

**BENCHMARK**

Square cut on NW corner of traffic signal handhole on SE corner of Milwaukee Ave. and Euclid Ave. Elevation 663.54

**EXISTING STRUCTURE**

S.N. 016-0242 was built in 1926 and was improved in 1976 including railing replacement and sidewalk removal. The existing three span structure utilizes simple span concrete T-beams with a 4" P.C.C. wearing surface and a 1 1/2" bituminous surface on a 6" concrete deck. The structure is 53 feet wide out to out and 159 feet long. The structure is founded on untreated timber piles.

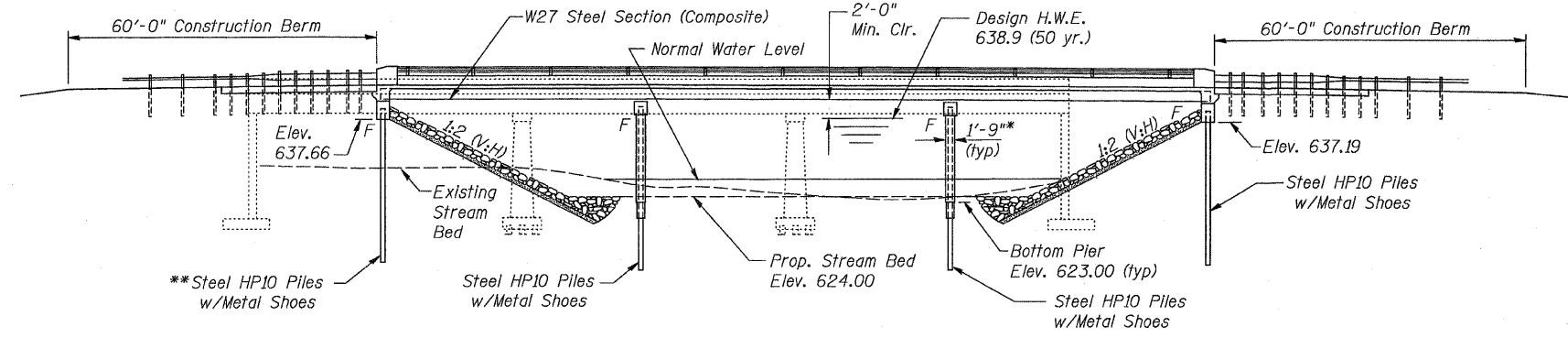
Stage construction will be utilized to maintain one lane of traffic in each direction at all times.

No Salvage.

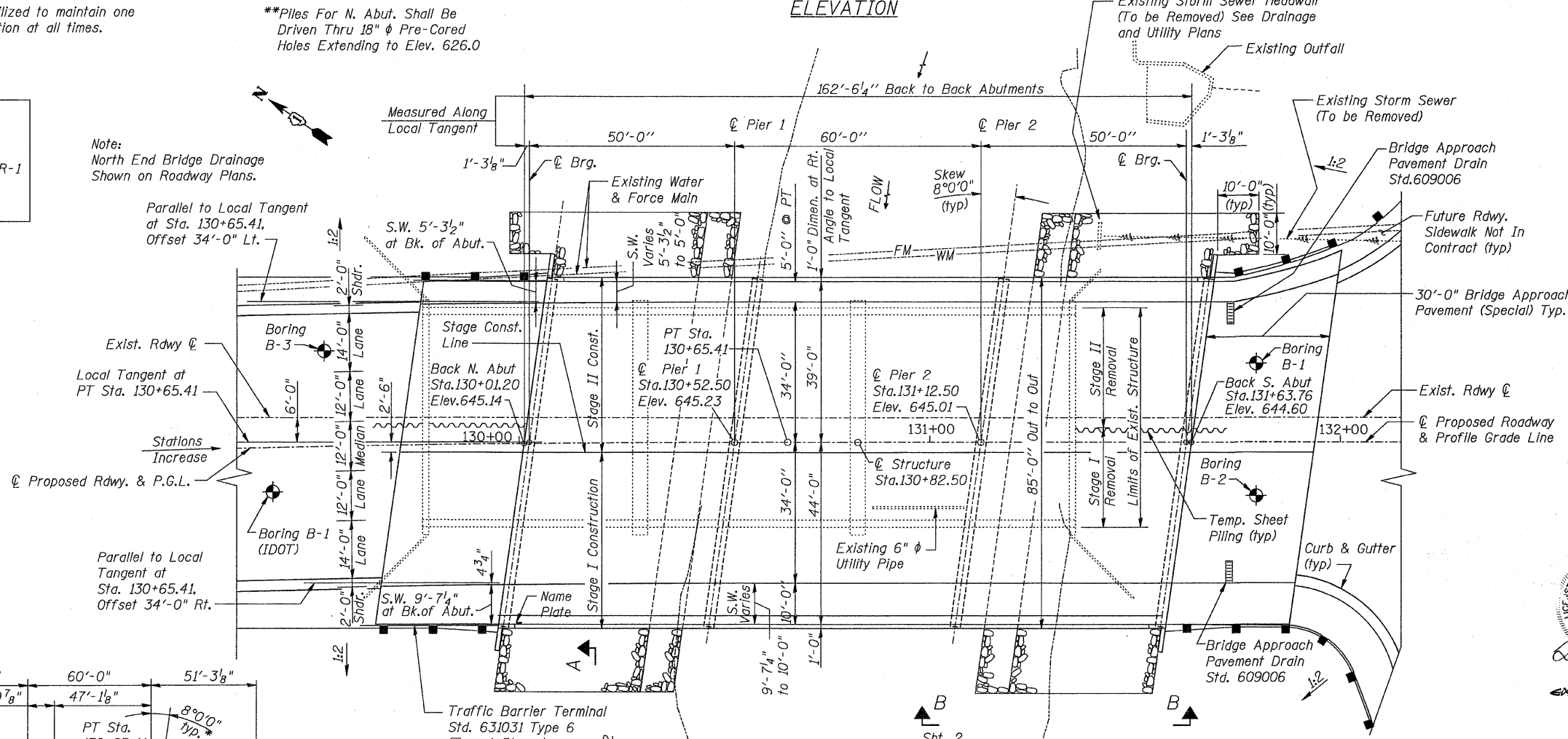
STATION 130+82.50  
BUILT 200\_ BY  
STATE OF ILLINOIS  
F.A.P. RT. 374 SEC. 3268F-R-1  
LOADING HS20  
STR. NO. 016-6566

**NAME PLATE**

See Std. 515001



**ELEVATION**



**PLAN**

**DESIGN SCOUR ELEVATION TABLE**

	N. Abut.	S. Abut.	Piers
Design Scour Elevation (ft)	637.66	637.19	617.00

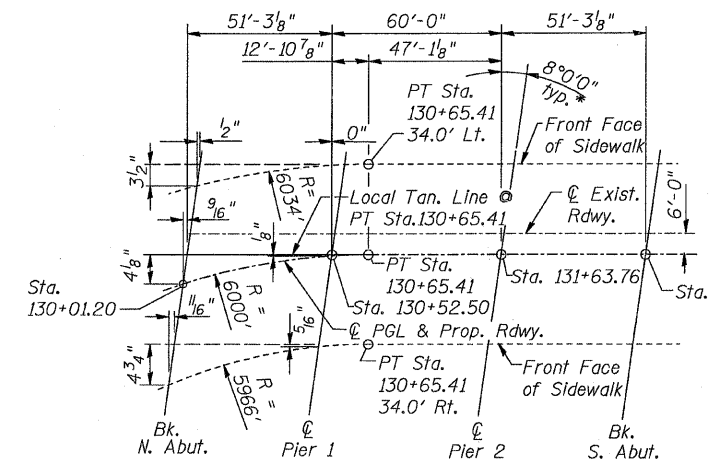
**WATERWAY INFORMATION**

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head-Ft.		Headwater El.
			Exist.	Prop.		Exist.	Prop.	
Overtopping	5	3000	977	1481	636.1	0.4	0.3	636.5
Design	50	5750	1290	1694	638.9	0.4	0.4	639.3
Base	100	6200	1335	1767	639.4	0.4	0.4	639.8
Max. Calc.	500	7359	1335	1915	640.5	0.4	0.4	640.9

**HORIZONTAL CURVE DATA**

Curve NX3  
 PI Sta. = 126+35.78 E = 15.47'  
 Δ = 8° 13' 10" (Rt) e = Normal Crown  
 D = 0° 57' 18" T.R. = N.A.  
 R = 6000.00' S.E. Run = N.A.  
 T = 431.11' P.C. Sta. = 122+04.67  
 L = 860.74' P.T. Sta. = 130+65.41

**OFFSET SKETCH**



**DESIGN SPECIFICATIONS**

2002 AASHTO Std. Specifications, 17th Edition

**LOADING HS20-44**

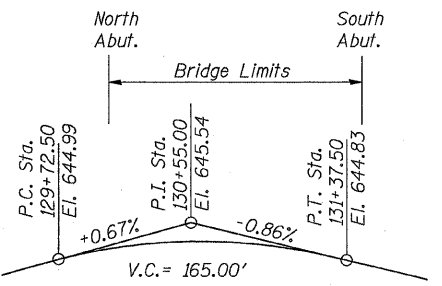
Allow 50 lbs/sq. ft. future wearing surface

**DESIGN STRESSES**

f'c = 3,500 psi  
 fy = 60,000 psi (reinforcement)  
 fy = 50,000 psi (M270 Gr.50W Structural Steel)

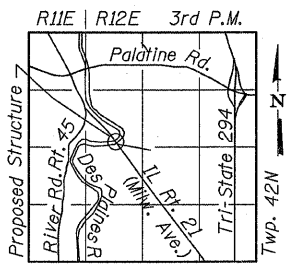
**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
 Bedrock Acceleration Coefficient (A) = 0.04g  
 Site Coefficient (S) = 1.2



**PROFILE GRADE LINE**

IL Route 21



**LOCATION SKETCH**

SEAL  
 LAWRENCE KIRCHNER  
 081-005343  
 CHICAGO, ILLINOIS  
 STATE OF ILLINOIS  
 2/5/08  
 EXP. 11/30/08

**CUT AND FILL IN FLOODWAY TABLE**

	UNIT	CUT	FILL
Volume between Normal Water Level and 10 year Flood Level	CU YD	790	15845
Volume between 10 Year and 100 Year Flood Level	CU YD	385	12535

REVISIONS	DATE
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 ILLINOIS ROUTE 21  
 MILWAUKEE AVE. OVER DES PLAINES RIVER  
 F.A.P. ROUTE 374 SECTION 3268F-R-1  
 COOK COUNTY, SN 016-6566  
 GENERAL PLAN  
 DESIGN BY: AWH DRAWN BY: BTO  
 DATE: 02/05/08 CHECKED BY: JAN CHECKED BY: JAN

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