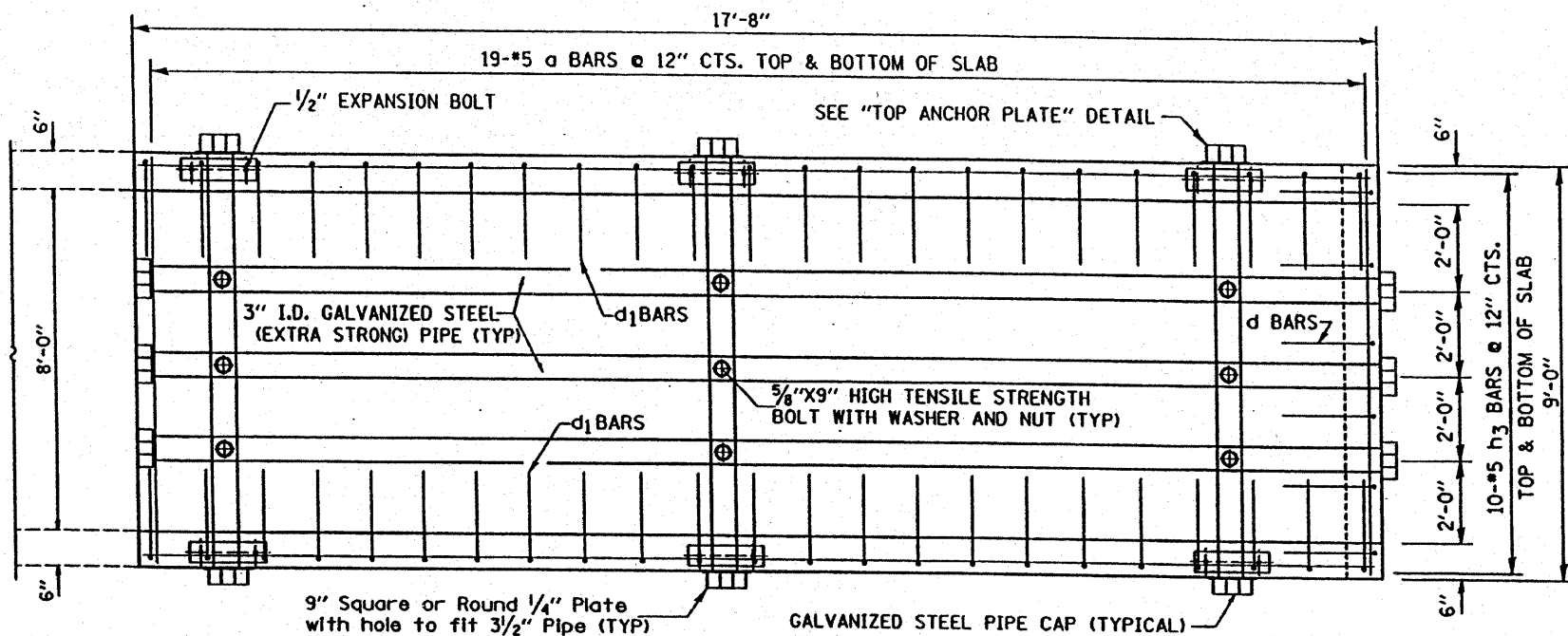


CONCRETE BOX CULVERT END SECTION LT & RT STA 284+80.47

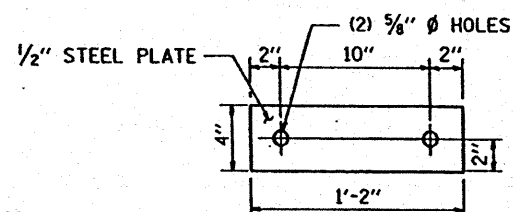
CONTRACT NO. 64C70

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
611	102T	HENRY	41	20
STA. 281+90 TO STA. 287+25				
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT

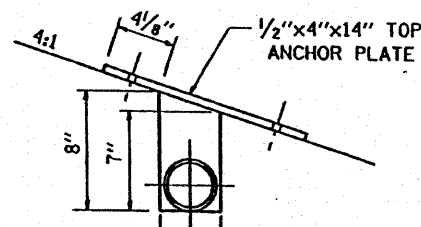
Order v, v₁ and h₆ bars full length
Cut to fit as shown and
use remainder of bars in
opposite wall.



PLAN

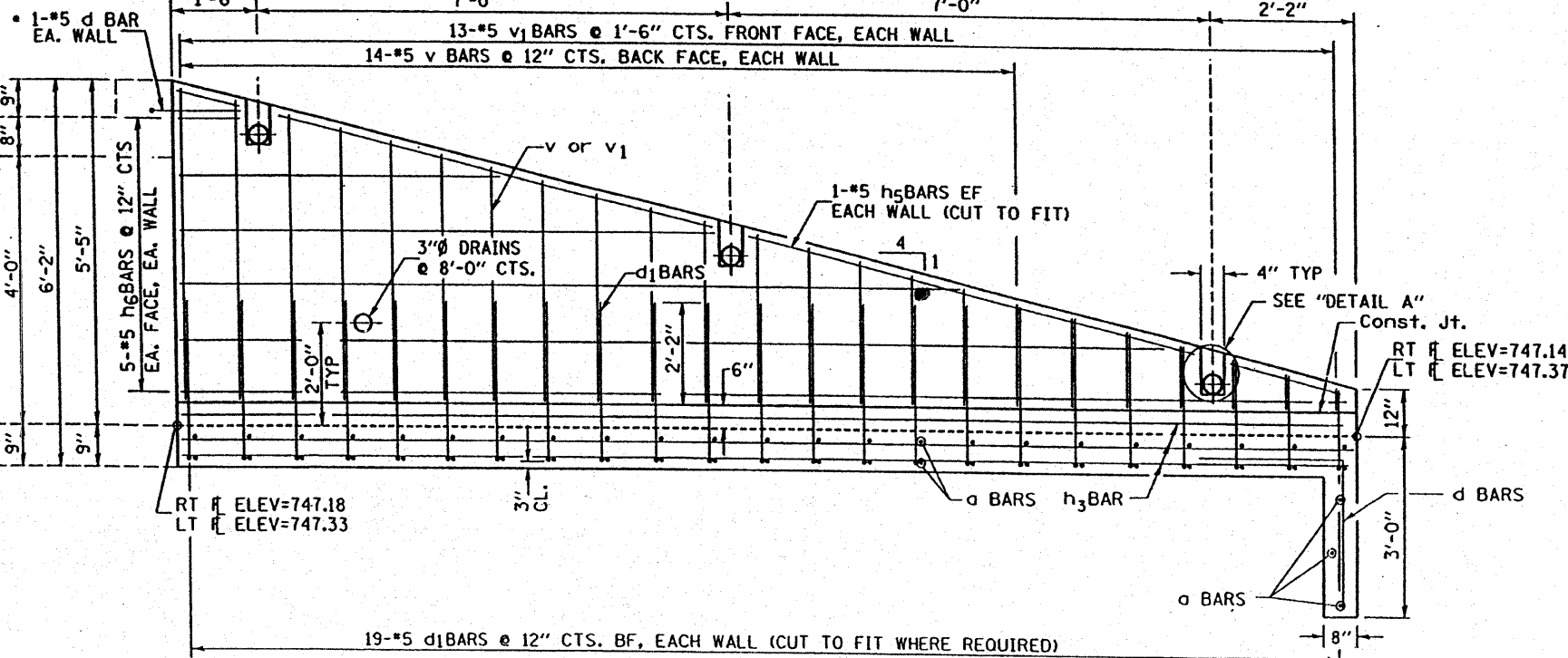


TOP ANCHOR PLATE

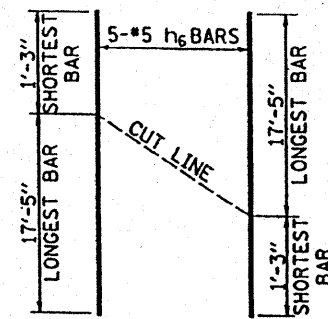


DETAIL "A"

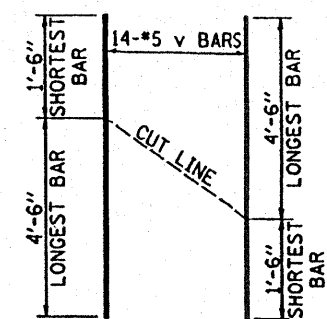
• TO BE CAST INTO CULVERT HEADWALL



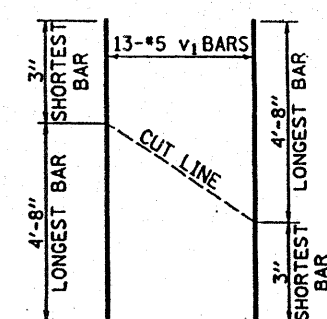
ELEVATION



**BAR h₆
out diagram**



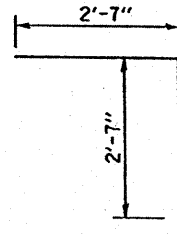
**BAR v
out diagram**



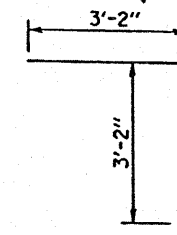
**BAR v₁
out diagram**



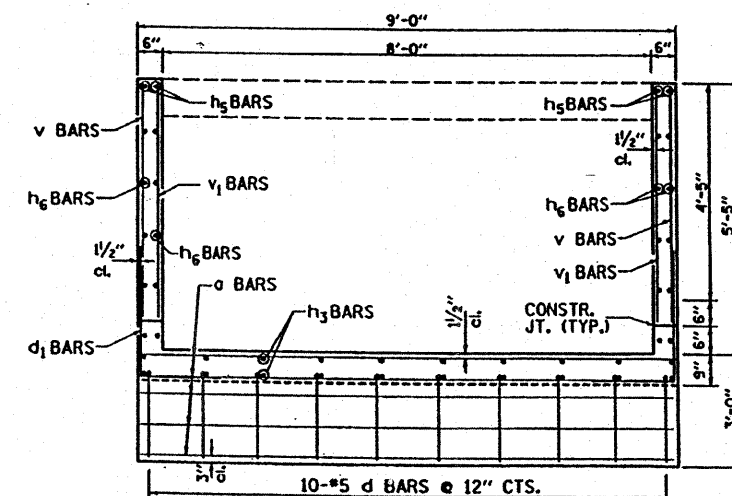
James O. Hamilton
1/24/2008 Expires 11/30/2008



BAR d



BAR d₁



SECTION THRU END SECTION

BILL OF MATERIALS

(Both Ends) (For Information Only)

BAR	NUMBER	SIZE	LENGTH
a	76	#5	8'-9"
d	24	#5	5'-2"
d ₁	76	#5	6'-4"
h ₃	48	#5	17'-5"
h ₅	8	#5	17'-11"
h ₆	20	#5	18'-8"
v	28	#5	6'-0"
v ₁	26	#5	4'-11"

DESCRIPTION	UNIT	QTY.
Concrete Box Culverts	CU. YD	14.0
Reinforcement Bars	LBS.	3,040
3" I.D. Galvanized Steel Pipe	6e	17'-9"
	6e	9'-4"
3" Galv Pipe Caps	EACH	24
1/4" Galv. Stl. Plate (9" Nominal)	EACH	12
1/2" x 4" x 14" Galv. Steel Plate	EACH	12
5/8" x 9" Galv. Steel Bolts	EACH	18
Expansion Bolts 1/2"	EACH	24

GENERAL NOTES:

Exposed edges shall be beveled 3/4".
Bolts, Nuts, and Washers shall be in accordance with Article 505 of the standard specification and shall be galvanized.
All work and materials incorporated (Except Reinf. Bars) into the construction of the Box Culvert, End Sections and grates shall be paid for at the contract unit price cu yd for CONCRETE BOX CULVERTS.
bars will be paid for at the contract unit price pound for REINFORCEMENT BARS
Steel pipes shall conform to A.S.T.M. A-53 Grade B, or A.S.T.M A501, and shall be galvanized conforming to AASHTO M111 and A.S.T.M. A385.
Steel Plates shall conform to AASHTO M-183 and shall be galvanized conforming to AASHTO M-111.
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr. 60 (IL Modified). See Special Provisions.
This work shall be done according to the applicable portions of 508 and 540 of the Standard Specifications.
Contractor shall field verify Galvanized pipe length.
See Plan and Profile Sheet for more information.
See Cross Section Sheet for more information.