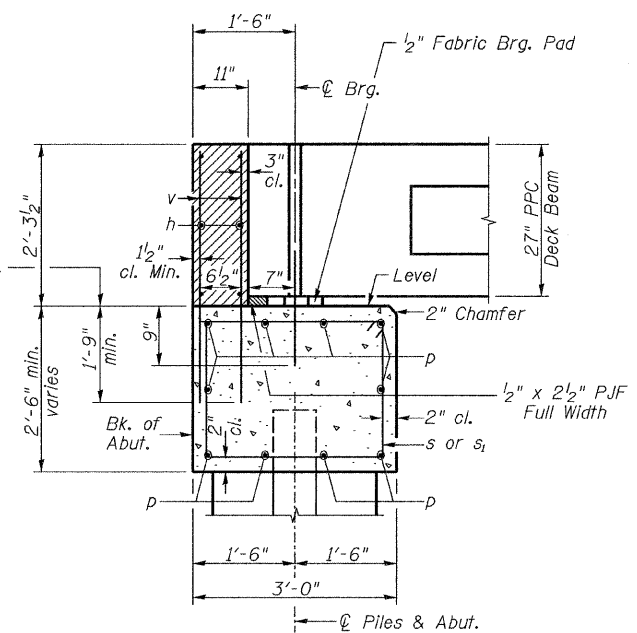
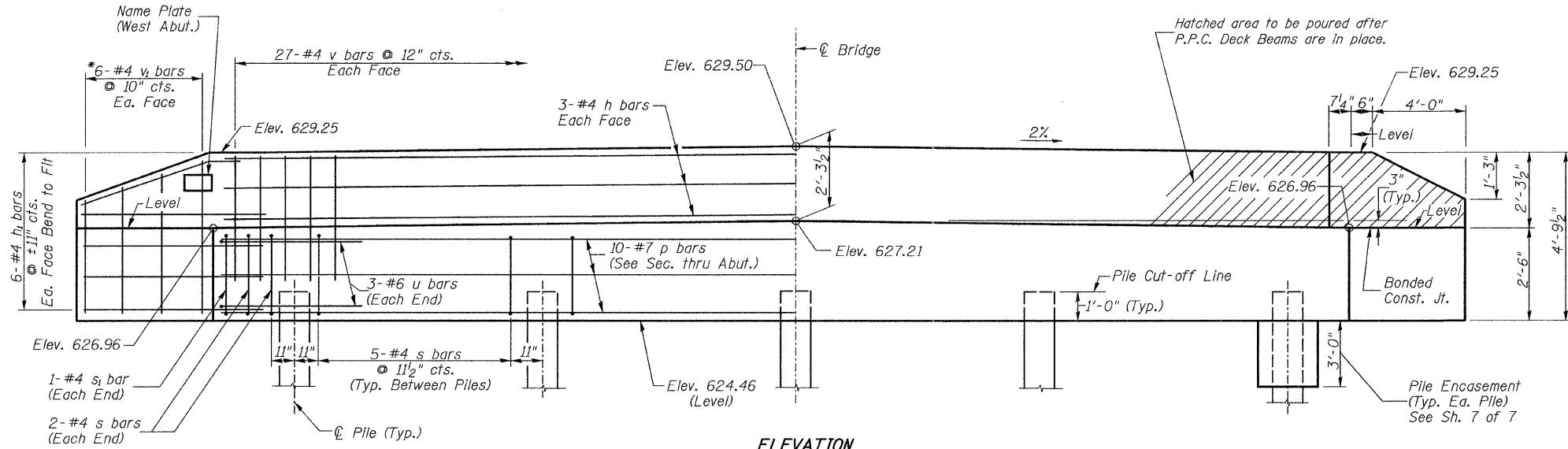


**PLAN**



**SECTION THRU ABUT.**  
(At Right Angles)



**ELEVATION**  
(Front View of Abutment)

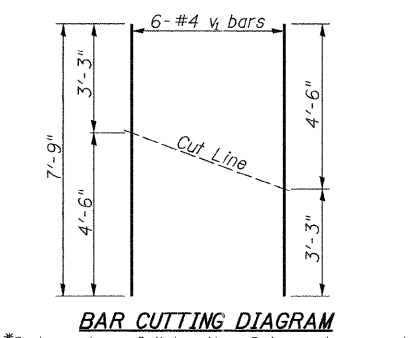
**TWO ABUTMENTS**  
**BILL OF MATERIAL**

BAR	NO.	SIZE	LENGTH	SHAPE
h	12	#4	26'-6"	—
h <sub>1</sub>	48	#4	6'-6"	—
p	20	#7	26'-6"	—
s	48	#4	10'-5"	□
s <sub>1</sub>	4	#4	7'-10"	□
u	12	#6	11'-9"	—
v	108	#4	4'-0"	—
v <sub>1</sub>	24	#4	7'-9"	—
Concrete Structures			CU YD	22.3
Reinforcement Bars			POUND	2,480
Name Plates			EACH	1
Furnishing Metal Shell Piles 12"x0.250"			FOOT	504
Driving Piles			FOOT	504
Test Pile Metal Shells			EACH	2
Concrete Encasement			CU YD	2.6

**DESIGN STRESSES**  
f'<sub>c</sub> = 3,500 p.s.i.  
f<sub>y</sub> = 60,000 p.s.i.

- NOTES**
- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
  - Reinforcement bars shall conform to ASTM A706 Grade 60.

**PILE DATA**  
Type & Size: Metal Shell 12"x0.250" walls  
Nominal Required Bearing: 245 kips  
Factored Resistance Available: 135 kips  
Est. Length: 60' East Abutment  
66' West Abutment  
No. Req'd.: 10 (Includes 1 Test Pile at Each Abut.)



**BAR CUTTING DIAGRAM**  
\*Order v<sub>1</sub> bars full length. Cut as shown and use remainder of bars in opposite face.

**BAR s<sub>1</sub>**

**BAR u**

**ABUTMENTS**  
**BUREAU COUNTY**  
**SECTION 11-07119-00-BR**  
**T.R. 55 OVER UNION DITCH**

SHEET NO. 6 11 SHEETS	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	TR 55	11-07119-00-BR	BUREAU	21	12
	S.N. 006-4096		CONTRACT NO. 87499		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRS-0011083			