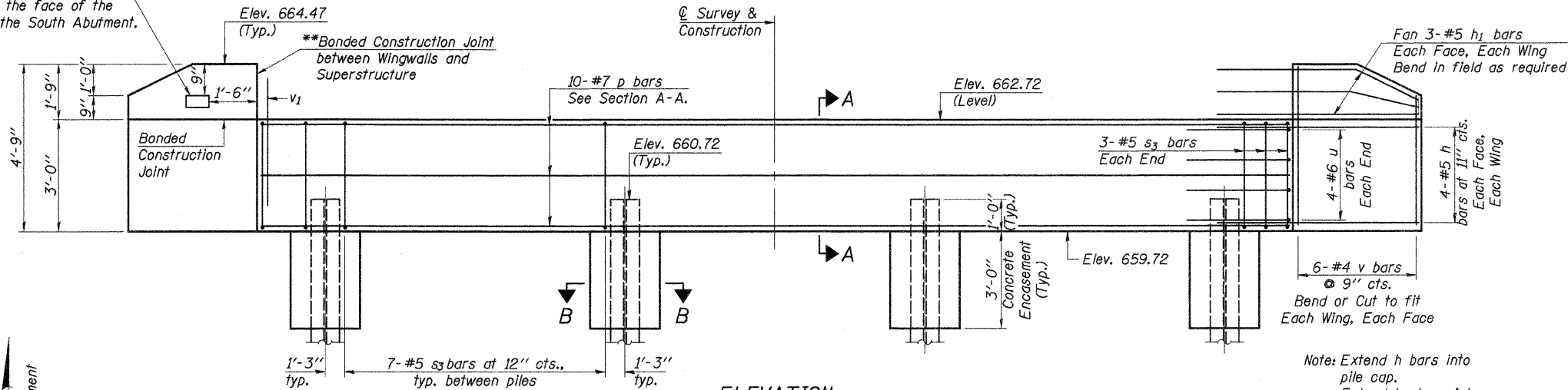


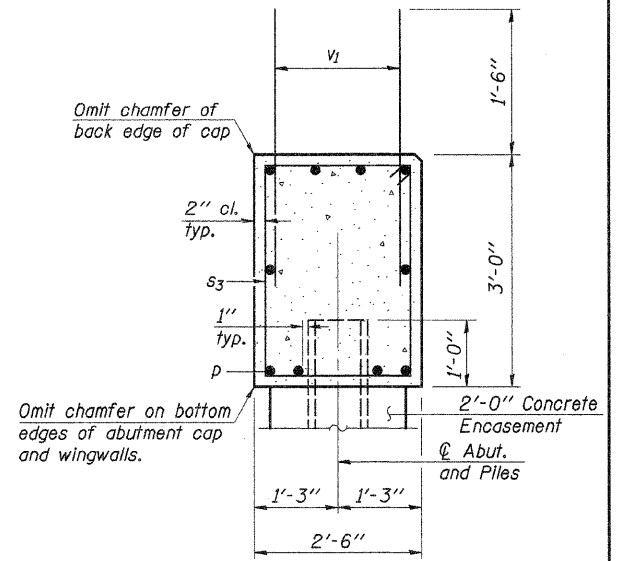
\*\*Wingwall portions, above top of abutment cap, may be placed monolithically with superstructure.

Note: All edges shall have standard 3/4" chamfer except as noted.

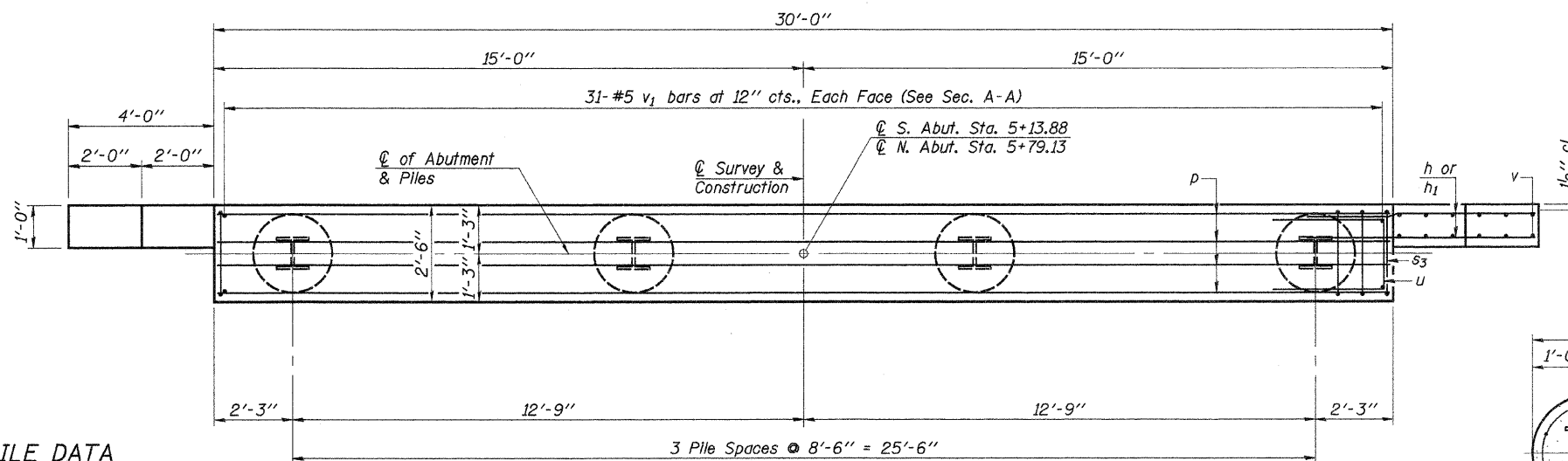
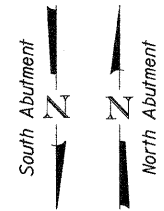
Name Plate shall be placed on the outside of the face of the East Wing of the South Abutment.



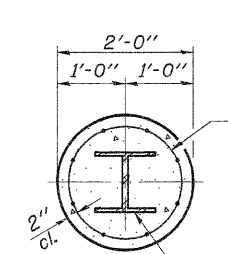
**ELEVATION**  
Looking South - South Abutment  
Looking North - North Abutment



**SECTION A-A**



**PLAN**



**SECTION B-B**  
Concrete Encasement

**BILL OF MATERIAL**  
**2 ABUTMENTS**

Bar	No.	Size	Length	Shape	
h	32	#5	6'-0"	—	
h <sub>1</sub>	24	#5	6'-6"	—	
p	20	#7	29'-8"	—	
s <sub>3</sub>	54	#5	10'-7"	□	
u	16	#6	14'-1"	—	
v	48	#4	4'-5"	—	
v <sub>1</sub>	124	#5	3'-6"	—	
Concrete Structures				Cu. Yd.	19.3
Reinforcement Bars, Epoxy Coated				Pound	3,110
Name Plates				Each	1
Furnishing Steel Piles, HP10x42				Foot	266
Driving Piles				Foot	266
Test Pile, Steel HP10x42				Each	1
Concrete Encasement				Cu. Yd.	2.8
Protective Coat				Sq. Yd.	6

See Sheet 7 of 9 for Pile Details.

Note: All reinforcement bars shall be epoxy coated.

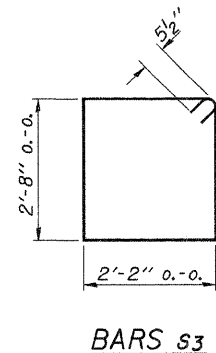
**PILE DATA**

Type & Size.....	HP10x42
No. Req'd. (2 Abutments).....	8*
Nominal Required Bearing.....	200 kips
Factored Resistance Available.....	100 kips
Estimated Length.....	38 Ft./Pile

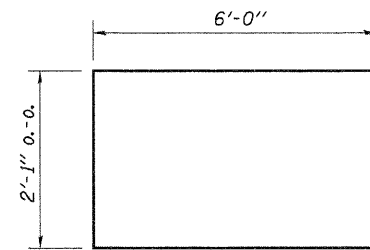
\*Includes 1 Test Pile to be driven in a permanent location at the South abutment.

The test piles shall be driven to 110 percent of the Nominal Required Bearing indicated above.

DESIGNED -	A.L.S.
CHECKED -	A.R.K.
DRAWN -	S.A.P.
CHECKED -	A.R.K. & A.L.S.



**BARS S3**



**BAR U**

**ABUTMENTS**  
COUNTY HIGHWAY 8  
SECTION 06-00098-01-BR  
IROQUOIS COUNTY  
STATION 5+46.50

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8800 www.fehr-graham.com	FEHR-GRAHAM & ASSOCIATES, LLC ENGINEERING AND SCIENCE CONSULTANTS PRAIRIE, IL. ROCKFORD, IL. ROCKFORD, IL. MONROE, WI. SPRINGFIELD, IL.	JOB NO.: 09-202 FILE: ABUTS.DGN DATE: 10/23/09
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