

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 1
FAP 328	4	CLAY	109	78	18 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	CONTRACT NO. 74107	

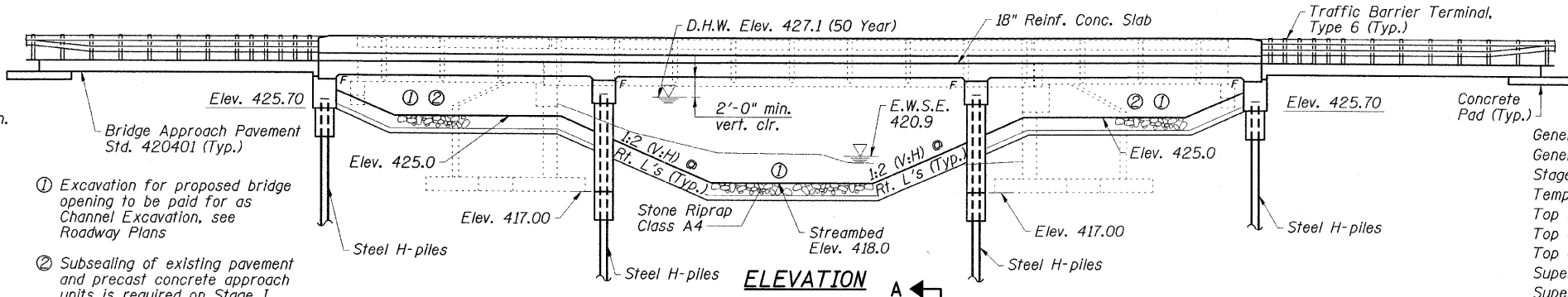
BENCHMARK: BM 209 - Railroad spike in Power Pole No. 217, Sta. 969+25, 29.7' Lt., Elev. 429.86 (NAVD 88)

EXISTING STRUCTURE: SN 013-0015 was originally built in 1921 as SBI 25, Section 8B and was reconstructed in 1974 as SBI 25, Section 8BR-4. It is a single span structure consisting of 21" PPC Deck Beams on closed abutments and wingwalls on spread footings. The deck width is 33'-0" and the length is 53'-0" back to back of abutments. Traffic shall be maintained utilizing stage construction.

No salvage.

STATION 968+56.00  
BUILT 200 BY  
STATE OF ILLINOIS  
F.A.P. RT. 328 SEC. (8BR-4)B-1  
LOADING HL-93  
STR. NO. 013-0043

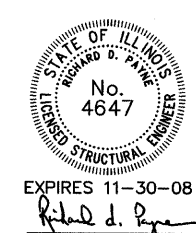
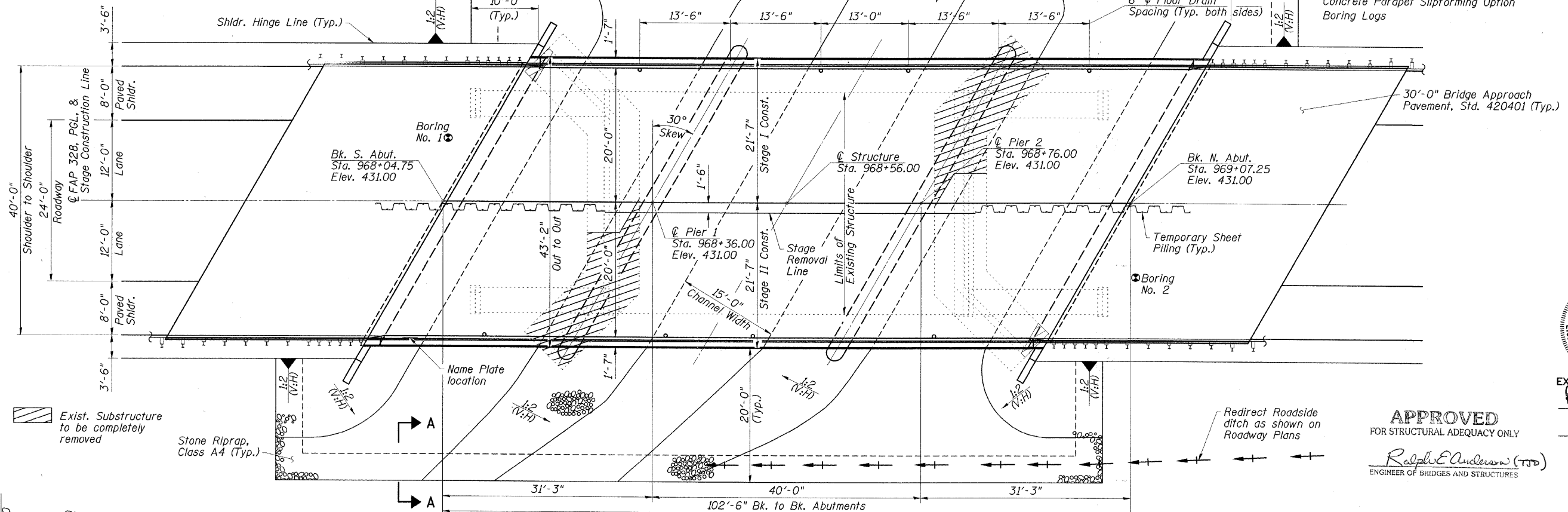
NAME PLATE  
See Std. 515001



- ① Excavation for proposed bridge opening to be paid for as Channel Excavation, see Roadway Plans
- ② Subsealing of existing pavement and precast concrete approach units is required on Stage I traffic side prior to implementing Stage I traffic, see Roadway Plans.

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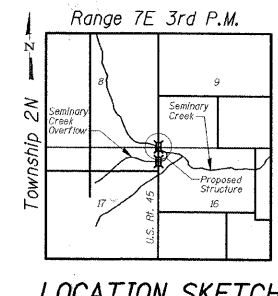
APPROVED  
FOR STRUCTURAL ADEQUACY ONLY  
Ralph E. Anderson (PE)  
ENGINEER OF BRIDGES AND STRUCTURES

**WATERWAY INFORMATION**

Total Drainage Area = 6.77 Sq. Mi.		Exist. Low Grade Elev. = 430.8 Ft. @ Sta. 971+00		Prop. Low Grade Elev. = 431.0 Ft. @ Sta. 971+00							
Flood	Freq. Yr.	Q - C.F.S.		Nat. H.W.E.		Headwater El.					
		Exist.	Prop.	Exist.	Prop.	Exist.	Prop.				
Design	50	Main Channel	1138	952	233	280	426.2	0.6	0.5	426.8	426.7
		Overflow	381	567	74	107					
		Total	1519	1519	307	387					
Base	100	Main Channel	1815	1743	278	348	427.1	1.1	0.7	428.2	427.8
		Overflow	641	713	92	127					
		Total	2456	2456	370	475					
Overtopping	-	Main Channel	2137	2040	293	372	427.4	1.8	0.9	429.2	428.3
		Overflow	742	839	98	133					
		Total	2879	2879	391	505					
Max. Calc.	500	Main Channel	2856	2687	328	426	428.1	2.2	1.6	430.3	429.7
		Overflow	1060	1229	112	148					
		Total	3916	3916	440	574					

**PLAN**

**DESIGN SPECIFICATIONS**  
2007 AASHTO LRFD  
**LOADING HL-93**  
Allow 50 psf for future wearing surface.  
**DESIGN STRESSES**  
**FIELD UNITS**  
f'c = 3,500 psi  
fy = 60,000 psi (Reinf.)  
**SEISMIC DATA**  
Seismic Performance Zone (SPZ) = 1  
Bedrock Acceleration Coefficient (A) = 0.09g  
Site Coefficient (S) = 1.0



**SCOUR INFORMATION**

Design Scour Elevation (Ft.)	S. Abut.	Pier 1	Pier 2	N. Abut.
	425.70	422.40	422.40	425.70

**GENERAL PLAN**  
**US 45 OVER SEMINARY CREEK**  
**FAP ROUTE 328 - SECTION (8BR-4)B-1**  
**CLAY COUNTY**  
**STATION 968+56.00**  
**STRUCTURE NO. 013-0043**

**ESCA**  
CONSULTANTS, INC.  
DESIGNED BY: MTD 04/08  
DRAWN BY: DWH 04/08  
CHECKED BY: DAJ 05/08  
APPROVED BY: RDP 08/08