE GENECO SEALTITE SEWER PIPE SADDLE.

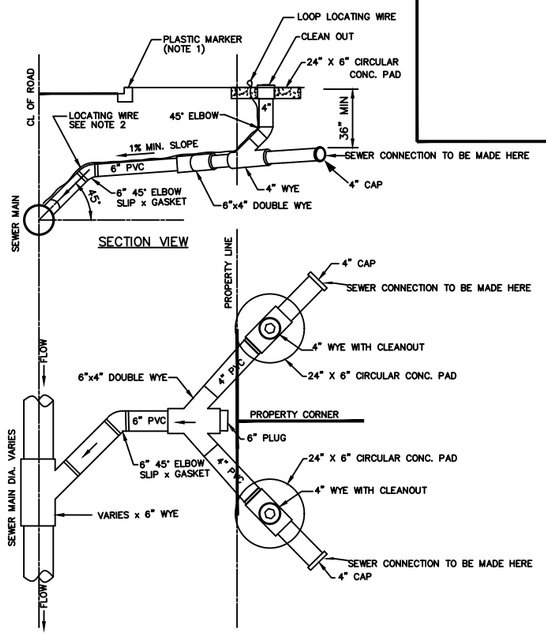
SANITARY SEWER CONNECTION DETAILS ONE SERVICE



NOTE

1. PROVIDE PLASTIC MARKERS AT SERVICE LATERALS ON BACK SIDE OF CURB.
2. THE TRACER WIRE SHALL BE A GREEN-COATED #10 COPPER HEAD HIGH STRENGTH (HS) SOLID TRACER AND JOINT SEAL SHALL BE INSTALLED ALONG ALL PIPE AND SERVICE. THE TRACER WIRE SHALL BE TAPED TO THE PIPE AND STUBBED UP AT ALL VALVES.

SANITARY SEWER CONNECTION DETAILS TWO SERVICES



ISSUE CODE
Modified 04-15-22 MJC
Modified 12-07-21 MJC

CITY OF LAKE WALES
201 CENTRAL AVE 863-678-4182

REV.	DESCRIPTION

ISSUE CODE			
A	PRELIMINARY	B	DESIGN
C	BIDS	D	CONSTRUCTION	E	APPROVAL

DESIGN BY:
CHK'D BY: DATE:
DRAWN BY: ENGR.
DRAWING TITLE
SANITARY SEWER DETAILS
JOB NO.
SHEET – OF – REV.