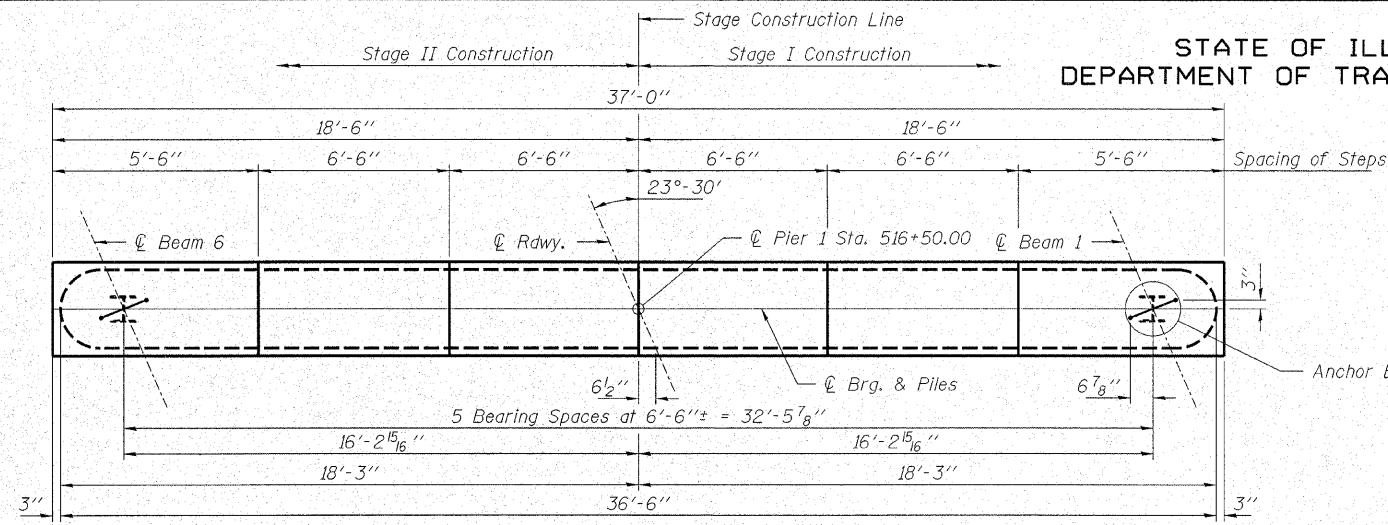


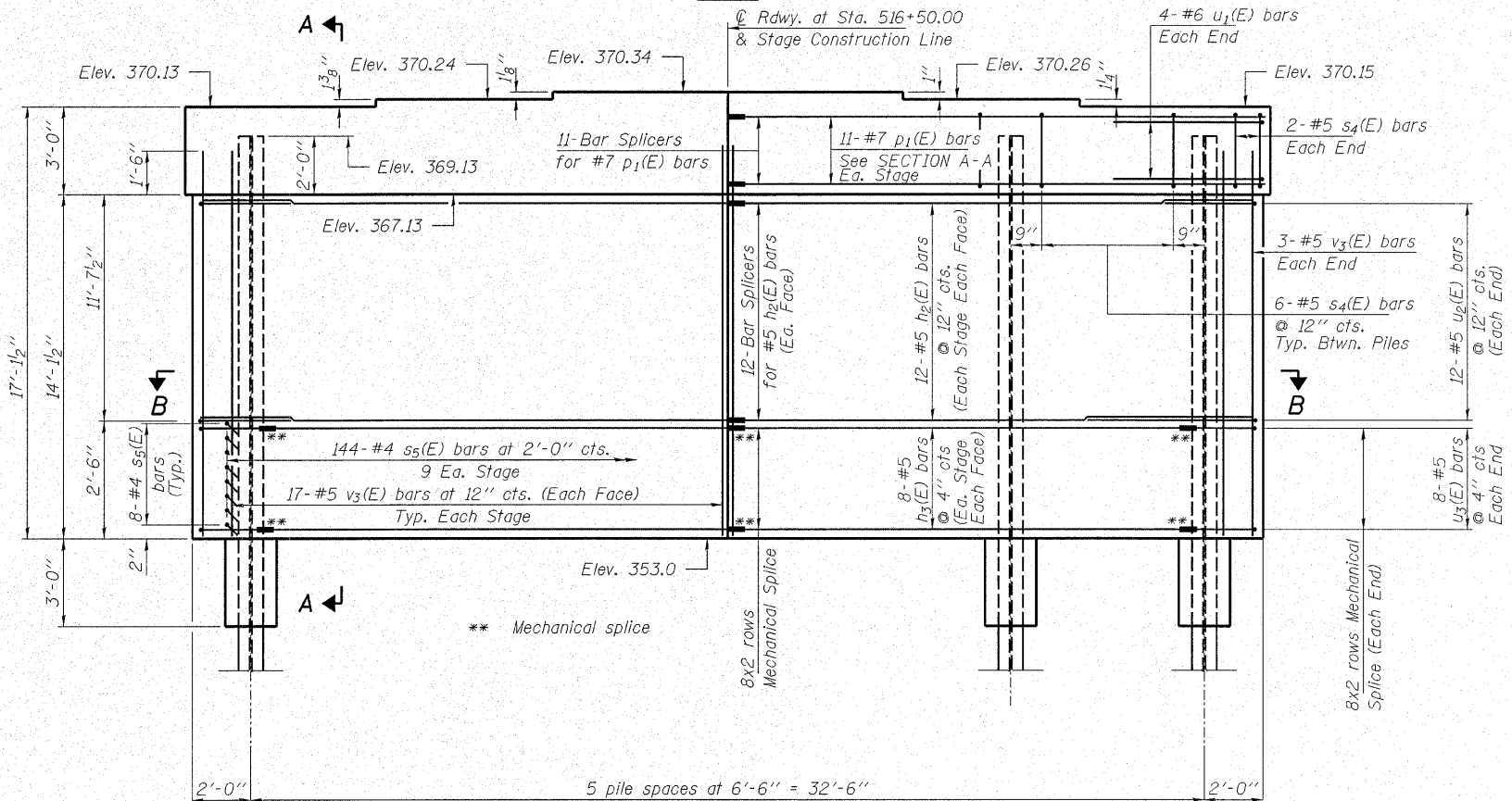
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	SHEET NO.
F.A.P. 776	(116BR -) JB-1	HAMILTON	140	37	25 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-		

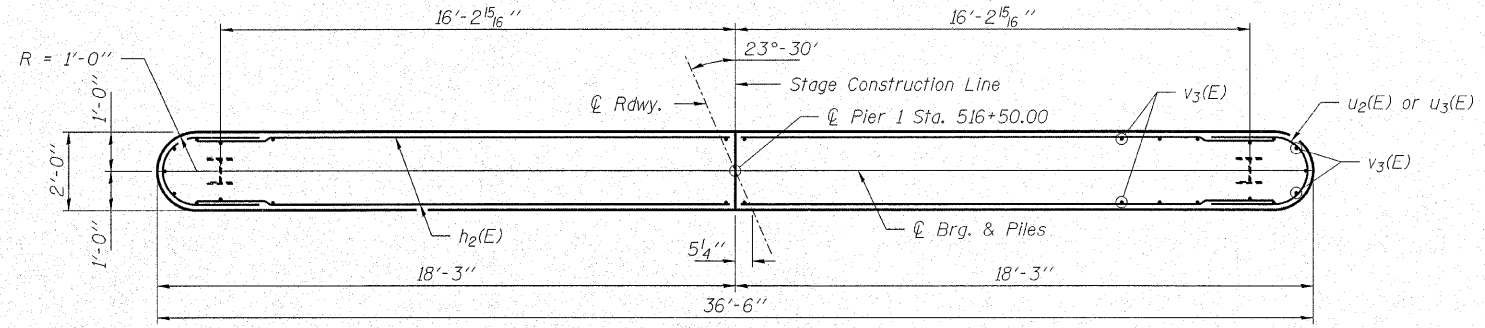
Contract #78006



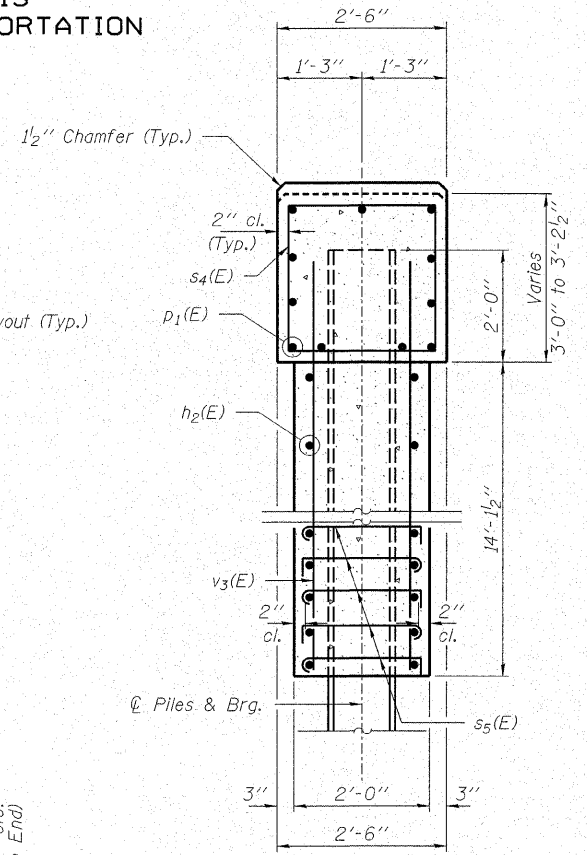
PLAN



ELEVATION
(Looking North)



SECTION B-B



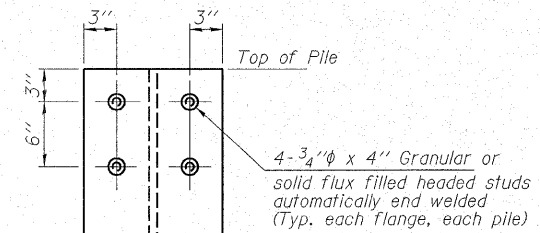
SECTION A-A

Note: For detail of Pile Encasement see Sheet 22 of 25. Space reinforcement in cap to miss anchor bolts.

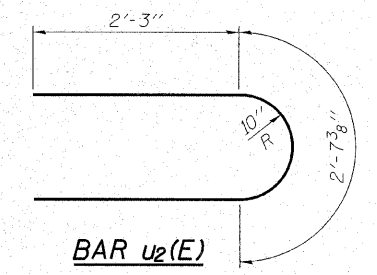
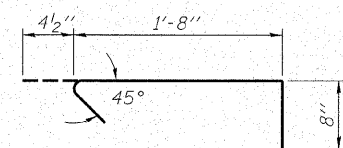
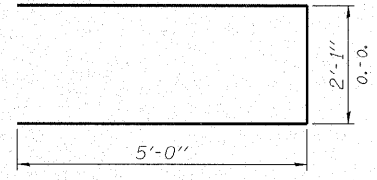
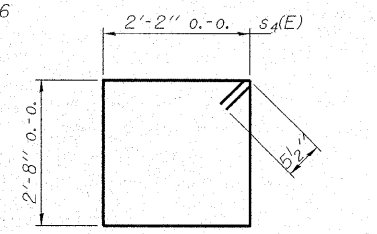
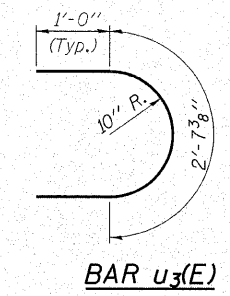
PILE DATA

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

Note: The Steel H-Piles shall be according to AASHTO M270 Grade 50.



SEISMIC ANCHORAGE FOR PILES



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₂ (E)	48	#5	17'-1"	—
h ₃ (E)	32	#5	16'-1"	—
p ₁ (E)	22	#7	18'-2"	—
s ₄ (E)	34	#5	10'-7"	□
s ₅ (E)	144	#4	2'-9"	┌
u ₁ (E)	8	#6	12'-1"	┌
u ₂ (E)	24	#5	7'-2"	┌
u ₃ (E)	16	#5	4'-8"	┌
v ₃ (E)	74	#5	15'-6"	—
Structure Excavation			Cu. Yd.	22
Concrete Structures			Cu. Yd.	47.8
Concrete Encasement			Cu. Yd.	2.0
Stud Shear Connectors			Each	48
Reinforcement Bars, Epoxy Coated			Pound	4,450
Bar Splicers			Each	35
Furnishing Steel Piles, HP10x57			Foot	420
Driving Piles			Foot	420
Underwater Structure Excavation Protection Location 1			Each	1
Mechanical Splice			Each	48

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

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

HLR

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.

PIER 1

IL ROUTE 142 OVER CONTRARY CREEK
F.A.P. ROUTE 776 - SECTION (116BR -) JB-1
HAMILTON COUNTY
STRUCTURE NO. 033-0050 / STATION 516+75

PLOT DATE: 10/26/2007 FILE NAME: 0330051-78006-41021br1.dwg 0050.dgn