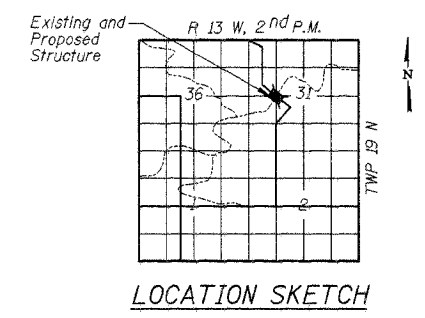
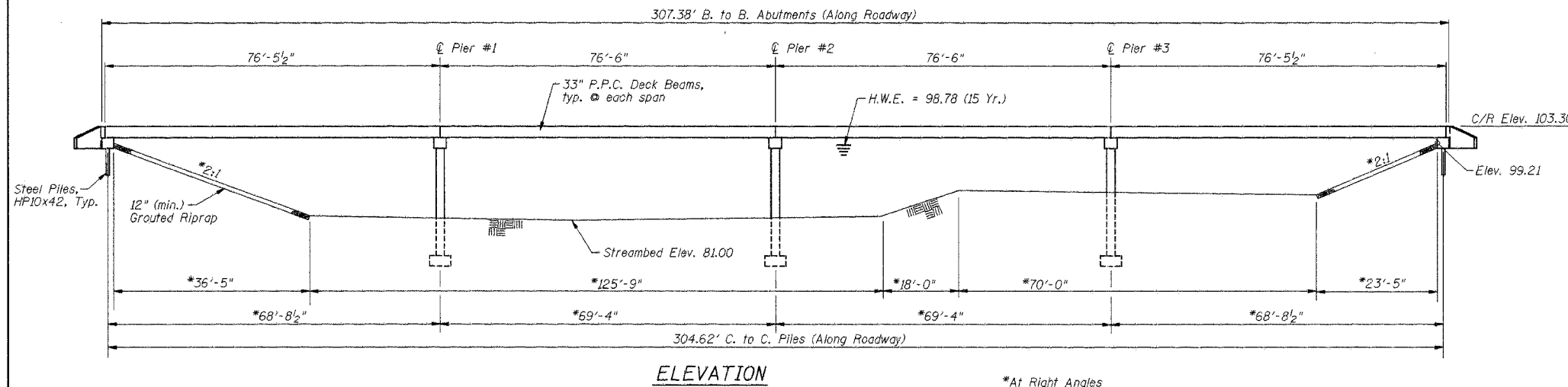


Existing Structure: Four span structure w/ Reinforced Concrete Tee Beams on Concrete Piers, 152' Long and 18.3' Wide

BM #1 - Chiseled "X" in top of NW wingwall of existing bridge, Elev. 99.95
 BM #2 - Chiseled "X" in top of SE wingwall of existing bridge, Elev. 100.00
 BM #3 - Top of L3x3 @ NW corner of concrete box culvert, Sta. 29+27, Elev. 88.88

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 38	*	Vermilion	18	6
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

91306 *00-19134-00-BR



DESIGN SPECIFICATIONS

AASHTO (2002) and applicable Interims (2003-2004)

DESIGN LOADING

HS 20-44
 25 P.S.F Future Wearing Surface

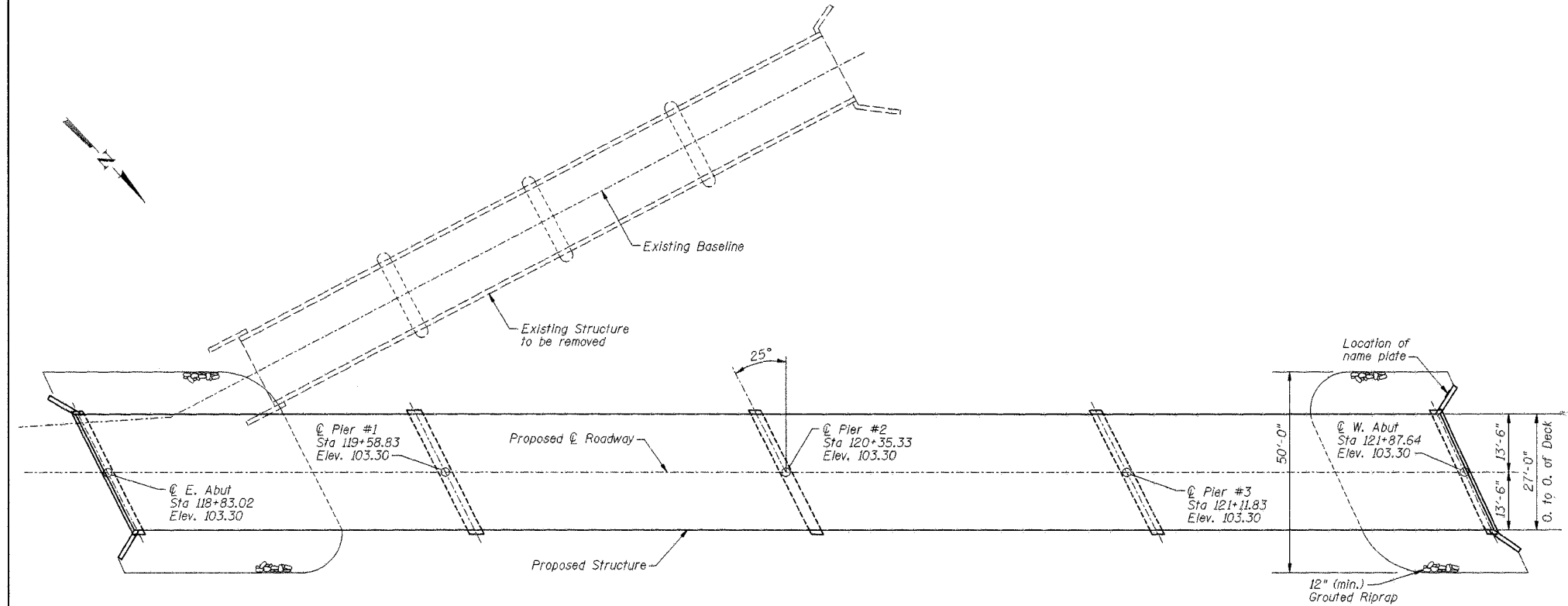
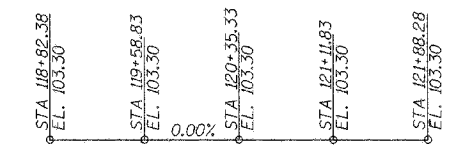
DESIGN STRESSES

$f'_c = 3,500$ psi (Cast in Place Concrete)
 $f'_c = 5,000$ psi (P.P.C. Units)
 $f'_{ci} = 4,100$ psi (P.P.C. Units)
 $f_y = 60,000$ psi (Reinforcement)
 $f'_s = 270,000$ psi (1/2" ϕ Strands)
 $f'_{sj} = 189,000$ psi (1/2" ϕ Strands)

STRUCTURE NO. 092-3481
 SEC. 00-19134-00-BR BUILT 200
 VANCE ROAD DISTRICT
 VERMILION COUNTY
 LOADING HS-20-44

NAME PLATE

See Standard 515001

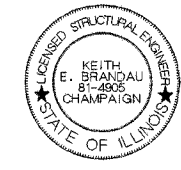


TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each	1		1
Precast Prestressed Concrete Deck Beams (33" Deep)	Sq. Ft.	8252		8252
Steel Railing, Type S-1	Foot	612		612
Furnishing Steel Piles, HP10x42	Foot		266	266
Driving Steel Piles	Foot		266	266
Test Piles, Steel HP10x42	Each		2	2
Metal Shoes	Each		14	14
Conc. Cut-off Wall	Cu. Yds.		6.0	6.0
Concrete Structures	Cu. Yds.		268.0	268.0
Name Plate	Each		1	1
Reinforcement Bars	Pound		21,140	21,140
Structure Excavation	Cu. Yds.		9	9
Cofferdam Excavation	Cu. Yds.		436	436
Rock Excavation for Structures	Cu. Yds.		37	37
Cofferdams	Each		3	3
Grouted Riprap	Sq. Yds.		456	456

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with the requirements of the current "AASHTO Standard Specifications for Highway Bridges."

Keith E Brandau 3/1/05



KEITH E. BRANDAU
 Illinois Licensed Structural Engineer Number 4905
 License Expires 11/30/06

FRAUENHOFFER
 Fraunhofer and Associates, P.C. Consulting Engineers
 3002 Crossing Court Champaign, IL 61822 217-351-6268

GENERAL PLAN AND ELEVATION
 VANCE ROAD DISTRICT
 SECTION 00-19134-00-BR
 VERMILION COUNTY

SHEET 6
 DWG van-gpe.dgn
 DATE AUG 2004
 PROJ NO. 2088

DSGN	J.R. Wolf				
DR	J.R. Wolf				
CHK	K.E. Brandau				
APVD	K.E. Brandau	NO.	DATE	REVISION	BY