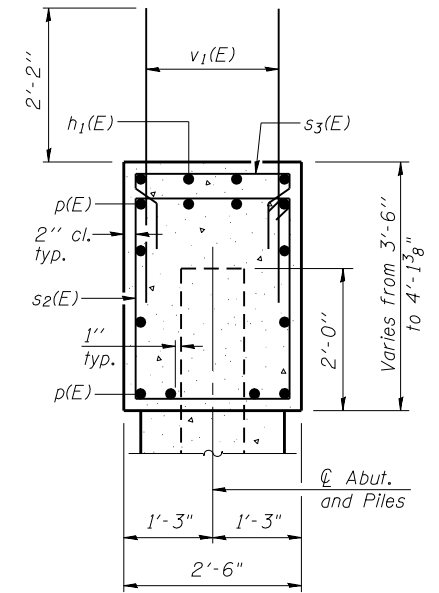
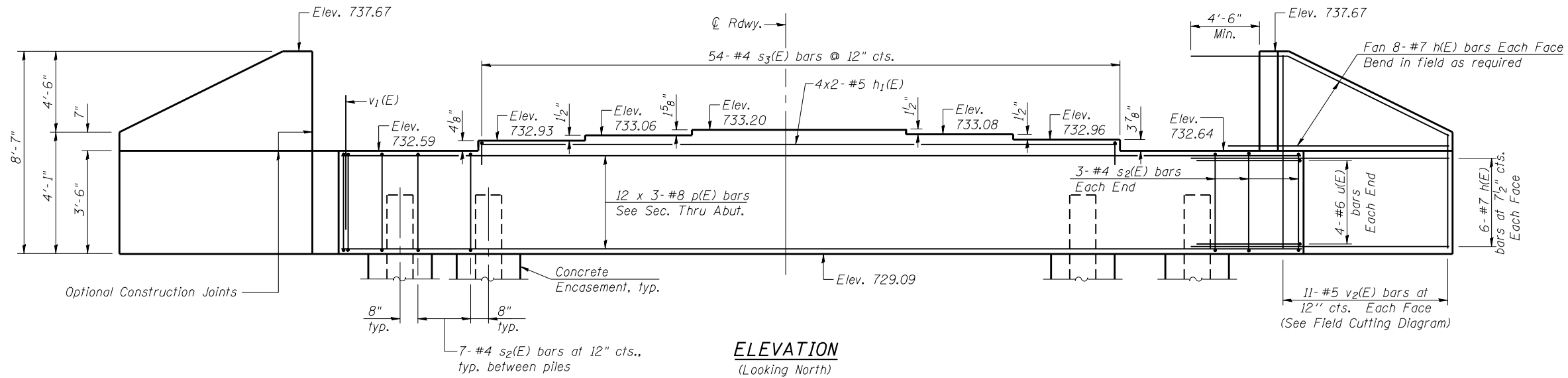


Notes:
Four steps monolithically with cap.

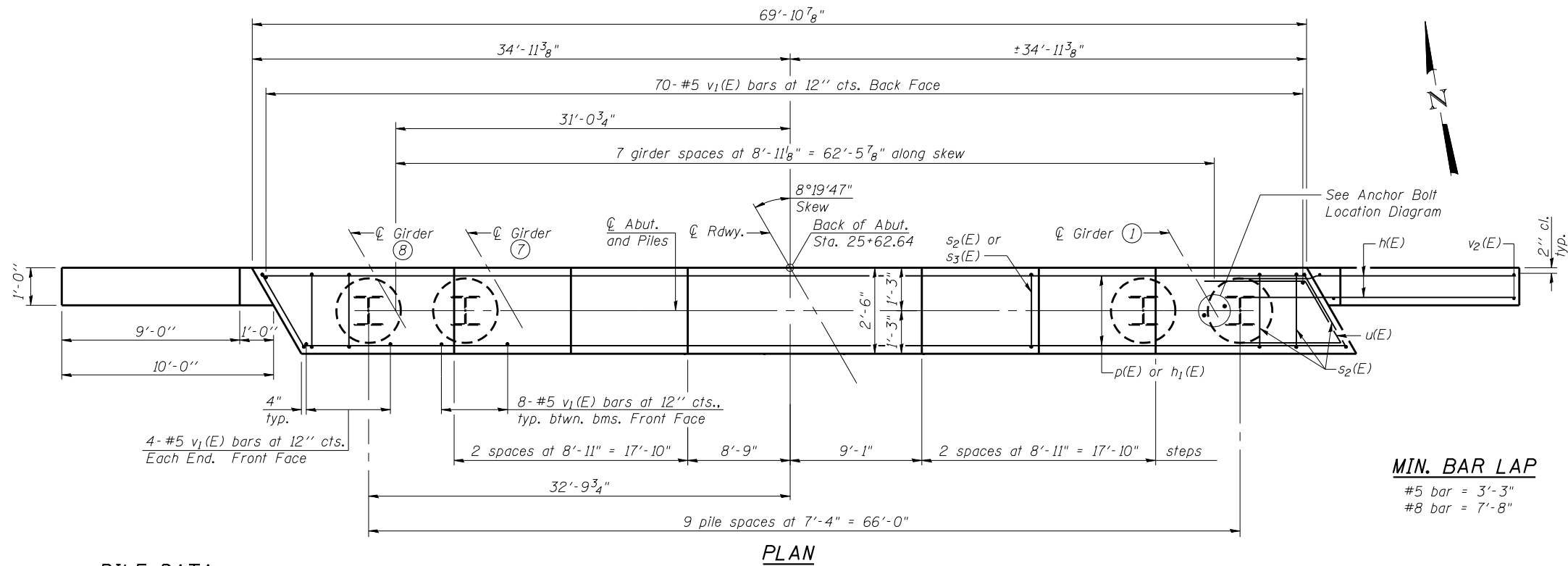


SEC. THRU ABUT.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
h(E)	56	#7	14'-6"	—	
h ₁ (E)	8	#5	28'-3"	—	
p(E)	36	#8	28'-3"	—	
s ₂ (E)	69	#4	11'-5"	□	
s ₃ (E)	54	#4	5'-2"	□	
u(E)	8	#6	11'-0"	∩	
v ₁ (E)	134	#5	4'-4"	—	
v ₂ (E)	22	#5	12'-0"	—	
Structure Excavation				Cu. Yd.	61
Concrete Structures				Cu. Yd.	29.9
Reinforcement Bars, Epoxy Coated				Pound	5,730
Furnishing Steel Piles, HP 14 x 89				Foot	765
Driving Piles				Foot	765
Test Pile, Steel HP 14 x 89				Each	1
Concrete Encasement				Cu. Yd.	5.5

For details of piles and Concrete Encasement, see sheet 20 of 23.

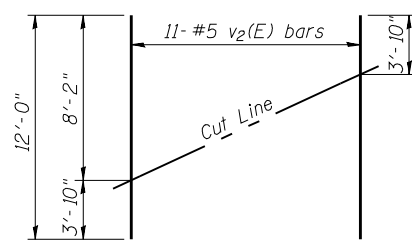


PLAN

PILE DATA

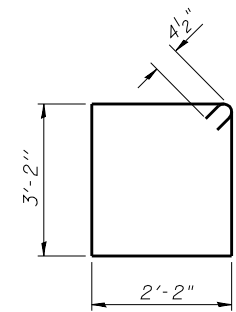
Type: Steel HP 14x89
Nominal Required Bearing: 705 kip
Factored Resistance Available: 388 kip
Est. Length: 85'
No. Production Piles: 9
No. Test Piles: 1

Note:
Piles shall be driven thru 22" ϕ precored holes extending to elevation 705.2 according to Article 512.09c of the Standard Specifications. Cost included in driving piles.

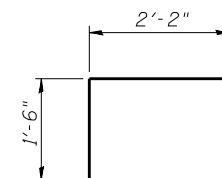


FIELD CUTTING DIAGRAM

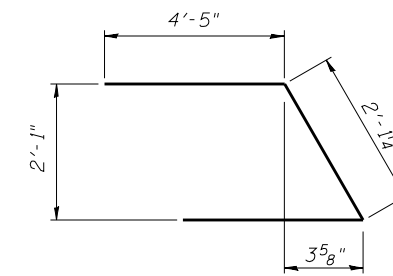
Order v₂(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s₂(E)



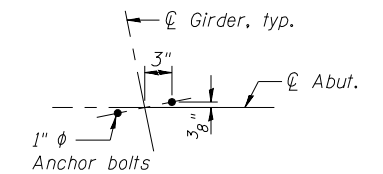
BARS s₃(E)



BAR u(E)

MIN. BAR LAP

#5 bar = 3'-3"
#8 bar = 7'-8"



ANCHOR BOLT LOCATION DIAGRAM

FILE NAME = 68409-017-abut.rwdgn
PROJECT NO. 04065

AI-L
Coombe-Bloxdorf P.C.
CIVIL ENGINEERS-
STRUCTURAL ENGINEERS-
LAND SURVEYORS
Design Firm License No. 184-002703

7-1-10

USER NAME = .MML.	DESIGNED - RKM	REVISED -
PLOT SCALE = 0/2" = 1' / IN.	CHECKED -	REVISED -
PLOT DATE = 10/16/2012	DRAWN - MML	REVISED -
	CHECKED - MCB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT
STRUCTURE NO. 036-0065

SHEET NO. 17 OF 23 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	7-2, 6-1	HENDERSON	976	515
CONTRACT NO. 68409				
ILLINOIS FED. AID PROJECT				