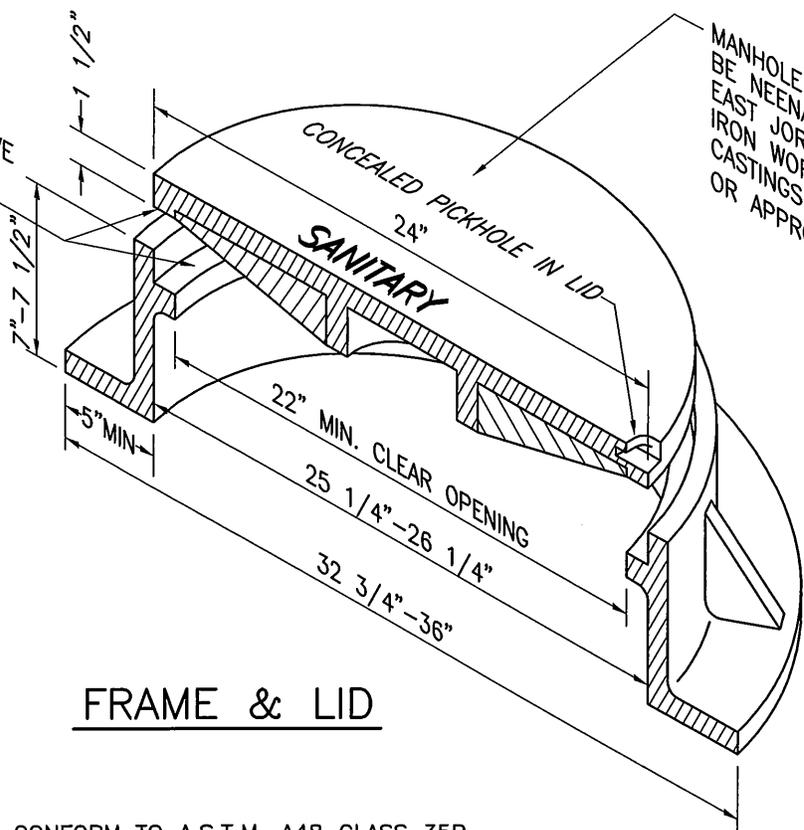


FRAME & LID TO HAVE MACHINED BEARING SURFACES

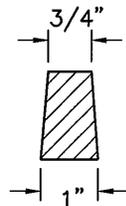
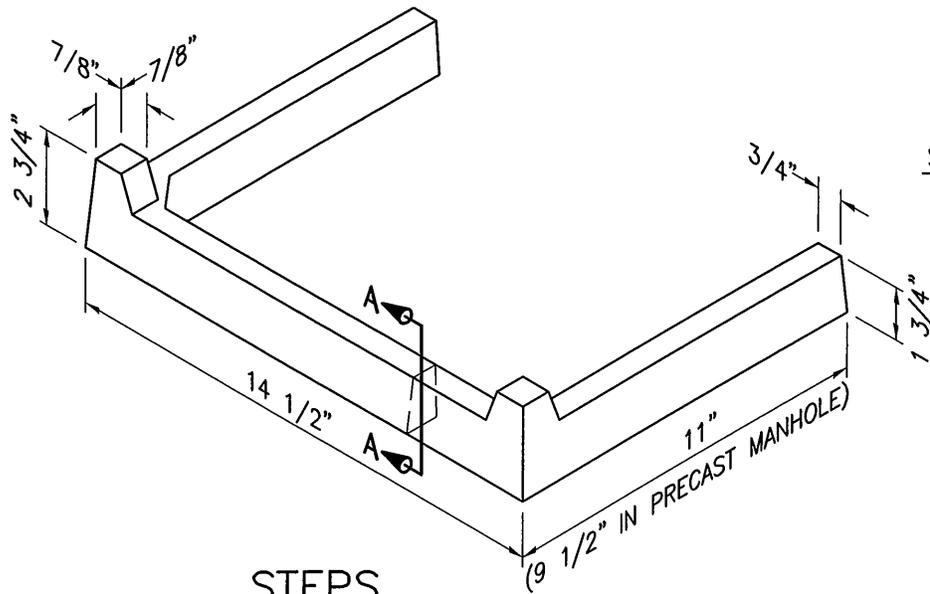
MANHOLE LID & FRAME TO BE NEENAH #R1726-A, EAST JORDAN IRON WORKS 1120, GCI CASTINGS 2276 OR APPROVED EQUAL



FRAME & LID

NOTES:

- 1. CASTINGS SHALL CONFORM TO A.S.T.M. A48 CLASS 35B.
- 2. LIDWEIGHT 135 lbs. ±5%. TOTAL WEIGHT OF 350 lbs. ±5%.
- 3. WATERTIGHT LID AND FRAME TO BE NEENAH #R-1916-F, OR APPROVED EQUAL
- 4. MANHOLE STEP NEENAH R-1980-J, CLAY & BAILEY 2102-01-6200 & 2102-01-6300, GCI MS 1114B OR APPROVED EQUAL.
- 5. BOLT DOWN LIDS SHALL HAVE FRAMES BOLTED TO THE CONE SECTION



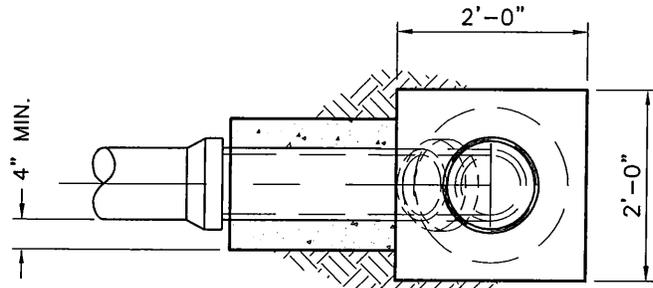
SECTION A-A

STEPS

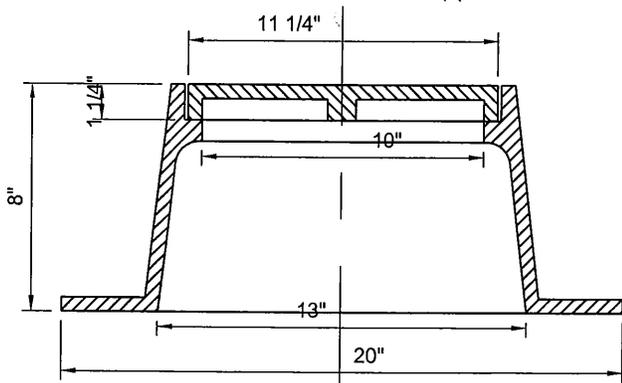
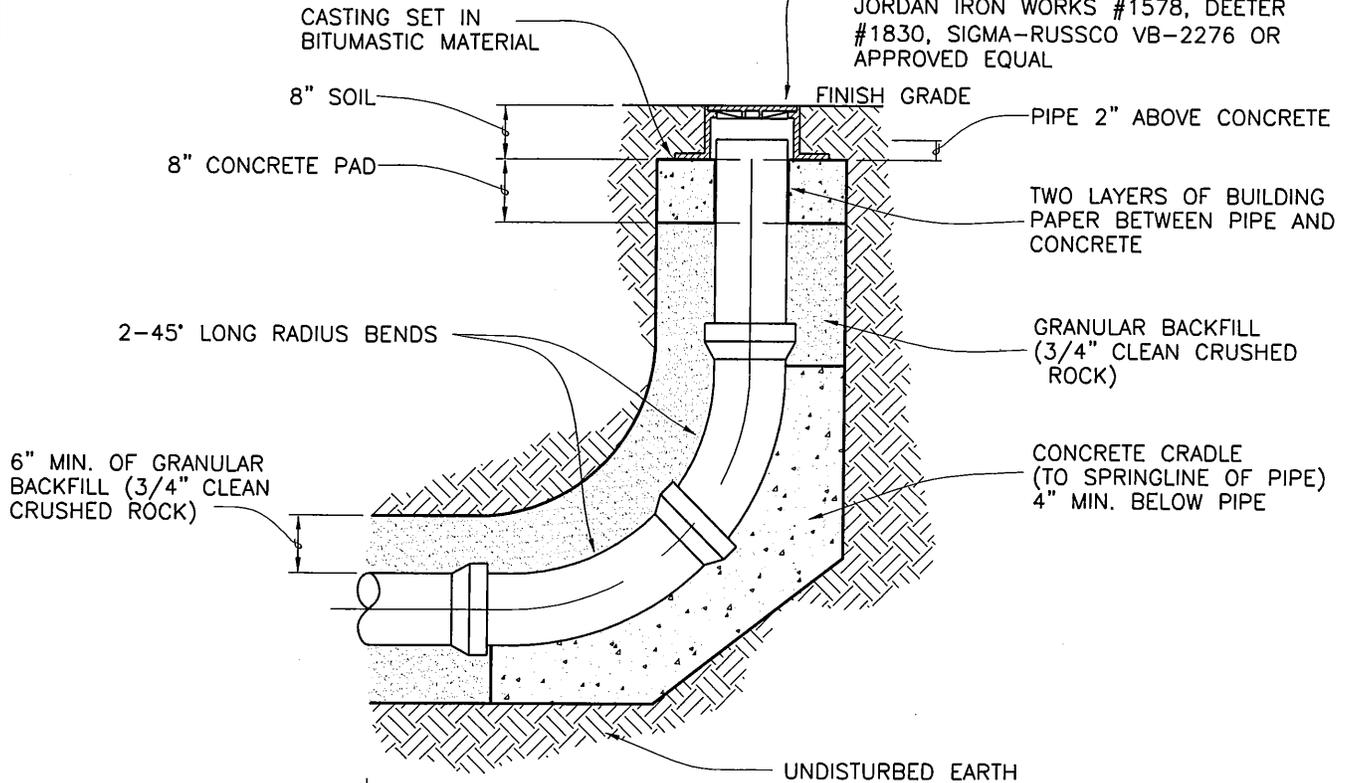
<i>Jahn</i>	7/19/2013
Approved	Date
Revisions	
▲	Revised casting weight



MANHOLE CASTINGS
(Frame, Lid & Steps)



▲
 CASTING WEIGHT 90 lbs ±5%. (NO VENT HOLES OR OPEN PICK HOLES) NEENAH #R-1976, GCI CASTINGS #G1000, EAST JORDAN IRON WORKS #1578, DEETER #1830, SIGMA-RUSSCO VB-2276 OR APPROVED EQUAL



FRAME & LID

NOTE:
 DISTANCE FROM CENTER OF DOWNSTREAM MANHOLE TO CENTER OF CLEANOUT SHALL BE 150 FEET OR LESS.

John
 Approved 7/19/2013
 Date D6te



City of Columbia
 Public Works Department

STANDARD CLEANOUT

Revisions

▲ Revised casting weight

Addendum #2

510.2. Materials.

Castings

Manhole and cleanout castings shall conform to ASTM A48, class 35 B. Manhole and cleanout casting dimensions shall conform to the Standard Details. Manhole lid shall have a weight of 135 lbs \pm 5%. Manhole lid plus manhole frame shall have a total weight of 350 lbs \pm 5%. Cleanout lid plus cleanout frame shall have a total weight of 90 lbs \pm 5%.