CHARLOTTE WATER
A CITY OF CHARLOTTE DEPARTMENT
STANDARD DETAILS
GRAVITY SEWER

Ш 5 MANH ш ONCR S **PRE**(

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NO SCALE VERSION 1.0

> DATE 04/2024

DETAIL 11.2.6



- STANDARD FRAME AND COVER.
- ASPHALT/GROUND

DESCRIPTION:

- 3. EXISTING OR PROPOSED PRECAST CONCRETE MANHOLE.
- RUBBER MANHOLE/PIPE CONNECTOR BOOT.
- 18' JOINT DIP (MIN.) OR DIP TO UNDISTURBED GROUND.
- DUCTILE IRON TEE, BxBxS.
- SHELF SHALL SLOPE 1" PER FOOT (MIN.) FROM MANHOLE WALL TO THE TROUGH (TYP.)
- DUCTILE IRON 90° BEND, ALL MJ BELL.
- 3,600 PSI CONCRETE BLOCKING.
- 3 #6 REBARS. 10.

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18

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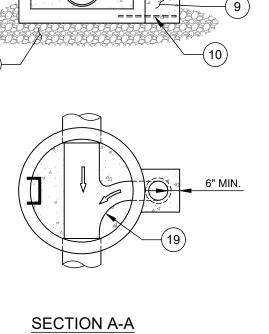
DIP

DIP

- 6" MINIMUM OF #57 STONE BASE, SUITABLE BEARING CAPACITY AS APPROVED BY GEOTECHNICAL ENGINEER.
- 8" TALL PRECAST CONCRETE GRADE RING.
- 6" WASHED #57 STONE.
- 8" BLIND FLANGE (TYPE 304 S.S. HARDWARE).
- 8" FL x PE DIP CLEANOUT.
- 8" REDUCER DUCTILE IRON (OMIT ON 8" MAINS).
- DUCTILE IRON CROSS OR TEE, ALL MJ BELL, SEE NOTE F.
- BACKFILL WITH #57 STONE-TYPICAL.
- 19. RESHAPE INVERT.
- R = 1/2 O.D. PIPE BARREL (DROP PIPE).
- 1/4" x 2" TYPE 304 STAINLESS STEEL STRAP, SEE NOTE H.
- 1/2" DIAMETER x 3" TYPE 316 S.S. ALL THREAD ANCHOR W/ S.S. NUT AND WASHER. USE EPOXY IN CLEANED DRILLED HOLE. SEE NOTE H.

## NOTES:

- CARE MUST BE TAKEN TO FORM A SMOOTH FINISHED TROUGH FROM ENTRANCE PIPES TO EXIT PIPE. AND IN CURVED MANHOLES THE TROUGH MUST BE A SMOOTH CIRCULAR ARC TANGENT TO THE INSIDE WALLS OF THE PIPES AT THEIR ENDS.
- THE SLOPE OF THE OUTSIDE DROP TROUGH SHALL BE 1/4" PER FOOT UNLESS PIPES ARE THE SAME DIAMETER.
- OUTSIDE DROP SHALL NOT ENTER MANHOLE IN CONE SECTION OR WITHIN 4" OF MANHOLE JOINTS.
- MATCH DROP INFLUENT CROWN TO CROWN WITH EFFLUENT
- PIPE CORES SHALL NOT PENETRATE THE MANHOLE JOINTS. PROVIDE MIN. 4" CLEARANCE.
- FOR DETACHED DROP, DELETE CLEANOUT AND USE TEE IN LIEU OF CROSS. CLEANOUT DROPS WILL BE SPECIFIED ON CONSTRUCTION PLANS.
- MAXIMUM DROP HEIGHT SHALL BE 10'.
- PIPE STRAPS SHALL TIGHTLY COMPRESS DROP TO MANHOLE WALL. GAPS BETWEEN STRAP AND MANHOLE SHALL BE FILLED WITH OVERSIZE S.S. WASHERS. ANCHOR EXTENSIONS ARE NOT ALLOWED. CUSTOM STRAP LENGTHS MAY BE REQUIRED.



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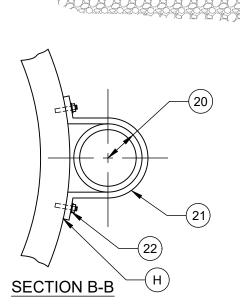
6" MIN.

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TYPE A - ATTACHED DROP

**VARIES** 

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TYPE B - DETACHED DROP

OR TYPE C - CLEANOUT DROP

**VARIES** 

16

DIP

DIP