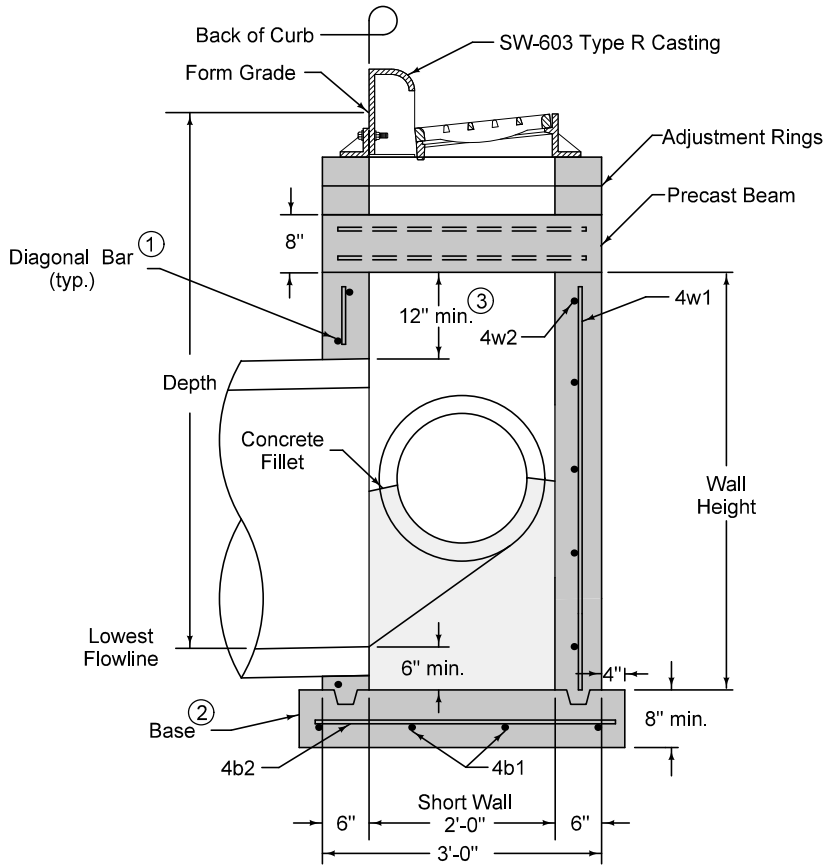
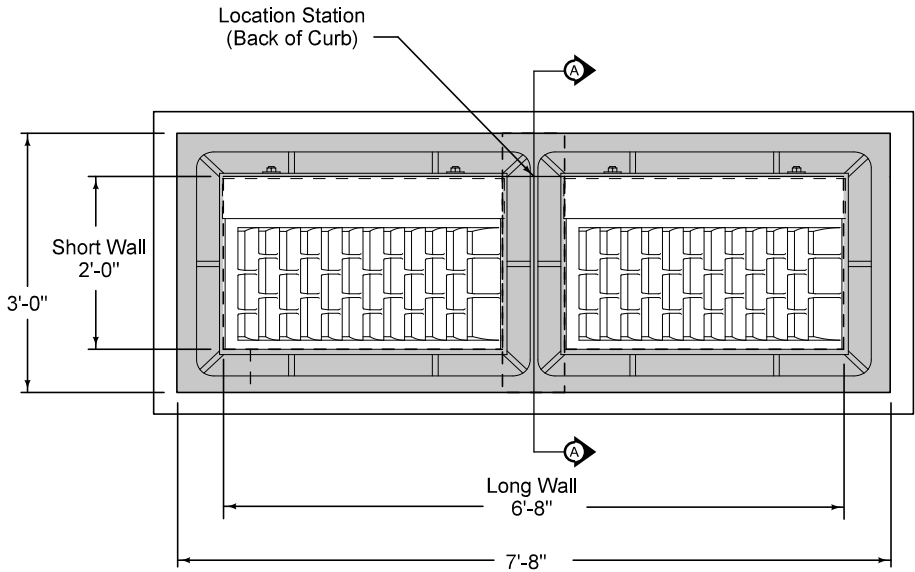


Refer to SW-514 for boxout details.

- ① Install four #4 diagonal bars at all pipe openings.
- ② 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.
- ③ 12 inch minimum wall height above all pipes.



SECTION A-A



PLAN

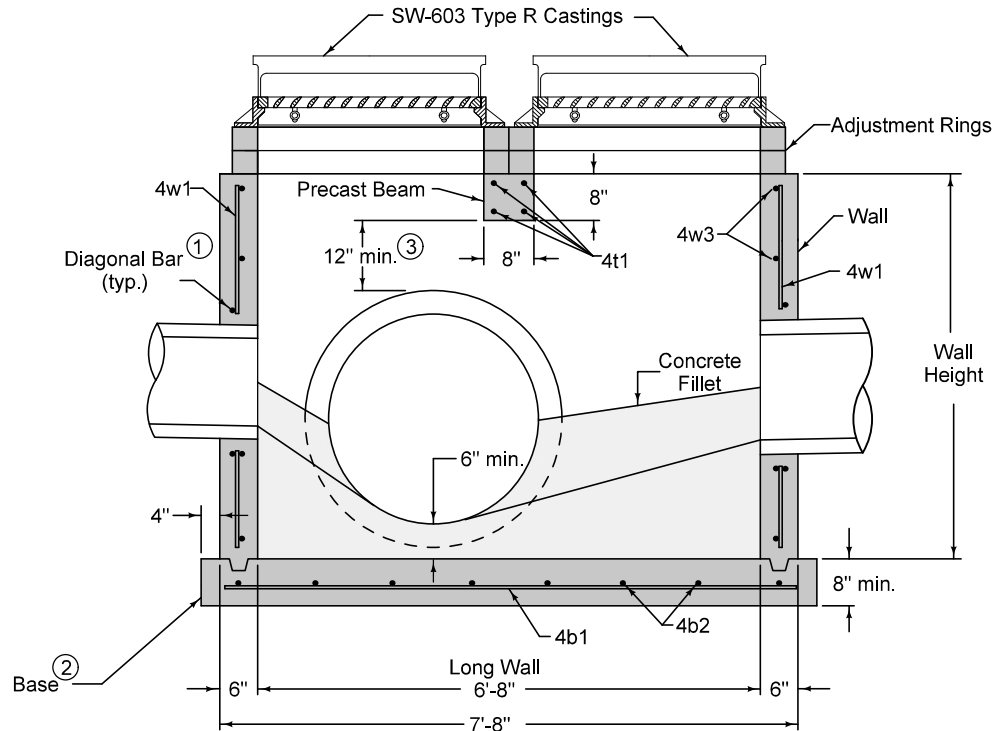
SUDAS	IOWADOT	REVISION	
		2	04-17-18
FIGURE 6010.505	STANDARD ROAD PLAN	SW-505	
		SHEET 1 of 2	

REVISIONS: Changed 'invert' callout to 'Concrete fillet'. Updated linework and Iowa DOT and SUDAS logo.

Paul D. Wigand SUDAS DIRECTOR *Brian Smith* DESIGN METHODS ENGINEER

DOUBLE GRATE INTAKE

FIGURE 6010.505 SHEET 1 OF 2



TYPICAL SECTION

- ① Install four #4 diagonal bars at all pipe openings.
- ② 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.
- ③ 12 inch minimum wall height above all pipes.

REINFORCING BAR LIST

Mark	Size	Location	Shape	Count	Length	Spacing
4t1	4	Beam	—	4	2'-8"	4"
4b1	4	Base	—	4	7'-10"	10"
4b2	4	Base	—	8	3'-2"	12"
4w1	4	Walls	—	20	Wall Height minus 4"	12"
4w2	4	Long Walls	—	Varies	7'-4"	12"
4w3	4	Short Walls	—	Varies	2'-8"	12"

MAXIMUM PIPE DIAMETERS

Pipe Location	Precast Structure	Cast-in-place Structure
Short Wall	15"	18"
Long Wall	60"	66"

		REVISION
		2 04-17-18
FIGURE 6010.505	STANDARD ROAD PLAN	SW-505
SHEET 2 of 2		
<small>REVISIONS: Changed 'invert' callout to 'Concrete Fillet'. Updated linework and Iowa DOT and SUDAS logo.</small>		
 <small>SUDAS DIRECTOR</small>		 <small>DESIGN METHODS ENGINEER</small>
DOUBLE GRATE INTAKE		