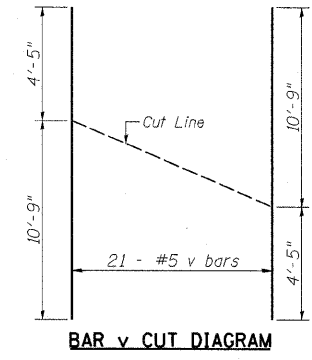
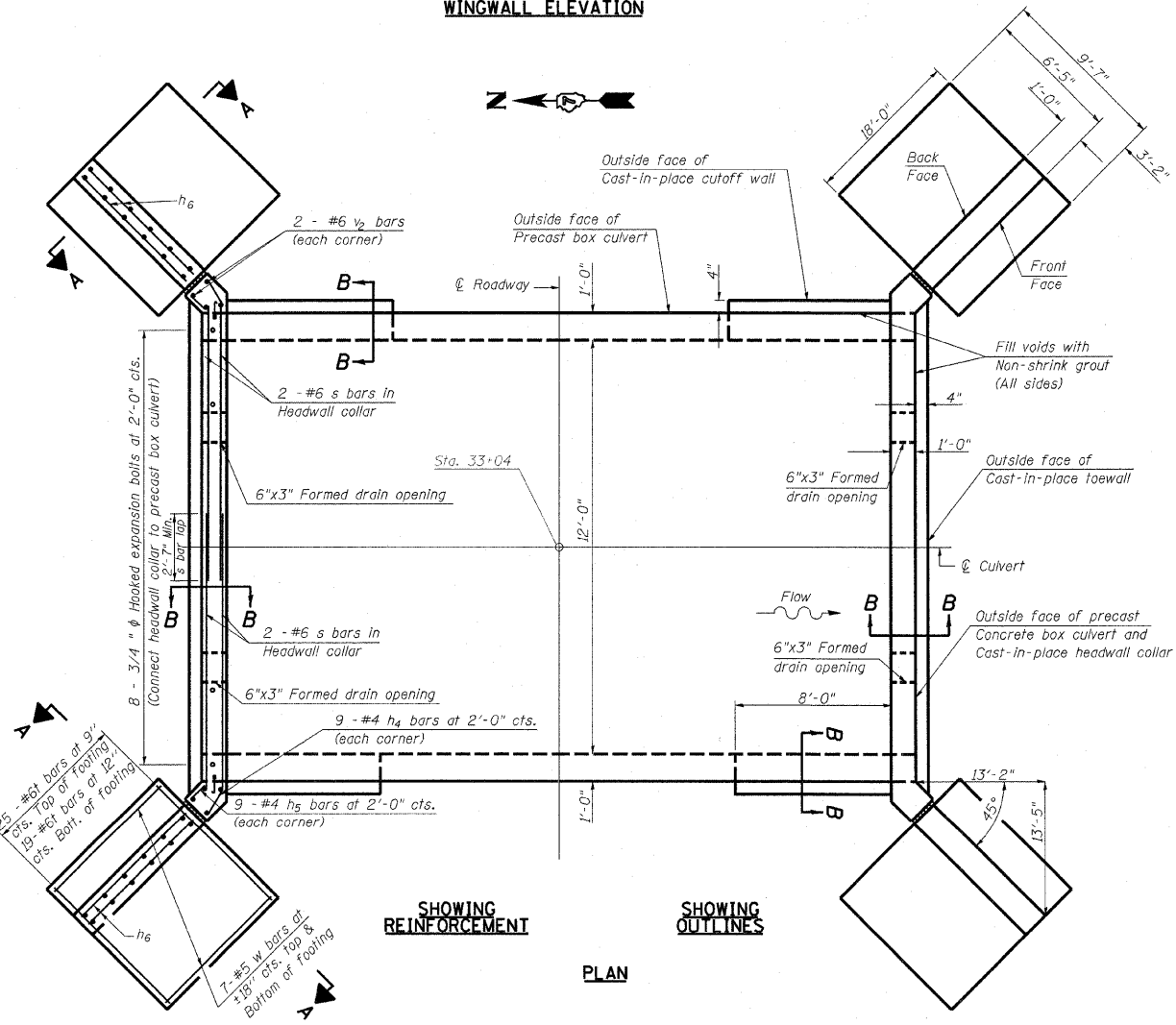


WINGWALL ELEVATION



**DESIGN STRESSES**

fy = 60,000 psi  
f'c = 3,500 psi

Max. Soil Pressure  
under footing = 3522 psf

**LOADING HS 20-44**

**BILL OF MATERIAL (ONE END SECTION)**

Bar	No.	Size	Length	Shape
d	21	#4	2'-8"	—
d1(E)	23	#4	3'-8"	—
h	3	#4	13'-0"	—
h1	4	#4	14'-5"	—
h2	8	#4	8'-10"	—
h3	6	#4	8'-0"	—
h4	18	#4	1'-2"	—
h5	18	#4	9"	—
h6	48	#4	17'-8"	—
n(E)	40	#7	7'-7"	⌋
n1(E)	42	#6	4'-8"	⌋
s	4	#6	21'-11"	—
t	88	#6	9'-4"	—
v	21	#5	15'-2"	—
v1	10	#4	16'-3"	—
v2	4	#6	14'-8"	—
v3(E)	8	#6	6'-10"	—
v4	42	#5	7'-9"	—
w	28	#5	17'-6"	—
<b>Concrete Box Culverts</b>			Cu. Yd.	42.3
<b>Reinforcement Bars, Epoxy Coated</b>			Pound	1053
<b>Reinforcement Bars</b>			Pound	3516
<b>Expansion Bolt 3/4" Ø</b>			Each	26

Pay Item	Unit	Qty.
Box Culvert End Sections	Each	2.0

FILE NAME =	USER NAME = steffernk	DESIGNED -	REVISED -
ca:\pwork\p\p\dot\steffernk\dms52291\07	4213-sh-culv.dgn	DRAWN -	REVISED -
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -
	PLOT DATE = 3/19/2009	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE:		SHEET NO.	OF SHEETS	STA.	TO STA.

**CULVERT DETAILS**

F.A.P. RTE. 823	SECTION 218-1	COUNTY Edwards	TOTAL SHEETS 24	SHEET NO. 10
			CONTRACT NO. 74213	
ILLINOIS FED. AID PROJECT				