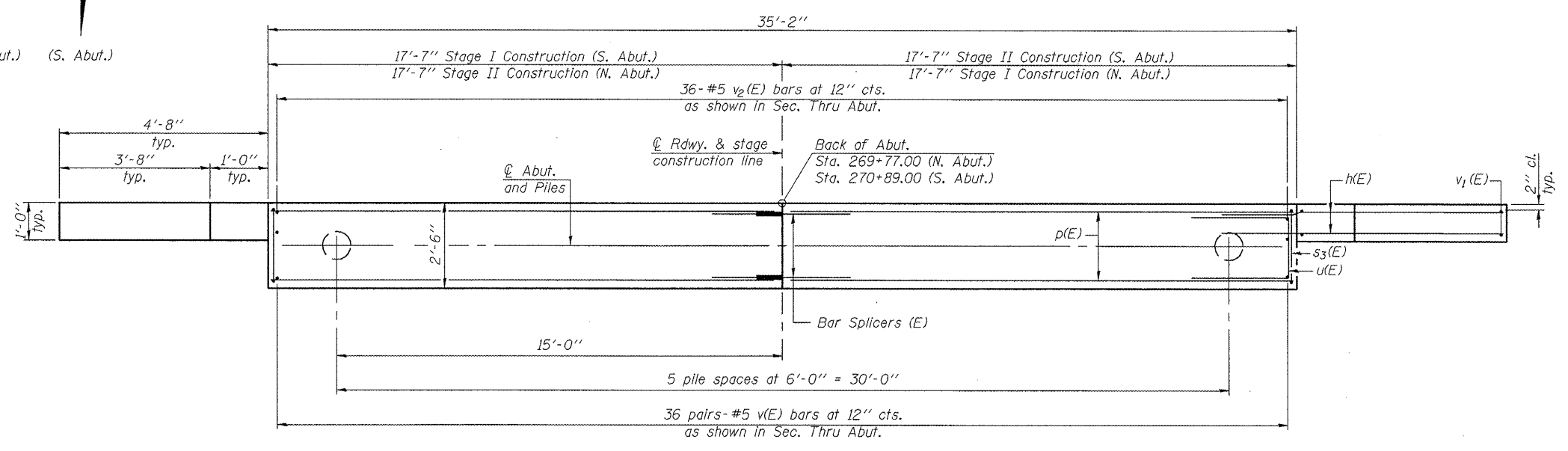
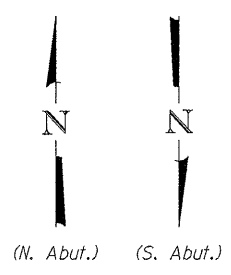


SEC. THRU ABUT.

BILL OF MATERIAL
(BOTH ABUTMENTS)

Bar	No.	Size	Length	Shape
h(E)	56	#4	6'-3"	—
p(E)	40	#9	17'-3"	—
s3(E)	72	#5	12'-7"	□
u(E)	16	#6	11'-9"	□
v(E)	144	#5	4'-1"	—
v1(E)	20	#5	10'-2"	—
v2(E)	72	#5	4'-7"	└
Structure Excavation			Cu. Yd.	162
Concrete Structures			Cu. Yd.	29.5
Reinforcement Bars, Epoxy Coated			Pound	4,980
Furnishing Metal Shell Piles 14" x 0.250"			Foot	600
Driving Piles			Foot	600
Test Pile Metal Shells			Each	2
Pile Shoes			Each	12

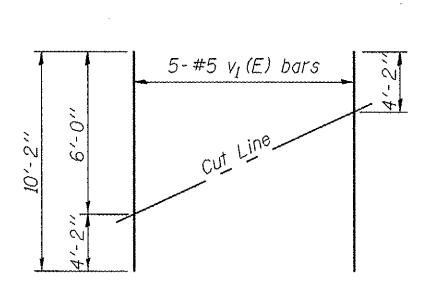
For details of Bar Splicers, see sheet 14 of 20.
For details of Metal Shell Piles, see sheet 13 of 20.



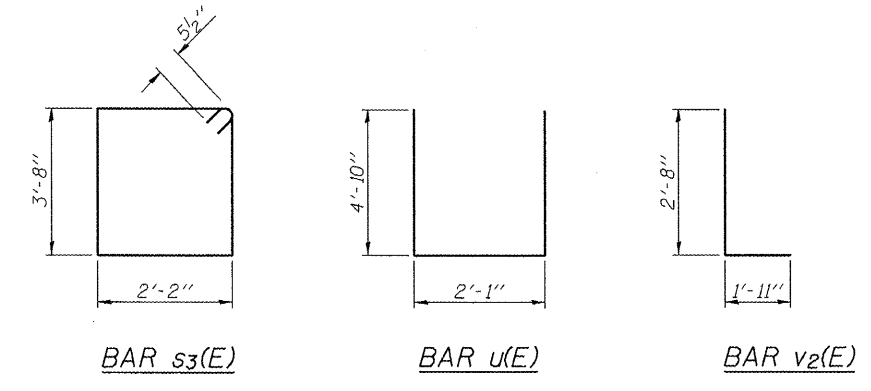
PLAN

N. ABUT. PILE DATA
 Type: Metal Shell - 14" ϕ x 0.250" wall w/ pile shoes
 Nominal Required Bearing: 325 Kips
 Factored Resistance Available: 179 Kips
 Est. Length: 60 ft.
 No. Production Piles: 5
 No. Test Piles: 1

S. ABUT. PILE DATA
 Type: Metal Shell - 14" ϕ x 0.250" wall w/ pile shoes
 Nominal Required Bearing: 319 Kips
 Factored Resistance Available: 176 Kips
 Est. Length: 60 ft.
 No. Production Piles: 5
 No. Test Piles: 1



FIELD CUTTING DIAGRAM
 Order v1(E) full length. Cut as shown and use remainder of bars in opposite face.



FILE NAME =	USER NAME = elegamonn	DESIGNED KAK	REVISED -
1:\08044\IL94\Cad\NS\Plans\0360072-68693.dgn		CHECKED EML	REVISED -
PLOT SCALE =		DRAWN KAK	REVISED -
PLOT DATE = 12/16/2010		CHECKED EML	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORNER & SHIFRIN, INC.
ENGINEERS

ABUTMENTS
STRUCTURE NO. 036-0072

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-1	HENDERSON	56	24
			CONTRACT NO. 68693	
ILLINOIS FED. AID PROJECT				

SHEET NO. 11 OF 20 SHEETS