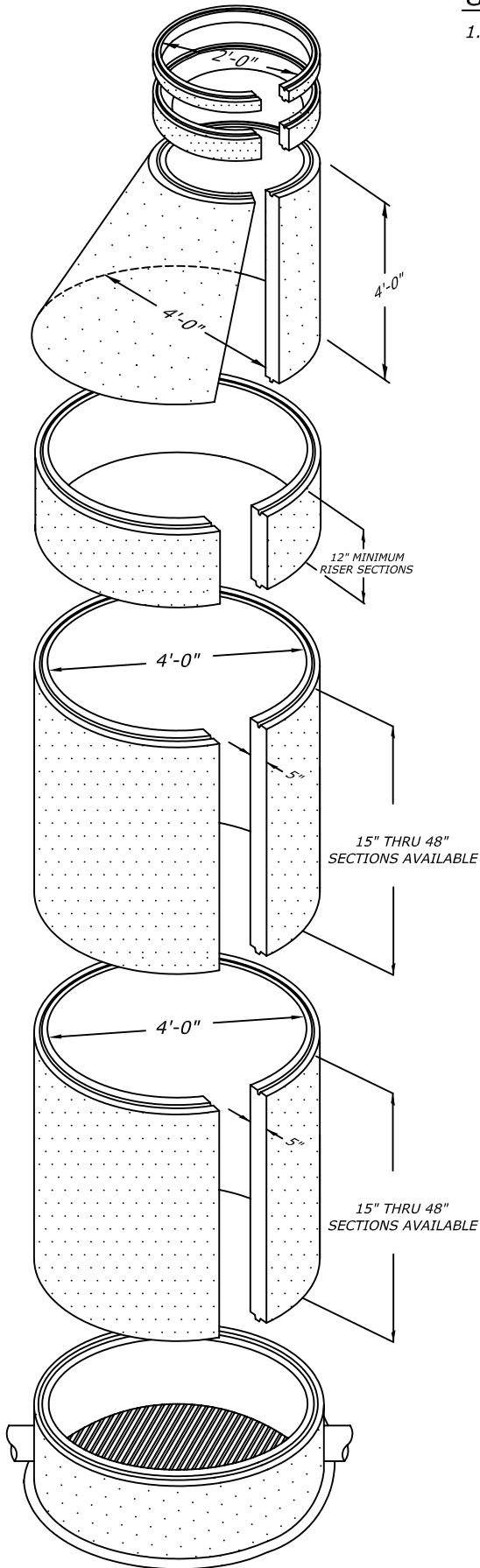


GENERAL NOTES:

1. ALL SHAFTING TO BE MANUFACTURED IN ACCORDANCE WITH ASTM C-478-95a.

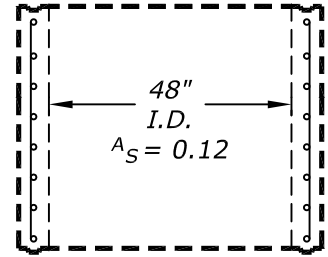


STRUCTURAL REINFORCEMENT DATA:

* ASTM A82, ASTM A 185
 ASTM A496, ASTM A 615
 ALL ACCEPTABLE STEEL
 REINFORCING.

A_s = NOT LESS THAN
 0.0025 X I.D. IN
 INCHES FOR ALL
 CIRCUMFERENTIAL
 REINFORCEMENT.

* STEEL CAGE TO BE PLACED
 IN THE CENTER THIRD OF
 MANHOLE WALL THICKNESS.



48" I.D.

STEEL REINFORCEMENT CAGE DESIGN =
 CIRCUMFERENTIAL: #4 ($A_s=0.05$) BAR @ 4" O.C.
 A_s = MINIMUM 0.12/VFT (12) #3 VERTICAL BARS
 CONCRETE: MIN 4500 psi @ 28 DAYS.

DESIGN NOTES:

1) LOAD CRITERIA:

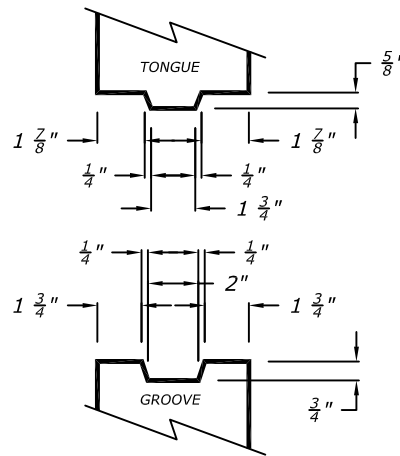
- AASHTO H-20 TRAFFIC LOADING (16,000 LBS. WHEEL LOAD) *FOR MANHOLES & RING & COVERS.
- INCIDENTAL H-20 TRAFFIC LOADING (OCCASIONAL TRAFFIC, OFF STREET LOCATIONS)
- PARKWAY LOADING (300 LBS./SQ. FT.)
- H-20 SURCHARGE AND LATERAL EARTH PRESSURE.
 * FOR PRECAST MANHOLES.

2) CONCRETE COMPRESSIVE STRENGTH: 4500 PSI @ 28 DAYS.

3) STEEL REINFORCING YIELD STRENGTH F_y = 60,000 PSI PER ASTM A-615.

4) ALL JOINTS TO BE SEALED USING FLEXIBLE GASKET MATERIAL (RAMNECK).

5) ALL MANHOLES MADE IN ACCORDANCE WITH ASTM C-478.



JOINT DETAIL

