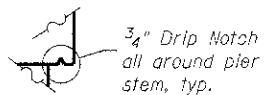


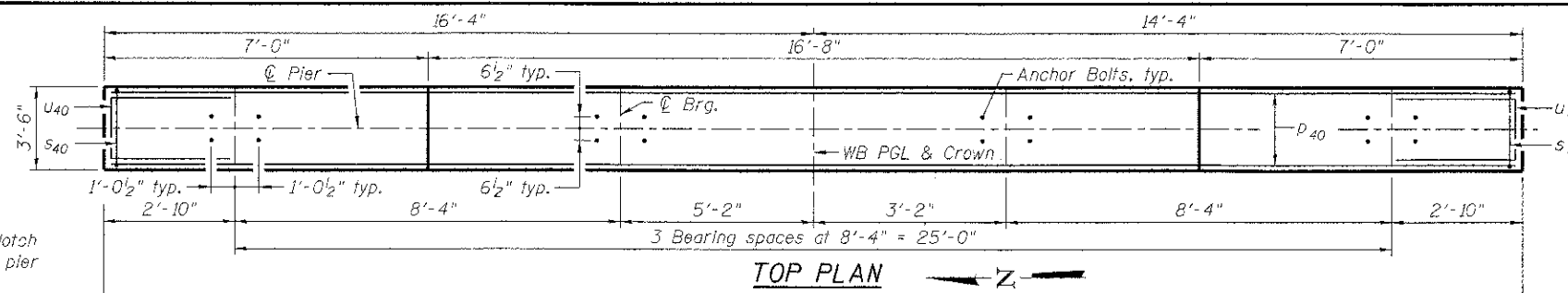
Notes:
 Space reinforcement in cap to miss anchor bolts.
 Four steps monolithically with cap.
 For details of piles, see sheet S-35 of S-41.

MINIMUM BAR LAP

(Pier)
 #5 bar = 2'-2"
 #8 bar = 3'-8"

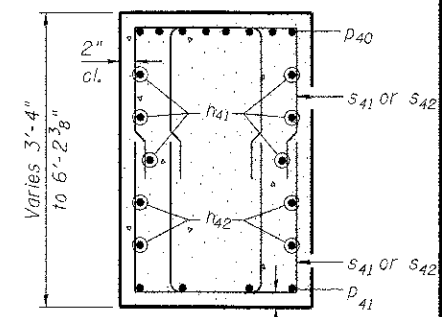


DRIP NOTCH DETAIL

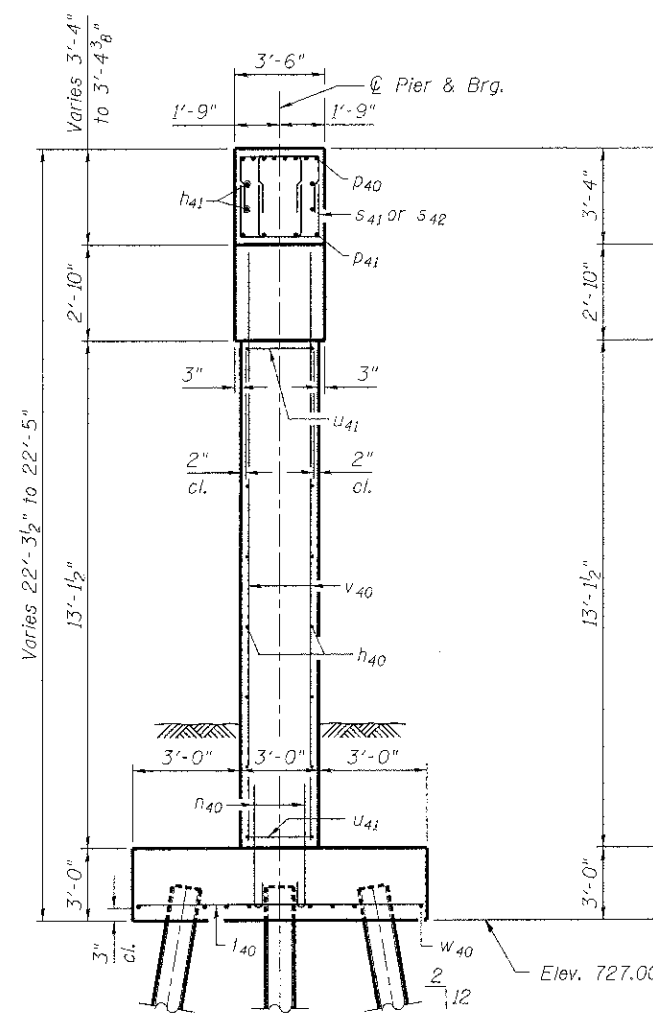


TOP PLAN

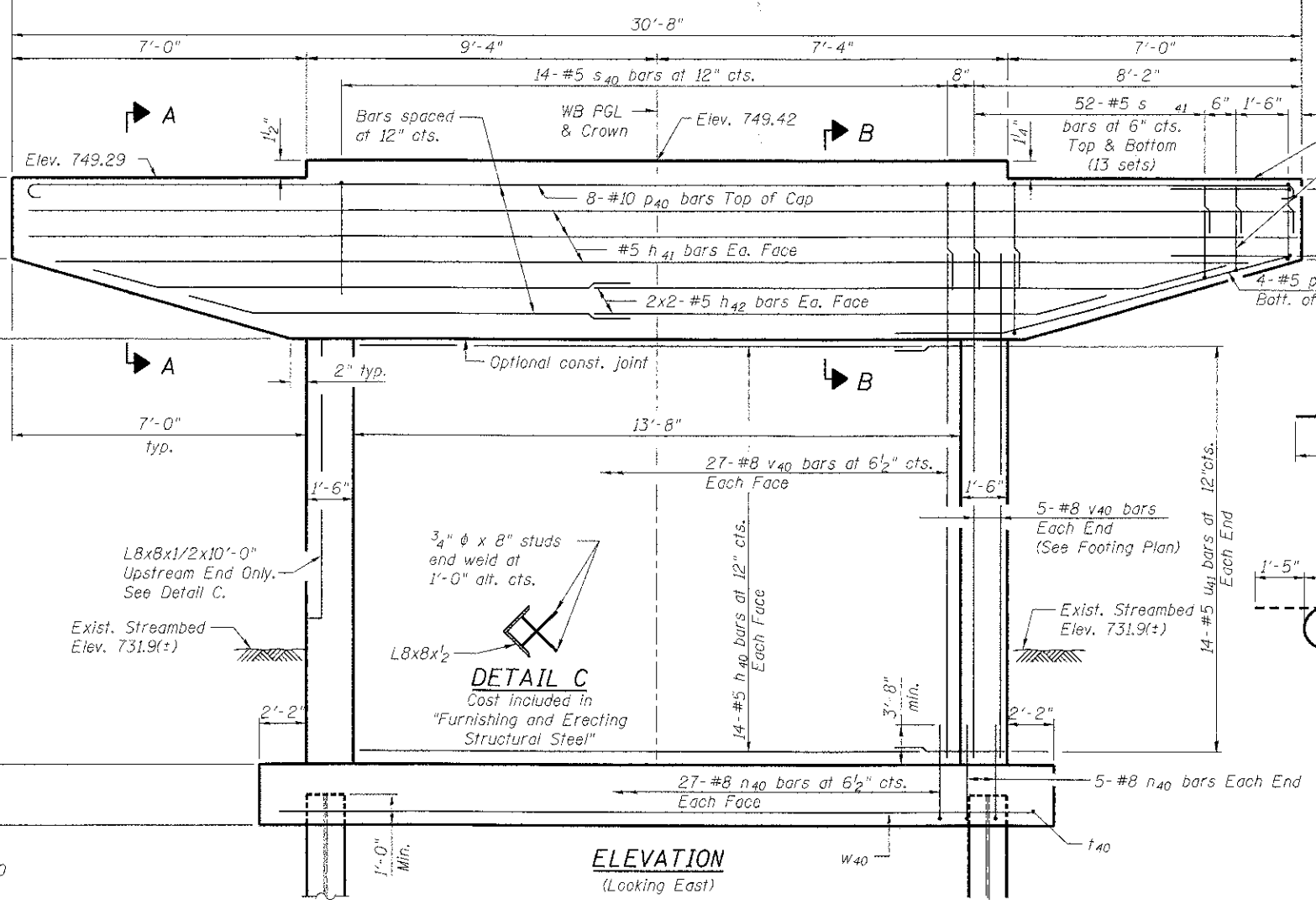
BAR U41



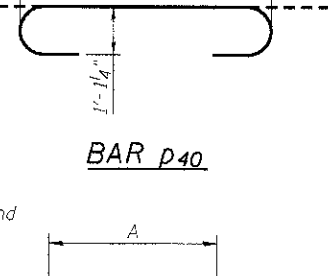
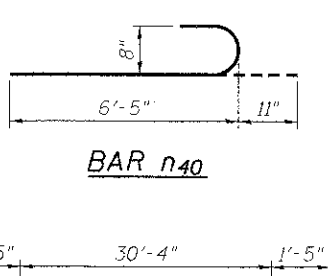
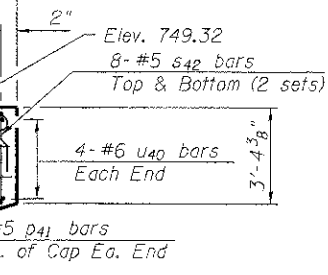
SECTION A-A



END VIEW



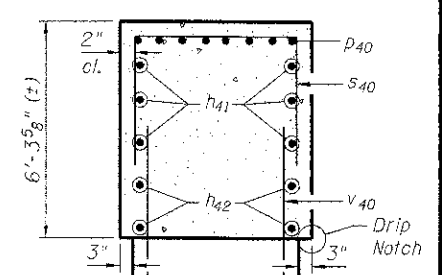
ELEVATION
(Looking East)



BARS

A & B DIMENSIONS

Bar	A	B
U40	3'-0 1/2"	2'-1"
S40	3'-2"	5'-5"
S41	2'-4"	4'-0"
S42	2'-4"	3'-1"



SECTION B-B

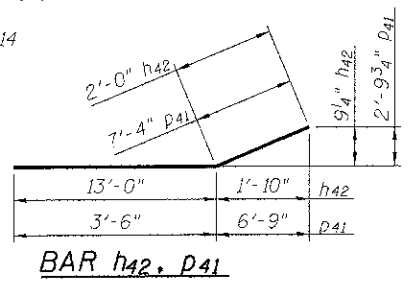
PIER 4

BILL OF MATERIAL

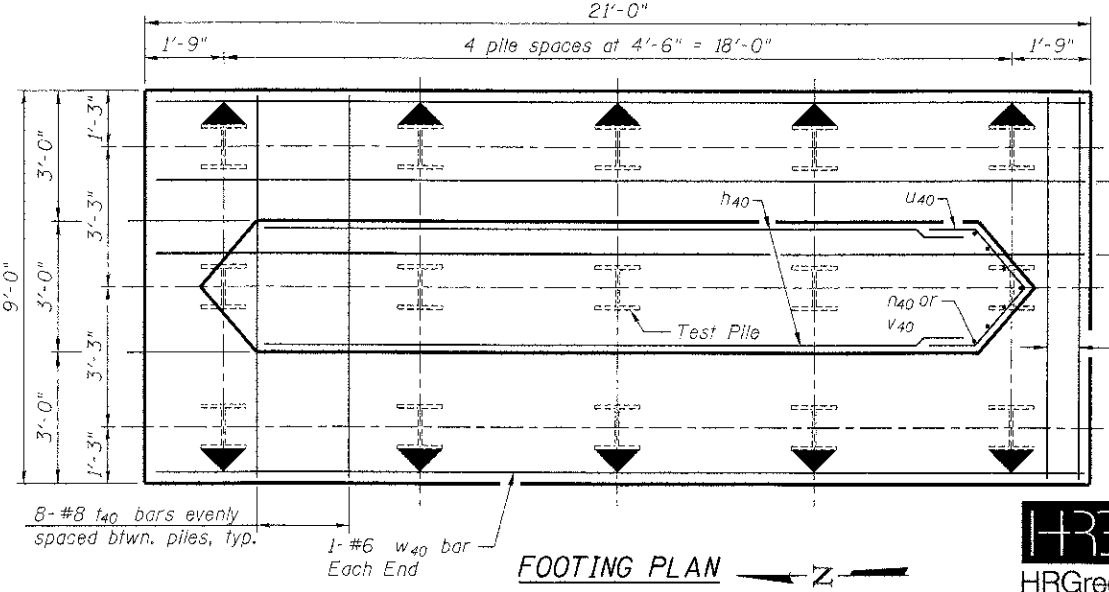
Bar	No.	Size	Length	Shape	
n40	28	#5	13'-4"	—	
h41	6	#5	30'-4"	—	
h42	8	#5	15'-0"	—	
p40	64	#8	7'-4"	—	
D40	8	#10	33'-2"	—	
D41	8	#5	10'-10"	—	
S40	14	#5	14'-0"	□	
S41	104	#5	10'-4"	□	
S42	16	#5	8'-6"	□	
f40	36	#8	8'-8"	—	
U40	8	#6	7'-3"	—	
U41	28	#5	8'-2"	—	
V40	64	#8	16'-0"	—	
W40	8	#6	20'-8"	—	
Concrete Structures				Cu. Yd.	65.5
Reinforcement Bars				Pound	8,800
Furnishing Steel Piles HP12X53				Foot	826
Driving Piles				Foot	826
Test Pile Steel HP12X53				Each	1
Cofferdam (Type 2) (Location - 4)				Each	1
Cofferdam Excavation				Cu. Yd.	96
Seal Coat Concrete				Cu. Yd.	36.1

PILE DATA

Type: Steel - HP12x53
 Nominal Required Bearing: 375k
 Factored Resistance Available: 187.5k
 Est. Length: 59'
 No. Production Piles: 14
 No. Test Piles: 1



BAR h42, P41



FOOTING PLAN

DESIGNED	JMW
CHECKED	RGD
DRAWN	WJH
CHECKED	RGD



HRGreen.com
 Illinois Professional Design Firm
 #184-001322

WB CHARLES J. MILLER ROAD BRIDGE		DATE: 7/23/12	
SHEET NO. S-33	F.A.U. RTE. 3860	SECTION 09-00372-00-PW	COUNTY McHENRY
S-41 SHEETS	TOTAL SHEETS 252		SHEET NO. 156
CONTRACT NO. 63633			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

PIER 4 DETAILS
 STRUCTURE NO. 056-3190