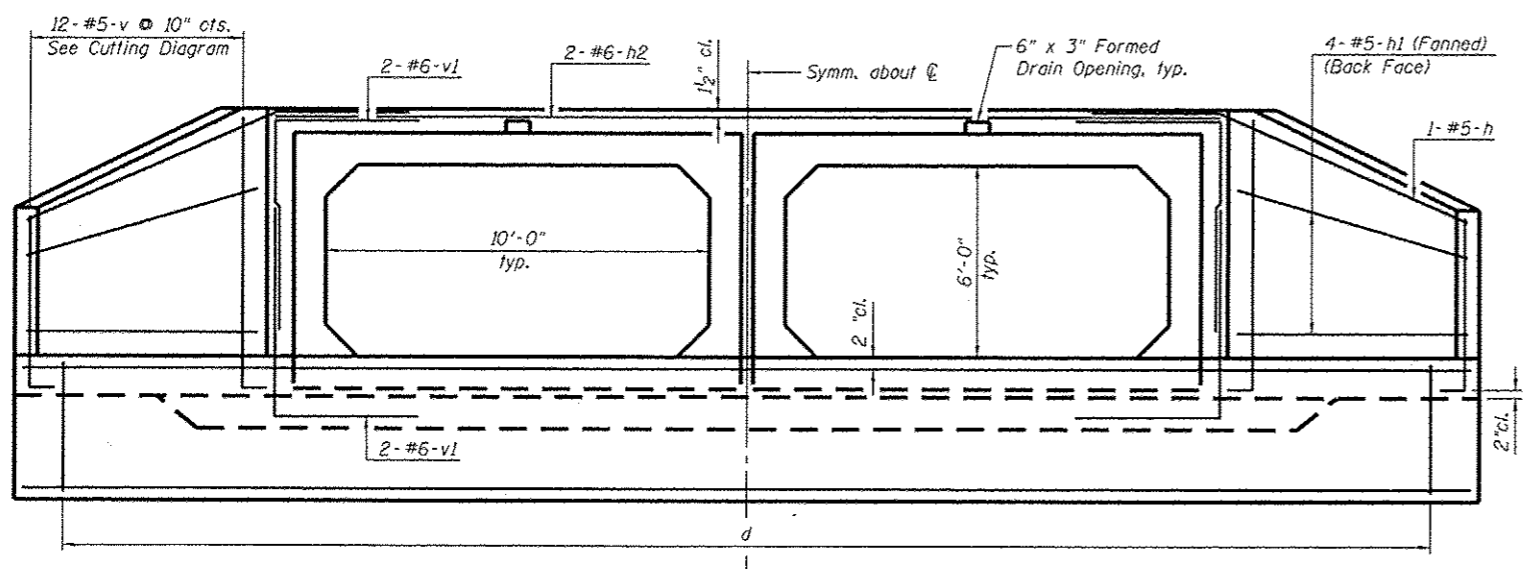
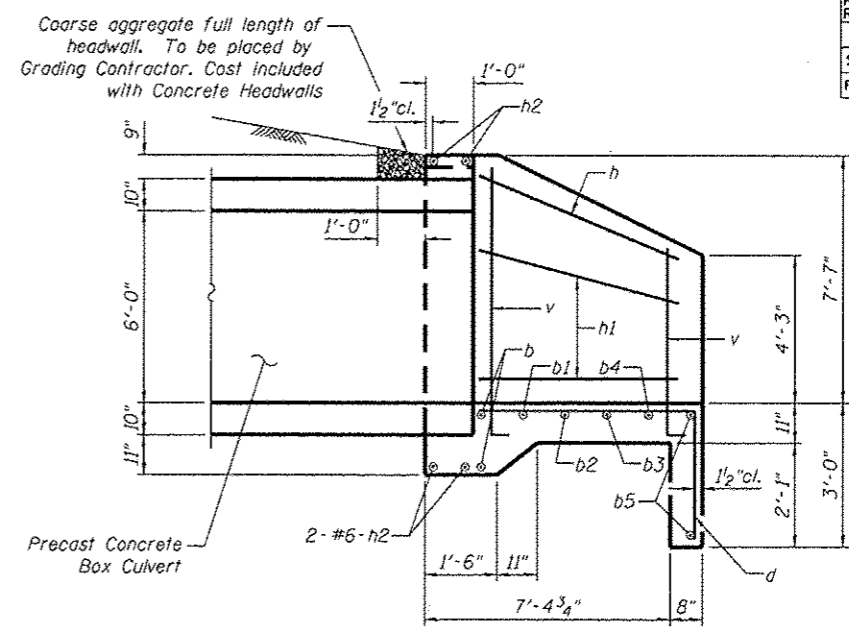


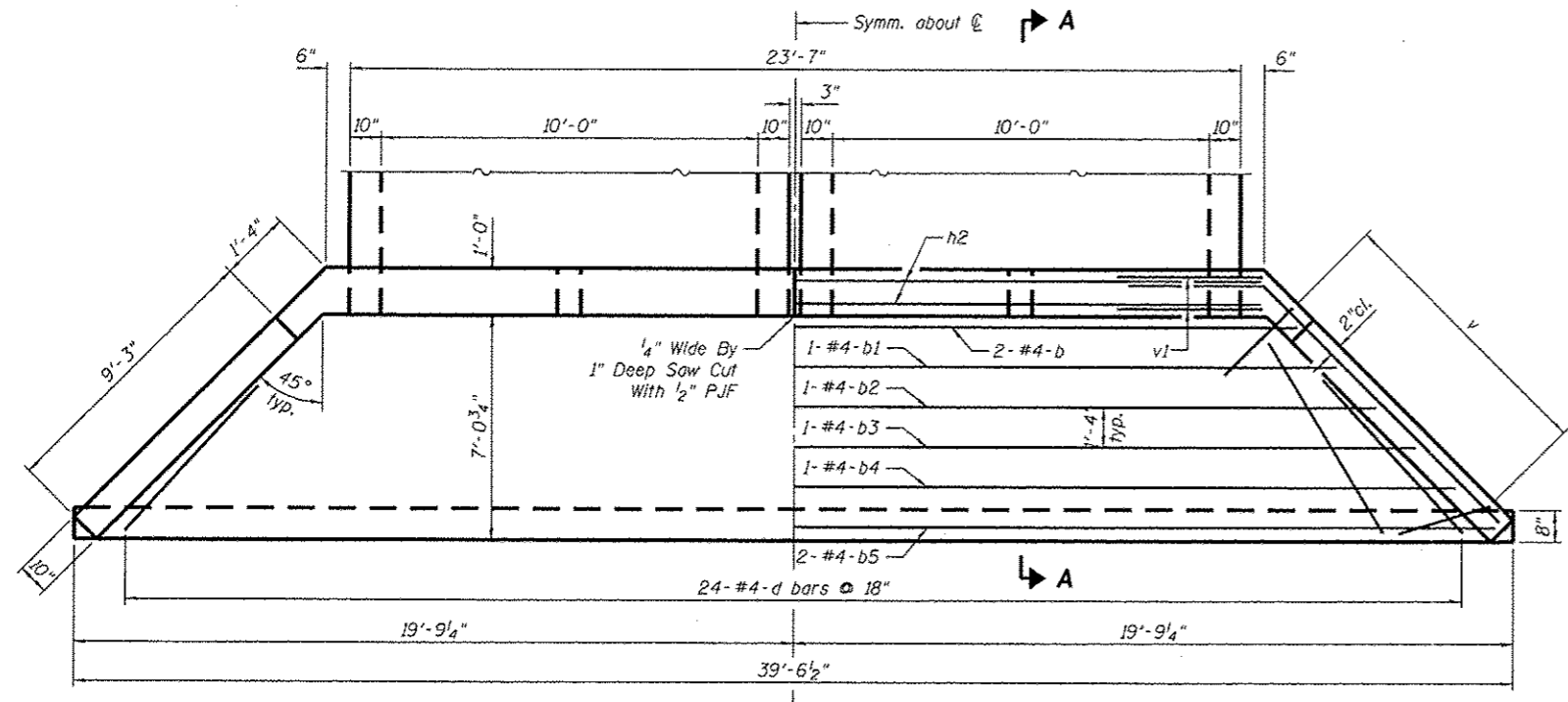
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
322	11-13	CHRISTIAN	437	261
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



END ELEVATION



SECTION A-A



SHOWING DIMENSIONS

SHOWING REINFORCEMENT

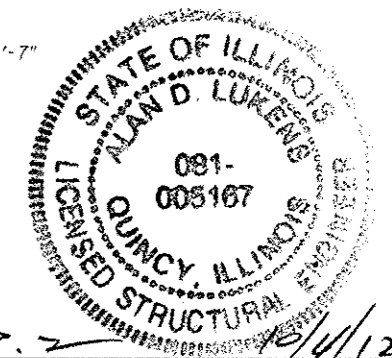
PLAN

BILL OF MATERIAL

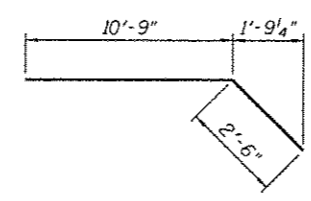
Bar	No.	Size	Length	Shape
b	4	#4	26'-5"	—
b1	2	#4	29'-2"	—
b2	2	#4	31'-10"	—
b3	2	#4	34'-6"	—
b4	2	#4	37'-3"	—
b5	4	#4	39'-2"	—
d	48	#4	9'-5"	┘
h	4	#5	13'-3"	┘
h1	16	#5	10'-5"	—
h2	8	#6	25'-5"	—
v	24	#5	17'-3"	┘
v1	16	#6	9'-10"	┘
Reinforcement Bars			Pound	1,860
Concrete Structures			Cu. Yd.	33.2

NOTES:

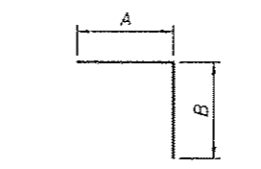
- Bill of Material for two headwalls, each end similar.
- Bar dimensions are out to out.
- Not to scale or proper orientation.
- Exposed edges shall be beveled 3/4".
- Reinforcement bars shall conform to the requirements of ASTM A706 Gr 60. See Special Provisions.
- Headwall at 0° skew to culvert centerline.
- Minimum bar laps:
#6 bar = 2'-7"



Alan D. Lukens
 Alan D. Lukens
 Licensed Structural Engineer
 State of Illinois No. 081-005167
 License Expires 11/30/2012
 Date: 10/4/12

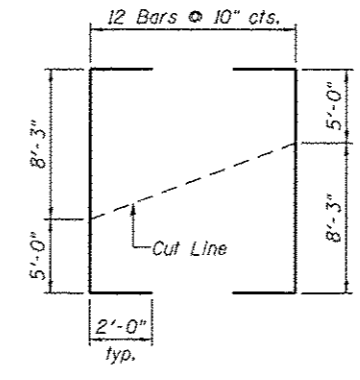


BAR h
(Bend in field)



BARS d & v1

Bar	A	B
d	6'-9"	2'-8"
v1	3'-0"	6'-10"



FIELD CUTTING DIAGRAM
BAR v

REVISIONS	
NAME	DATE

US 51 (STA 381+65 RT)
 ILLINOIS DEPARTMENT OF TRANSPORTATION
CAST-IN-PLACE END SECTIONS
 FAP 322 (US 51)
 SECTION 11-13
 CHRISTIAN COUNTY
 SCALE: _____ DRAWN BY: EBB
 DATE: _____ CHECKED BY: RJP

10/1/2012
 2011-11-15 10:58:53 SOUTH PLANS NEW.CADD SmartDraw 10/1/2012 10:58:53