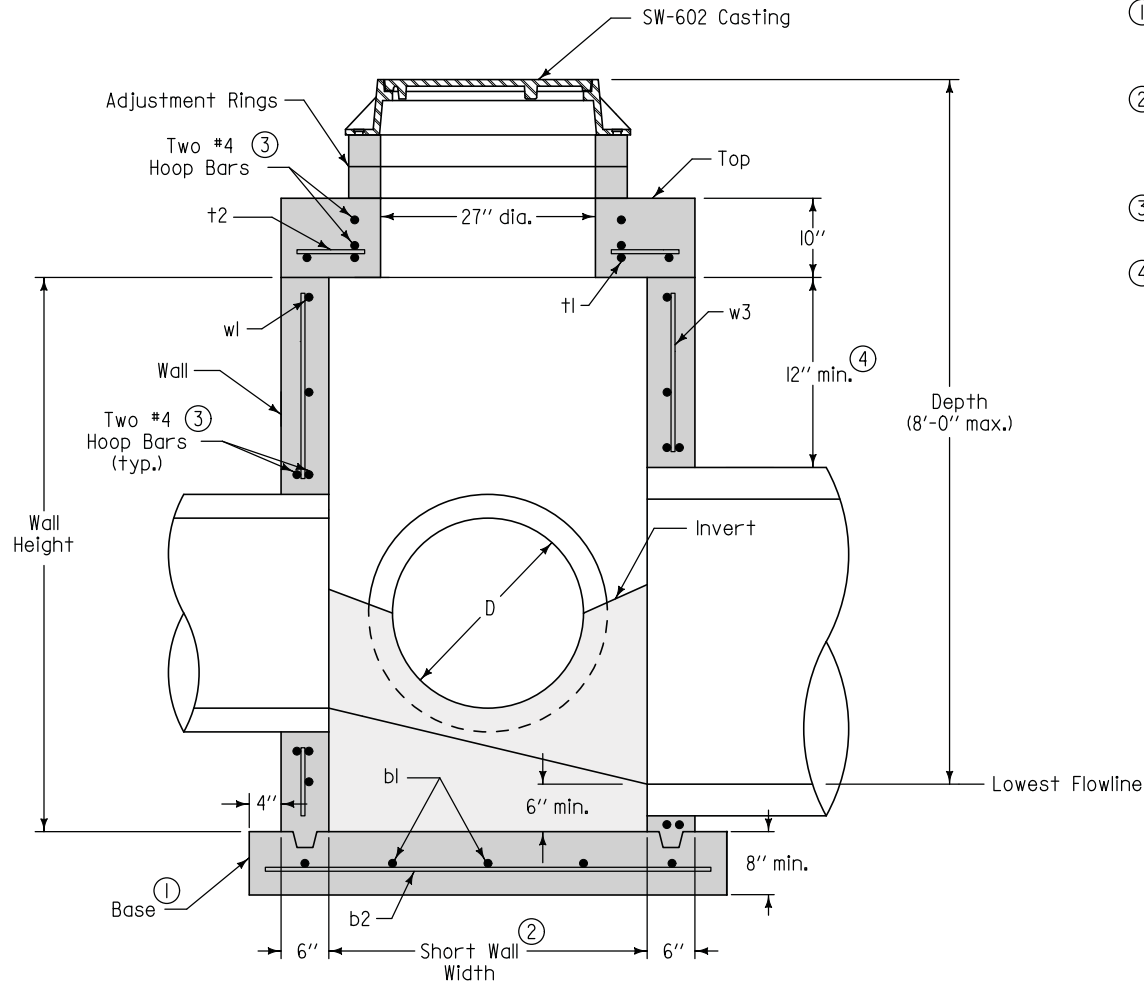


Adjacent walls may have different widths based upon pipe configuration, but structure must be rectangular.

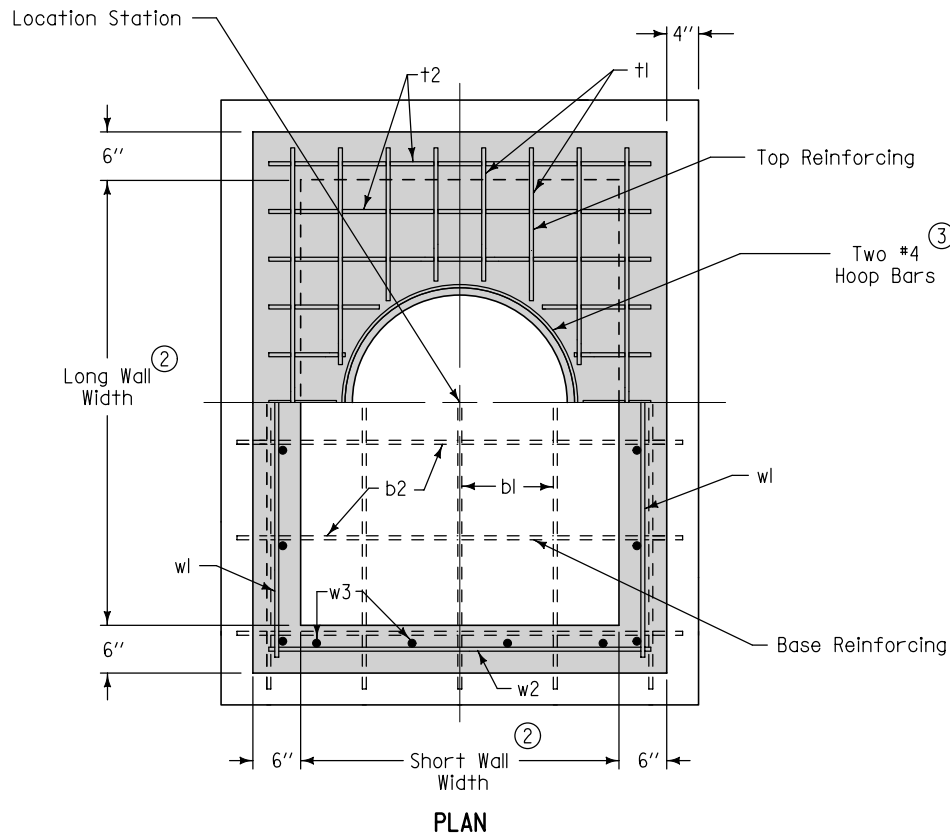


TYPICAL SECTION

- ① Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- ② Wall widths vary with pipe diameter and range from 40 inches minimum to 77 inches maximum. Provide 6 inches of wall width (minimum) each side of pipe opening.
- ③ Provide two #4 hoop bars at top opening and at all pipe openings.
- ④ 12 inch minimum wall height above all pipes.

FIGURE 6010.402 SHEET 1 OF 2

SUDAS	Iowa Department of Transportation	REVISION	
		NEW	04-21-09
<b>FIGURE 6010.402 STANDARD ROAD PLAN</b>		<b>SW-402</b>	
		SHEET 1 of 2	
REVISIONS: New. Replaces SUDAS Type "M-B" Manhole. Will replace RA-49.			
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER	
<b>RECTANGULAR STORM SEWER MANHOLE</b>			



- ② Wall widths vary with pipe diameter and range from 40 inches minimum to 77 inches maximum. Provide 6 inches of wall width (minimum) each side of pipe opening.
- ③ Provide two #4 hoop bars at top opening and at all pipe openings.

REINFORCING BAR LIST					
Mark	Size	Location	Shape	Length	Spacing
t1	See Table	Top	—	Long Wall plus 8"	6"
t2	See Table	Top	—	Short Wall plus 8"	6"
b1	See Table	Base	—	Long Wall plus 14"	12"
b2	See Table	Base	—	Short Wall plus 14"	12"
w1	See Table	Walls	—	Long Wall plus 8"	12"
w2	See Table	Walls	—	Short Wall plus 8"	12"
w3	See Table	Walls	—	Wall Height minus 4"	12"

Diameter of Largest Pipe, D	Minimum Bar Size
48" or 54"	6
33" to 42"	5
30" or smaller	4

FIGURE 6010.402 SHEET 2 OF 2

		REVISION
		NEW 04-21-09
<b>FIGURE 6010.402</b>	<b>STANDARD ROAD PLAN</b>	<b>SW-402</b>
		SHEET 2 of 2
REVISIONS: New, Replaces SUDAS Type "M-B" Manhole. Will replace RA-49.		
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<b>RECTANGULAR STORM SEWER MANHOLE</b>		