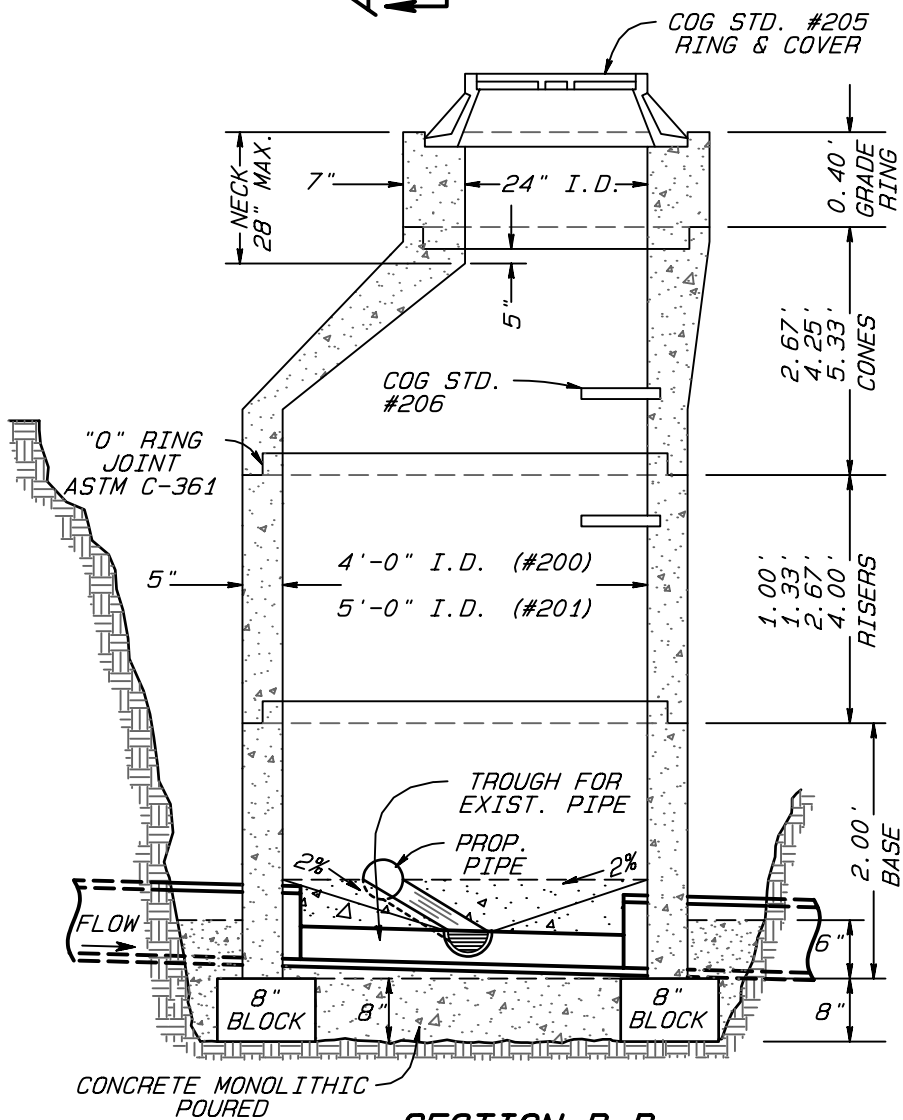


**SECTION A-A**



**SECTION B-B**

**NOTES:**

ON NEW INSTALLATION A MAX. OF TWO GRADE RINGS SHALL BE USED. (EXCEPT ON OUTFALLS, USE WATERTIGHT RING & COVER)

CONCRETE SHALL BE CLASS AA, 4000 PSI AS PER ASTM C-478.

STEEL REINFORCING SHALL MEET ASTM C-185 (4' DIA) OR ASTM C-478 (5' DIA).

MANHOLES OVER 3'-6" IN DEPTH SHALL BE PROVIDED WITH STEPS 16" ON CENTERS STEPS SHALL BE IN ACCORDANCE W/ COG STD. #206.

8" CLASS "AA" CONCRETE UNDER M.H. PORTIONS OF THE INVERT CAN BE POURED AT THE SAME TIME. BOTTOM SHOULD EXTEND A MIN. OF 6" BEYOND M.H. BASE

VACUUM TEST REQUIRED ON ALL INSTALLATIONS PRIOR TO PUTTING MANHOLE INTO SERVICE

**MANHOLES  
(MAX. PIPE O.D.)**

MH DIA	45° DEFL	90° DEFL
4'	31-1/2"	25"
5'	42"	32"
6'	51"	38"

\* PRECAST INVERT (OPTIONAL)

**CITY OF GREENSBORO**

**STANDARD 4' I.D. & 5' I.D.  
ECCENTRIC PRECAST BOTTOMLESS MANHOLE OVER  
EXISTING SANITARY SEWER (DOGHOUSE MANHOLE)**

STD. NO.	REV.
200A 201A	DEC-05