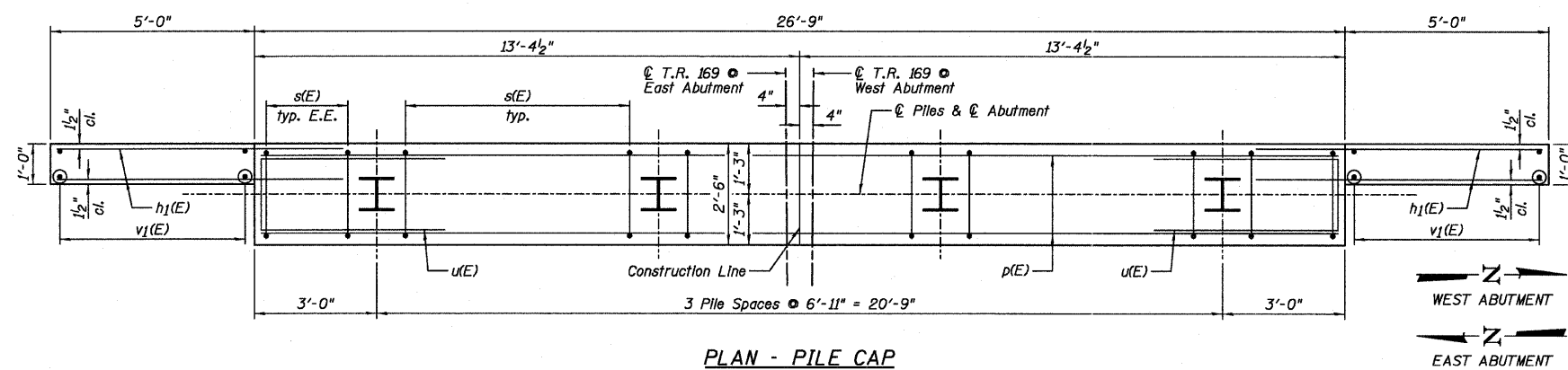
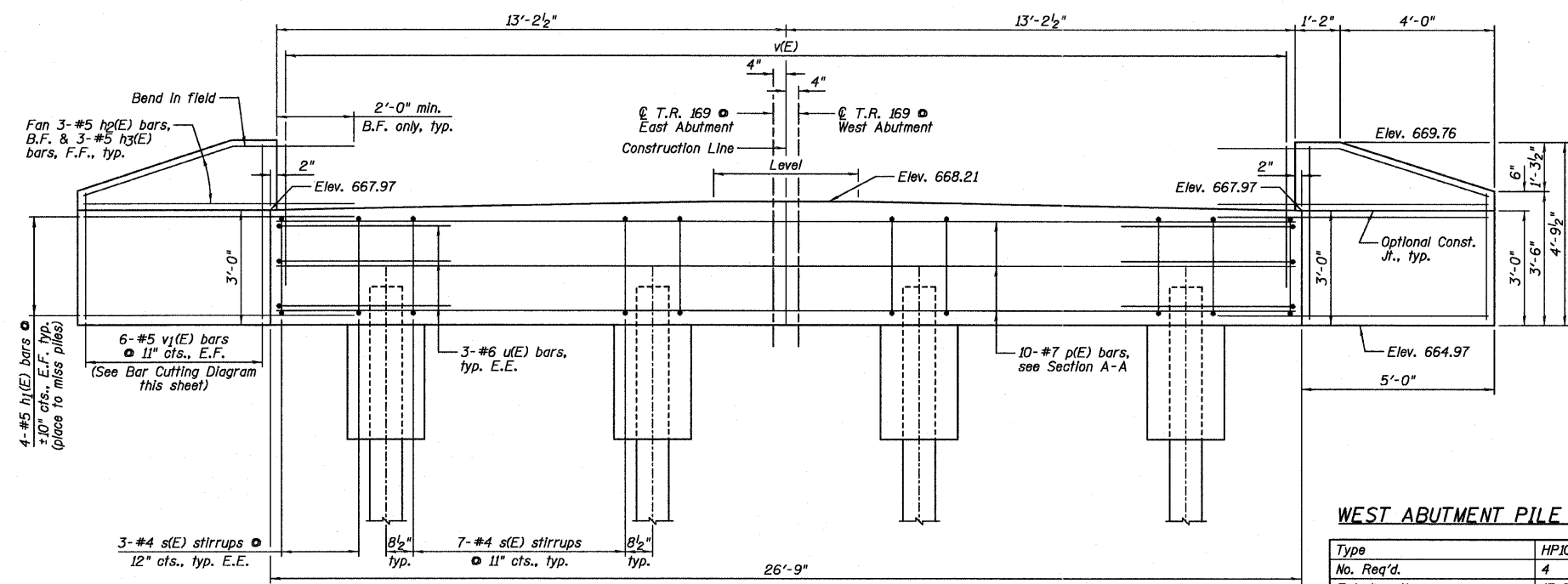


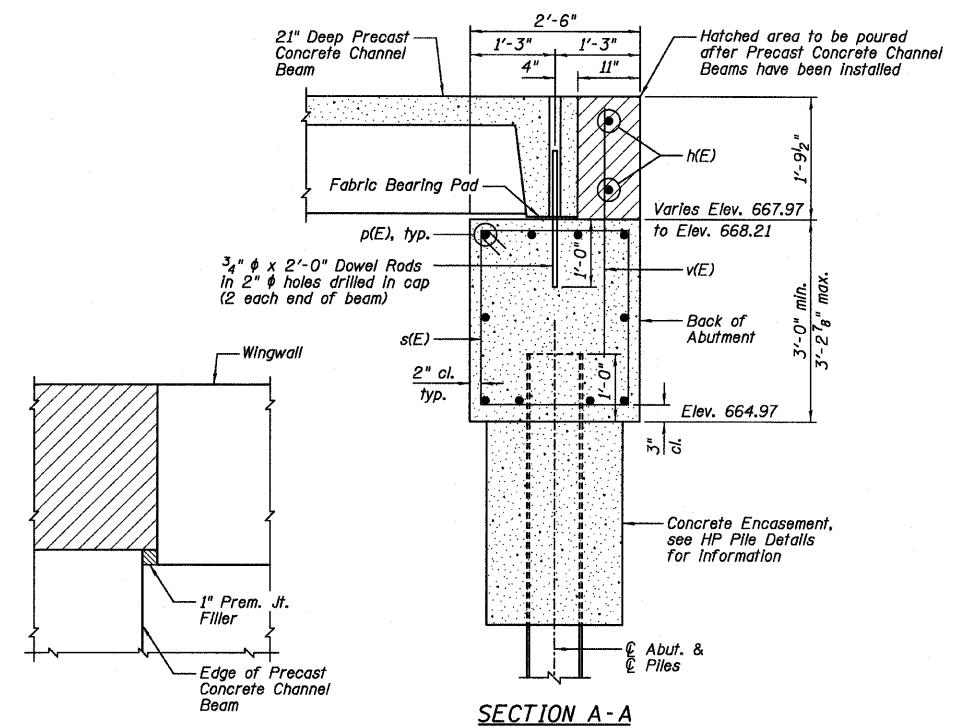
PLAN



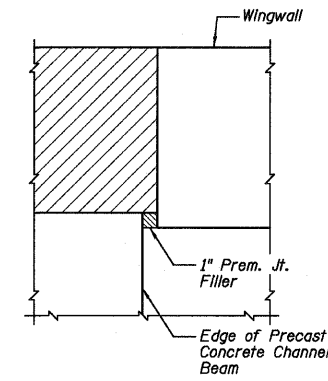
PLAN - PILE CAP



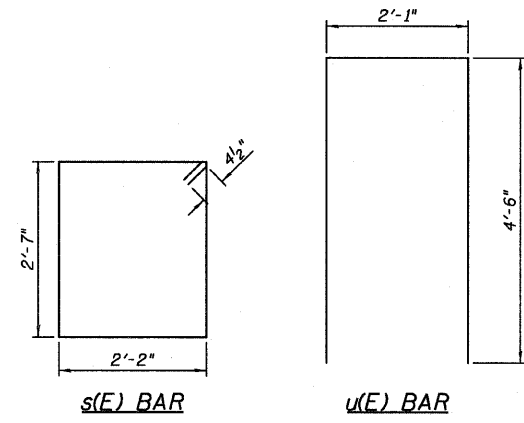
ELEVATION



SECTION A-A

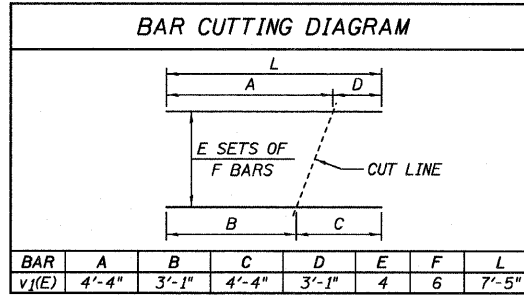


ENLARGED VIEW



s(E) BAR

u(E) BAR



BAR CUTTING DIAGRAM

TWO ABUTMENTS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	4	#5	26'-1"	—
h1(E)	32	#5	7'-0"	—
h2(E)	12	#5	7'-3"	—
h3(E)	12	#5	4'-10"	—
p(E)	20	#7	26'-5"	—
s(E)	54	#4	10'-3"	□
u(E)	12	#6	11'-1"	□
v(E)	54	#5	3'-8"	—
v1(E)	24	#5	7'-5"	—

Item	Unit	Quantity
Porous Granular Embankment, Special	Cu. Yd.	47
Structure Excavation	Cu. Yd.	80
Concrete Structures	Cu. Yd.	22.0
Concrete Encasement	Cu. Yd.	2.8
Reinforcement Bars, Epoxy Coated	Pound	2,540
Furnishing Steel Piles HP10x42	Foot	116
Driving Piles	Foot	116
Test Pile Steel HP10x42	Each	1
Geocomposite Wall Drain	Sq. Yd.	20
Pipe Underdrains For Structures 4"	Foot	110

WEST ABUTMENT PILE DATA:

Type	HP10x42 Steel
No. Req'd.	4
Est. Length	17 feet
Nominal Required Bearing	335 kips
Allowable Resistance Available	112 kips

EAST ABUTMENT PILE DATA:

Type	HP10x42 Steel
No. Req'd.	3+1 Test Pile
Est. Length	16 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.

Farnsworth GROUP, INC.
2709 MacDraw Drive
Bloomington, Illinois 61704
309/653-8435, 309/653-1571 fax

DESIGNED - CEE	REVISOR
CHECKED - JML	REVISOR
DRAWN - DJM	REVISOR
DATE - 02/06/12	CHECKED - MSW

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENTS

SHEET NO. B5 OF 9 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
169	09-20110-02-BR	LIVINGSTON	17	10

CONTRACT NO. 87496
ILLINOIS FED. AID PROJECT