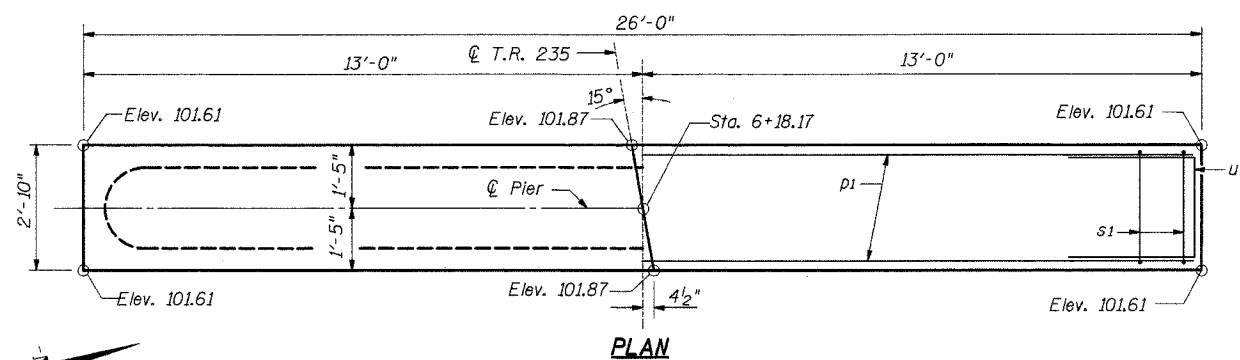
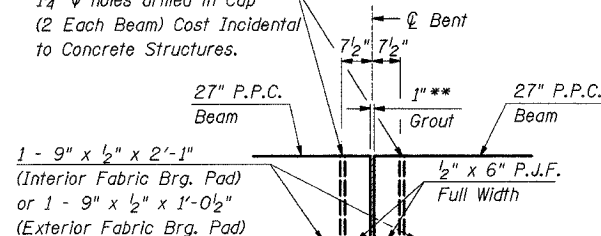


T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
235	93-02109-00-BR	CHRISTIAN	18	17
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	
SHEET 9 OF 10				

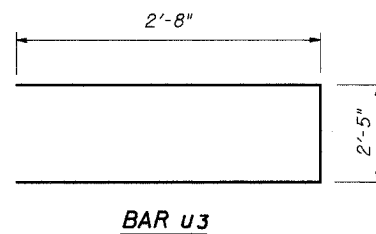
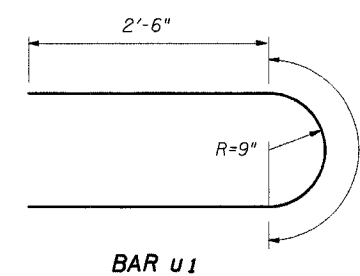
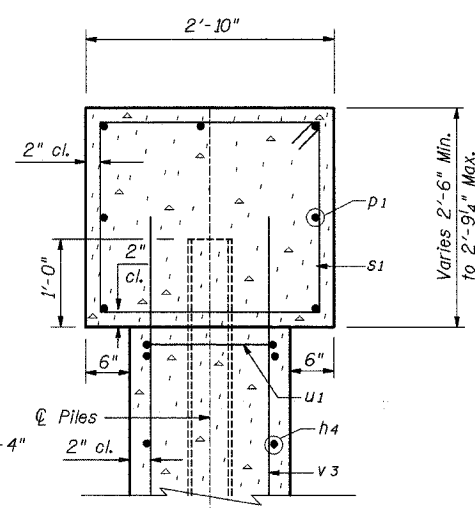
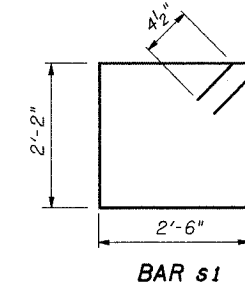
\*\* 1" Joint shall be packed with a very dry mix of 2:1 sand and P.C. mortar. 1" Dimension may Vary plus or Minus to accommodate Tolerance in Beam Lengths.

\*\*\* Dowel Rods to be grouted after beams are in place and allowed to cure (Min. 24 hours) prior to grouting Shear Keys.

\*\*\* 3/4"  $\phi$  x 1'-6" Dowel Rods in 1/4"  $\phi$  holes drilled in Cap (2 Each Beam) Cost Incidental to Concrete Structures.



NOTE:  
All Edges shall have Standard 3/4" Chamfer except as Noted.

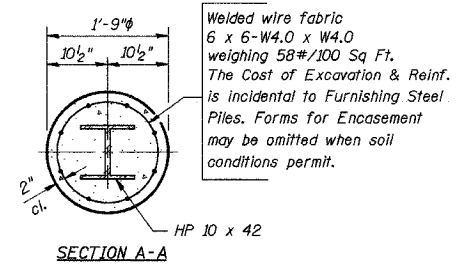
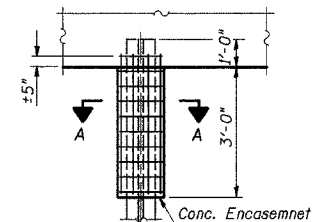
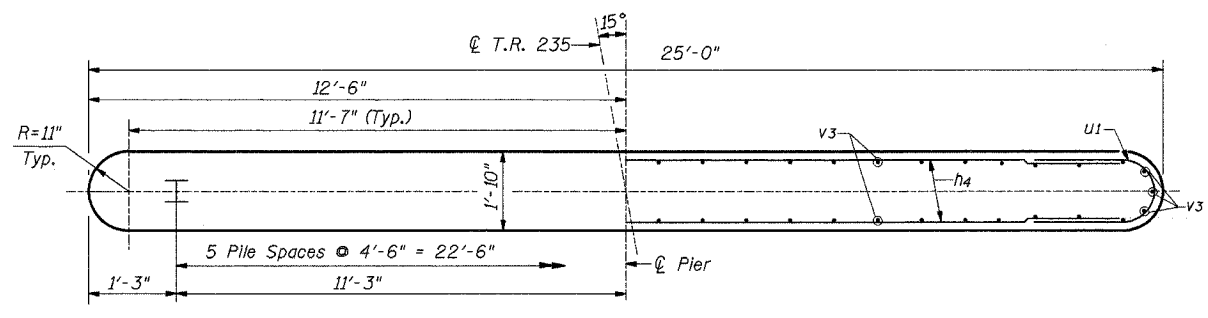
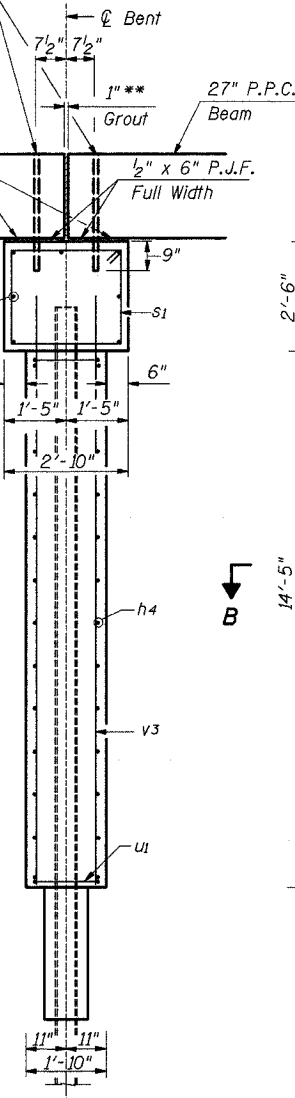
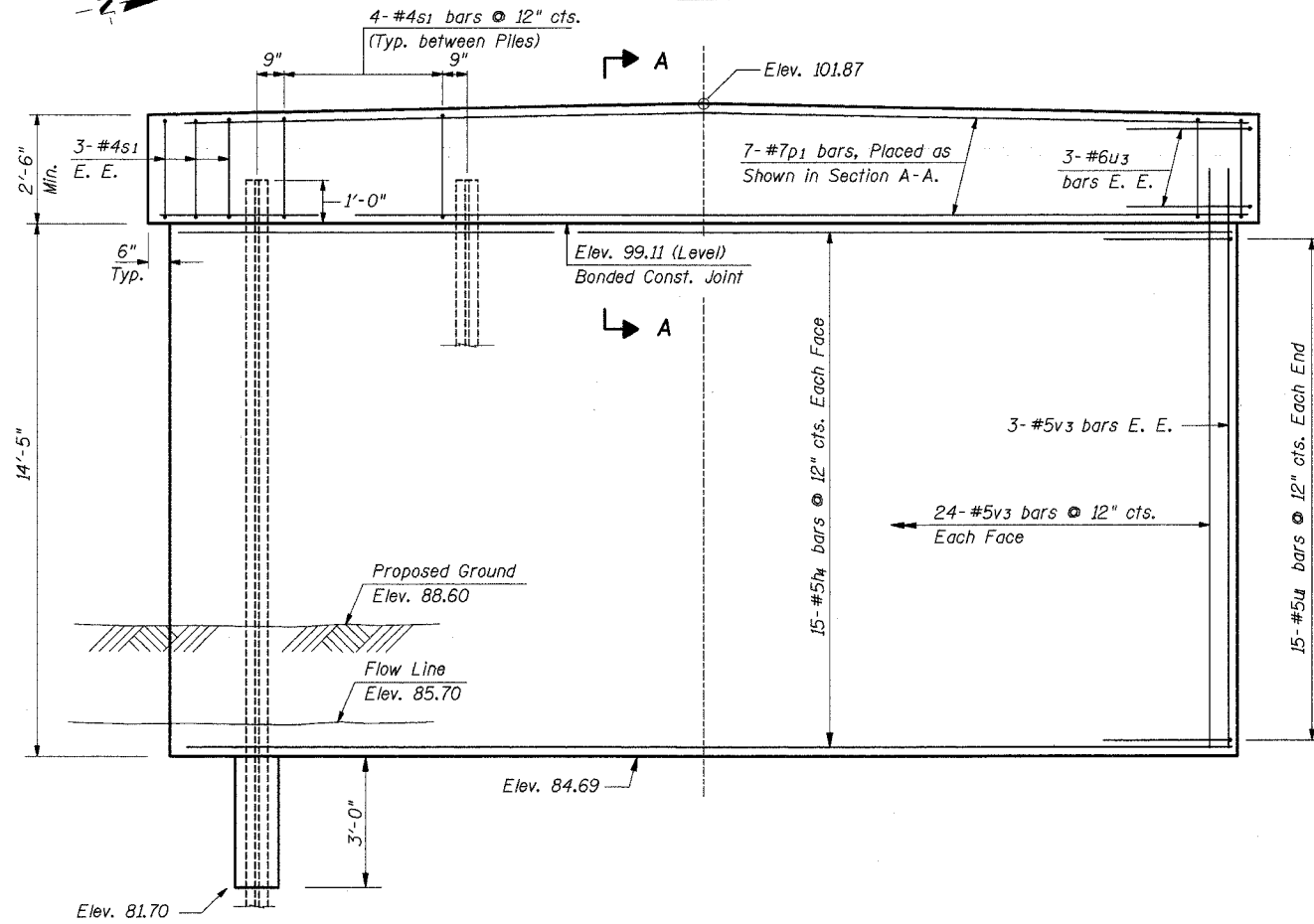


**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h4	30	#5	22'-10"	—
p1	7	#7	25'-8"	—
s1	26	#4	10'-1"	□
u1	30	#5	7'-4"	U
u3	6	#6	7'-9"	—
v3	54	#5	15'-6"	—

ITEM	UNIT	QUANTITY
Reinforcement Bars	Pound	2430
Concrete Structures	Cu. Yd.	31.3
Furnishing Steel Piles, HP 10 x 42	Foot	145
Driving Steel Piles	Foot	145
Test Piles	Each	1
Structure Excavation	Cu. Yd.	25
Concr. Encasement	Cu Yd.	1.6
Underwater Structure Excavation Protection, Location 1	Ea.	1



PILE ENCASEMENT DETAIL

**PILE DATA**

- Type = HP 10 x 42
- Capacity = Drive to Refusal
- Estimated Length = 29'
- Number Req'd. = 6 (Including 1 Test Pile)

**PIER 2 DETAILS**  
**T.R. 235 OVER BEAR CREEK**  
**SECTION 93-02109-00-BR**  
**CHRISTIAN COUNTY**  
**STR. NO. 011-3400**  
**STA. 6+24.42**

<b>ie</b> consultants	INTERNATIONAL ENGINEERING CONSULTANTS, INC. 6420 SOUTH SIXTH STREET SPRINGFIELD, ILLINOIS 62707 TEL. (217) 529-8027 FAX (217) 529-4543 IESPRINGFIELD@IE-CONSULTANTS.COM WWW.IE-CONSULTANTS.COM			
	DESIGNED BY: G.B.M.	CHECKED BY: D.R.B.	DRAWN BY: THW	DATE: 5-03-04