

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOWNSHIP	SHEET
FAP 681	116BR-1	FORD	37	13
PROJ. NO.	PROJ. NAME			
DWG. NO. 1 OF 15				

CONTRACT NO. 66561

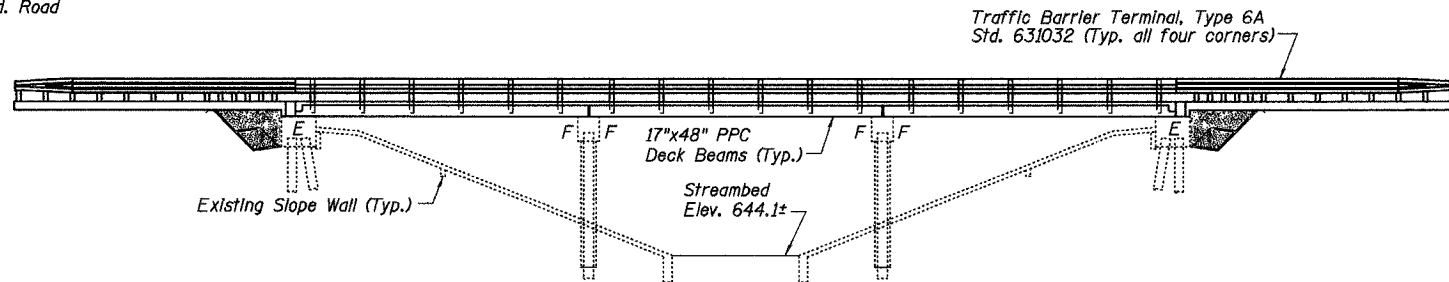
BENCHMARK: Railroad spike in power pole, station 59+32.75, 39.35' Rt. Elev. 659.48

EXISTING STRUCTURE: SN 027-0044 was originally built in 1971 as Section 116 BR. The superstructure consists of 3 simple spans of 17" PPC deck beams on pile bent abutments and piers. The back-to-back abutments dimension measures 106'-0" while the out-to-out width measures 33'-0". The existing superstructure shall be removed and replaced. Road closure shall be used during construction.

No salvage

STRUCTURE INDEX OF SHEETS

General Plan	Dwg. No. 1 of 15
General Data	Dwg. No. 2 of 15
Superstructure	Dwg. No. 3 of 15
Superstructure Details	Dwg. No. 4-5 of 15
Type SM Steel Bridge Rail	Dwg. No. 6 of 15
Strip Seal Expansion Joint	Dwg. No. 7 of 15
Anchor Bolt Details	Dwg. No. 8 of 15
West Abutment	Dwg. No. 9 of 15
East Abutment	Dwg. No. 10 of 15
Abutment Details	Dwg. No. 11 of 15
Pier 1	Dwg. No. 12 of 15
Pier 2	Dwg. No. 13 of 15
Pier Details	Dwg. No. 14 of 15
Bar Splicer Assembly Details	Dwg. No. 15 of 15



ELEVATION

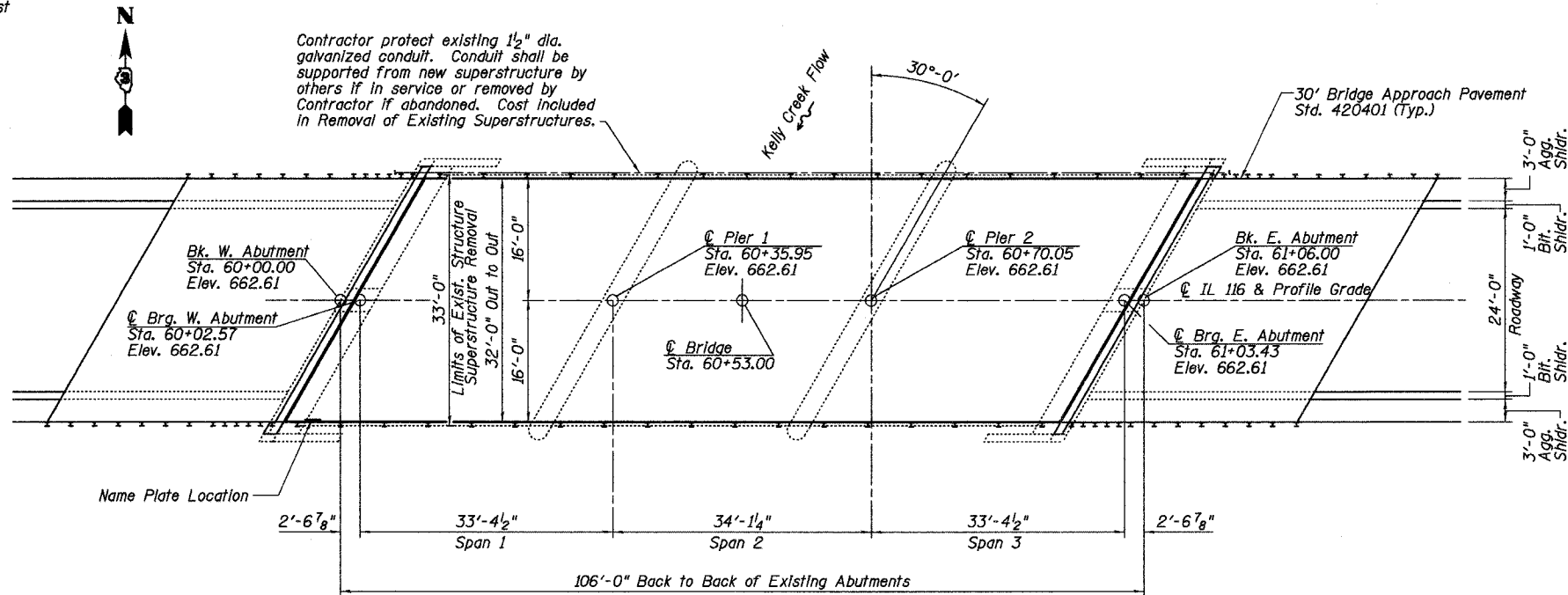
STATION 60+53
BUILT 200_ BY
STATE OF ILLINOIS
F.A.P. RT. 681 SEC. 116BR-1
LOADING HS20
STR. NO. 027-0044

NAME PLATE

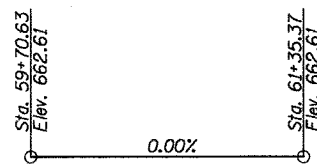
Note:
See Std. 515001
Existing Name Plate shall be cleaned and relocated adjacent to the new plate. Cost included with Name Plates.

SCOPE OF WORK

1. Remove existing surfacing, steel railing, and deck beams.
2. Seal existing cracks and repair delaminated/spalled concrete areas on substructure units.
3. Repair beam bearing seats at abutments and piers as required.
4. Reconstruct a three-span PPCD beam superstructure with concrete wearing surface and Steel Bridge Rail Type SM, and new bridge approach pavements.



PLAN



PROFILE GRADE
(Along \odot Roadway)

ESCA
CONSULTANTS, INC.

DESIGNED BY:	ELH	6/05
DRAWN BY:	CJG	6/05
CHECKED BY:	ELH	10/05
APPROVED BY:	RDP	10/05



EXPIRES 11-30-06
SIGNATURE
10/13/05
DATE

DESIGN SPECIFICATION

2002 AASHTO
LOADING HS20-44
Allow 25 psf future wearing surface

DESIGN STRESSES

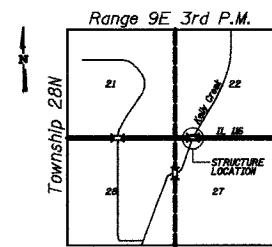
FIELD UNITS
 $f'_c = 5,000$ psi (Concrete Wearing Surface)
 $f'_c = 3,500$ psi (All concrete except CWS)
 $f_y = 60,000$ psi (reinf.)

PRECAST PRESTRESSED UNITS

$f'_c = 5,000$ psi
 $f'_ci = 4,000$ psi
 $f'_s = 270,000$ psi ($1/2$ " low lax strands)
 $f'_sl = 201,960$ psi (2 " low lax strands)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.043g
Site Coefficient (S) = 1.2



LOCATION SKETCH

GENERAL PLAN
IL 116 OVER KELLY CREEK
FAP ROUTE 681 - SECTION 116BR-1
FORD COUNTY
STATION 60+53.00
STRUCTURE NO. 027-0044