

## SECTIONAL VIEW SANITARY MANHOLE

### MANHOLE CONSTRUCTION

Manhole shall be 4500 p.s.i. concrete reinforced with 10 x 10 - W10 x W10 welded wire fabric. Wall and base thickness shall be a minimum of 5".

### PRECAST CONCRETE RISER RINGS

No more than 12" of rings may be used to adjust the frame and cover to grade.

### PRECAST ECCENTRIC TOP SECTION

Precast flat tops shall be used when the manhole is less than 6' deep. See detail below.

### JOINT SEALING

Joints between all manhole sections shall be sealed with an approved rubber gasket. Outside joints shall be sealed with a Trowelable Butyl Rubber.

### PRECAST MANHOLE BARREL SECTION

### COMBINED PRECAST MANHOLE BASE and BARREL SECTION

The base and first barrel section shall be monolithic and additionally reinforced with 4 - #4 bar els 60" long.

### CAST or CORE DRILLED OPENINGS

All openings shall be at least 3" from the top of the base part of the precast section.

### BEDDING

4" of #11 stone on soil or  
6" of #11 stone on rock

### MANHOLE FRAME AND COVER

Frame shall be East Jordan Iron Works casting no. 1020, 1022 or an approved equivalent. Cover shall be East Jordan Iron Works casting no. 1020A or an approved equivalent. "SANITARY SEWER" shall be cast in each cover. All castings shall be coated.

Frame shall be set on Butyl Rubber Rope.

### MANHOLE STEPS

Shall be constructed of Fiberglass reinforced polypropylene. Install with nonshrink mortar or epoxy grout 12" to 16" apart and at a location allowing access to the table.

### MANHOLE SEALANT

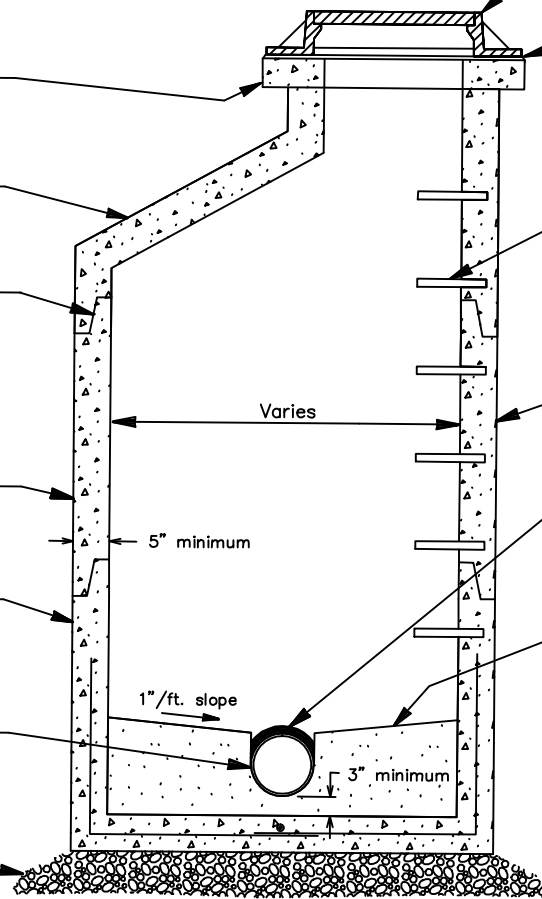
See 4.4.2.2.6 of CBU Specifications.

### GASKETS and BOOTS

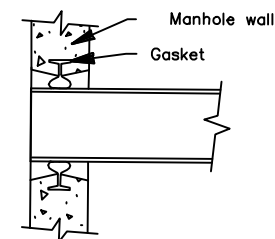
Pipe to manhole connections shall be flexible boot or cast in place gasket. See special detail below and 4.4.2.2.5 of CBU Specifications.

### TROUGH and TABLE

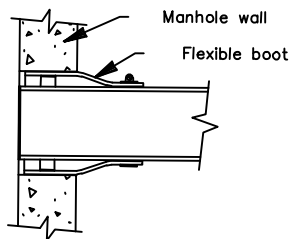
Construct with concrete brick, and non-shrink mortar. Troughs shall be smooth with a semicircular bottom and extend upward to the height of the pipe crown. The table shall be smooth and slope toward the trough at 1"/ft.



### PIPE CONNECTIONS TO MANHOLE

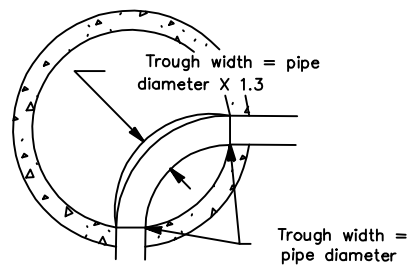


Cast in place gasket

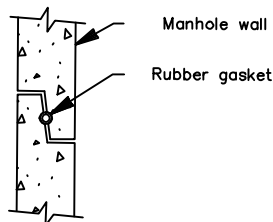


Flexible boot connector

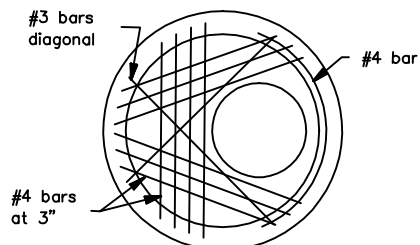
### TROUGH CONSTRUCTION



### PRECAST SECTION JOINT



### FLAT TOP CONSTRUCTION



### MINIMUM PIPE INVERT DROP THROUGH MANHOLE

TROUGH DEFLECTION	MIN. DROP (Ft.)
0° - 22°	.10
23° - 45°	.20
46° - 90°	.30

City of Bloomington Utilities Engineering Department

NO SCALE Drawing File: I:\COMMON\STANDARD DRAWINGS\STD 1.DWG  
2/21/94  
by: M. Hicks

REVISED 02/18/08 T.A.

## STANDARD SANITARY MANHOLE

STANDARD  
DETAIL  
NUMBER

1