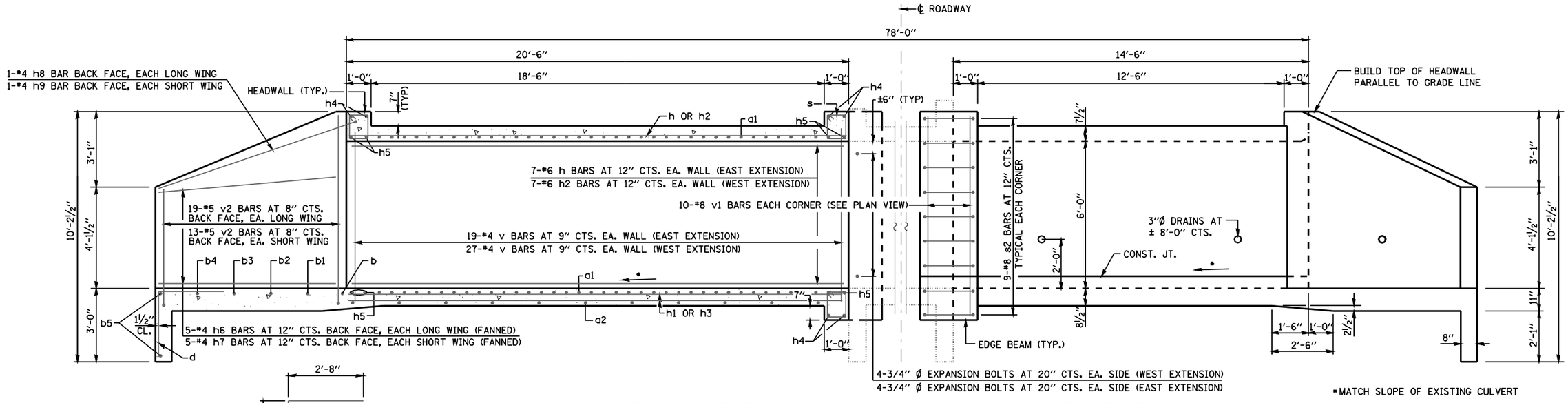
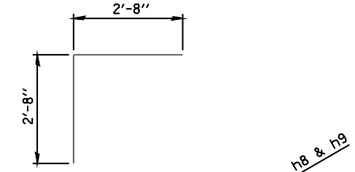


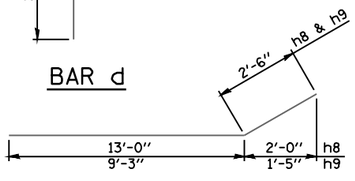
HALF LONG. SECTION

HALF ELEVATION

(DIMENSIONS AT RT. L'S TO ℄ ROADWAY)

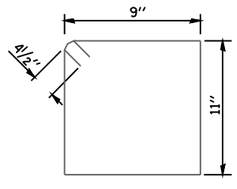


BAR d

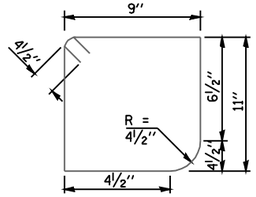


BARS h8 & h9

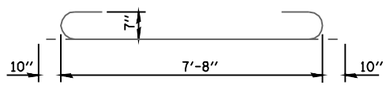
(BEND IN FIELD)



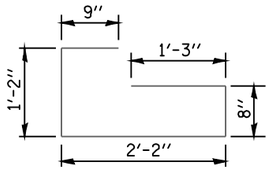
BAR s



BAR s1



BAR a1



BAR s2

DESIGN STRESSES

(NEW CONSTRUCTION)

fy= 60,000 PSI

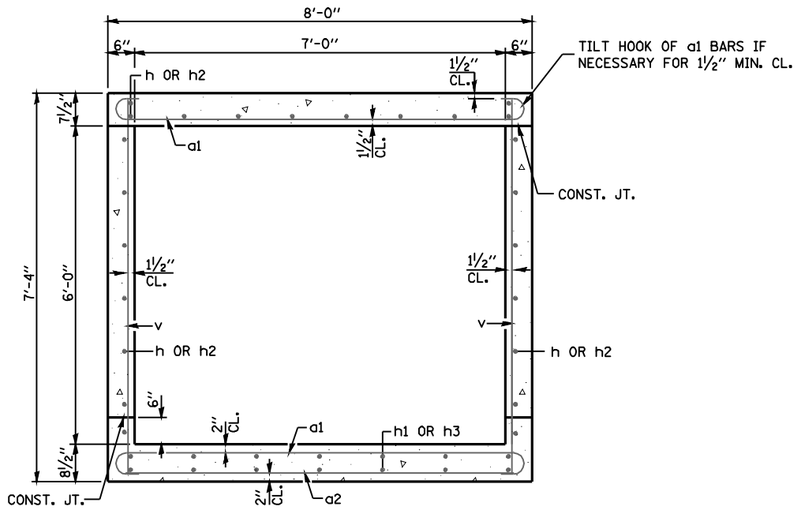
f'c= 3,500 PSI

LOADING HS 20-44 & ALT.

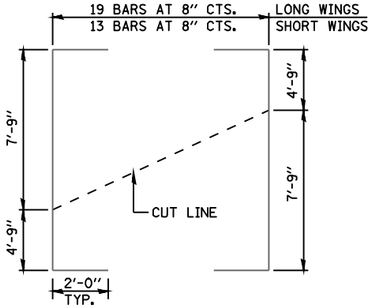
(NEW CONSTRUCTION)

BILL OF MATERIAL

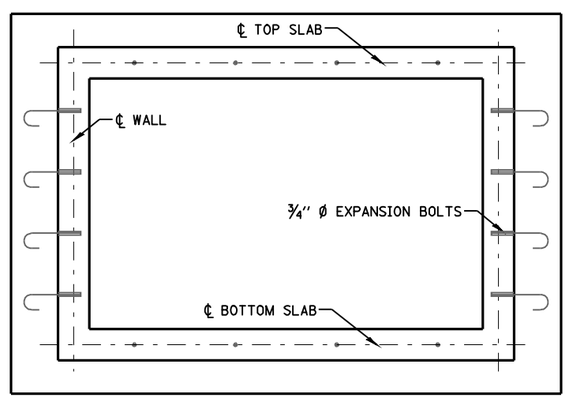
BAR	NO.	SIZE	LENGTH	SHAPE
a1	126	#7	9'-4"	
a2	17	#4	7'-3"	
b	2	#4	9'-10"	
b1	2	#4	12'-7"	
b2	2	#4	15'-5"	
b3	2	#4	18'-3"	
b4	2	#4	21'-1"	
b5	4	#4	22'-11"	
d	32	#4	5'-4"	
h	23	#6	15'-1"	
h1	14	#5	15'-1"	
h2	23	#6	21'-6"	
h3	14	#5	21'-6"	
h4	12	#6	7'-7"	
h5	16	#6	8'-3"	
h6	10	#4	12'-7"	
h7	10	#4	8'-11"	
h8	2	#4	15'-6"	
h9	2	#4	11'-9"	
s	40	#4	4'-1"	
s1	8	#4	3'-11"	
s2	36	#8	6'-0"	
v	92	#4	7'-0"	
v1	40	#8	8'-2"	
v2	64	#5	16'-6"	
REINFORCEMENT BARS		POUND	8,190	



SECTION THRU BARREL



FIELD CUTTING DIAGRAM
BAR v2



EXPANSION BOLT LOCATION DETAIL

NOTES:

1. EXPOSED EDGES SHALL BE BEVELED ¾".
2. FOR BACKFILLING AND EMBANKMENT, SEE STANDARD SPECIFICATIONS.
3. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 GR. 60. SEE SPECIAL PROVISIONS.
4. EXPANSION BOLTS SHALL BE ¾" Ø HOOKED BOLTS. HOOKED BOLTS SHALL EXTEND A MINIMUM OF 9" INTO NEW CONCRETE.

FILE NAME = c:\pw_work\PWIDOT\LAUGHLINRL\d0182983\091-sht-Box Culvert Details.dgn	USER NAME = laughlinrl	DESIGNED -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	DRAWN -	REVISED -
	PLOT DATE = Feb-01-2010 10:54:50AM	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT DETAILS
IL 57 STATION 31+17.0

SCALE: none | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172	1-(1,2,3,4,5)RS	ADAMS	165	92
		CONTRACT NO. 72A09		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		