

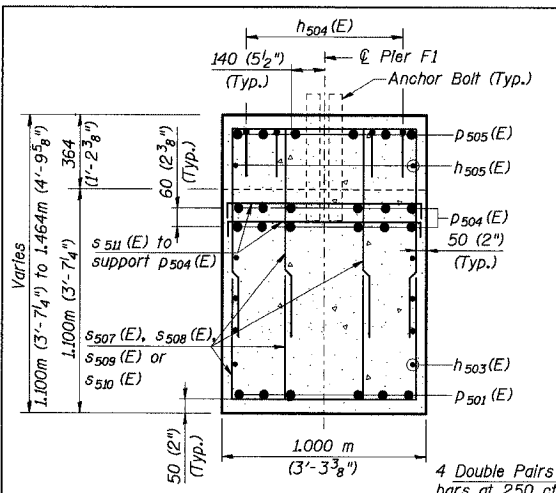
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 81
F. A. I. 80/94		COOK	870	595	91 SHEETS
FED. ROAD DIST. NO. 1			ILLINOIS FED. AID PROJECT-		
(0203.1 & 0312-708W) R-3			CONTRACT NO. 62108		

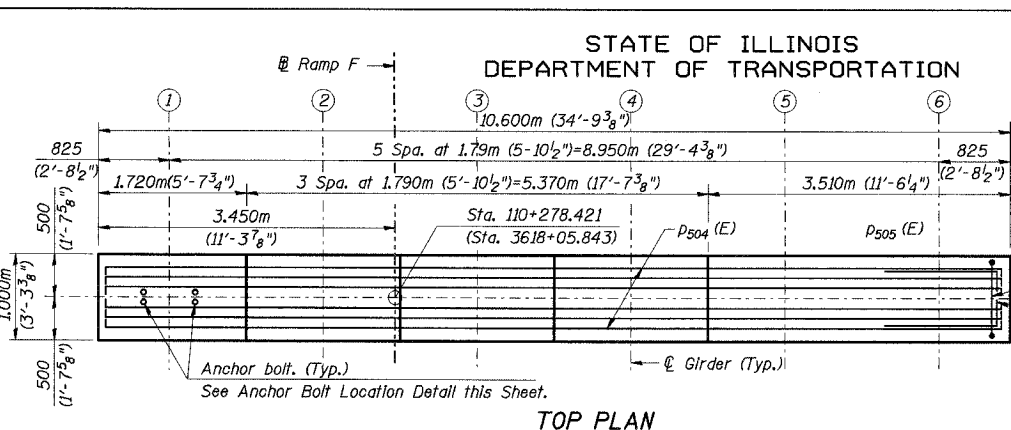
BILL OF MATERIAL

Bar	No.	Size	Length (m)	Shape
h ₅₀₁ (E)	8	#15	7.300	
h ₅₀₂ (E)	5	#20	7.300	
h ₅₀₃ (E)	8	#20	9.000	
h ₅₀₄ (E)	12	#15	2.560	
h ₅₀₅ (E)	2	#20	5.650	
n ₅₀₁ (E)	60	#30	3.000	
p ₅₀₁ (E)	6	#25	7.400	
p ₅₀₂ (E)	4	#15	3.640	
p ₅₀₃ (E)	4	#15	4.050	
p ₅₀₄ (E)	12	#30	11.500	
p ₅₀₅ (E)	6	#15	3.930	
s ₅₀₁ (E)	24	#15	4.200	
s ₅₀₂ (E)	26	#15	2.850	
s ₅₀₃ (E)	18	#15	2.140	
s ₅₀₄ (E)	36	#15	2.500	
s ₅₀₅ (E)	36	#15	2.800	
s ₅₀₆ (E)	72	#15	1.140	
s ₅₀₇ (E)	8	#15	2.025	
s ₅₀₈ (E)	16	#15	2.225	
s ₅₀₉ (E)	92	#15	2.545	
s ₅₁₀ (E)	56	#15	2.675	
s ₅₁₁ (E)	27	#15	1.420	
t ₅₀₁ (E)	26	#25	4.000	
u ₅₀₁ (E)	10	#15	2.350	
u ₅₀₂ (E)	10	#20	4.060	
v ₅₀₁ (E)	60	#30	4.200	
w ₅₀₁ (E)	10	#15	8.000	
ITEM	UNIT	QUANTITY		
Structure Excavation, Common	m ³	51.5		
Concrete for Bridges & Drainage Structures (Class SP)	m ³	57		
Reinforcing Steel, Epoxy Coated	kg	5990		
Furnishing Steel Piles	m	185		
Driving Steel Piles	Each	14		
Test Piles	m	14		

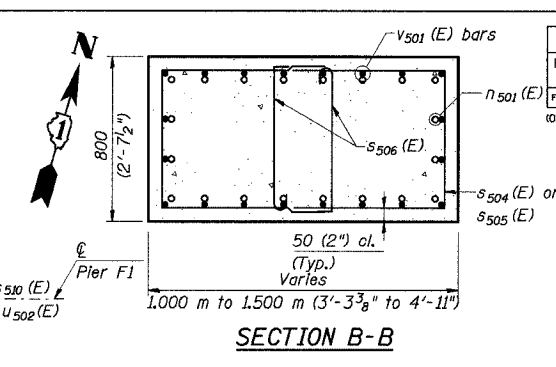
- Notes:
1. Space reinforcement in cap to miss anchor bolts.
 2. Pour steps monolithically with cap.
 3. All dimensions are in millimeters (mm) except as noted.
 4. Min bar laps (Unless otherwise shown):
#15 bars - 710 mm
#20 bars - 880 mm
#25 bars - 1480 mm
#30 bars - 2070 mm
 5. Reinforcement Bars Designated (E) shall be epoxy coated.
 6. Information in parentheses in English Units
- ↑ Indicates Pile Batter.



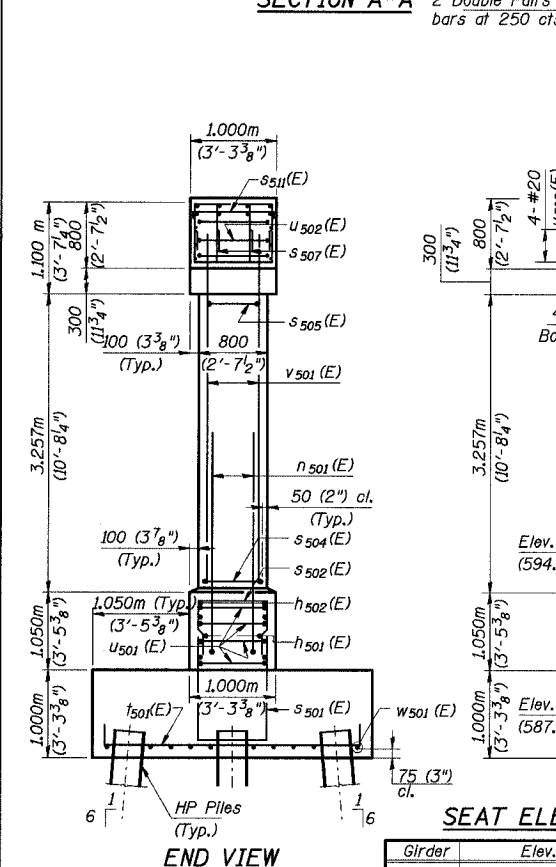
SECTION A-A



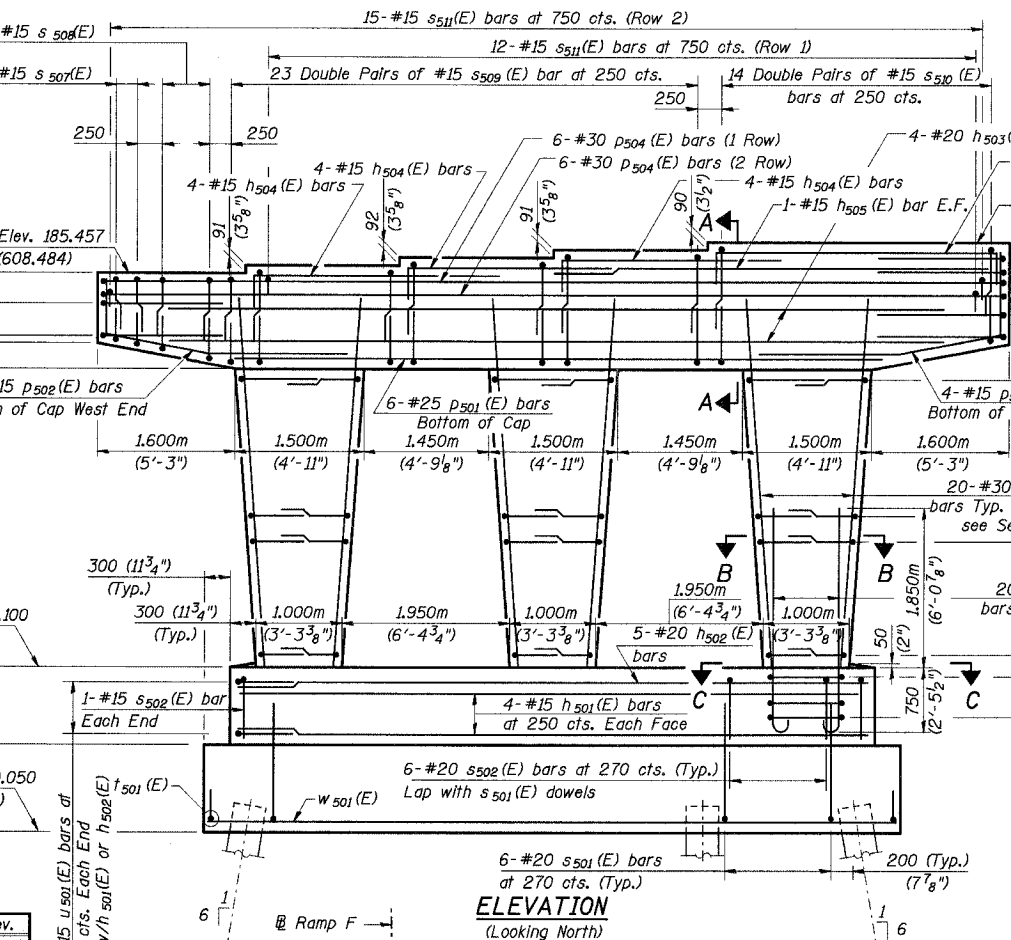
TOP PLAN



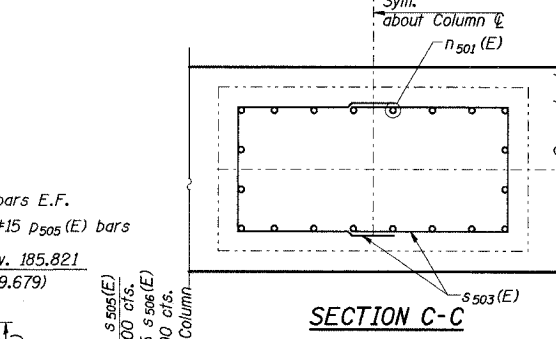
SECTION B-B



END VIEW



ELEVATION (Looking North)



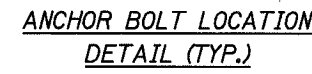
SECTION C-C

PILE DATA

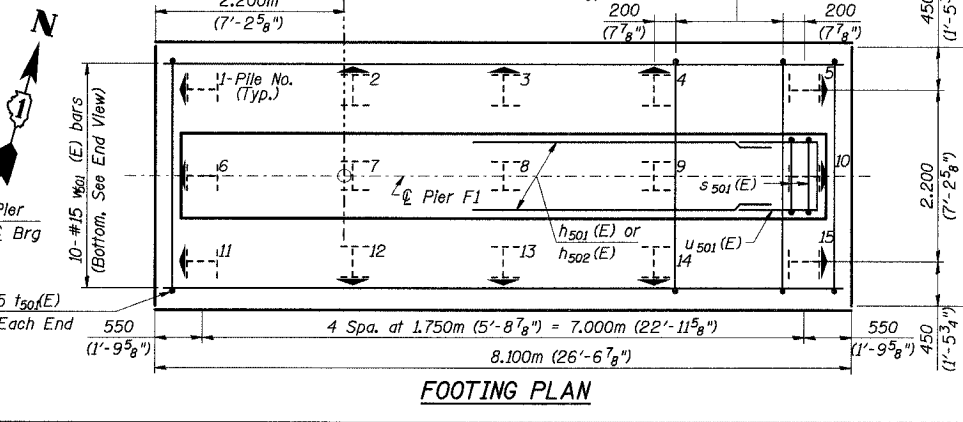
Type: HP 360 x 108 (HP 14 x 73)
Capacity: 650 kN (146 kips)
(Driven to 975 kN (219 kip) Bearing)
Est. Length 13.2m (43.3ft)
Test Piles driven to 1460 kN (328 kip)
No. Required: 15 (Includes 1 test pile)

Girder	Elev.	Elev.
1	185.457	(608.484)
2	185.548	(608.783)
3	185.640	(609.085)
4	185.731	(609.383)
5, 6	185.821	(609.679)

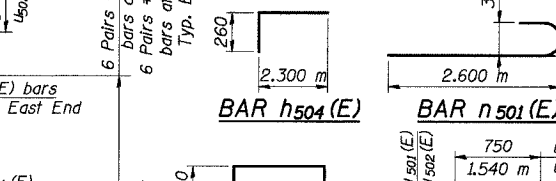
DESIGNED	JFA
CHECKED	MEA
DRAWN	LK
CHECKED	MEA



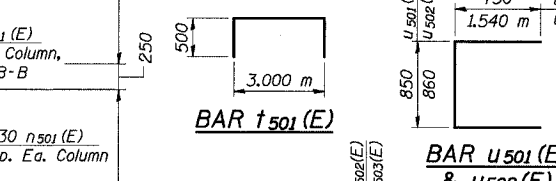
ANCHOR BOLT LOCATION DETAIL (TYP.)



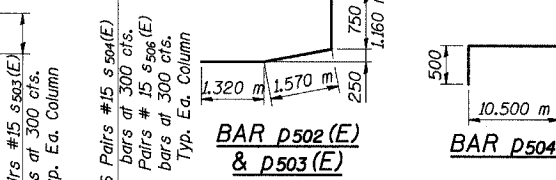
FOOTING PLAN



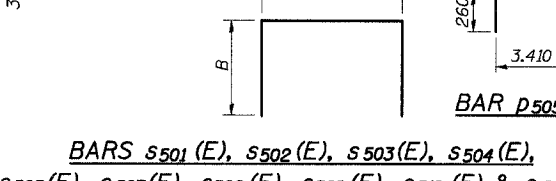
BAR h₅₀₄(E)



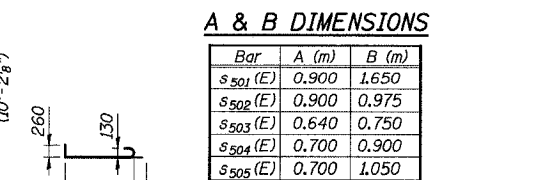
BAR n₅₀₁(E)



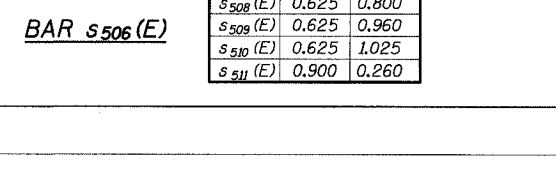
BAR t₅₀₁(E)



BAR u₅₀₁(E) & u₅₀₂(E)



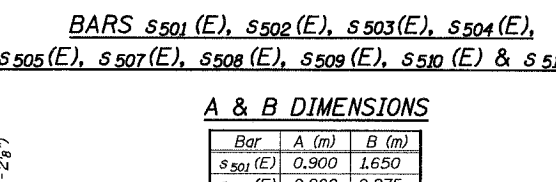
BAR p₅₀₂(E) & p₅₀₃(E)



BAR p₅₀₄(E)



BAR p₅₀₅(E)



BARS s₅₀₁(E), s₅₀₂(E), s₅₀₃(E), s₅₀₄(E), s₅₀₅(E), s₅₀₇(E), s₅₀₈(E), s₅₀₉(E), s₅₁₀(E) & s₅₁₁(E)

A & B DIMENSIONS

Bar	A (m)	B (m)
s ₅₀₁ (E)	0.900	1.650
s ₅₀₂ (E)	0.900	0.975
s ₅₀₃ (E)	0.640	0.750
s ₅₀₄ (E)	0.700	0.900
s ₅₀₅ (E)	0.700	1.050
s ₅₀₇ (E)	0.625	0.700
s ₅₀₈ (E)	0.625	0.800
s ₅₀₉ (E)	0.625	0.960
s ₅₁₀ (E)	0.625	1.025
s ₅₁₁ (E)	0.900	0.260

ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

PIER F1
RAMP F OVER THORN CREEK
F.A.P. 332 SECTION (0203.1 & 0312-708W) R-3
COOK COUNTY
STA. 440+704.350 STRUCTURE NO. 016-2845
DATE JUL 18, 2005
SCALE ---

HNTB