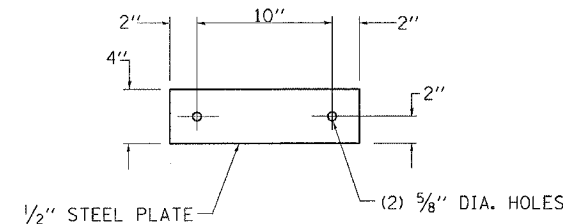
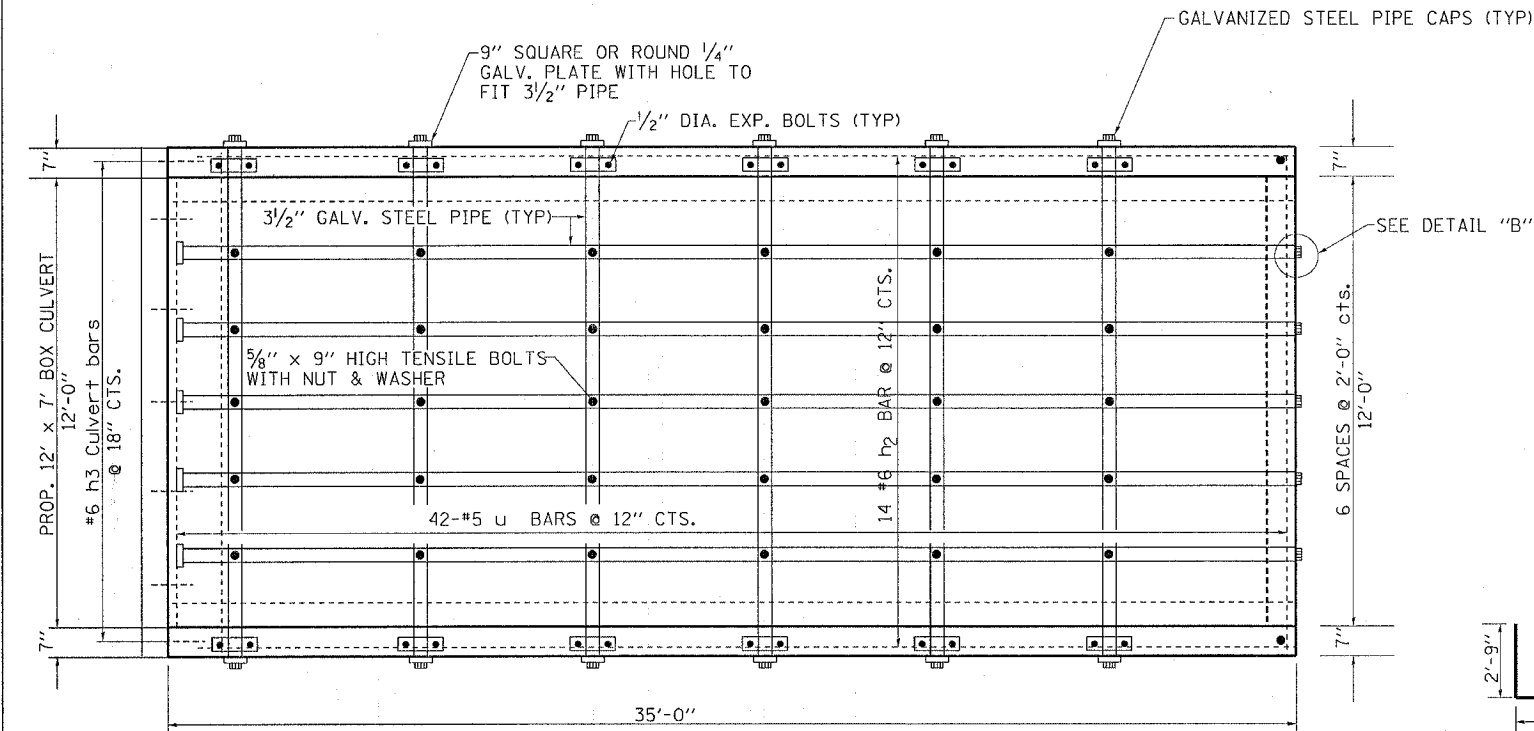


CONCRETE BOX CULVERT END SECTION STA 438+13 LT

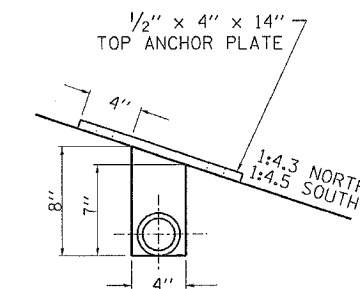
CONTRACT NO. 64178			
F.A.P. RTE. 549	SECTION 116RS-1	COUNTY OGLE	TOTAL SHEETS 593
SHEET NO. 207		TO STA.	
STA.		FED. ROAD DIST. NO. ILLINOIS	
		FED. AID PROJECT	

BILL OF MATERIALS

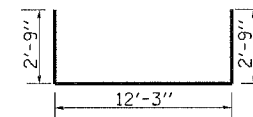
BAR	NUMBER	SIZE	LENGTH	QTY.
d	14	#4	4'-6"	42.08
h	9	#4	35'-0"	210.42
h ₁	2	#4	35'-6"	47.43
h ₂	14	#6	34'-9"	730.72
h ₃	3	#5	12'-11"	40.42
u	42	#5	17'-9"	777.56
v	42	#5	10'-2"	445.63
REINFORCEMENT BARS			LB	2293.99
CONCRETE BOX CULVERTS			CU YD	20.7
3/2" GALV. STEEL PIPE			EACH	5 @ 35'-3" 6 @ 13'-4"
1/2" x 4" x 14" GALV. ANCHOR PLATE			EACH	12
5/8" x 9" GALV. BOLTS			EACH	27
GALV. STEEL PIPE CAPS			EACH	22
1/2" Ø GALV. EXP. BOLTS			EACH	22
9" SQ. OR ROUND 1/4" GALV. PLATE			EACH	12



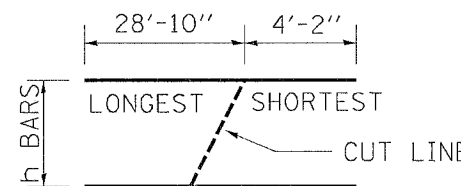
TOP ANCHOR PLATE



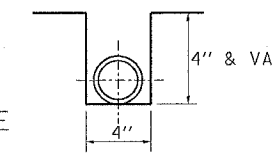
DETAIL "A"



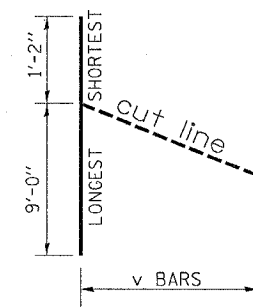
BAR "u"



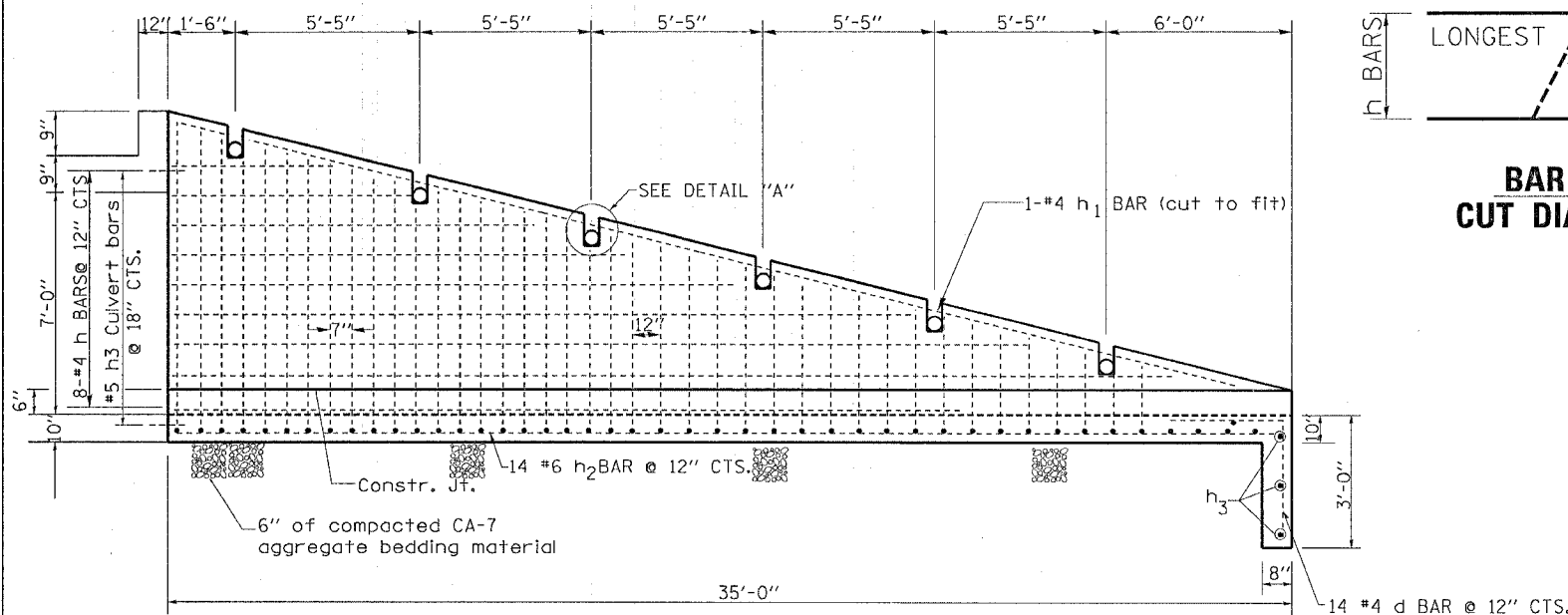
BAR "h" CUT DIAGRAM



DETAIL "B"



BAR "v" CUT DIAGRAM



GENERAL NOTES:

STEEL PIPES SHALL CONFORM TO A.S.T.M. A-53 (TYPE E OR S) GRADE B, SCHEDULE 40, & SHALL BE GALVANIZED CONFORMING TO A.S.T.M. A-120.

STEEL PLATES SHALL CONFORM TO AASHTO M-183 & SHALL BE GALVANIZED CONFORMING TO AASHTO M-111.

BOLTS, NUTS, & WASHERS SHALL BE IN ACCORDANCE WITH ARTICLE 1006.08 OF THE STANDARD SPECIFICATIONS AND SHALL BE GALVANIZED.

6" OF COMPACTED CA-7 AGGREGATE SHALL BE PLACED BENEATH THE EXTENSION

THE CONTRACT UNIT PRICE "CU YD" FOR CONCRETE BOX CULVERTS SHALL INCLUDE THE GALVANIZED PIPES, BOLTS, NUTS, WASHERS, STEEL PLATES, EARTH EXCAVATION, BACKFILLING, COMPACTED CA-7 AGGREGATE BEDDING MATERIAL AND NECESSARY GRADING.

REINFORCEMENT BARS WILL BE PAID FOR SEPARATELY

ORDER v AND h BARS @ FULL LENGTH. CUT TO FIT AS SHOWN AND USE REMAINDER OF BARS IN OPPOSITE WALL.