BENCHMARK: Chiseled Square in top of southwest wingwall of SN 083-0038, Sta. 1562+35.00, 17.5' Rt., Elev. 366.31.

EXISTING STRUCTURE: SN 083-0038 was originally built in 1932 as S.B.I. Rte. 143, Section 105BC at Sta. 1561+70. The superstructure was replaced in 1972 and precast concrete bridge slabs were utilized to widen the approaches. The superstructure consists of three spans. The outer spans, Spans 1 & 3, consist of 21"x36" PPC deck beams. The interior span, Span 2 consists of 27"x36" PPC deck beams. The substructure consists of two reinforced concrete closed abutments and two reinforced concrete piers on timber piles. The back-to-back abutments length is 155'-2½", the out-to-out width is 33'-0". The existing superstructure and the existing bridge approach shoulders shall be removed and replaced utilizing stage construction.

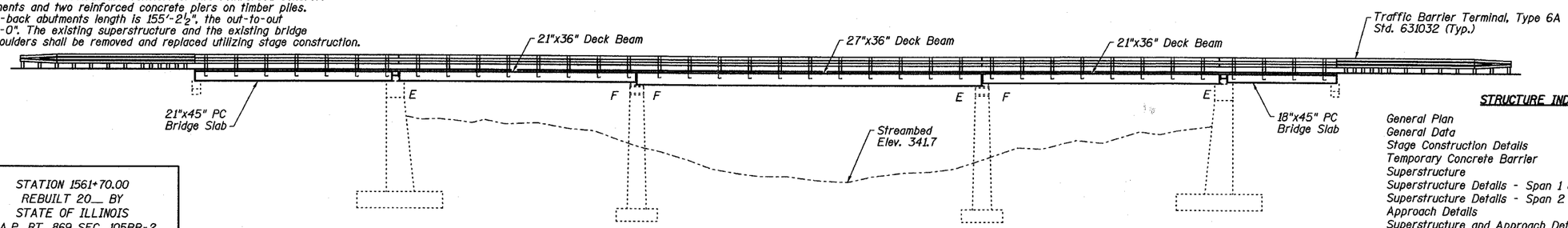
No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 869	105BR-2	SALINE	118	50
FED. ROAD DIST. NO. 9		ILLINOIS	FED. AID PROJECT- AGO	

SHEET NO. 1
23 SHEETS

78031



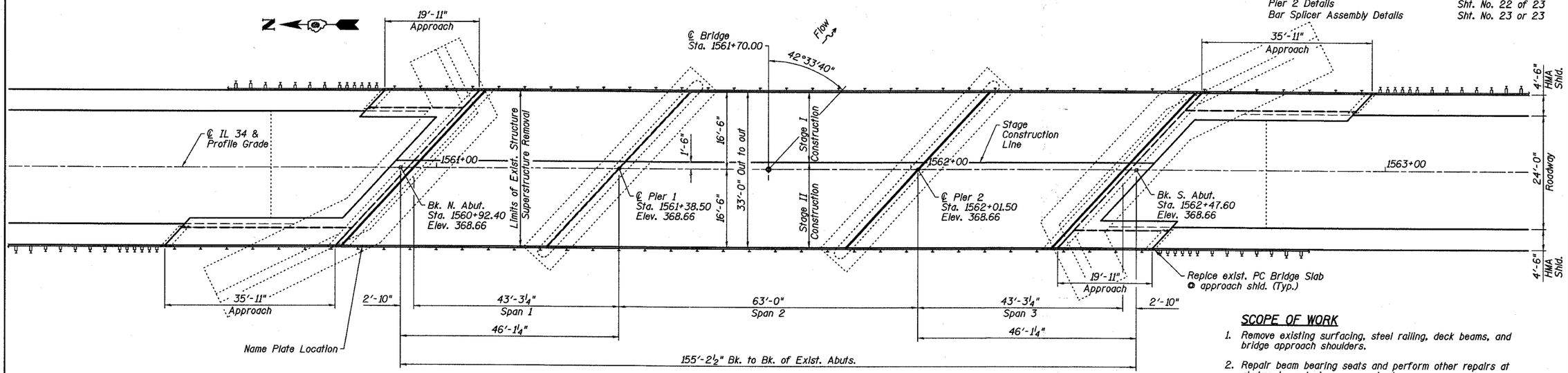
ELEVATION

STATION 1561+70.00
REBUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 869 SEC. 105BR-2
LOADING HS20
STR. NO. 083-0038

NAME PLATE
See Std. 515001

STRUCTURE INDEX OF SHEETS

General Plan	Sht. No. 1 of 23
General Data	Sht. No. 2 of 23
Stage Construction Details	Sht. No. 3 of 23
Temporary Concrete Barrier	Sht. No. 4 of 23
Superstructure	Sht. No. 5 of 23
Superstructure Details - Span 1 & 3	Sht. No. 6 & 7 of 23
Superstructure Details - Span 2	Sht. No. 8 & 9 of 23
Approach Details	Sht. No. 10 & 11 of 23
Superstructure and Approach Details	Sht. No. 12 & 13 of 23
Steel Railing, Type SM	Sht. No. 14 of 23
Strip Seal Expansion Joint	Sht. No. 15 of 23
North Abutment	Sht. No. 16 of 23
South Abutment	Sht. No. 17 of 23
Abutment Details	Sht. No. 18 of 23
Pier 1	Sht. No. 19 of 23
Pier 1 Details	Sht. No. 20 of 23
Pier 2	Sht. No. 21 of 23
Pier 2 Details	Sht. No. 22 of 23
Bar Splicer Assembly Details	Sht. No. 23 or 23



PLAN

SCOPE OF WORK

1. Remove existing surfacing, steel railing, deck beams, and bridge approach shoulders.
2. Repair beam bearing seats and perform other repairs at abutments and piers as required.
3. Reconstruct a three-span PPCD beam superstructure with Concrete Wearing Surface and Steel Railing, Type SM. Reconstruct existing approach shoulders with Precast Concrete Bridge Slab with Concrete Wearing Surface and Steel Railing Type SM.

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

STATE OF ILLINOIS
RICHARD D. PAYNE
No. 4647
LICENSED STRUCTURAL ENGINEER
EXPIRES 11-30-08
R. D. Payne
SIGNATURE
04/04/08
DATE

DESIGN SPECIFICATION
2002 AASHTO

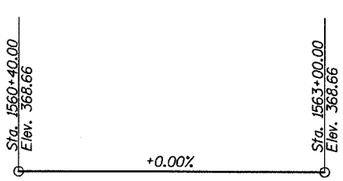
LOADING HS20-44
No allowance for future wearing surface

DESIGN STRESSES

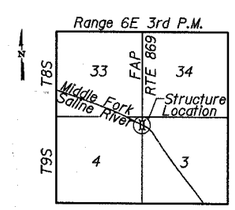
FIELD UNITS
f'c = 5,000 psi (Concrete Wearing Surface)
f'c = 3,500 psi (All concrete except CWS)
fy = 60,000 psi (reinf.)

PRECAST PRESTRESSED UNITS
f'c = 6,000 psi
f'ci = 5,000 psi
f's = 270,000 psi (½"ϕ low lax strands)
fsi = 201,960 psi (½"ϕ low lax strands)

PRECAST UNITS
f'c = 4,500 psi
fy = 60,000 psi (reinf.)



PROFILE GRADE
(Along ℄ Roadway)



LOCATION SKETCH

GENERAL PLAN
IL 34 OVER
MIDDLE FORK SALINE RIVER
FAP ROUTE 869 - SECTION 105BR-2
SALINE COUNTY
STATION 1561+70.00
STRUCTURE NO. 083-0038

ESCA
CONSULTANTS, INC.

DESIGNED BY:	JMS	02/08
DRAWN BY:	KAH/HAS	02/08
CHECKED BY:	ELH	04/08
APPROVED BY:	RDP	04/08