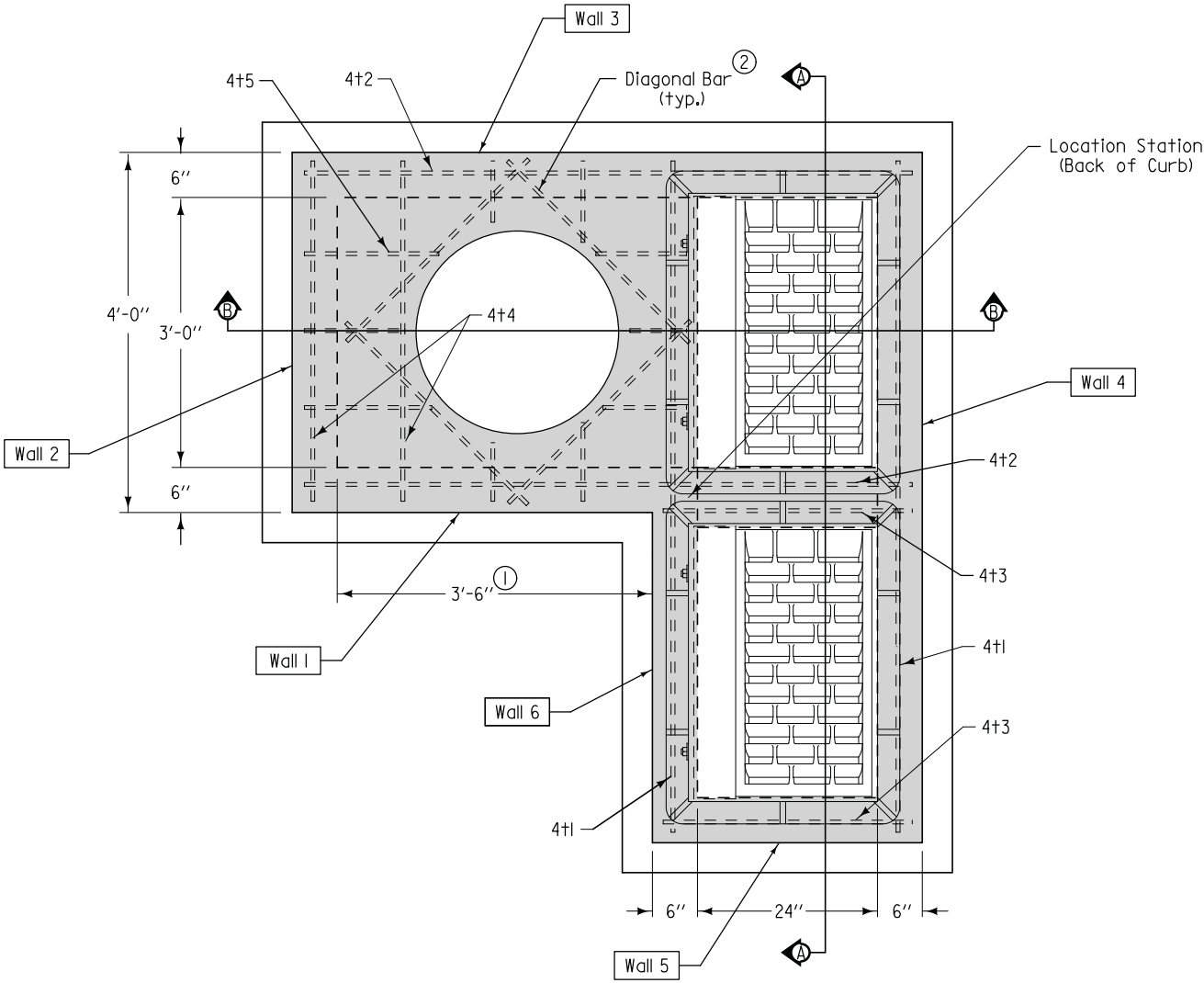


Refer to SW-514 for boxout details.

- ① 36 inch pipe may be used when wall dimension is increased to 4 feet.
- ② Install four #4 diagonal bars at manhole opening and at all pipe openings.

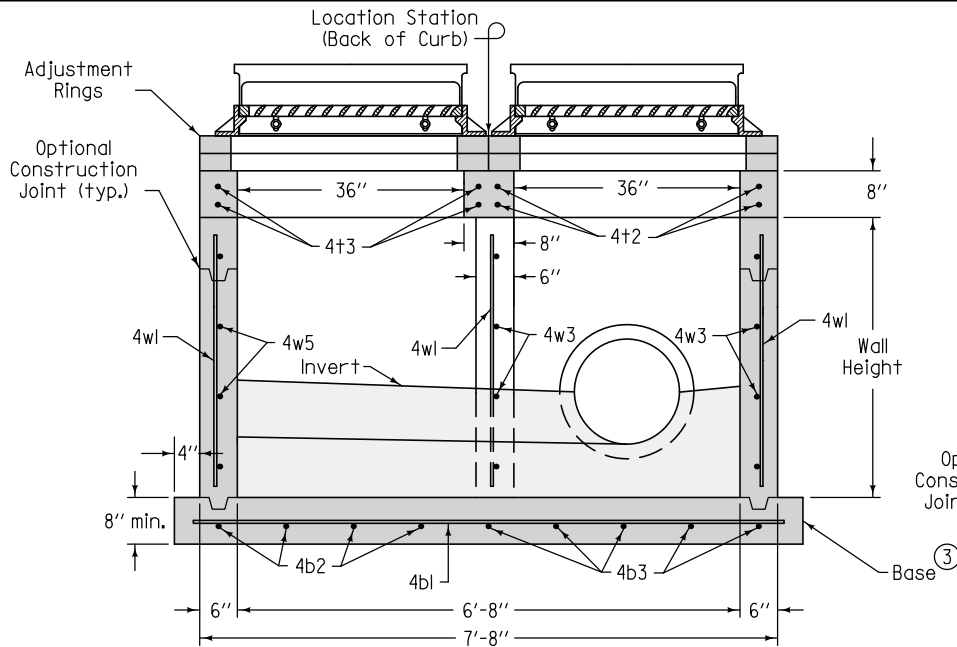


MAXIMUM PIPE DIAMETERS	
Wall	Max. Dia.
1	30" ①
2	24"
3	36"
4	48"

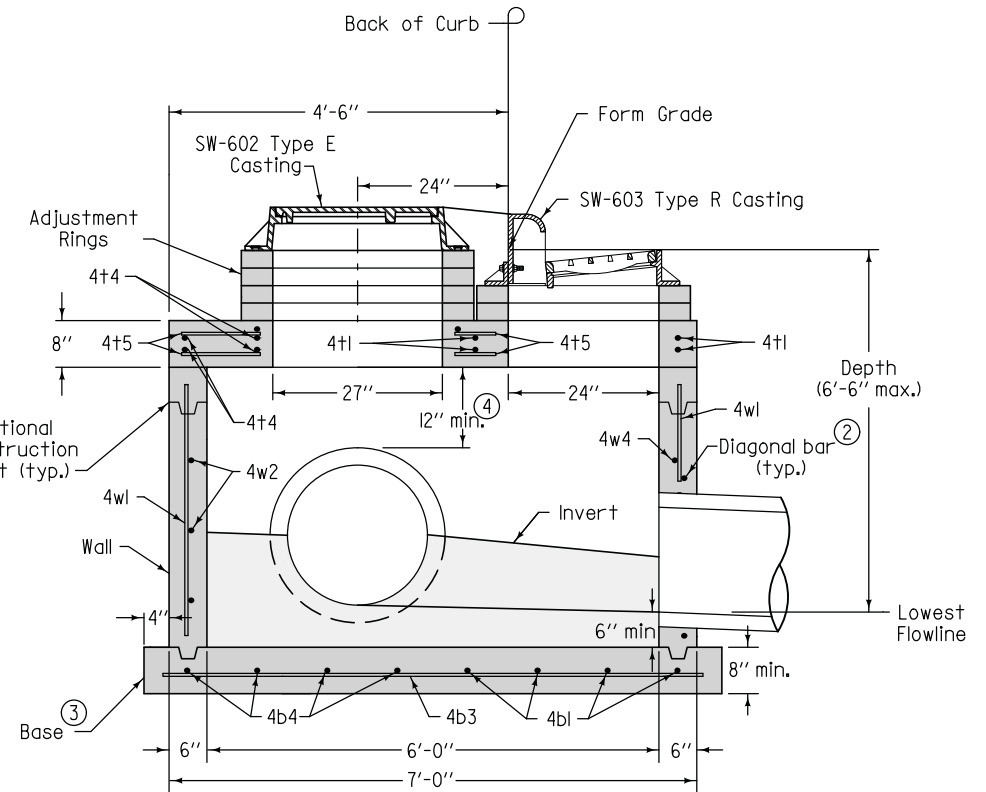
FIGURE 6010.506 SHEET 1 OF 2

PLAN

SUDAS	Iowa Department of Transportation	REVISION
		1 10-16-12
FIGURE 6010.506 STANDARD ROAD PLAN		SW-506 SHEET 1 of 2
REVISIONS: Added reference to SW-514.		
<i>Paul D. Wigand</i> SUDAS DIRECTOR		<i>Deanna Marfeldt</i> DESIGN METHODS ENGINEER
DOUBLE GRATE INTAKE WITH MANHOLE		



SECTION A-A



SECTION B-B

REINFORCING BAR LIST

Mark	Size	Location	Shape	Count	Length	Spacing
4+1	4	Top	—	4	7'-4"	See Detail
4+2	4	Top	—	4	6'-8"	See Detail
4+3	4	Top	—	4	2'-8"	See Detail
4+4	4	Top	—	8	3'-8"	12"
4+5	4	Top	—	6	4'-2"	12"
4b1	4	Base	—	4	7'-10"	12"
4b2	4	Base	—	4	3'-2"	12"
4b3	4	Base	—	5	7'-2"	12"
4b4	4	Base	—	4	4'-2"	12"
4w1	4	Walls	—	29	Wall Height minus 4"	12"
4w2	4	Wall 2	—	Varies	3'-8"	12"
4w3	4	Walls 1 and 3	—	Varies	6'-8"	12"
4w4	4	Wall 4	—	Varies	7'-4"	12"
4w5	4	Wall 5	—	Varies	2'-8"	12"
4w6	4	Wall 6	—	Varies	3'-10"	12"

- ② Install four #4 diagonal bars at manhole opening and at all pipe openings.
- ③ Cast-in-place base shown. If base is precast integral with walls, the footprint of base is not required to extend beyond the outer edge of the walls.
- ④ 12 inch minimum wall height above all pipes.

SUDAS Iowa Department of Transportation	FIGURE 6010.506 STANDARD ROAD PLAN	REVISION 1 10-16-12
		SW-506 SHEET 2 OF 2
REVISIONS: Added reference to SW-514.		
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DOUBLE GRATE INTAKE WITH MANHOLE		