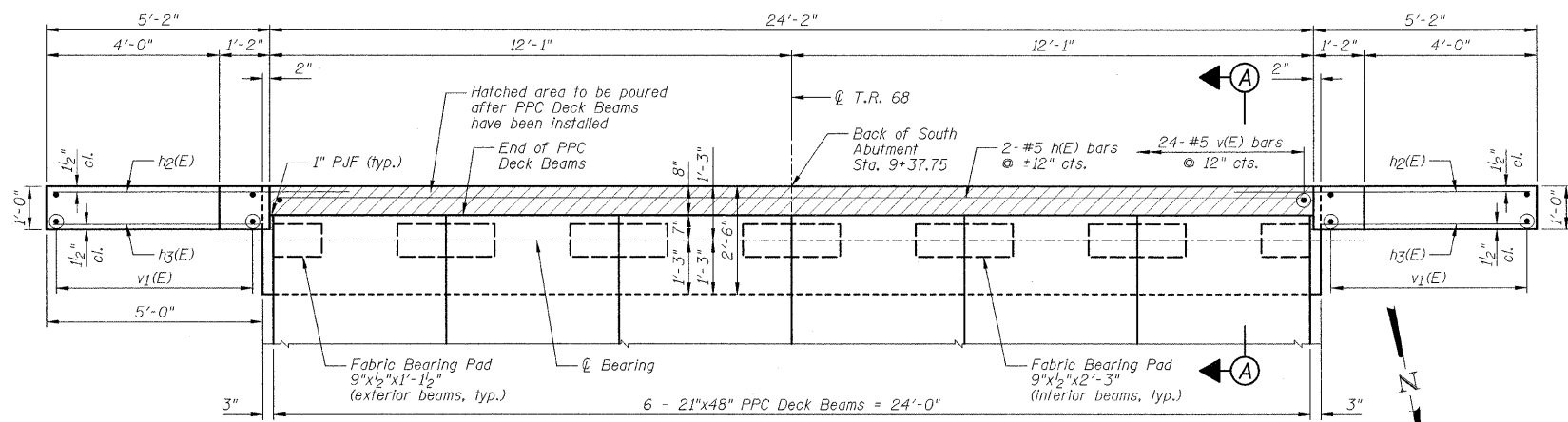
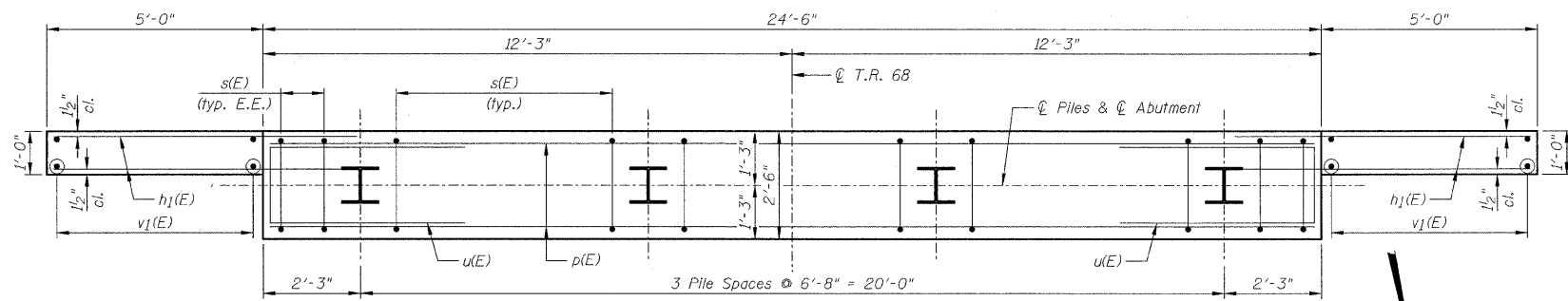


**SOUTH ABUTMENT
BILL OF MATERIAL**

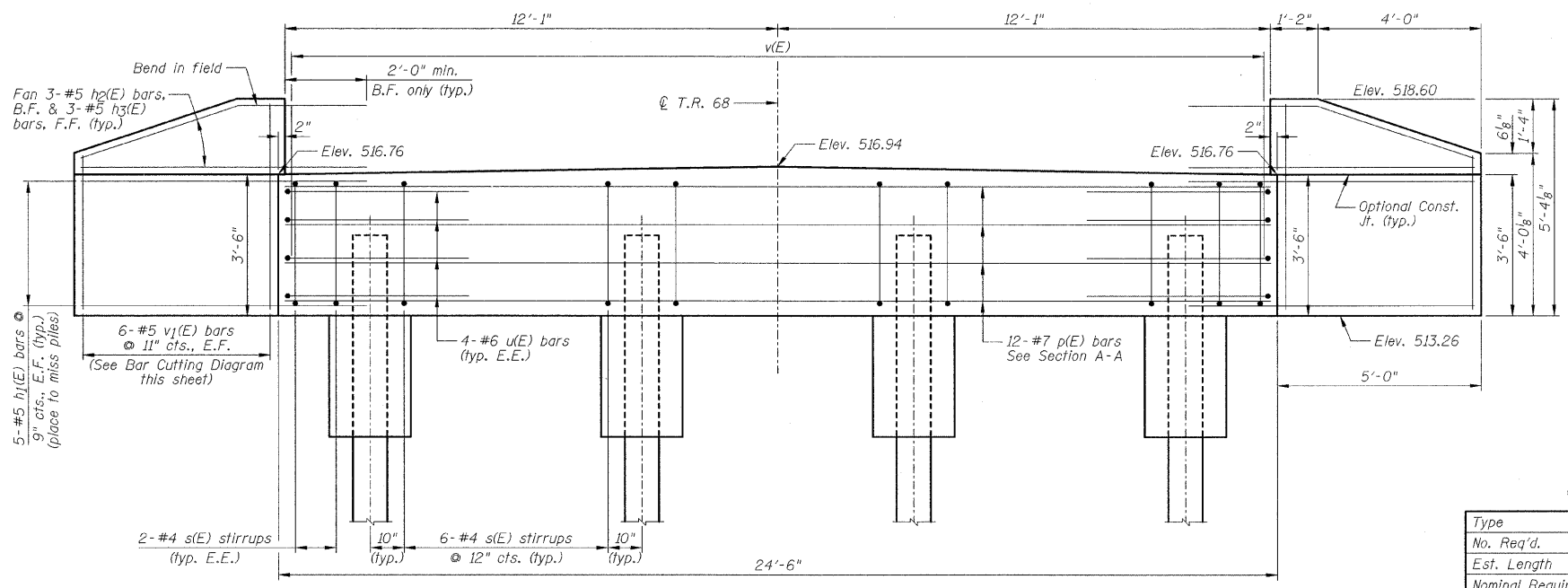
Bar	No.	Size	Length	Shape
h(E)	2	#5	23'-10"	—
h1(E)	20	#5	6'-10"	—
h2(E)	6	#5	7'-3"	—
h3(E)	6	#5	4'-10"	—
p(E)	12	#7	24'-2"	—
s(E)	22	#4	11'-3"	□
u(E)	8	#6	11'-1"	—
v(E)	24	#5	3'-8"	—
v1(E)	12	#5	8'-8"	—
Item	Unit	Quantity		
Porous Granular Embankment, Special	Ton	56		
Structure Excavation	Cu. Yd.	39		
Concrete Structures	Cu. Yd.	11.1		
Reinforcement Bars, Epoxy Coated	Pound	1360		
Furnishing Steel Piles HP10x42	Foot	39		
Driving Piles	Foot	39		
Test Pile Steel HP10x42	Each	1		
Geocomposite Wall Drain	Sq. Yd.	16		
Pipe Underdrains For Structures 4"	Foot	58		



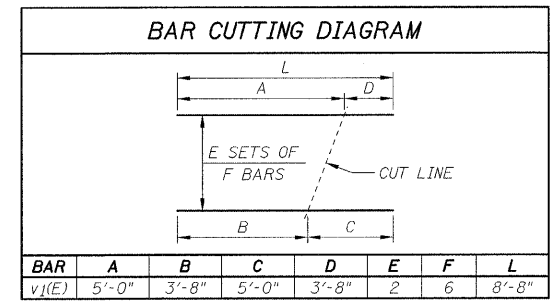
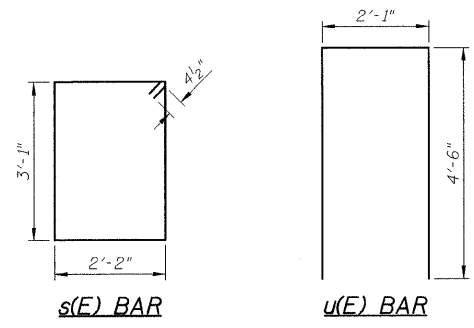
PLAN



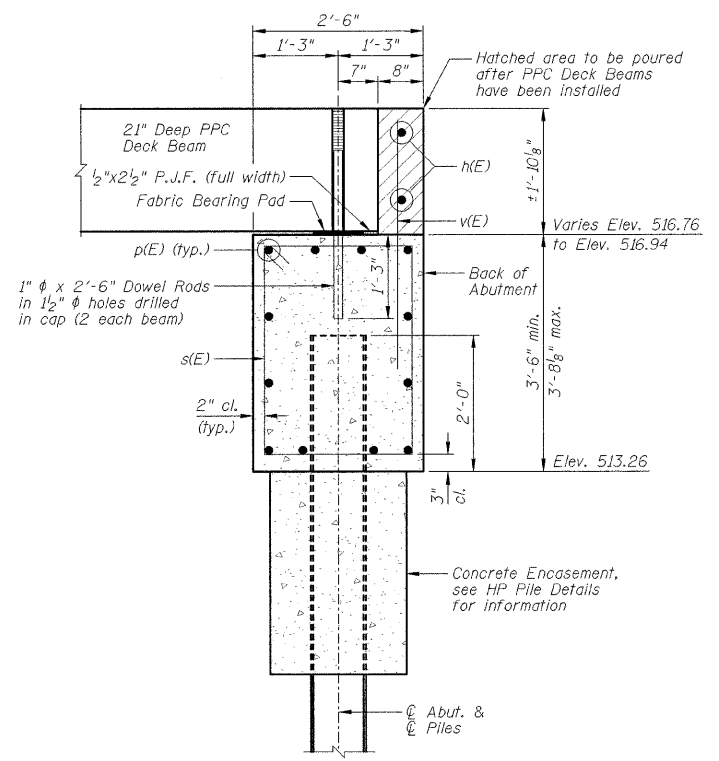
PLAN - PILE CAP



ELEVATION
(Looking South)



BAR CUTTING DIAGRAM



SECTION A-A

PILE DATA:

Type	HP10x42 Steel
No. Req'd.	3+1 Test Pile
Est. Length	13 feet
Nominal Required Bearing	335 kips
Allowable Resistance Available	112 kips

NOTES:

- 1.) E.E. denotes Each End, E.F. denotes Each Face, F.F. denotes Front Face & B.F. denotes Back Face.
- 2.) Order v1(E) bars full length. Cut according to Bar Cutting Diagram. Use remainder of v1(E) bars in opposite face of wingwall.
- 3.) The Contractor shall limit the pile hammer size selected considering the relatively high soil strengths indicated in the borings and avoid overdriving the piles beyond their nominal required bearing to prevent pile damage during driving.

DESIGNED - JML	REVISED -
DRAWN - DJM	REVISED -
CHECKED - MSW	REVISED -
DATE - 06/22/09	REVISED -

EFFINGHAM COUNTY DEPARTMENT OF HIGHWAYS

SOUTH ABUTMENT

**T.R. 68 OVER FULFER CREEK
SECTION 05-07106-00-BR
EFFINGHAM COUNTY
STATION 9+96.25 STRUCTURE NO. 025-3318**

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
68	05-07106-00-BR	EFFINGHAM	25	17
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT			CONTRACT NO. 95593	

FARNSWORTH GROUP, INC.

CONSULTING ENGINEERS - 2709 MCGRAW DRIVE BLOOMINGTON, ILLINOIS 61704 (309) 663-8435 / (309) 663-1571 FAX