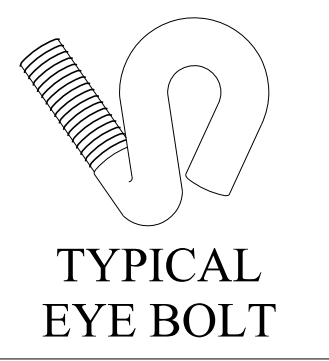
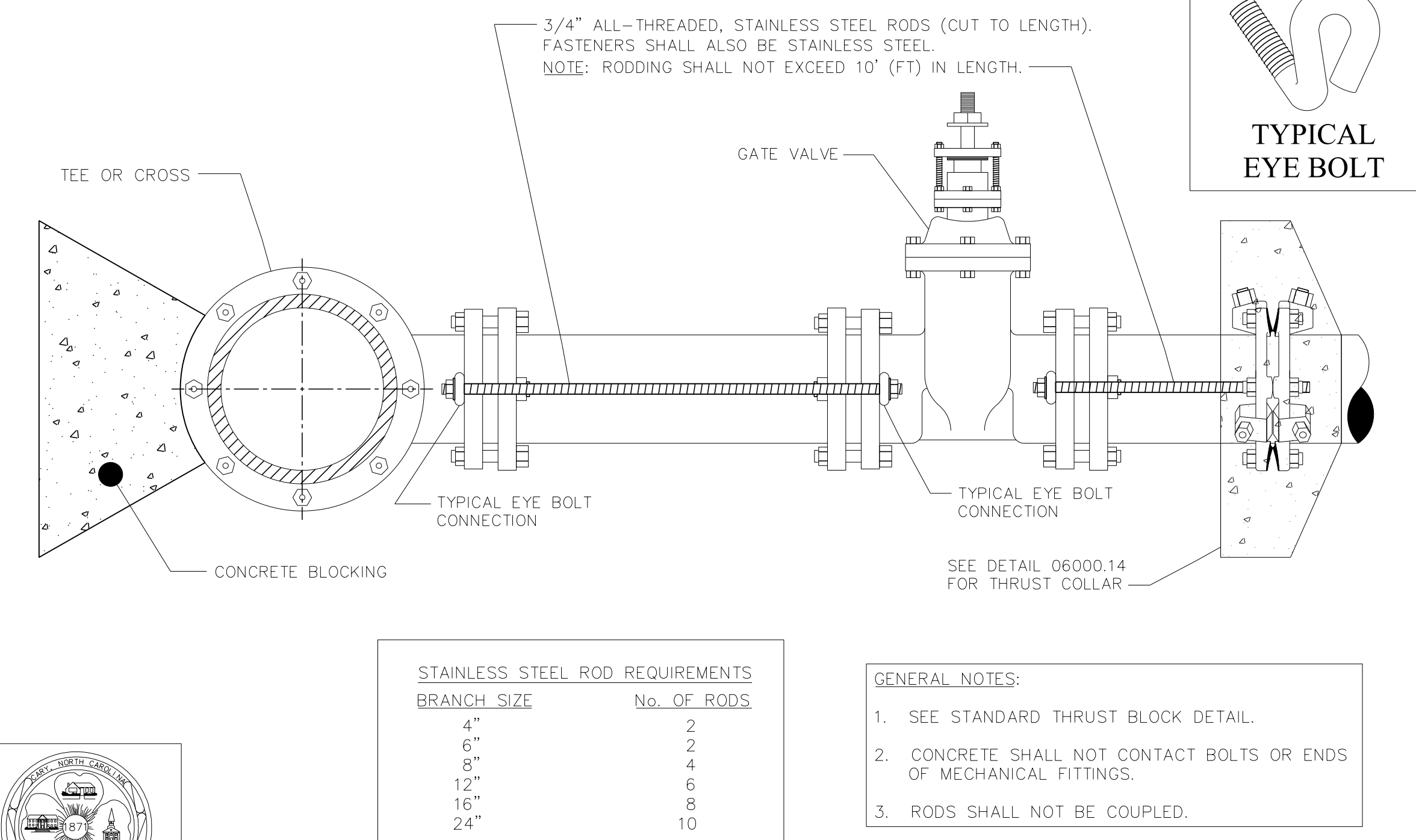


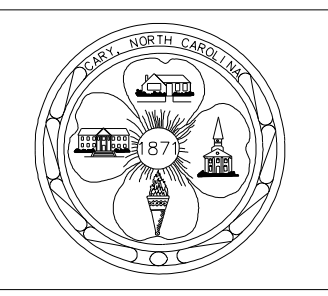
8/17/09



**STAINLESS STEEL ROD REQUIREMENTS**

BRANCH SIZE	No. OF RODS
4"	2
6"	2
8"	4
12"	6
16"	8
24"	10

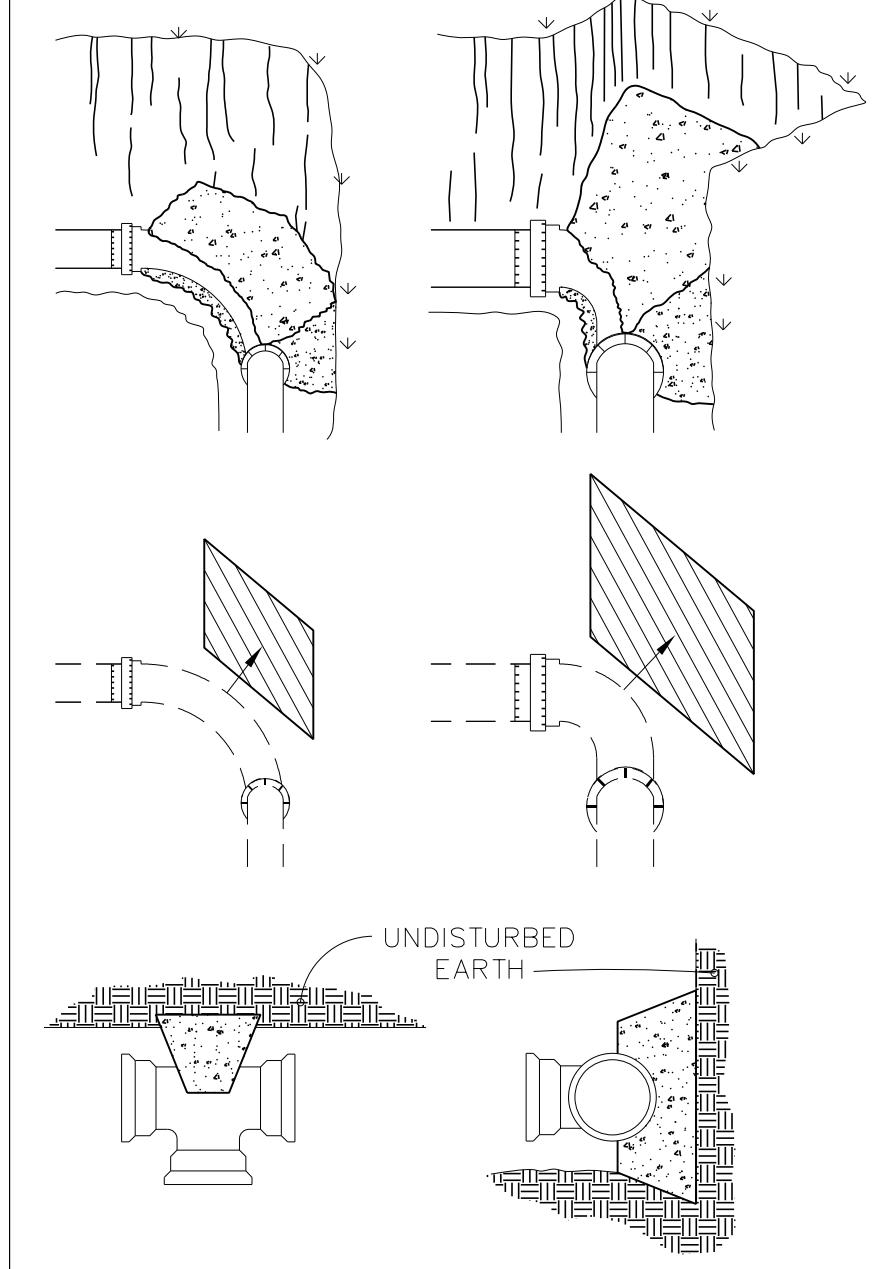
- GENERAL NOTES:**
- SEE STANDARD THRUST BLOCK DETAIL.
  - CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL FITTINGS.
  - RODS SHALL NOT BE COUPLED.



**STANDARD VALVE RESTRAINT**

DETAIL No. 06000.09  
SHEET 1 OF 2

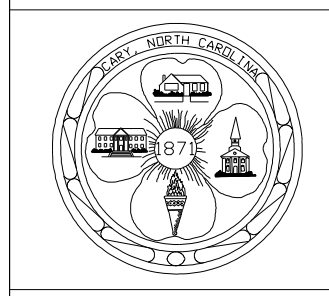
EFFECTIVE: 12/10/09



**MINIMUM CONCRETE BLOCKING (C.Y.) \***

NOMINAL PIPE DIAMETER INCHES	TEES & DEAD ENDS	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
4	1/3	1/3	1/3	1/3	1/3
6	1/3	1/3	1/3	1/3	1/3
8	1/3	1/2	1/3	1/3	1/3
10	2/3	3/4	1/2	1/3	1/3
12	3/4	1.0	2/3	1/3	1/3
14	1.0	1 1/2	3/4	1/2	1/3
16	1 1/3	2.0	1.0	1/2	1/3
18	1 2/3	2 1/3	1 1/3	2/3	1/3
20	2.0	3.0	1 2/3	3/4	1/2
24	3.0	4 1/3	2 1/3	1 1/3	2/3

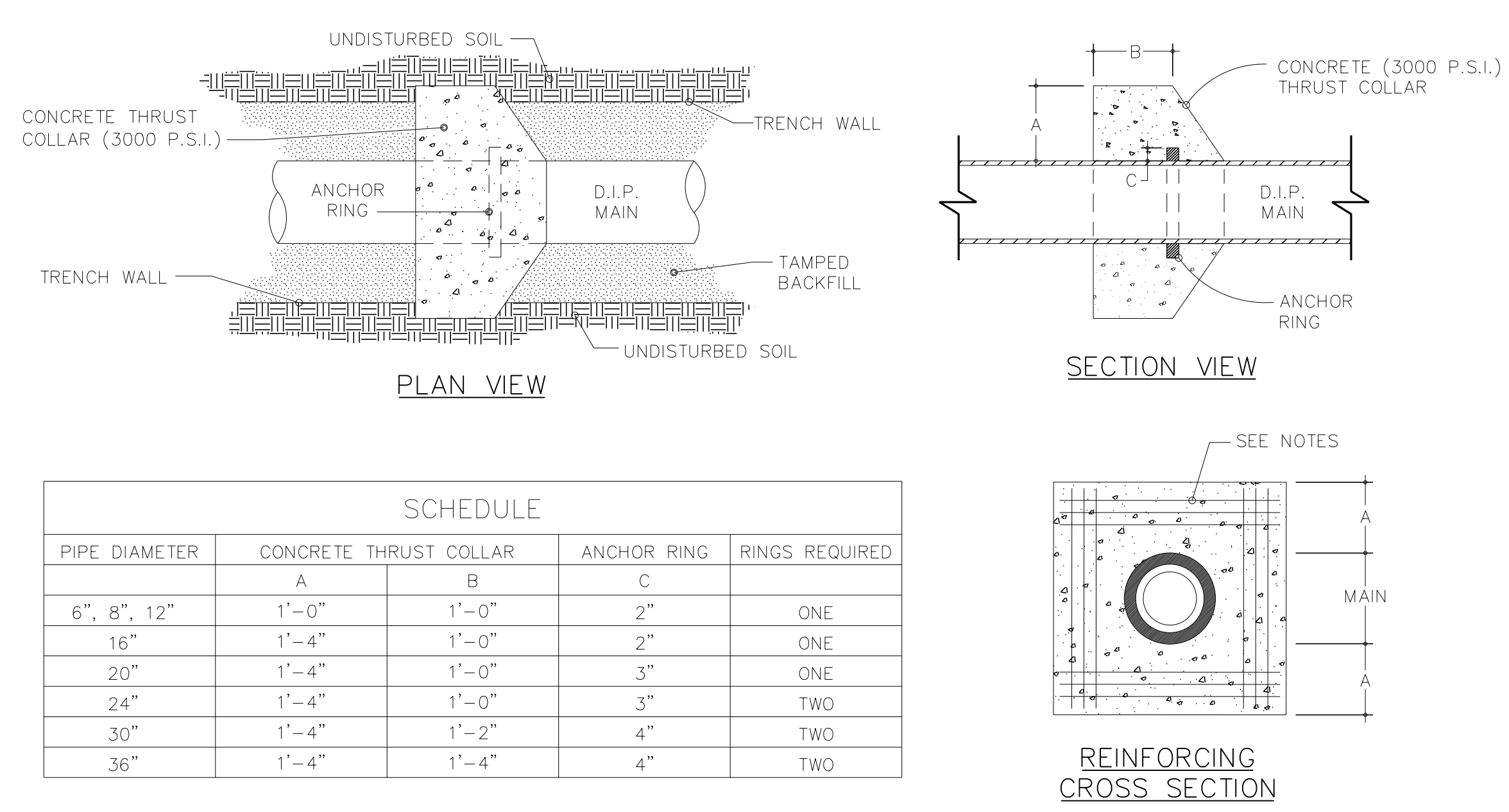
- NOTES:**
- FITTING SHALL BE WRAPPED WITH A MINIMUM 4 MIL PLASTIC.
  - NO CONCRETE SHALL COVER BOLTS OR GLANDS.
- \* CONCRETE SHALL BE 3000 P.S.I. MIX.



**STANDARD REACTION BLOCKING**

DETAIL No. 06000.13  
SHEET 1 OF 1

EFFECTIVE: 12/10/09



**SCHEDULE**

PIPE DIAMETER	CONCRETE THRUST COLLAR		ANCHOR RING	RINGS REQUIRED
	A	B		
6", 8", 12"	1'-0"	1'-0"	2"	ONE
16"	1'-4"	1'-0"	2"	ONE
20"	1'-4"	1'-0"	3"	ONE
24"	1'-4"	1'-0"	3"	TWO
30"	1'-4"	1'-2"	4"	TWO
36"	1'-4"	1'-4"	4"	TWO



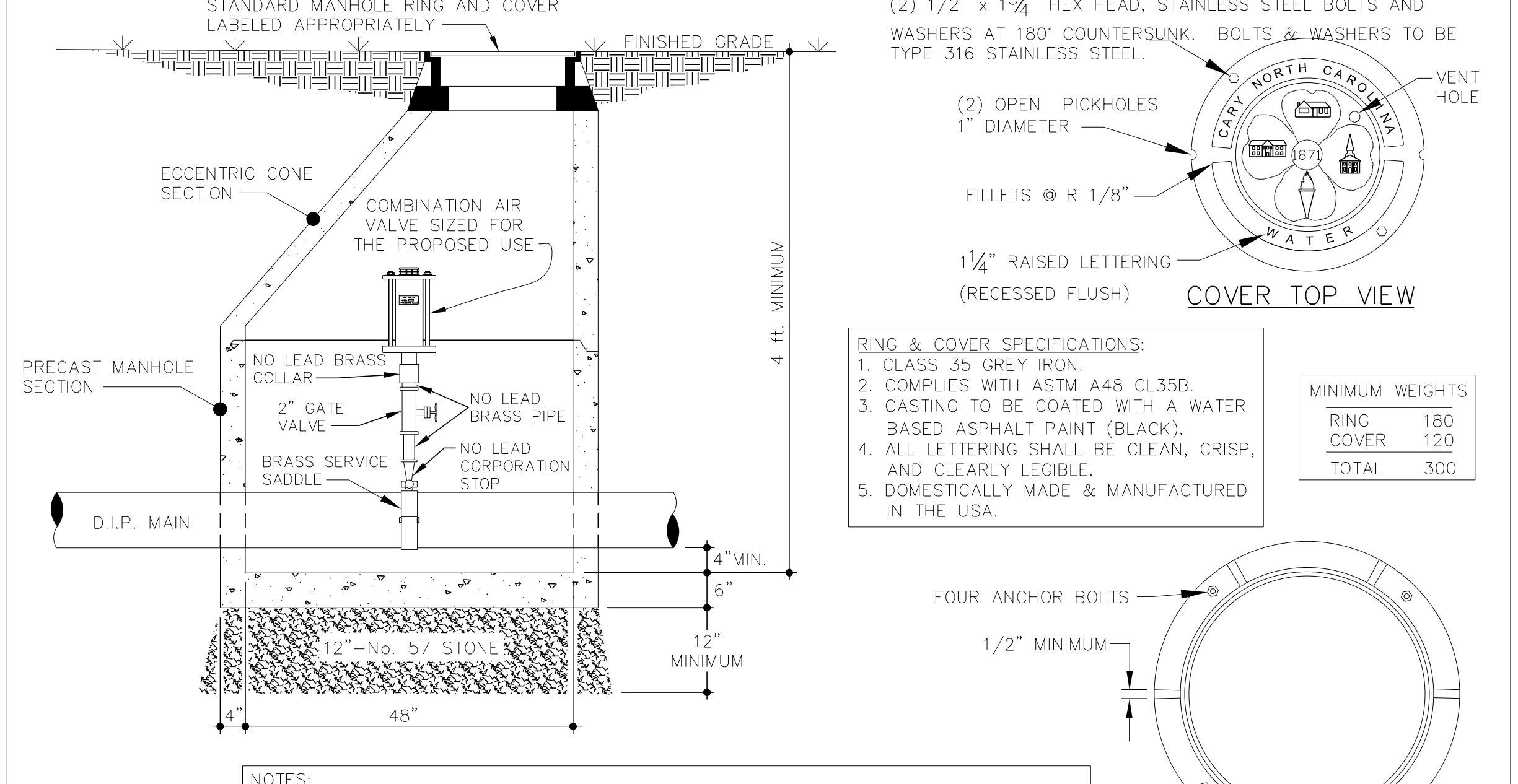
- NOTES:**
- 6" TO 16" MAINS = 12-NO. 7 BARS
  - 20" TO 36" MAINS = 12-NO. 8 BARS
  - BARS PLACED AS SHOWN



**STANDARD THRUST COLLAR INSTALLATION**

DETAIL No. 06000.14  
SHEET 1 OF 1

EFFECTIVE: 12/10/09



(2) 1/2" x 1 3/4" HEX HEAD, STAINLESS STEEL BOLTS AND WASHERS AT 180° COUNTERSUNK. BOLTS & WASHERS TO BE TYPE 316 STAINLESS STEEL.

(2) OPEN PICKHOLES 1" DIAMETER

FILLETS @ R 1/8"

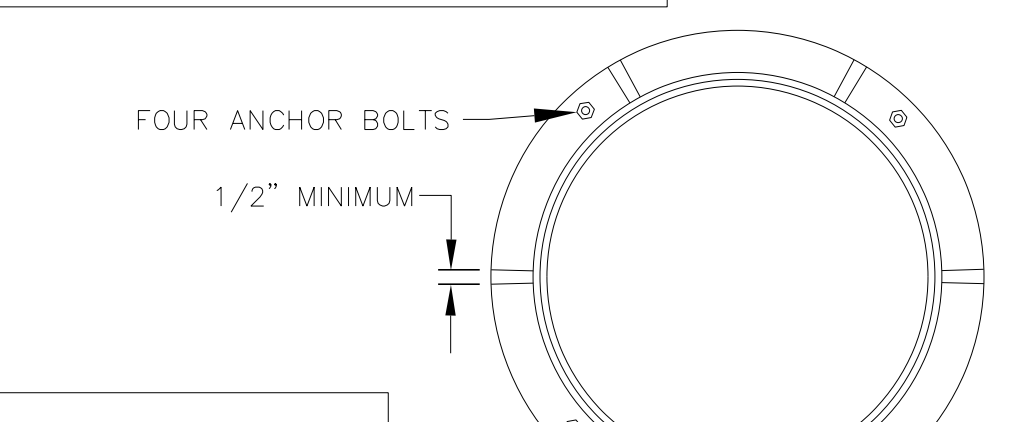
1 1/4" RAISED LETTERING (RECESSED FLUSH)

**COVER TOP VIEW**

- RING & COVER SPECIFICATIONS:**
- CLASS 35 GREY IRON.
  - COMPLIES WITH ASTM A48 CL35B.
  - CASTING TO BE COATED WITH A WATER BASED ASPHALT PAINT (BLACK).
  - ALL LETTERING SHALL BE CLEAN, CRISP, AND CLEARLY LEGIBLE.
  - DOMESTICALLY MADE & MANUFACTURED IN THE USA.

**MINIMUM WEIGHTS**

RING	180
COVER	120
TOTAL	300



- NOTES:**
- TAP SIZE AND ISOLATION VALVE TO BE SAME SIZE AS AIR VALVE.
  - ALL PIPING AND FITTINGS, IN THE MANHOLE, SHALL BE 'NO LEAD' BRASS OR BRONZE UNLESS NOTED.
  - MANHOLE STEPS SHALL BE PLACED 16" O.C. AS SHOWN BY DETAIL 07000.02.
  - CENTRIC CONES MAY BE USED FOR AIR VALVE MANHOLES LESS THAN 5' IN DEPTH.



**STANDARD COMBINATION AIR VALVE (FOR POTABLE WATER SYSTEMS)**

DETAIL No. 06000.15  
SHEET 1 OF 2

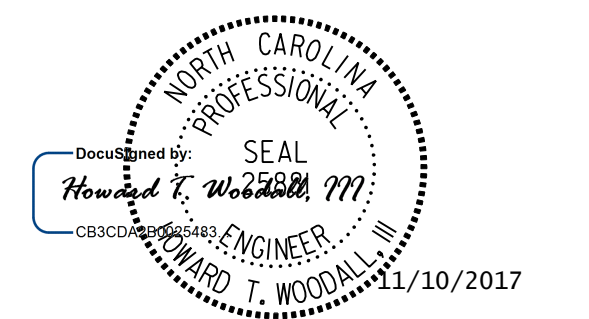
EFFECTIVE: 07/01/13

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**UTILITY CONSTRUCTION PLANS**  
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PROJECT REFERENCE NO. U-5315 A&B  
SHEET NO. UC-3B