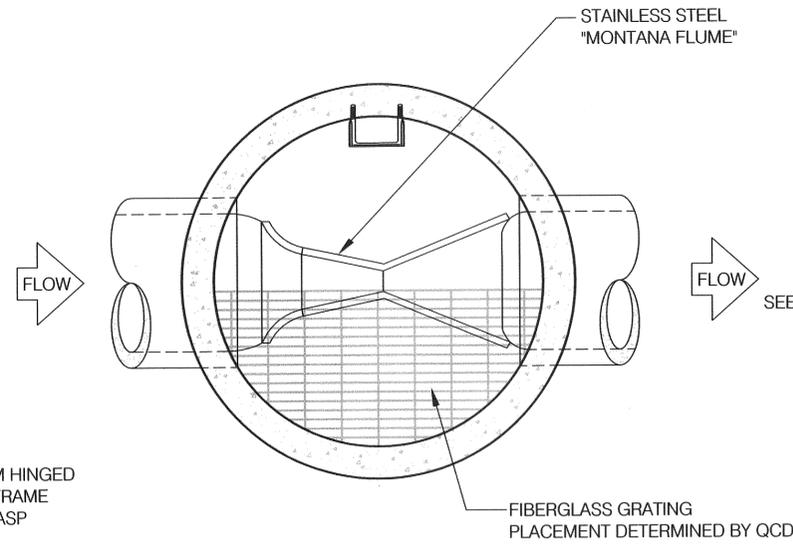
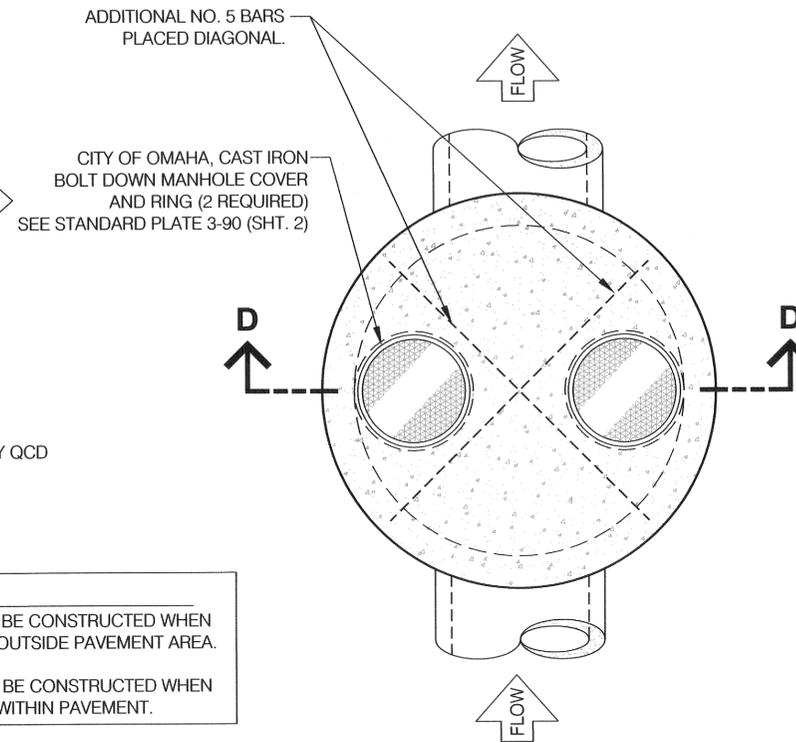


MANHOLE PLAN OUTSIDE PAVEMENT

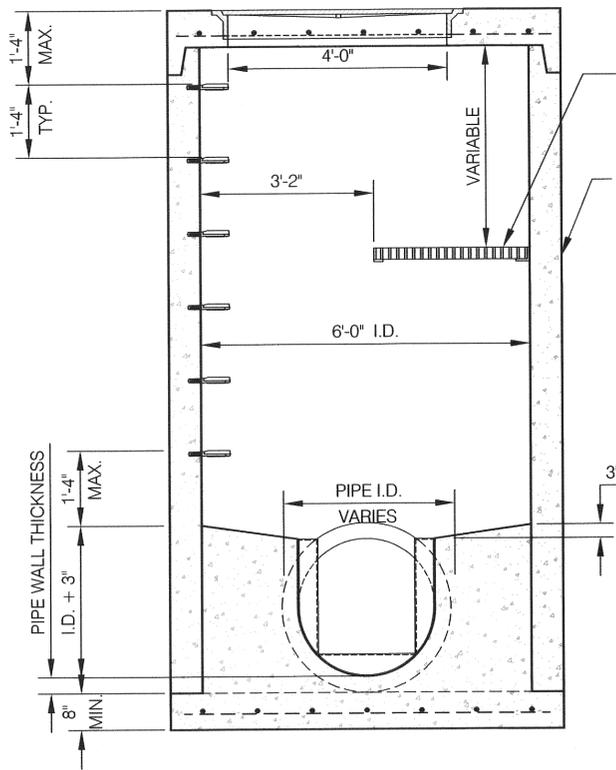


INTERIOR PLAN

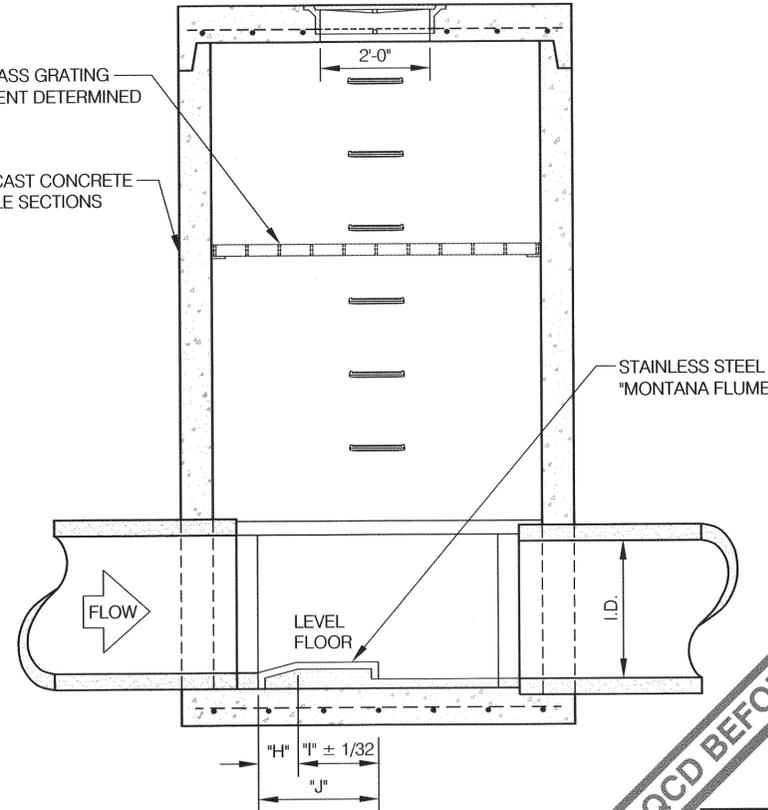
NOTE
 HINGED LID TOP SHALL BE CONSTRUCTED WHEN MANHOLE IS LOCATED OUTSIDE PAVEMENT AREA.
 ALTERNATE TOP SHALL BE CONSTRUCTED WHEN MANHOLE IS LOCATED WITHIN PAVEMENT.



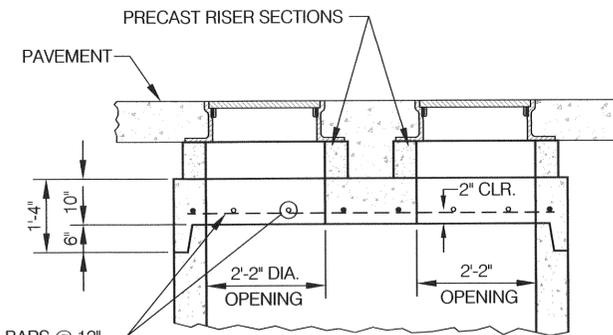
**ALTERNATE TOP
 MANHOLE LOCATED WITHIN PAVEMENT**



SECTION B-B



SECTION A-A 1



SECTION D-D

- NOTES:** 1
1. QUALITY CONTROL DIVISION (QCD) MUST VERIFY THE DIMENSIONS AND TOLERANCES OF THE FLUME BEFORE INSTALLATION.
 2. INDUSTRY SHALL PROVIDE ANTICIPATED MAXIMUM AND MINIMUM FLOW RATES IN GALLONS PER MINUTE (GPM) OR CUBIC FEET PER SECOND (CFS) TO QCD FOR SIZING PURPOSES.
 3. QCD MUST INSPECT FORMS BEFORE POURING CONCRETE AND AFTER TO VERIFY PROPER INSTALLATION AND TO ENSURE TOLERANCE ARE WITHIN SPECIFICATION. CONTACT QCD: 444-3915 (EXT 135) TO ARRANGE INSPECTIONS.
 4. ALL DIMENSIONS SHALL BE PROVIDED BY QCD.
 5. FLUME SHALL BE FABRICATED FROM 10 GAUGE TYPE 304 STAINLESS STEEL.
 6. FLUME MUST BE INSTALLED LEVEL AND PLUMB.
 7. DISCHARGE OF FLUME MUST HAVE A FREE FALL OF _____ INCHES (SUPPLIED BY QCD) DEPENDENT ON FLUME SIZE.
 8. APPROACH SECTION OF FLUME MAY BE FABRICATED OF STAINLESS STEEL OR FORMED IN CONCRETE.
 9. TOLERANCES ON THROAT WIDTH (W) +/- 1/64TH OF AN INCH. ALL OTHER DIMENSIONS OF FLUME +/- 1/32ND OF AN INCH.
 10. 2/3(A) MUST BE ETCHED INTO THE FLANGE OF THE FLUME AT THE EXACT DISTANCE. (SEE SHEET 3)
 11. THE UPSTREAM APPROACH PIPE TO THE SMH MUST BE STRAIGHT (NO TIE INS, BENDS OR TURNS). THE MINIMUM LENGTH OF THE APPROACH PIPE SHALL BE EQUAL TO OR GREATER THAN 25 TIMES THE DIAMETER OF THE PIPE.
 12. THE UPSTREAM AND DOWNSTREAM PIPE MUST HAVE A UNIFORM SLOPE AND BE DESIGNED SO THE APPROACHING FLOW IS RELATIVELY FREE OF TURBULENCE. PROVIDE QCD WITH % SLOPE FOR APPROVAL.
 13. ALL CONCRETE SHALL BE HIGH ALKALINITY, MINIMUM 50% ALCAREOUS AGGREGATE, CLASS L65M, TYPE II CEMENT.
 14. THE MINIMUM INSIDE DEPTH OF SAMPLING MANHOLES SHALL BE 4 FEET.
 15. HINGED TOP LID SHALL BE CONSTRUCTED WHEN THE SAMPLING MANHOLE IS LOCATED OUTSIDE PAVEMENT AREA. ALTERNATE TOP SHALL BE CONSTRUCTED WHEN SAMPLING MANHOLE IS LOCATED WITHIN PAVEMENT (SEE SHEET 2).
 16. CONCRETE TOP MAY BE PRECAST OR CAST IN PLACE.
 17. STAINLESS STEEL SUPPORT ANGLES FOR GRATING SHALL BE FASTENED TO THE WALLS WITH STAINLESS STEEL CONCRETE ANCHORS.
 18. GRATING PLACEMENT TO SMH SHALL BE DETERMINED BY QCD.
 19. GRATING AND APPURTENANCES SHALL BE DESIGNED TO CARRY A UNIFORM LIVE LOAD OF 250PSF AND A 500 LB CONCENTRATED LOAD AT THE MIDPOINT.
 20. A LAYER OF ALUMILASTIC CONSISTENCY C, C-1, OR K, OR APPROVED EQUAL, SHALL BE PLACED BETWEEN ALUMINUM COMPONENTS AND ALL CONCRETED CONTACT POINTS.
 21. PRECAST CONCRETE MANHOLE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THIS STANDARD PLATE AND SANITARY MANHOLE REQUIREMENTS IN SECTION 700 OF THE MOST CURRENT VERSION OF 'THE CITY OF OMAHA STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION'. JOINTS SHALL BE CONFINED O-RING GASKET CONFORMING TO THE REQUIREMENTS OF ASTM C361.
 22. 72" I.D. MANHOLE SHALL BE MANUFACTURED ACCORDING TO A.S.T.M. STANDARD SPECIFICATION C478-72 EXCEPT AS NOTED. USE 7" WALL THICKNESS.
 23. SAMPLING MANHOLES SHALL BE LOCATED SO ACCESS IS AVAILABLE TO SAMPLING CREWS AT ALL TIMES.
 24. MANHOLES ON PRIVATE PROPERTY SHALL BE LOCATED SO THEY ARE UNOBSTRUCTED BY PARKED OR MOVING VEHICLES.
 25. IF THE FINAL QCD INSPECTION DETERMINES THE METERING DEVICE/PIPING DOES NOT MEET TOLERANCES OR SPECIFICATIONS THE INSTALLATION WILL BE REJECTED.

CALL QCD BEFORE PROCEEDING

		CITY OF OMAHA PUBLIC WORKS DEPARTMENT	
		SAMPLING MANHOLE MONTANA FLUME TYPE	
		STANDARD PLATE 3-18	SHEET 2/3
		ISSUE DATE: MARCH 26, 2003	

1 REVISION 02/11/2011

DESIGN ENGINEER
 CITY ENGINEER