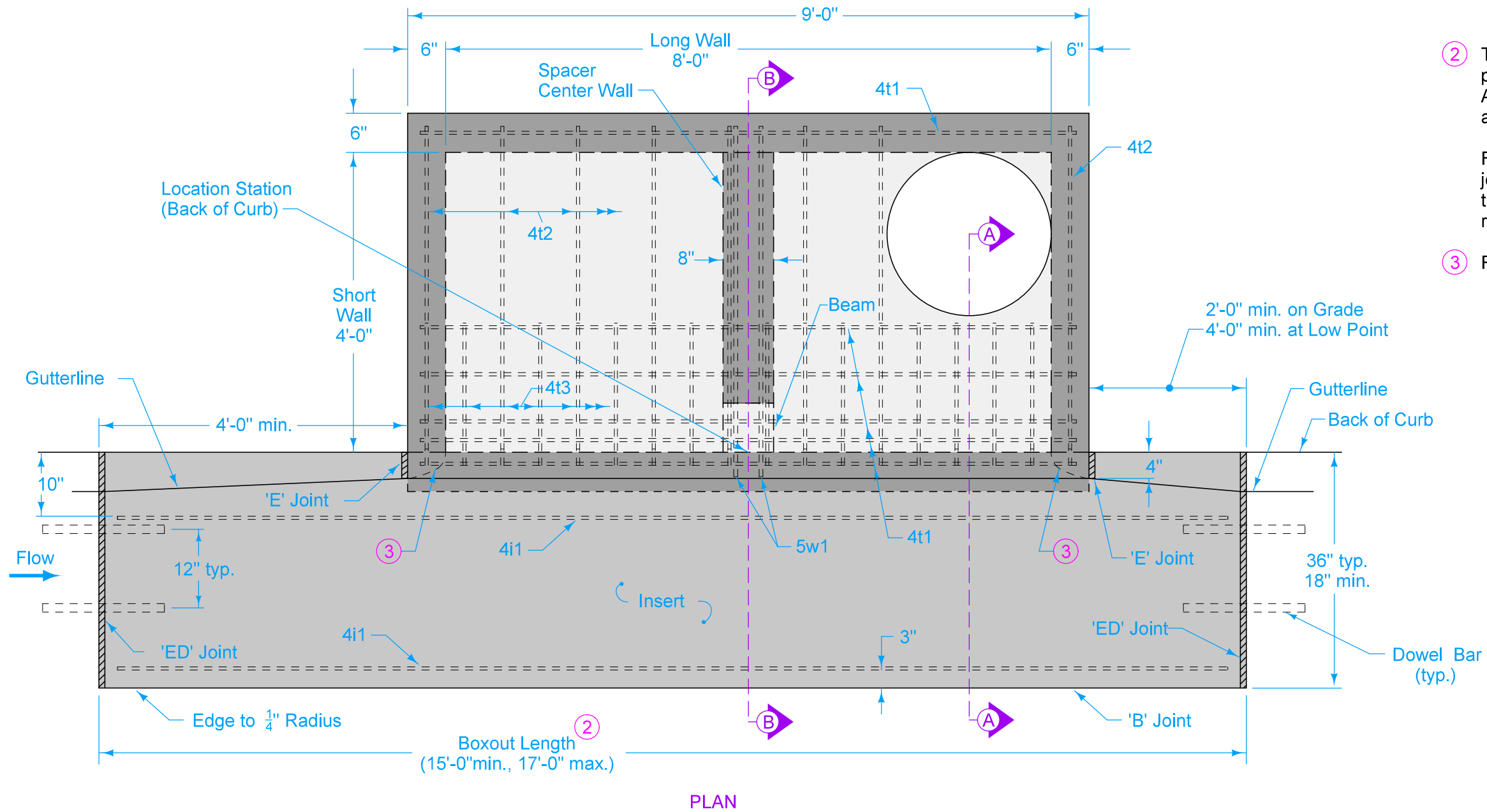


① Insert shaping may be modified for insert widths less than 36 inches. For an 18 inch insert, reduce dimensions indicated by  $\frac{1}{4}$  inch.

FIGURE 6010.510 SHEET 1 OF 3

SUDAS	IOWA DOT	REVISION	
		6	04-21-20
FIGURE 6010.510	STANDARD ROAD PLAN	<b>SW-510</b>	
REVISIONS: Added Class 1 Bedding Material and changed maximum box out length to 17'.		SHEET 1 of 3	
Paul D. Wrigand SUDAS DIRECTOR		Stuart Miller DESIGN METHODS ENGINEER	

**DOUBLE OPEN-THROAT CURB  
INTAKE, LARGE BOX**



- ② Transverse joint spacing on new concrete pavement is controlled by the intake boxout. Adjust adjacent joint spacing as required to accommodate boxouts.
- For retrofit intakes, match existing pavement joints. Stop any transverse pavement joints that do not conform to the minimum spacing requirements at the edge of the insert area.
- ③ Rounded shaping at inlet.

2'-0" min. on Grade  
4'-0" min. at Low Point

Gutterline  
4'-0" min.

Gutterline  
Back of Curb

Location Station  
(Back of Curb)

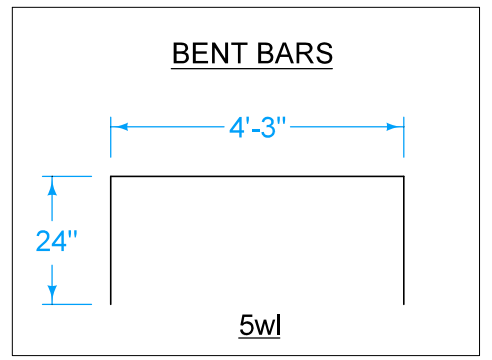
Short Wall  
4'-0"

Long Wall  
8'-0"

Boxout Length  
(15'-0" min., 17'-0" max.)

PLAN

REINFORCING BAR LIST						
Mark	Size	Location	Shape	Count	Length	Spacing
4b1	4	Base	—	9	4'-6"	12"
4b2	4	Base	—	6	8'-6"	11"
4i1	4	Insert	—	4	Boxout Length minus 8"	See Insert
4t1	4	Top	—	7	8'-6"	See Plan
4t2	4	Top	—	8	4'-4"	12"
4t3	4	Top	—	18	1'-10"	6"
4w1	4	Walls	—	24	Wall Height minus 4"	13"
4w2	4	Long Walls	—	Varies	4'-8"	12"
4w3	4	Short Walls	—	Varies	8'-8"	12"
5w1	5	Beam	┌	2	8'-3"	4"



SUDAS IOWA DOT	REVISION
	6   04-21-20
FIGURE 6010.510	STANDARD ROAD PLAN
<b>SW-510</b> SHEET 2 of 3	

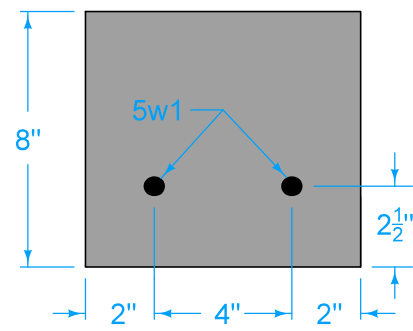
REVISIONS: Added Class 1 Bedding Material and changed maximum box out length to 17'.

Paul D. Wrigand  
 SUDAS DIRECTOR

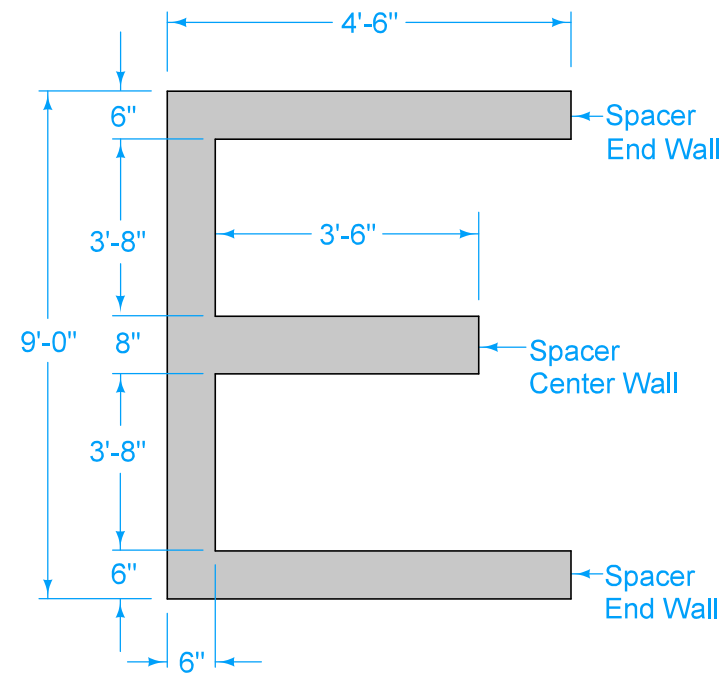
Stuart Miller  
 DESIGN METHODS ENGINEER

**DOUBLE OPEN-THROAT CURB  
INTAKE, LARGE BOX**

FIGURE 6010.510 SHEET 2 OF 3



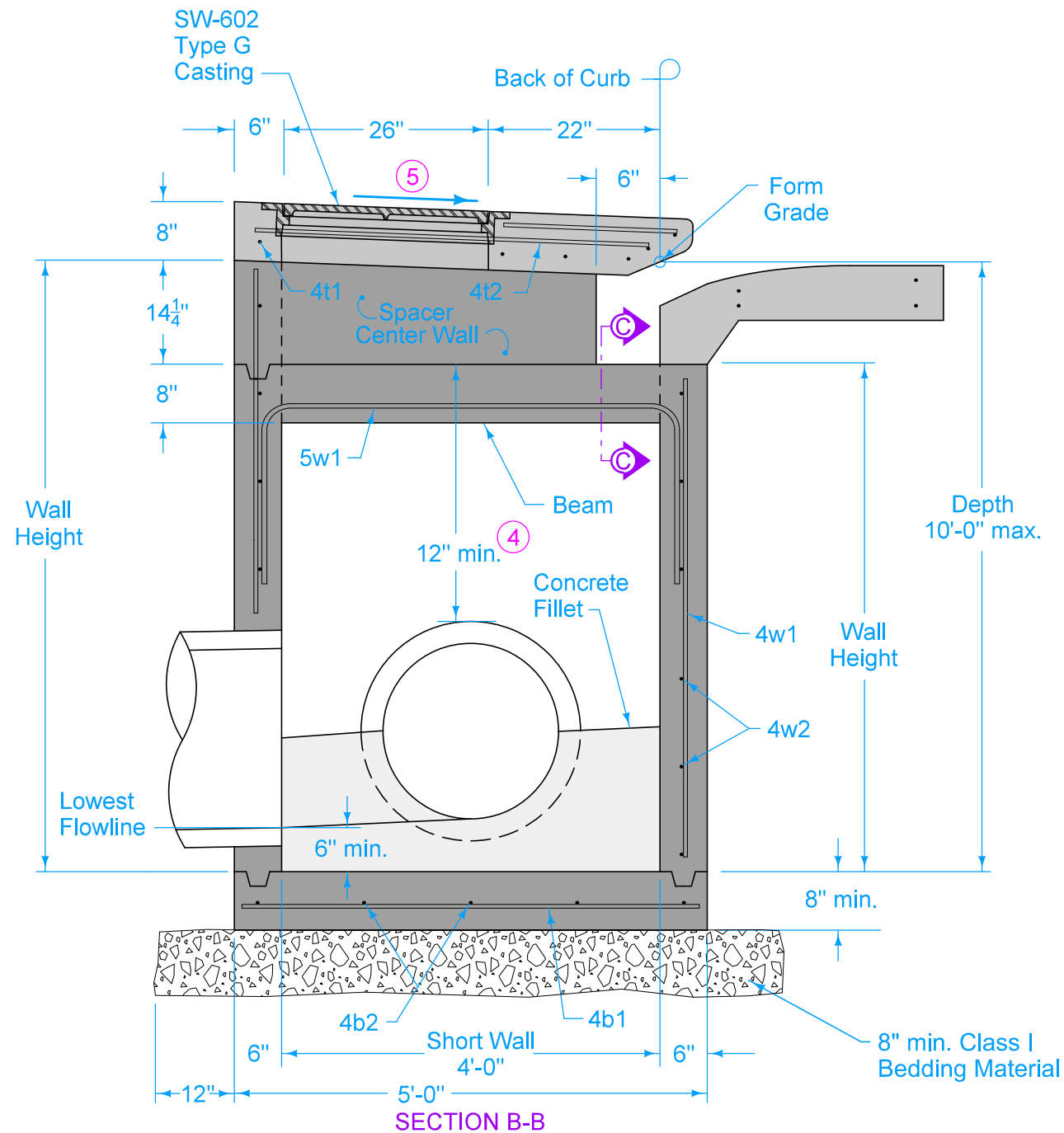
SECTION C-C



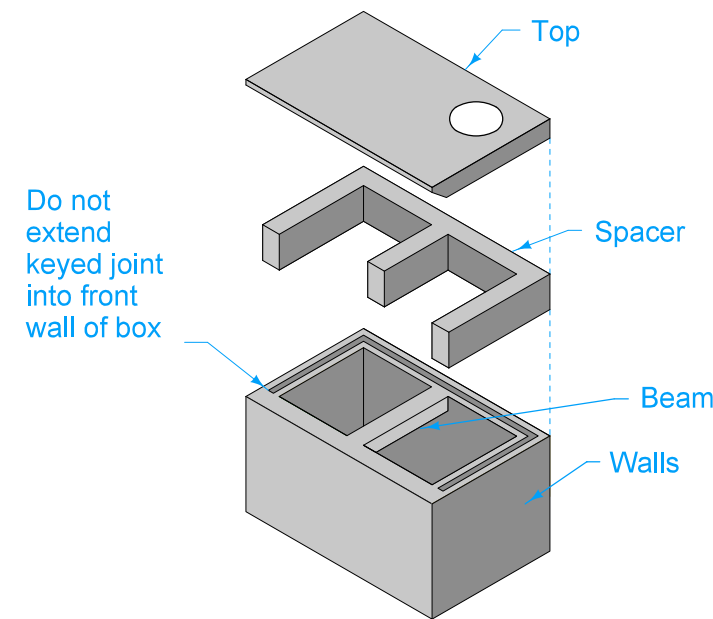
PLAN (SPACER)

- ④ 12 inch minimum wall height above all pipes.
- ⑤ Slope of 1.5% or as specified in the contract documents.

MAXIMUM PIPE DIAMETERS		
Pipe Location	Precast Structure	Cast-in-place Structure
Short Wall	30"	36"
Long Wall	60"	66"



SECTION B-B



ISOMETRIC (Refer to Section B-B for alignment of Top with Spacer)

FIGURE 6010.510 SHEET 3 OF 3

SUDAS	IOWA DOT	REVISION	
		6	04-21-20
FIGURE 6010.510	STANDARD ROAD PLAN	<b>SW-510</b>	
REVISIONS: Added Class I Bedding Material and changed maximum box out length to 17'.		SHEET 3 of 3	
Paul D. Wrigand SUDAS DIRECTOR		Shawn Miller DESIGN METHODS ENGINEER	

**DOUBLE OPEN-THROAT CURB INTAKE, LARGE BOX**