NOTES:

1. MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH AASHTO M199 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE STANDARD SPECIFICATIONS.

2. HANDHOLDS IN ADJUSTMENT SECTION SHALL HAVE 3" MIN. CLEARANCE. STEPS IN MANHOLE SHALL HAVE 6" MIN. CLEARANCE. SEE STD. DTL. D-15, "MANHOLE DETAILS." MANHOLDS SHALL BE PLACED IN ALTERNATING
GRADE RINGS OR LEVELING BRICK COURSE WITH A MIN. OF ONE HANDHOLD BETWEEN THE LAST STEP AND
THE TOP OF THE MANHOLE.

3. NON-REINFORCED CONCRETE IN CHANNEL AND SHELF SHALL BE CLASS 3000. ALL PRECAST CONCRETE SHALL
BE CLASS 4000.

4. PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE WALL
THICKNESS OF 2" MIN. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT. PIPES
SHALL BE INSTALLED ONLY IN FACTORY KNOCKOUTS UNLESS OTHERWISE APPROVED BY THE ENGINEER.

5. KNOCKOUT OR CUTOUT HOLE SIZE SHALL EQUAL PIPE OUTER DIAM. PLUS MANHOLE WALL THICKNESS. MAX.
HOLE SIZE BE 60" FOR 72" MANHOLE, 84" FOR 96" MANHOLE. MIN. DISTANCE BETWEEN HOLES SHALL BE 12".

6. MANHOLE RINGS AND COVERS SHALL BE IN ACCORDANCE WITH SEC. 7.05 OF THE STANDARD SPECIFICATIONS.
MATING SURFACES SHALL BE FINISHED TO ASSURE NON-ROCKING FIT WITH ANY COVER POSITION.

7. FOR HEIGHTS OF 12’ OR LESS, MIN. SOIL BEARING VALUE SHALL EQUAL 3,300 POUNDS PER SQUARE FOOT.
FOR HEIGHTS OVER 12’ MIN. SOIL BEARING VALUE SHALL EQUAL 3,800 POUNDS PER SQUARE FOOT.

8. FOR DETAILS SHOWING GRADE RING, LADDER, STEPS, HANDHOLDS, AND TOP SLABS, SEE
STD. DTL. D-5.

9. SEE THE STANDARD SPECIFICATIONS SEC. 7-05.3 FOR JOINT REQUIREMENTS.

10. APPLY NON-SHRINK GROUT TO INSIDE AND OUTSIDE OF ALL JOINTS, RISERS, RINGS AND FRAMES.