

Bench Mark: Disk T-36 at S.W. Corner of Existing Structure (Corps of Engr. 1963 Chicago District)  
 NAVD '88 = 546.93 Ft.

Existing Structure: S.N. 084-0052, originally built in 1956 as F.A. Route 49, Section 19B. The existing structure is six spans with two three-span continuous, non-composite, riveted built-up plate girder units supported on pile bent abutments and solid wall piers. The back to back of abutments measures 777'-8 3/4" and the out to out bridge width measures 35'-8".  
 The contractor shall remove and replace the existing deck.  
 Traffic is to be detoured during construction.

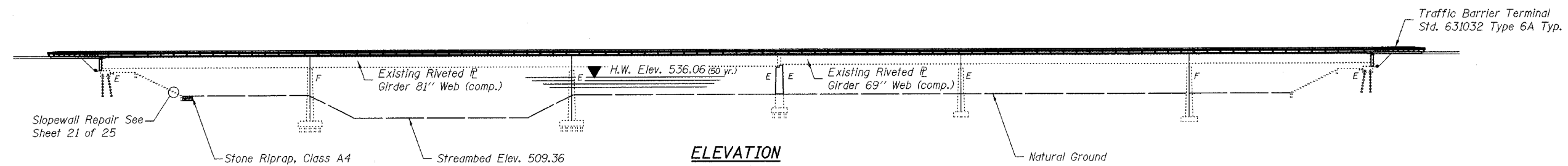
Salvage: None

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
7978	BR-1	SANGAMON	261	126	25 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-	Contract #72449		

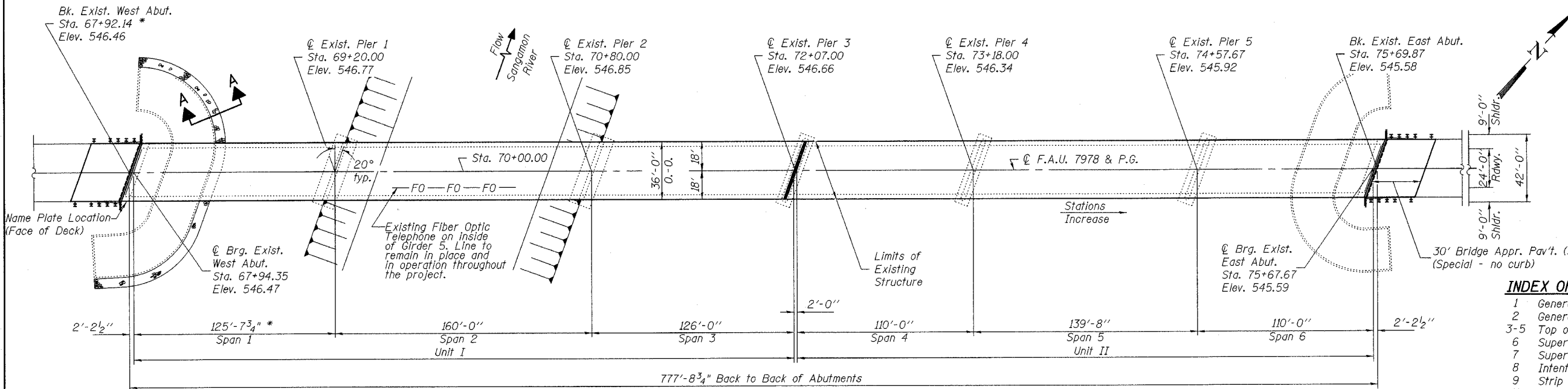
STATION 70+00.00  
 REBUILT 20\_\_ BY  
 STATE OF ILLINOIS  
 F.A.U. RTE. 7978 SECTION BR-1  
 LOADING HS20  
 STR. NO. 084-0052

**NAME PLATE**  
 See Std. 515001

**APPROVED**  
 FOR STRUCTURAL ADEQUACY ONLY  
*Patricia C. Anderson*  
 ENGINEER OF BRIDGES AND STRUCTURES



**ELEVATION**

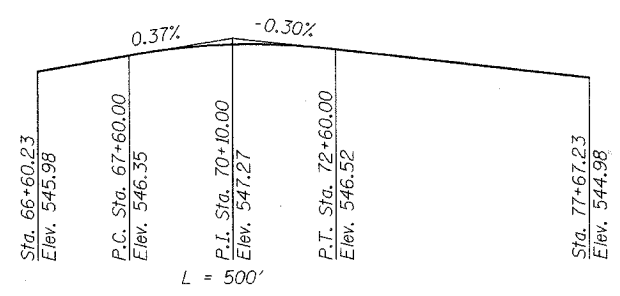


**PLAN**

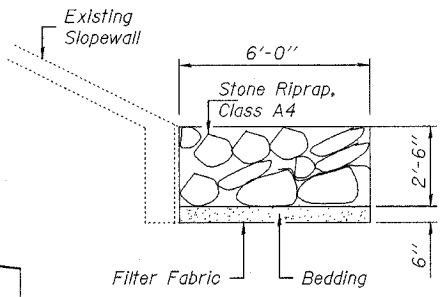
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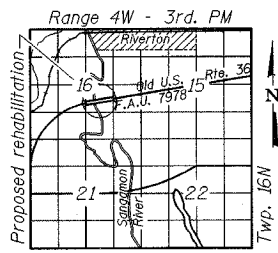
\* Note: The existing length of span 1 is being reduced to 125'-7 3/4" due to the existing west abutment being constructed approximately 4 1/4" east of the original intended location.



**PROFILE GRADE**  
 (along @ Old U.S. 36/Improvement)



**SECTION A-A**  
 (Estimated Length=200 lin. ft. measured along toe of W. Slopewall)



**LOCATION SKETCH**



*Sheila J. Kimlinger* 9/8/05  
 Sheila J. Kimlinger, S.E.  
 Structural Engineer License No. 081-005283  
 Expiration Date: 11/30/2006

**DESIGN SPECIFICATIONS**  
 2002 AASHTO

**SEISMIC DATA**  
 Seismic Performance Category (SPC) = A  
 Bedrock Acceleration Coefficient (A) = 0.048g  
 Site Coefficient (S) = 1.2

**LOADING HS20-44**  
 Allow 50#/sq. ft. for future wearing surface.

**DESIGN STRESSES**

**New Construction**  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 36,000$  psi (Structural Steel)

**Existing Construction**  
 $f'_c = 1,400$  psi (Superstructure)  
 800 psi (Substructure)  
 $f_y = 40,000$  psi (Reinforcement)  
 $f_y = 33,000$  psi (Structural Steel)

ILLINOIS DEPARTMENT OF TRANSPORTATION

**GENERAL PLAN**  
 OLD U.S. ROUTE 36 OVER  
 SANGAMON RIVER  
 F.A.U. ROUTE 7978  
**SECTION BR-1**  
 SANGAMON COUNTY  
 STA. 70+00.00  
 STRUCTURE NUMBER 084-0052

DATE: MARCH 2005  
 DRAWN BY: NJV  
 CHECKED BY: PBB