

12/22/2004 10:59:05 PM

EXISTING STRUCTURE

The existing structure SN 016-0529 was built under section 110-1516, CHS Route 110 in 1965. The existing structure is a three span open abutment bridge with a total length of 210'-11" back to back of the abutment. The end spans measure 47' and the center span is 114'-6". The structure is hinged in the end spans 15' from the centerline of each pier. The superstructure consists of 36" rolled steel beams with a 7" concrete deck and a 1/2" bituminous overlay. The out-to-out deck width is 64'-0". The substructure consists of open abutments with beam ends and bearings encased in the backwall.

The existing structure is to be removed and replaced utilizing staged construction.

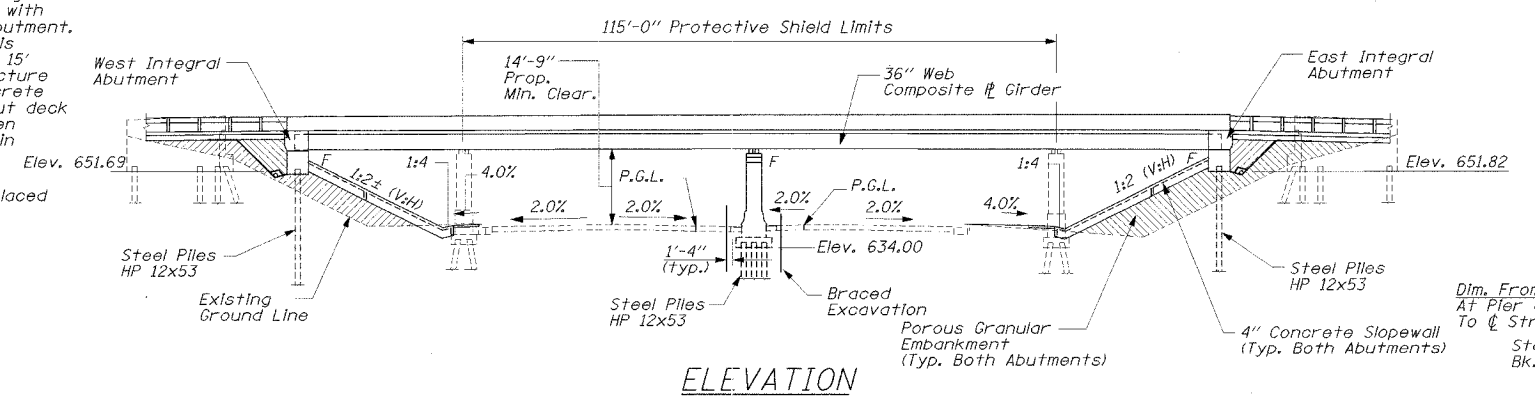
No salvage.

BENCH MARK:

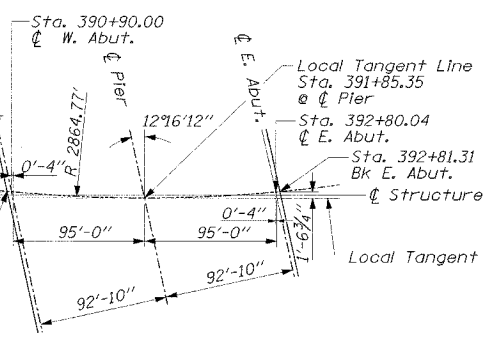
TBM C: Elev. 661.57
Chiseled 'D' Center of Sidewalk on SE corner of Willow Rd. Bridge over Milwaukee Ave.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

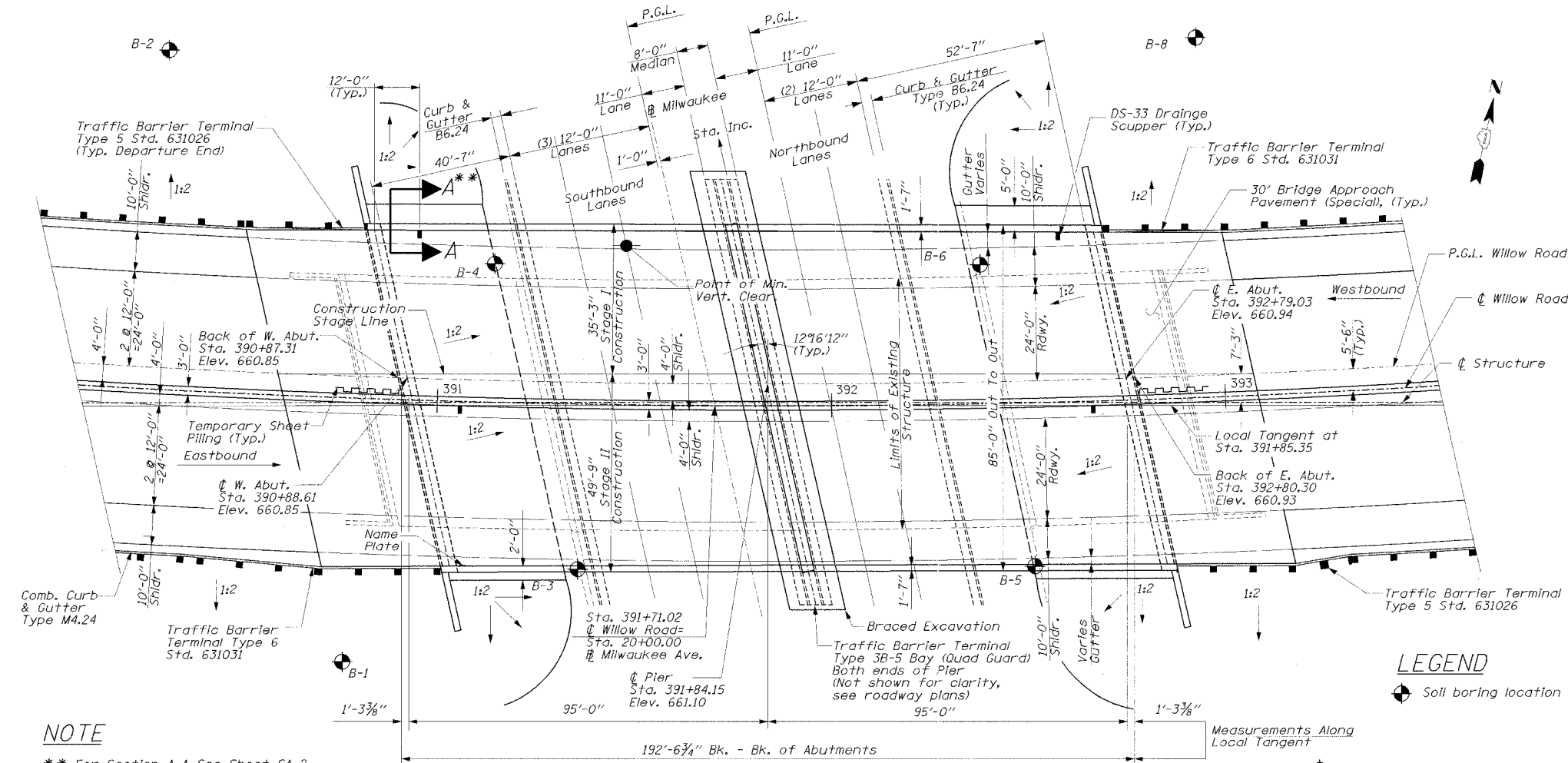
CONTRACT 62829		F.A.P. RATE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. SA-1
		305	2004-088B	COOK	145	54	OF SHEETS SA-30
FED. ROAD DIST. NO. 1	RELEASE	FED. AID PROJECT					



ELEVATION



OFFSET SKETCH



PLAN

DESIGN STRESSES

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf.)
 $f_y = 50,000$ psi AASHTO M270 (Struct. Steel, Gr. 50)
 $f_y = 36,000$ psi AASHTO M270 (Struct. Steel, Gr. 36)

DESIGN SPECIFICATIONS

1996 AASHTO with 1997 thru 2000 Interims.

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04
Site Coefficient (S) = 1.0

LOADING HS 20-44

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

WILLOW ROAD CURVE DATA

P.I. Sta. 387+09.20
 $\Delta = 35^\circ 2' 29''$ (L.T.)
 $D = 2^\circ 00' 00''$
 $L = 1760.39'$
 $E = 140.75'$
 $R = 2864.77'$
 $S.E. = 4.5\%$
P.C. Sta. 478+00.34
P.T. Sta. 395+60.61

* Station Equation at Roadway
Project Limit = Sta. 483+65.13 Back =
Sta. 383+65.00 Ahead

LEGEND

Soil boring location



SIGNED: *Maqued E. Zaglaw*
DATE: 12/22/04
EXPIRES: 11/30/06
FOR DRAWINGS SA-1 TO SA-30

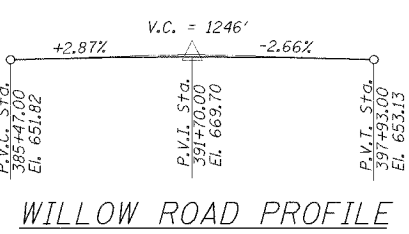
APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

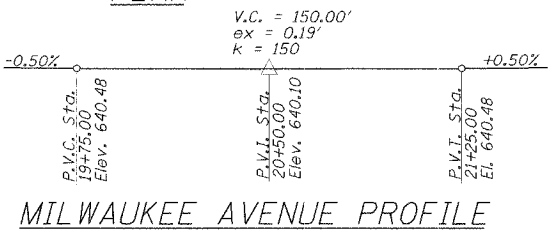
**GENERAL PLAN AND ELEVATION
WILLOW ROAD OVER
MILWAUKEE AVENUE
(IL RTE. 21/U.S. 45)
F.A.P. RTE. 305
SECTION 2004-088B
COOK COUNTY
STA. 391+71.02 @ WILLOW RD.
STR. NO. 016-2786**

EDWARDS AND KELCEY

DESIGNED	AJN
CHECKED	JAP
DRAWN	ABW
CHECKED	EL



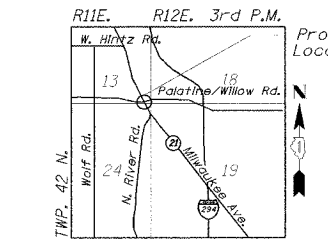
WILLOW ROAD PROFILE



MILWAUKEE AVENUE PROFILE

STATION 397+71.02
BUILT 200. BY
STATE OF ILLINOIS
FAP RT. 305 SEC. 2004-088B
LOADING HS20
STR. NO. 016-2786

NAME PLATE
See Std. 515001



LOCATION SKETCH