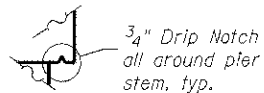


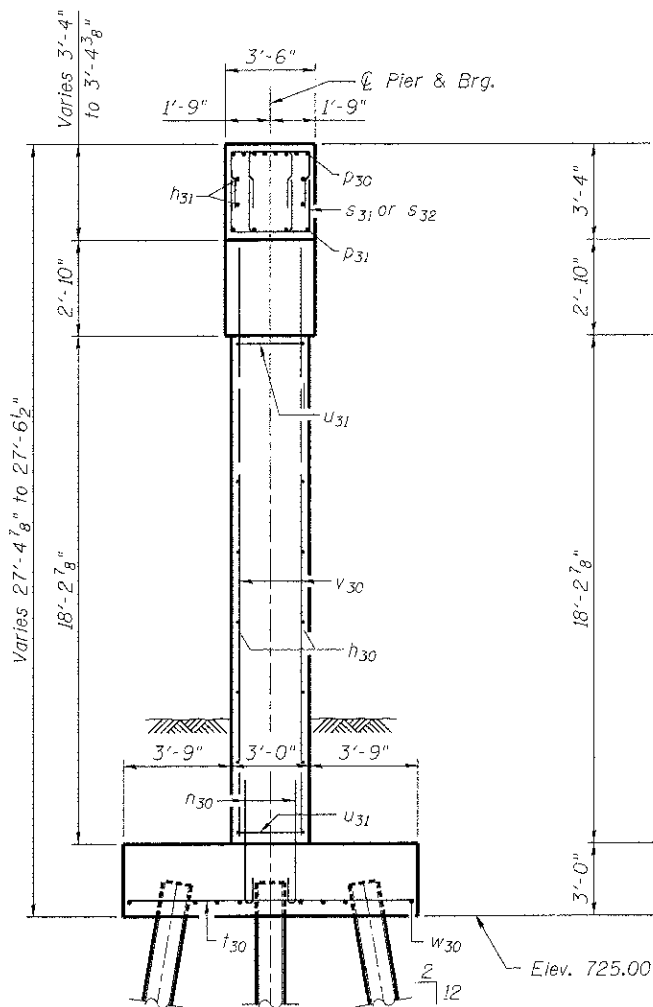
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet S-35 of S-41.

MINIMUM BAR LAP
(Pier)

#5 bar = 2'-2"
#8 bar = 3'-8"



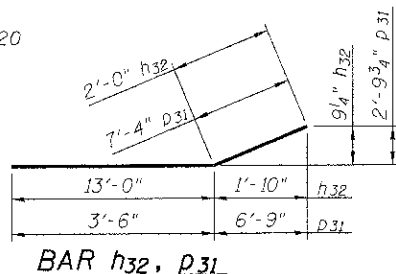
DRIP NOTCH DETAIL



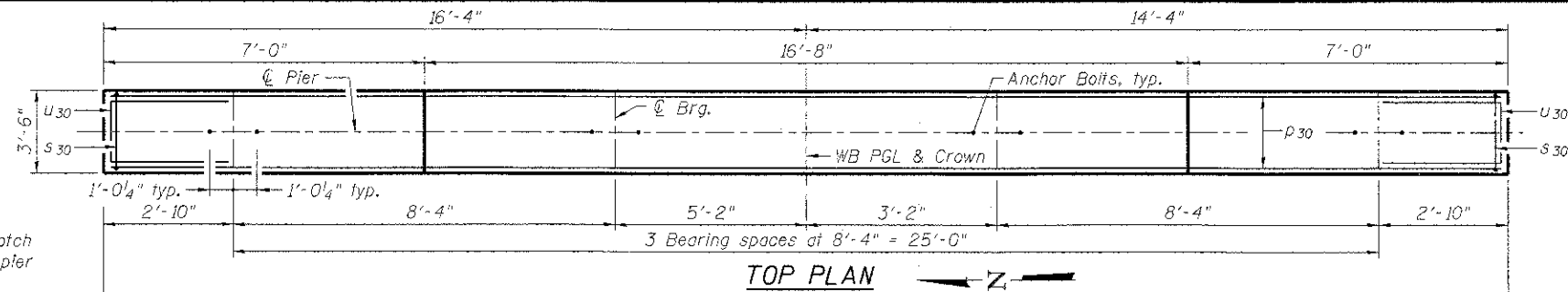
END VIEW

PILE DATA

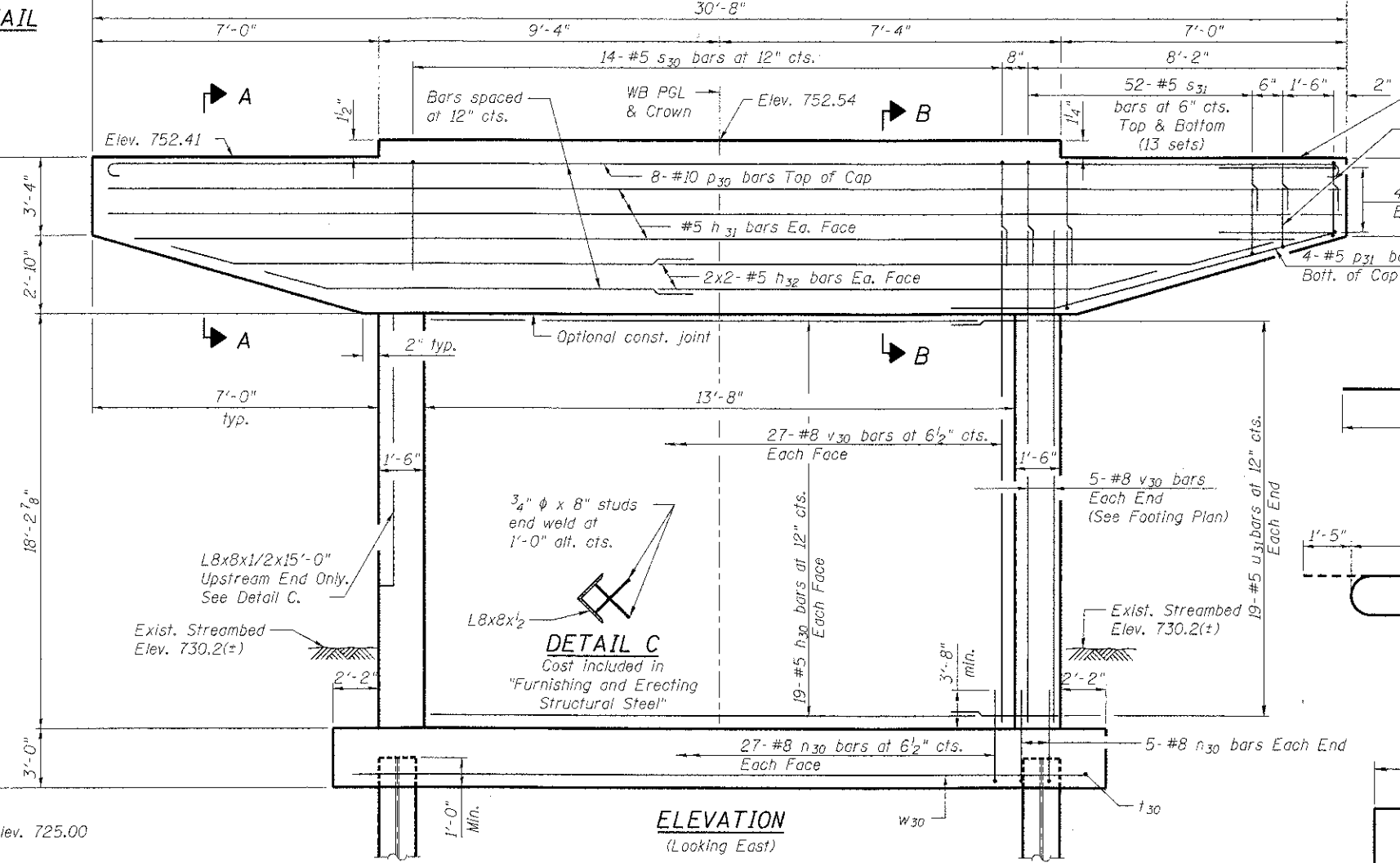
Type: Steel - HP12x53 with Pile Shoes
Nominal Required Bearing: 390k
Factored Resistance Available: 195k
Est. Length: 38'
No. Production Piles: 20
No. Test Piles: 1



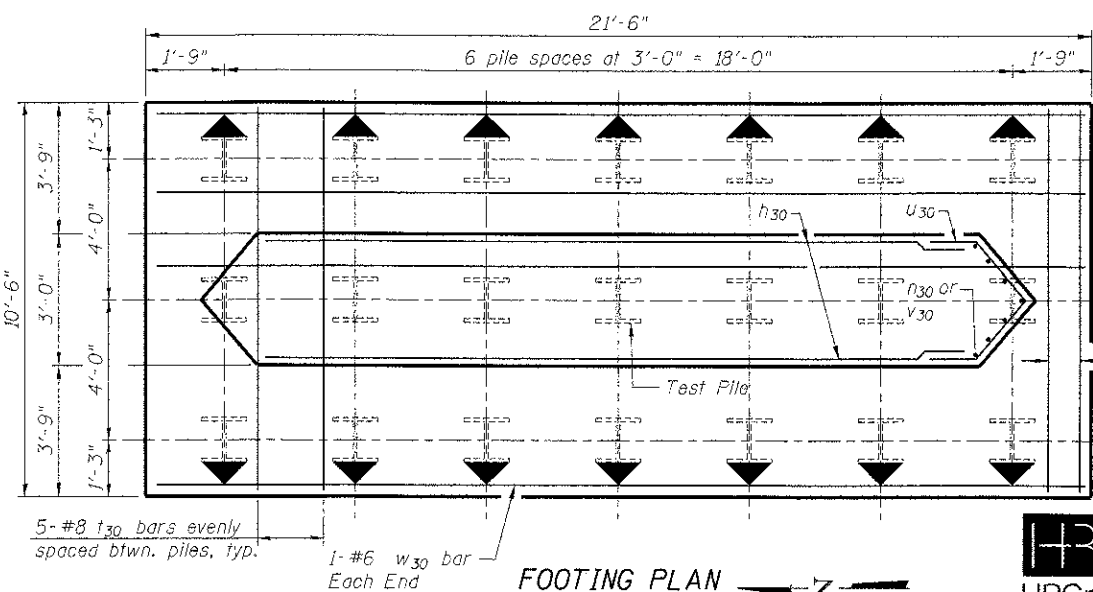
BAR h32, p31



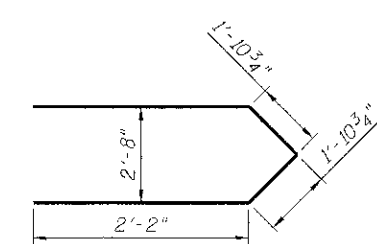
TOP PLAN



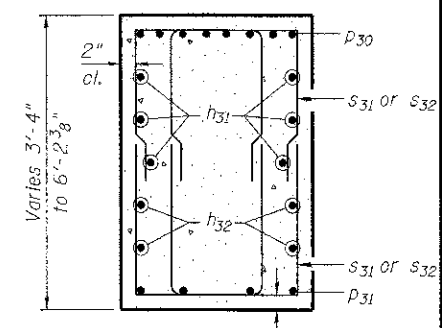
ELEVATION
(Looking East)



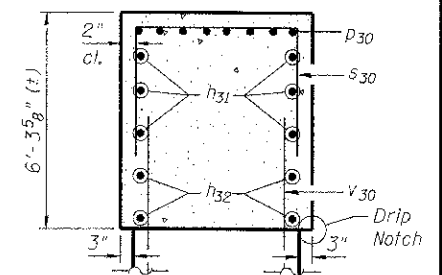
FOOTING PLAN



BAR u31



SECTION A-A



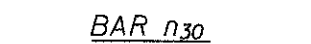
SECTION B-B

PIER 3

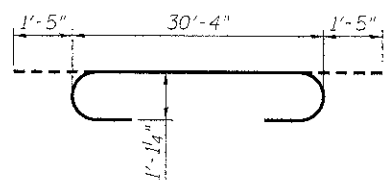
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h30	38	#5	13'-4"	—
h31	6	#5	30'-4"	—
h32	8	#5	15'-0"	—
n30	64	#8	7'-4"	—
D30	8	#10	33'-2"	—
D31	8	#5	10'-10"	—
S30	14	#5	14'-0"	—
S31	104	#5	10'-4"	—
S32	16	#5	8'-6"	—
t30	36	#8	10'-2"	—
u30	8	#6	7'-3"	—
u31	38	#5	8'-2"	—
v30	64	#8	21'-2"	—
w30	10	#6	21'-2"	—

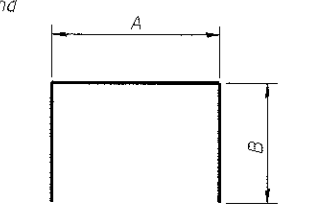
Concrete Structures	Cu. Yd.	78.2
Reinforcement Bars	Pound	10,120
Furnishing Steel Piles HP12x53	Foot	760
Driving Piles	Foot	760
Test Pile Steel HP12x53	Each	1
Pile Shoes	Each	21
Cofferdam (Type 2) (Location - 3)	Each	1
Cofferdam Excavation	Cu. Yd.	113
Seal Coat Concrete	Cu. Yd.	41.1



BAR n30



BAR p30



BARS

A & B DIMENSIONS

Bar	A	B
u30	3'-0 1/2"	2'-1"
S30	3'-2"	5'-5"
S31	2'-4"	4'-0"
S32	2'-4"	3'-1"

PIER 3 DETAILS
STRUCTURE NO. 056-3190

WB CHARLES J. MILLER ROAD BRIDGE		DATE: 7/23/12	
SHEET NO. S-32	F.A.U. RTE. 3860	SECTION 09-00372-00-PW	COUNTY McHENRY
S-41 SHEETS	TOTAL SHEETS 252	SHEET NO. 155	CONTRACT NO. 63633
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



HRGreen.com
Illinois Professional Design Firm
#184-001322

DESIGNED	JMW
CHECKED	RGD
DRAWN	WJH
CHECKED	RCD

FILE NAME: 09007-per-0309
PLOT DRIVER: p4f.plt
PEN TABLE: standard-trans.tbl