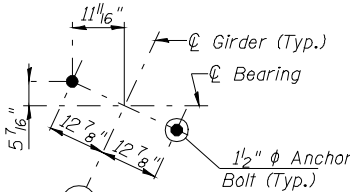


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP Rte 614	144(B-1)	Cass & Mason	351	188
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 52
86 SHEETS

Contract #72A76



ANCHOR BOLT LAYOUT
(Typical all Girder Locations)

**NORTH ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	22	#5	21'-0"	
h1(E)	12	#5	6'-3"	
h2(E)	12	#5	6'-3"	
h3(E)	26	#4	15'-3"	
h4(E)	18	#4	15'-3"	
h5(E)	8	#6	21'-3"	
h7(E)	20	#5	22'-9"	
n(E)	26	#6	11'-6"	
n1(E)	12	#6	5'-9"	
p(E)	14	#7	42'-10"	
p1(E)	12	#7	16'-0"	
s(E)	72	#5	15'-7"	
s1(E)	34	#4	9'-5"	
u(E)	8	#6	16'-0"	
v(E)	82	#5	9'-0"	
v1(E)	41	#4	3'-2"	
v2(E)	32	#6	8'-7"	
v3(E)	6	#6	8'-7"	
v4(E)	26	#6	8'-8"	
Structure Excavation		Cu. Yd.	193	
Concrete Structures		Cu. Yd.	69.5	
Reinforcement Bars, Epoxy Coated		Pound	7250	
Furnishing Metal Shell Piles 14" X 0.250"		Foot	85	
Furnishing Steel Piles, HP14x89		Foot	900	
Driving Piles		Foot	900	
Pile Shoes		Each	10	
Concrete Encasement		Cu. Yd.	6.0	
Concrete Sealer		Sq. Ft.	612	

For details of Bar Splicers, see sheet 70 of 86.
For details of piles and Concrete Encasement,
see sheet 71 & 72 of 86.

NORTH ABUTMENT - PLAN and ELEVATION
F.A.P. 614 (IL 78) OVER SANGAMON RIVER
PUBLIC WATERS
CASS & MASON COUNTIES
SECTION 144 (B-1)
STA. 913+26.00
STRUCTURE NUMBER 009-0510

PROFESSIONAL DESIGN FIRM LICENSE #184-001084

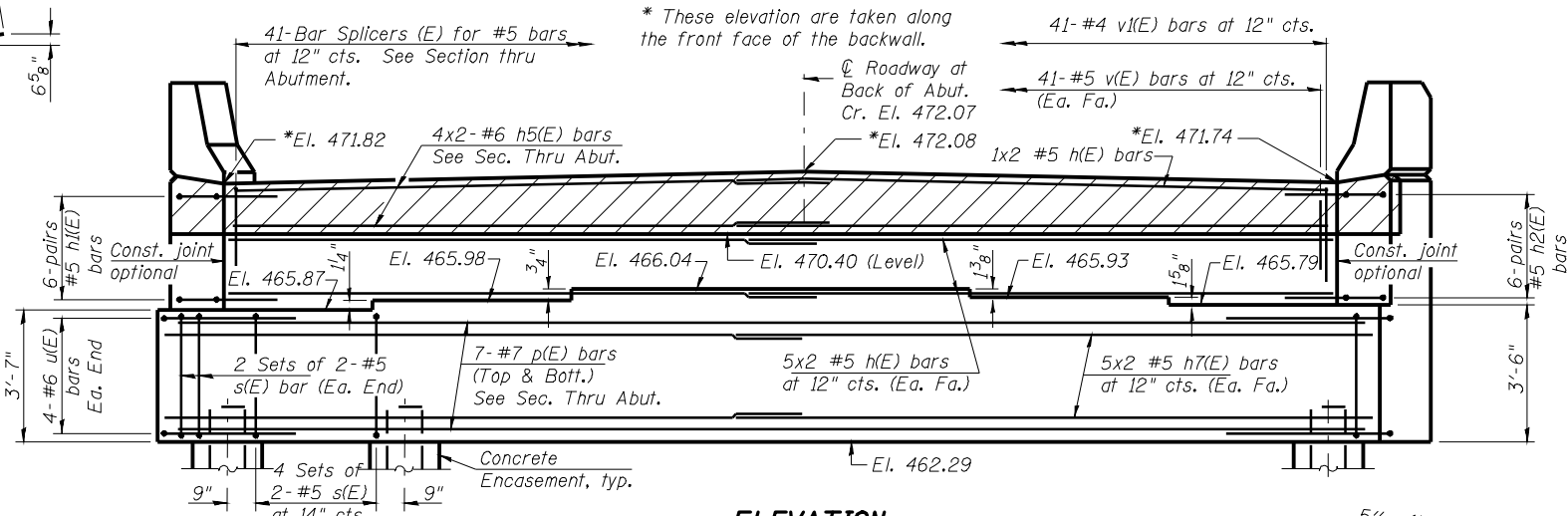
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HANSON
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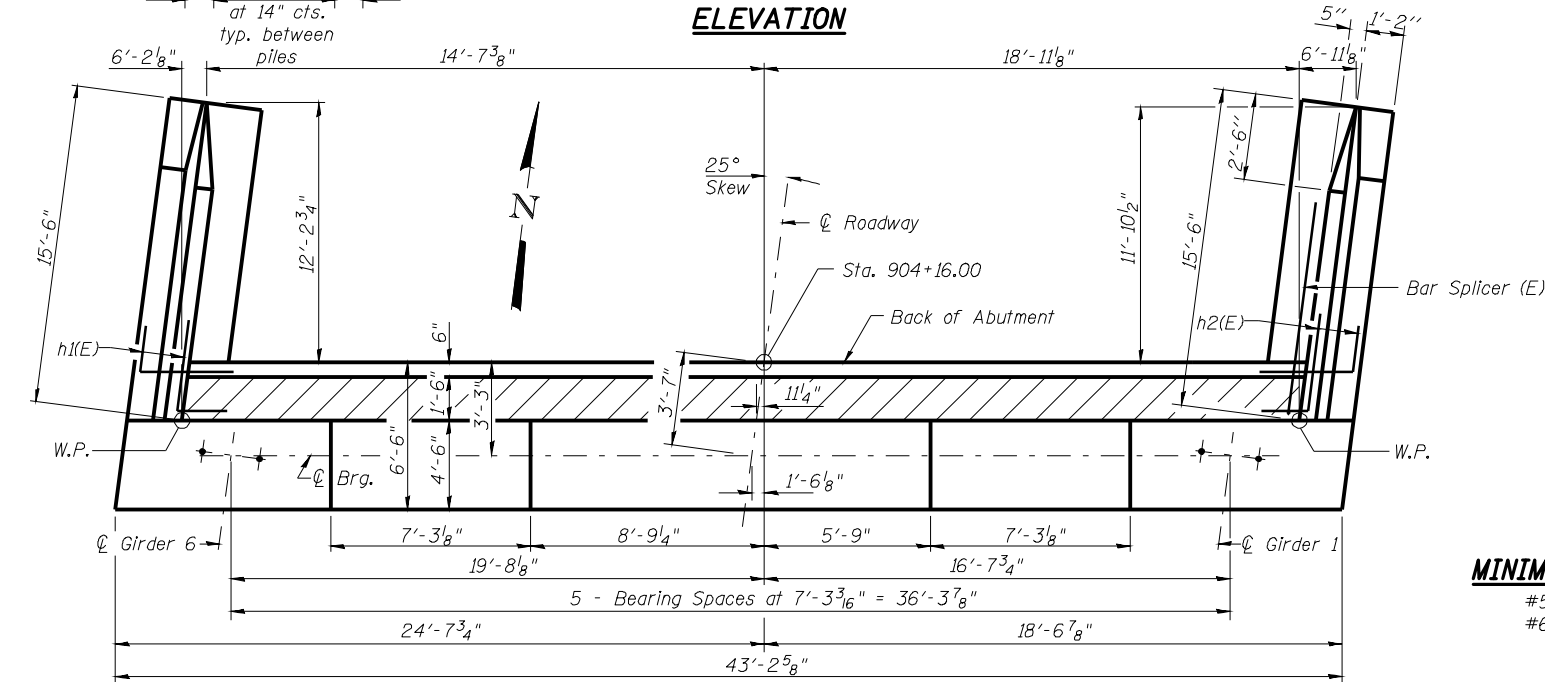
JOB NO.
07S2026

DATE
03/27/09

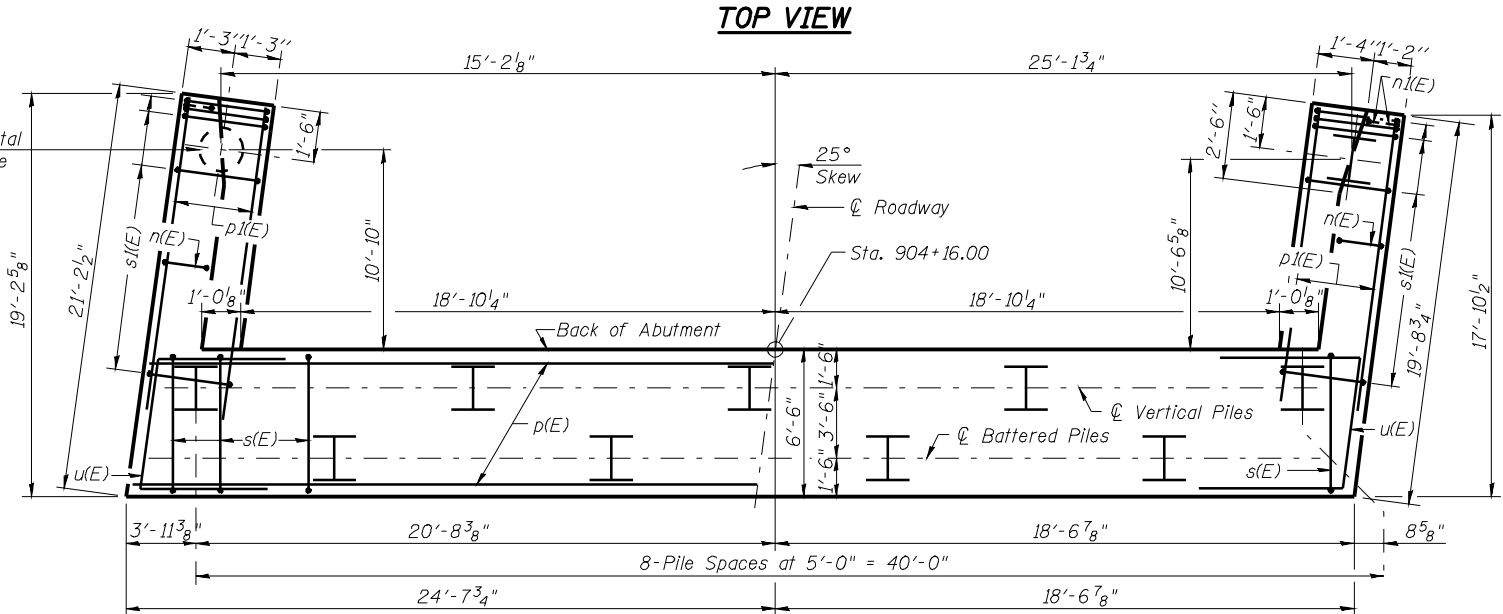
* These elevation are taken along
the front face of the backwall.



ELEVATION



TOP VIEW



PLAN-PILE CAP

MINIMUM BAR LAPS

#5 bar = 2'-5"
#6 bar = 2'-10"

H-PILE PILE DATA

Type: HP14x89
Nominal Required Bearing: 705 Kips
Factored Resistance Available: 304 Kips
Est. Length: 90 Feet
No. Production Piles: 10
No. Test Piles: None

EXPERIMENTAL PILE DATA

Type: 14" Metal Shell
(0.25" Wall Thkns.)
Nominal Required Bearing: 300 Kips
Factored Resistance Available: 150 Kips
Est. Length: 85 Feet
No. Production Piles: 1
No. Test Piles: None

**NORTH ABUTMENT EXPERIMENTAL PILE
DRIVING and TESTING SEQUENCE**

1. Pre-core experimental pile location to elevation 451.0 ft.
2. With dynamic monitoring, drive pile to a tip elevation of 392.0 ft.
3. Wait a minimum 3 calendar days to allow pile to set-up, other abutment piles may be driven during this waiting period.
4. Redrive the experimental pile with dynamic monitoring to a tip elevation of 383.0 ft or higher as directed by the Engineer. The driven bearing during redriving will exceed the nominal required bearing shown in the Experimental Pile Data table.

14" Experimental
Metal Shell Pile

BAR h2(E)

BAR h4(E)

BAR h1(E)

BAR n(E)

BAR n1(E)

BARS s(E) & s1(E)

BAR u(E)

BAR v1(E)

BAR v3(E)

BAR v4(E)

MAN: 09/12/08
DES: 09/10/08
CHK: 09/10/08
REV: 09/10/08
TCH: 09/10/08

LAYOUT: 09/12/08
DRAWN: 09/10/08
REVIEWED: 09/10/08