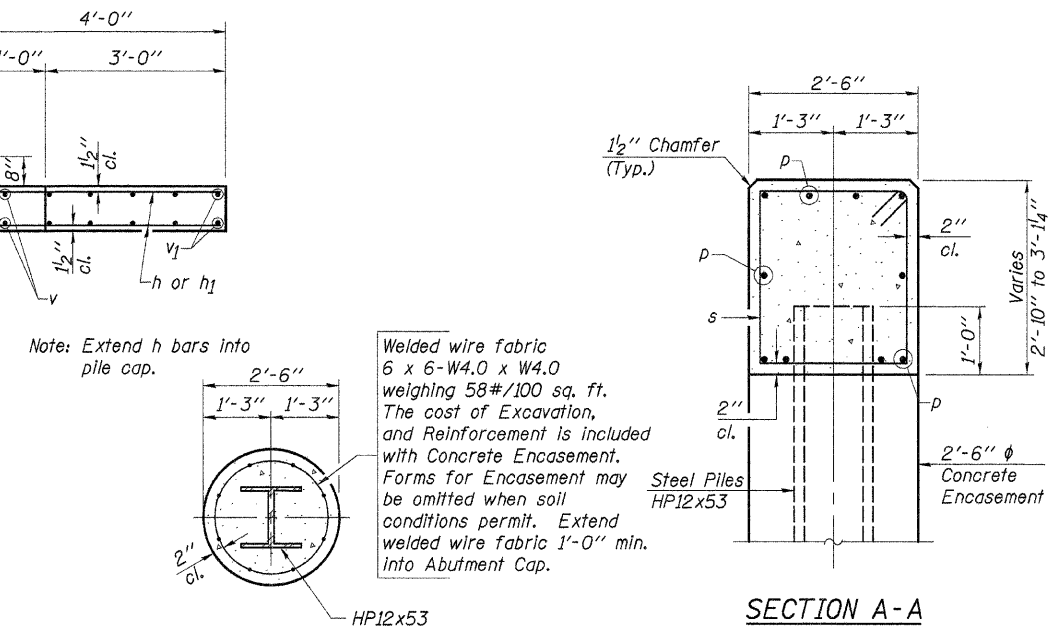
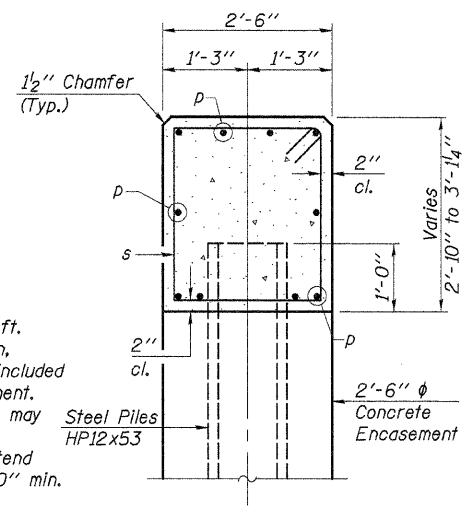


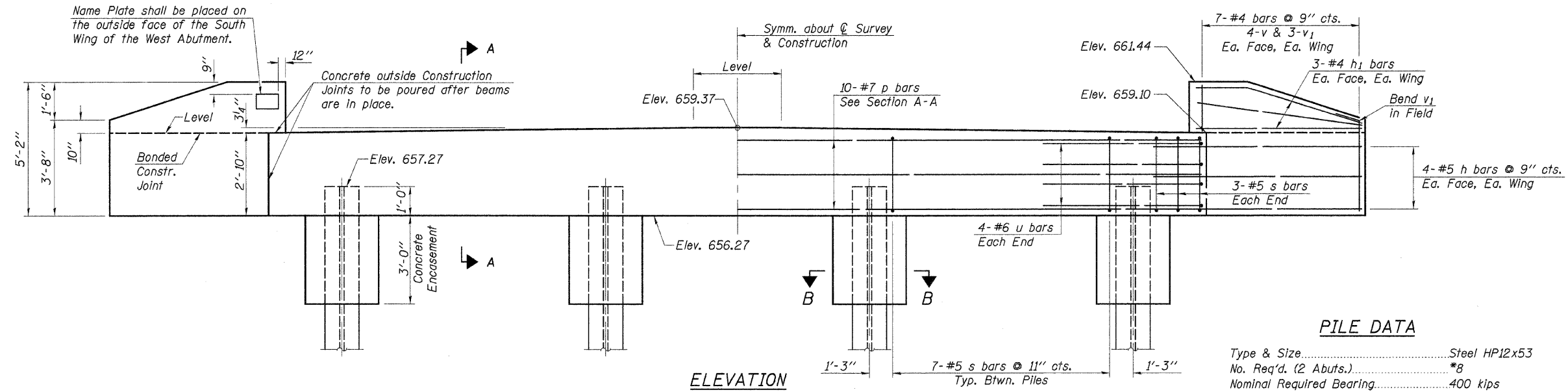
PLAN



SECTION B-B  
PILE ENCASEMENT DETAIL



SECTION A-A



ELEVATION

2 ABUTMENTS  
BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
h	32	#5	6'-9"	—	
h <sub>1</sub>	24	#4	4'-8"	—	
p	20	#7	28'-8"	—	
s	54	#5	10'-3"	□	
u	16	#6	12'-1"	▭	
v	32	#4	4'-10"	—	
v <sub>1</sub>	24	#4	4'-3"	—	
Concrete Structures				Cu. Yd.	18.7
Reinforcement Bars				Pound	2,510
Name Plates				Each	1
Test Pile Steel HP12x53				Each	1
Steel Piles HP12x53				Foot	259
Driving Piles				Foot	259
Concrete Encasement				Cu. Yd.	4.4

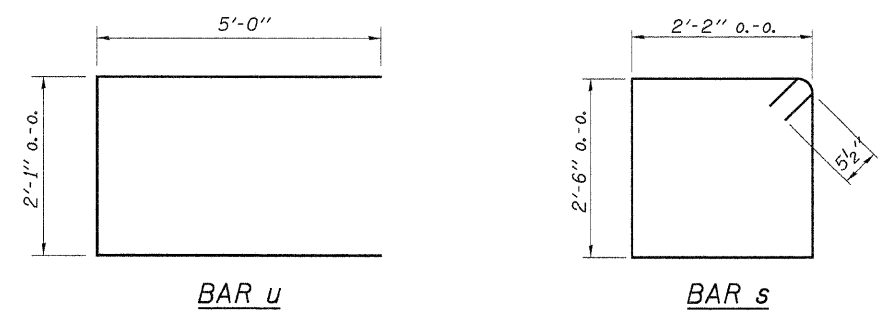
See Sheet 13 for Pile Details.

PILE DATA

Type & Size	Steel HP12x53
No. Req'd. (2 Abutments)	*8
Nominal Required Bearing	400 kips
Factored Resistance Available	220 kips
Estimated Length	37 ft./pile

\*Includes 1 Test Pile to be driven in a permanent location at the west abutment.  
The test piles shall be driven to 110 percent of the Nominal Required Bearing indicated above.

Steel Piles shall be according to AASHTO M270 Grade 50.



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

ABUTMENTS  
S.N. 021-4307

<b>FEHR-GRAHAM &amp; ASSOCIATES, LLC</b> ENGINEERING AND SCIENCE CONSULTANTS FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL	TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	56	09-05123-01-BR	DOUGLAS	19	11
CONTRACT NO. 91433					
4440 ASH GROVE SPRINGFIELD, IL 62711 (217)-793-8600 www.fehr-graham.com		GARRETT ROAD DIST. ILLINOIS			