

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	10-32HB-3,K	Champaign	352	152
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
<b>CONTRACT NO. 90758</b>				

F.A.I. RT. 57  
SEC. 10-32HB-3,K  
LOADING HS 20-44 & ALT.  
STR. NO. 010-8354

**NAME PLATE**

- See Highway Standard 515001-02 for dimensions and placement.
- Name Plate will be paid for at the contract unit price per "EACH" for "NAME PLATES".

**BILL OF MATERIAL**

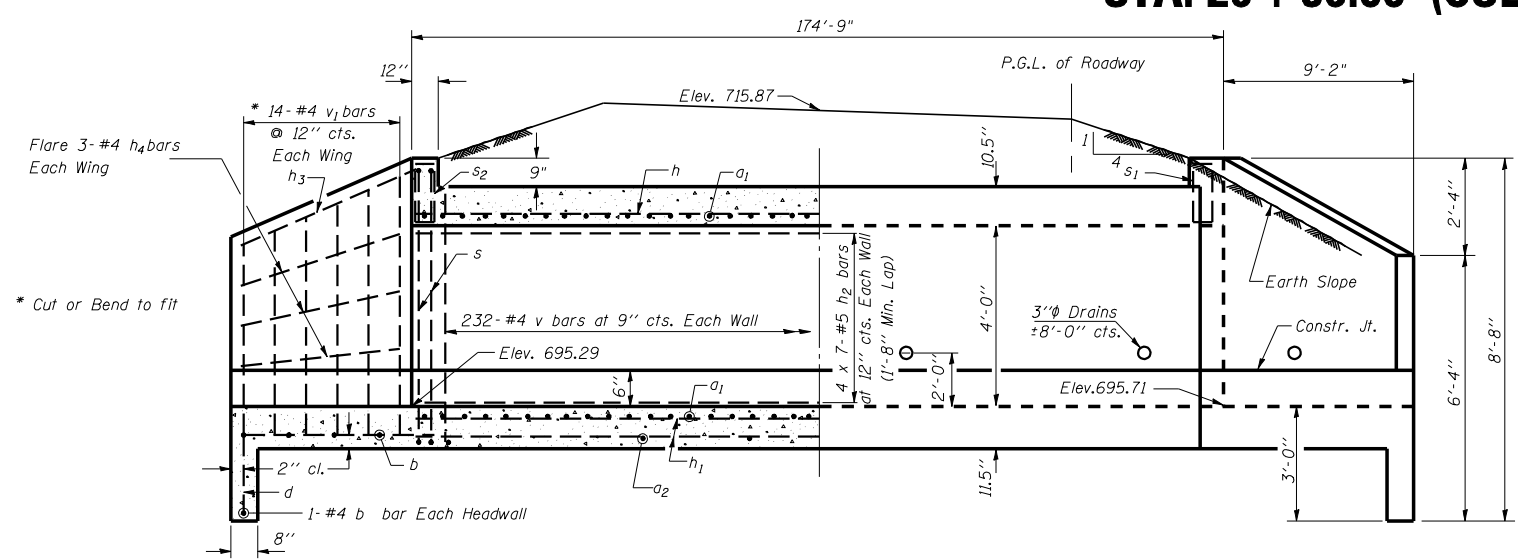
Bar	No.	Size	Length	Shape
a <sub>1</sub>	702	#8	11'-6"	U
a <sub>2</sub>	89	#4	9'-8"	U
b	16	#4	28'-0"	—
d	36	#4	13'-3"	L
h	70	#8	28'-1"	—
h <sub>1</sub>	112	#6	26'-8"	—
h <sub>2</sub>	56	#5	26'-5"	—
h <sub>3</sub>	2	#4	35'-11"	—
h <sub>4</sub>	12	#4	13'-1"	—
s	4	#4	32'-2"	U
s <sub>1</sub>	10	#4	4'-0"	U
s <sub>2</sub>	10	#4	4'-0"	U
v	464	#4	5'-6"	—
v <sub>1</sub>	56	#4	8'-4"	—
Concrete Box Culverts Cu. Yd.				166.1
Reinforcement Bars Pound				36,339

# DETAIL OF CAST IN PLACE BOX CULVERT & END SECTION

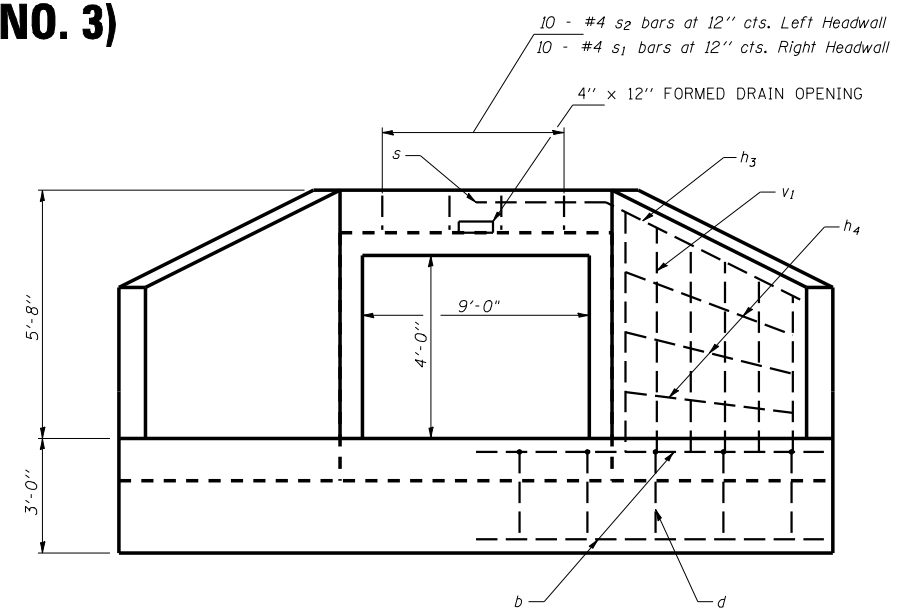
## A.R. BOX CULVERT 1 @ 9.0' X 4.0'

**STA. 26 + 36.00 (CULVERT NO. 3)**

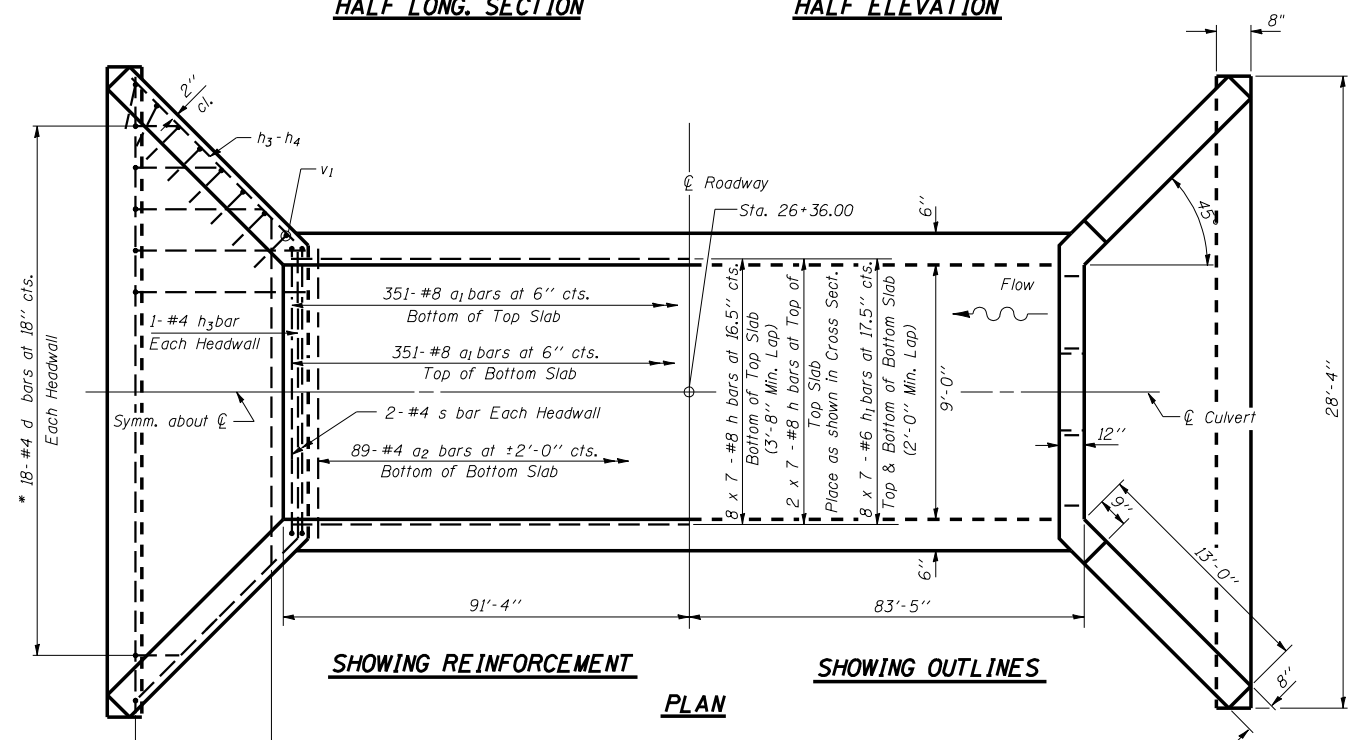
**PRECAST OPTION NOT ALLOWED**



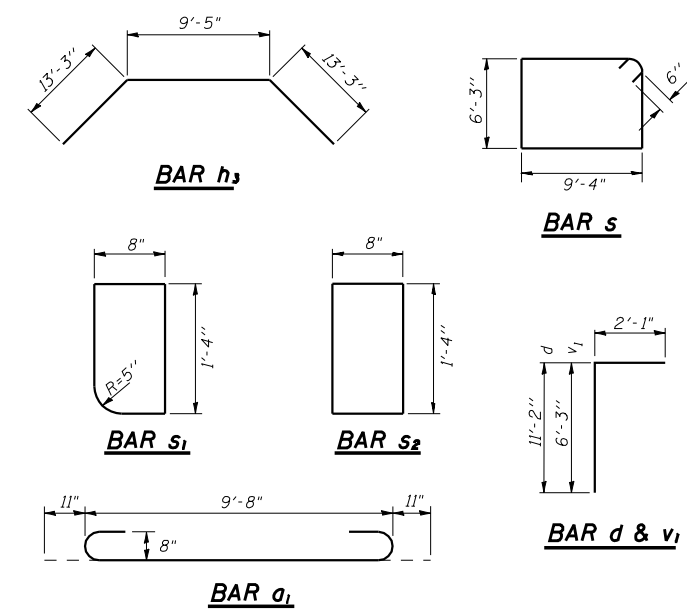
**HALF LONG SECTION      HALF ELEVATION**



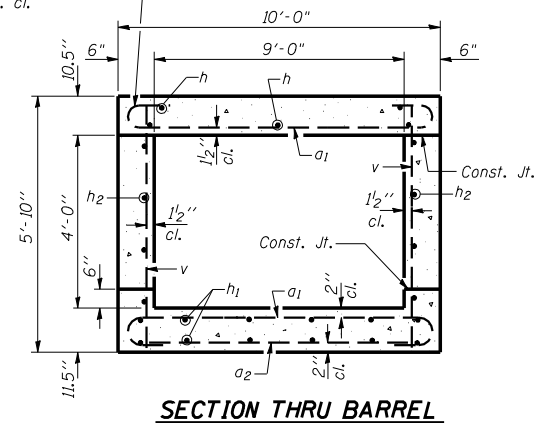
**END VIEW**



**SHOWING REINFORCEMENT PLAN      SHOWING OUTLINES**



Tilt hook of a<sub>1</sub> bars if necessary for 1/2" min. cl.



**SECTION THRU BARREL**

**NOTES**

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.

Reinforcement Bars shall conform to the requirements of AASHTO M-31, M-42 or M-53, Grade 60.

Bars indicated thus 12 x 4-#5 etc. indicates 12 lines of bars with 4 lengths per line.

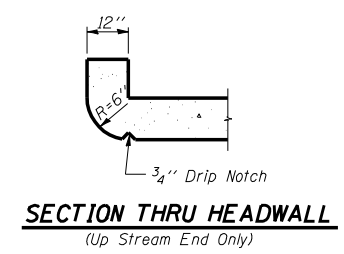
All construction joints shall be bonded.

Any excavation required for box culvert construction shall be included in the contract unit price for concrete, per Art. 502.15.

**DESIGN STRESSES**

f<sub>y</sub> = 60,000 psi  
f'<sub>c</sub> = 3,500 psi

**LOADING HS 20-44 & ALT.**



**SECTION THRU HEADWALL**  
(Up Stream End Only)

**BOX CULVERT & END SECTIONS (CAST IN PLACE)**  
**1 @ 9.0' X 4.0'**  
**STA. 26+36.00 NO SKEW**

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		<b>CULVERT DETAILS</b>

SCALE: VERT. HORIZ. DATE 061705 DRAWN BY JDC CHECKED BY JDE