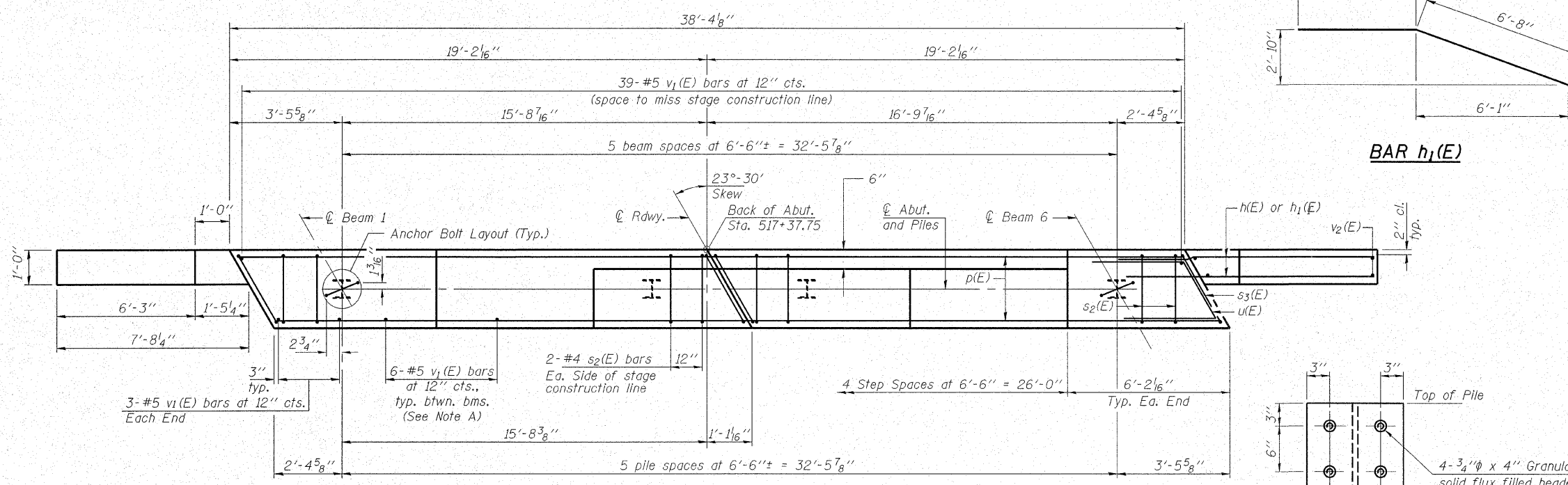
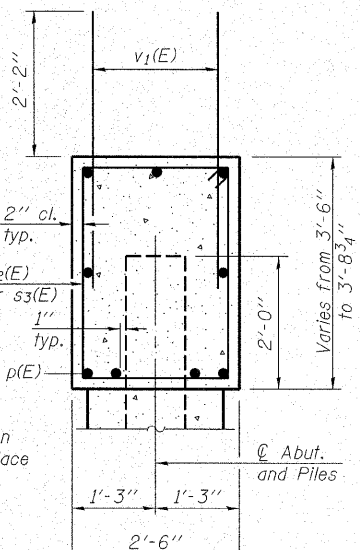
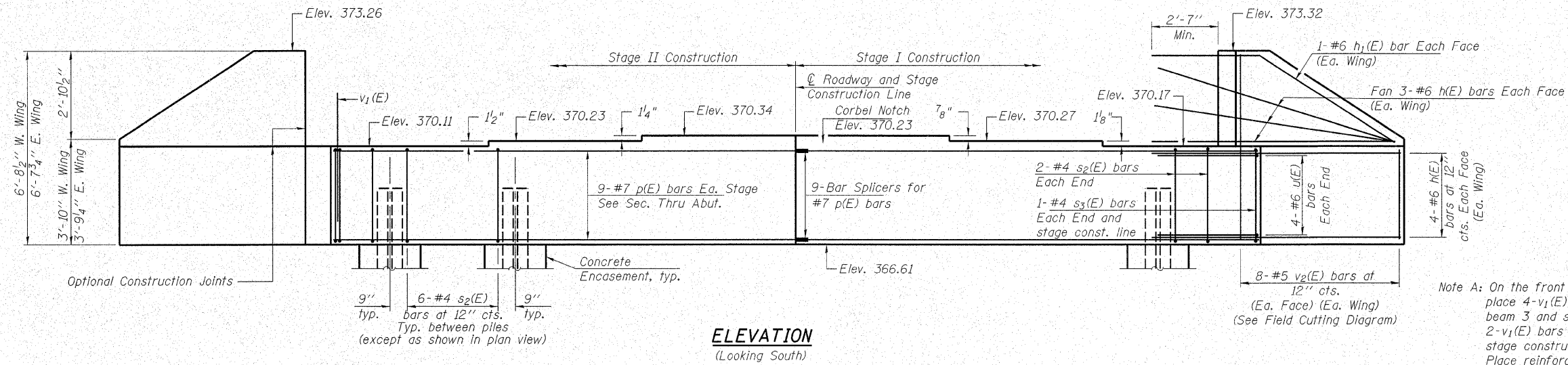


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

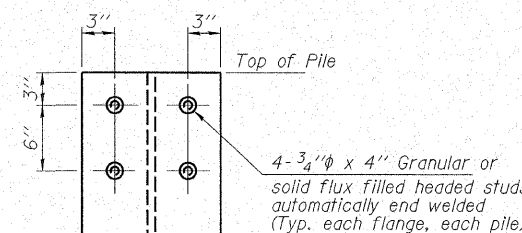
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 17 25 SHEETS
F.A.P. 776	(116BR-1) 11B-1	HAMILTON	140	36	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

Contract #78006

Notes: Four steps monolithically with cap.



**BAR h<sub>1</sub>(E)**



**BILL OF MATERIAL**

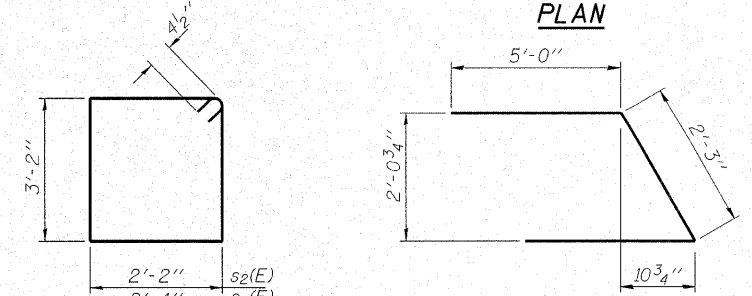
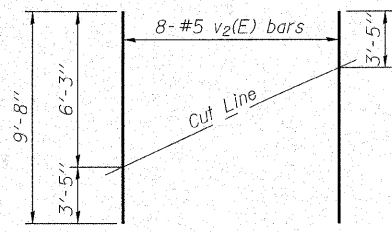
Bar	No.	Size	Length	Shape
h(E)	28	#6	10'-3"	—
h <sub>1</sub> (E)	4	#6	10'-8"	—
p(E)	18	#7	18'-10"	—
s <sub>2</sub> (E)	32	#4	11'-5"	□
s <sub>3</sub> (E)	4	#4	11'-9"	□
u(E)	8	#6	12'-3"	∩
v <sub>1</sub> (E)	74	#5	4'-4"	—
v <sub>2</sub> (E)	16	#5	9'-8"	—
Structure Excavation			Cu. Yd.	96
Concrete Structures			Cu. Yd.	15.9
Concrete Encasement			Cu. Yd.	2.0
Stud Shear Connectors			Each	48
Reinforcement Bars, Epoxy Coated			Pound	2,110
Bar Splicers			Each	9
Furnishing Steel Piles, HP10x57			Foot	420
Driving Piles			Foot	420

For details of Bar Splicers, see sheet 20 of 25.  
For details of piles and Concrete Encasement, see sheet 22 of 25.

**PILE DATA**

Type and Size \_\_\_\_\_ Steel HP10x57  
No. Req'd. \_\_\_\_\_ 6  
Nominal Req'd Bearing \_\_\_\_\_ 453 Kips/Pile  
Allowable Resistance Available \_\_\_\_\_ 151 Kips/Pile  
Est. Lengths \_\_\_\_\_ 70 Ft/Pile

Notes: The Steel H-Piles shall be according to AASHTO M270 Grade 50.  
The test piles shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.



**HAMPTON, LENZINI & RENWICK, INC.**  
CIVIL & STRUCTURAL ENGINEERS  
LAND SURVEYORS

3085 STEVENSON DRIVE, SUITE 201  
SPRINGFIELD, ILLINOIS 62703  
(217) 546-3400

ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-41-0021-1 DATE: 10/25/07  
DESIGNED: P.L. CHECKED: S.W.M. DRAWN: D.T.M.

**SOUTH ABUTMENT**

IL ROUTE 142 OVER CONTRARY CREEK  
F.A.P. ROUTE 776 - SECTION (116BR-1)1B-1  
HAMILTON COUNTY

STRUCTURE NO. 033-0050 / STATION 516+75

PLOT DATE: 11/26/2007 FILE NAME: 03330051-78006-41021br-1sge0050.dgn