

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
78	10BR-3D & 11BR-8	JO DAVIESS	45	28

12 SHEETS

Contract # 64B27

BENCH MARK

Chiseled "□" on top of N.W. concrete wing wall (near North end) on Bridge II-BR-6, Sta. 481+25*. Elev. 647.75

Existing Structure: SN 043-0042 was built in 1982 as FA Rte 642 Section 10 BR-6 at Sta. 480+80.00

The structure consist of three simple span PPC Deck Beams on pile bent abutments and solid piers on spread footing. The back to back abutment dimension is 110'-4 3/4" while the out to out width measures 36'-0".

The existing superstructure is to be replaced with PPC Deck Beams and 5" (min.) concrete wearing surface.

Traffic is to be maintained by utilizing Stage construction. One lane of traffic for both direction will be provided.

No salvage.

* Corresponds to Sta. 21+20.37

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Superstructures	Each	1	-	1
Concrete Removal	Cu. Yd.	-	12.6	12.6
Concrete Structures	Cu. Yd.	5.4	-	5.4
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	3852	-	3852
Reinforcement Bars, Epoxy Coated	Pound	5580	820	6400
Concrete Wearing Surface, 5"	Sq. Yd.	428.7	-	428.7
Bridge Deck Grooving	Sq. Yd.	409	-	409
Protective Coat	Sq. Yd.	447.0	-	447.0
Steel Bridge Rail, Type SM	Foot	214.5	-	214.5
Name Plates	Each	1	-	1
Bridge Joint System (Expansion), 1 5/8"	Foot	36	-	36
Bar Splicers	Each	111	86	197
Asbestos Bearing Pad Removal	Each	-	72	72

LOADING HS20-44

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

NEW & EXISTING CONSTRUCTION

FIELD UNITS

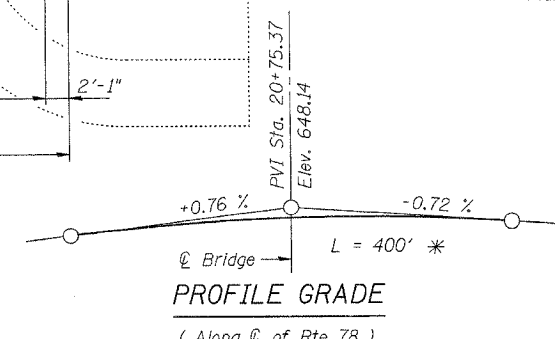
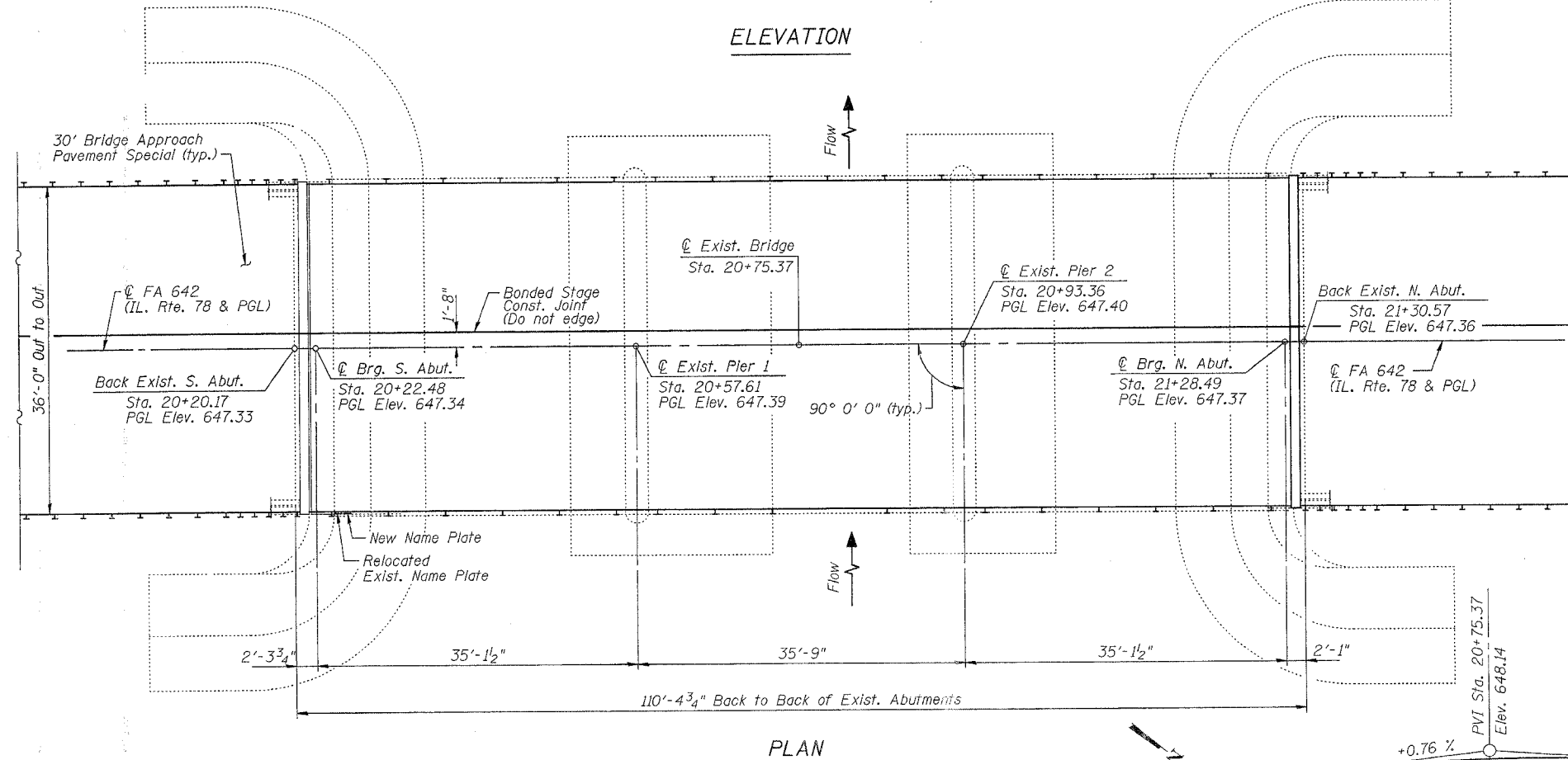
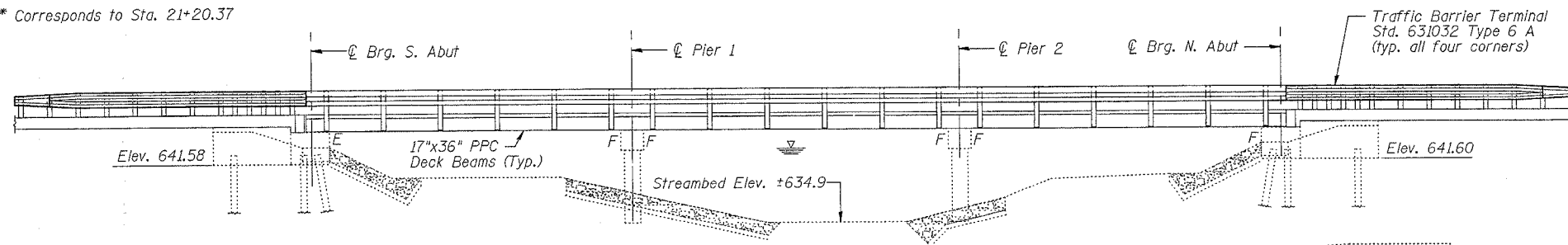
f'c = 5,000 psi (Concrete Wearing Surface)
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (1/2" φ low relax strands)
f'si = 201,960 psi (1/2" φ low relax strands)

Index of Sheets

1. General Plan
2. Construction Staging
3. Superstructure Plan
4. Superstructure Details - 1
5. Superstructure Details - 2
6. Type SM Steel Bridge Rail Side Mounted
7. Bridge Joint System - Expansion (Preformed Joint Seal)
8. Bridge Joint System - Expansion (Alternate - Strip Seal)
9. Substructure Concrete Removal
10. South Abutment
11. North Abutment
12. Bar Splicer Assembly Details

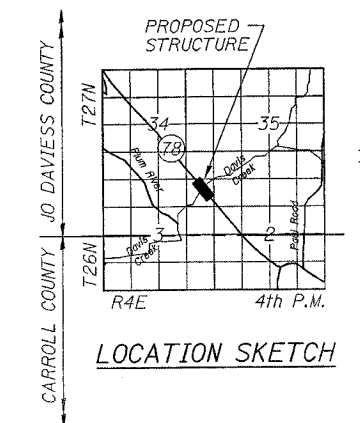


STATION 20+75.37
REBUILT 200... BY
STATE OF ILLINOIS
F.A. RT. 642 SEC 11BR-8
LOADING HS20
STR. NO. 043-0042

NAME PLATE

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

STATE OF ILLINOIS
ERREN M. MIRANDA
81-3997
CHICAGO, ILLINOIS
REGISTERED STRUCTURAL ENGINEER
12/23/05
EXP. 11/30/06



GENERAL PLAN

IL. RTE. 78 OVER
DAVIS CREEK
F.A. 642 SECTION (10BR-3D & 11BR-8)
JO DAVIESS COUNTY
STA. 20+75.37
STRUCTURE NUMBER 043-0042

DESIGNED	COM	200
CHECKED	EMM	ENGINEER OF BRIDGE DESIGN
DRAWN	COM	ENGINEER OF BRIDGES AND STRUCTURES
CHECKED	EMM	

* Vertical curve data is only valid from Sta. 20+20+17 Sta. 21+30.57 Beyond those limits, see roadway plans for bituminous taper to meet existing grades.