

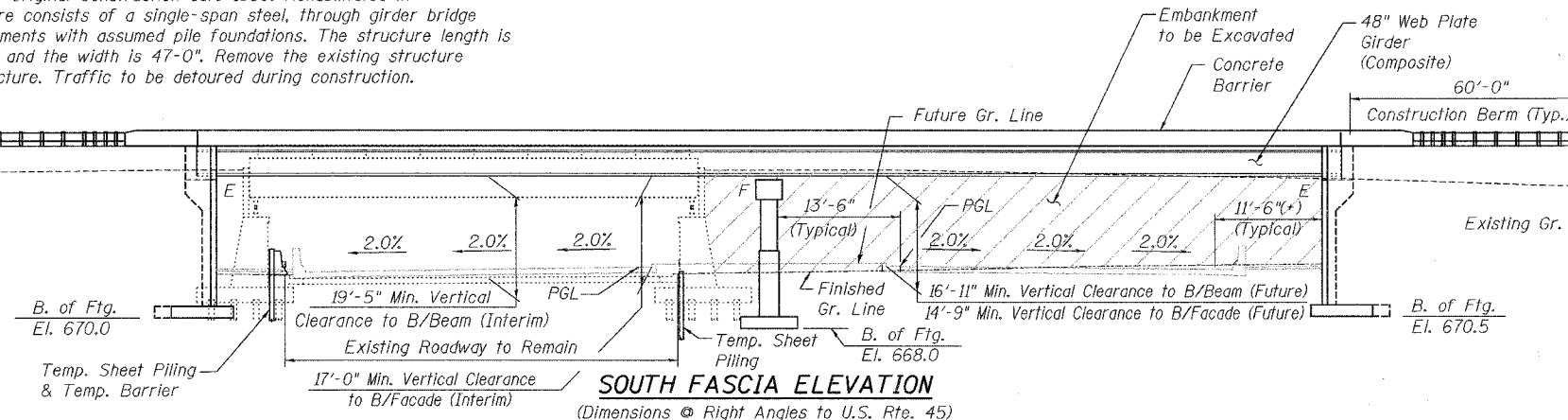
Bench Mark: Top of Brass Disk in West Curb of US Rte. 45 (LaGrange Rd.) Approximately 675' North of the Centerline of IL Rte. 7 (Southwest Highway). Elev. 689.07.

Existing Structure: S.N. 016-0465, Original Construction date 1930, Rehabilitated in 1970, 1995, and 1999. The structure consists of a single-span steel, through girder bridge supported on closed concrete abutments with assumed pile foundations. The structure length is 83'-0" back to back of abutments and the width is 47'-0". Remove the existing structure and replace it with a 2 span structure. Traffic to be detoured during construction.

Salvage: None

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FAU 3578	1327 F	COOK	16	3	14 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



DESIGN SPECIFICATIONS
AASHTO (2002)

LOADING HS20-44

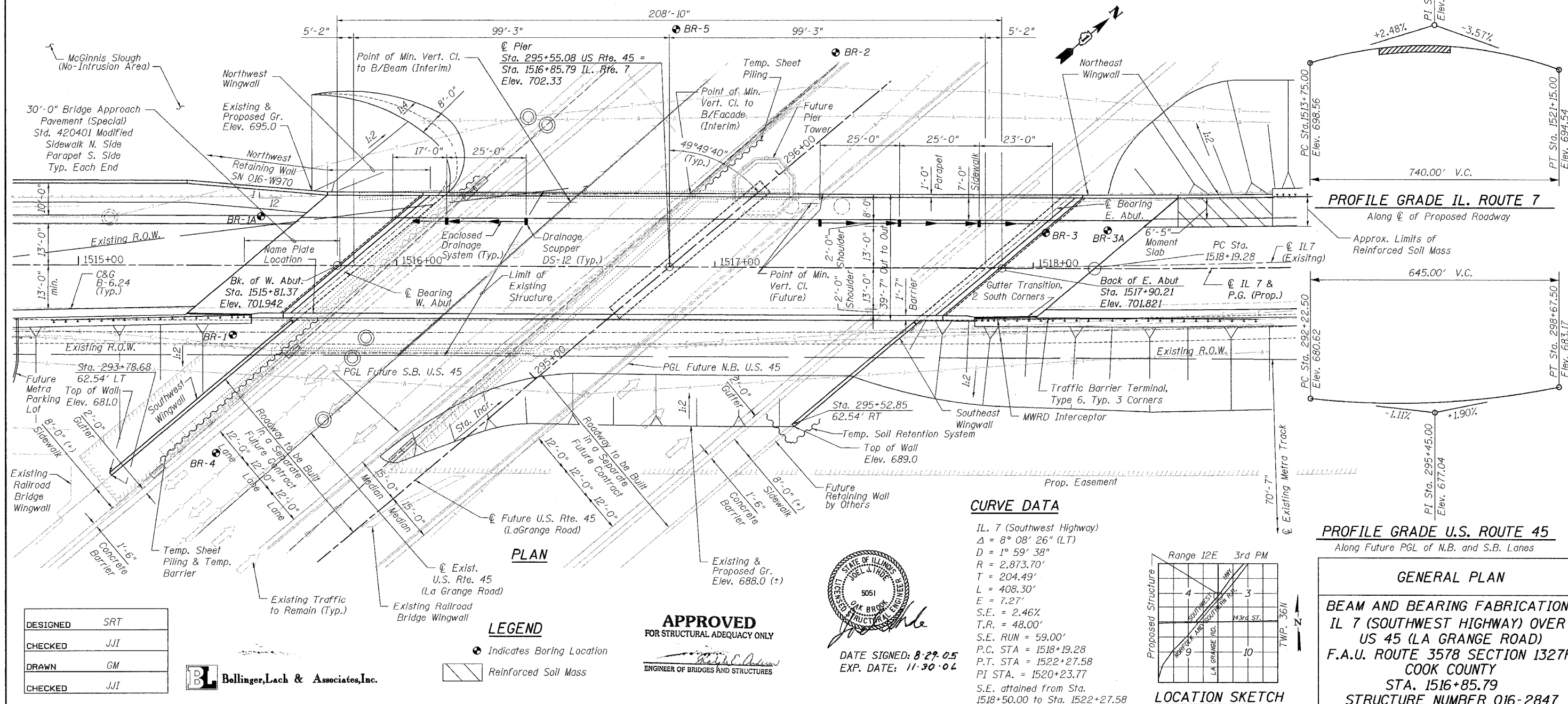
Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

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

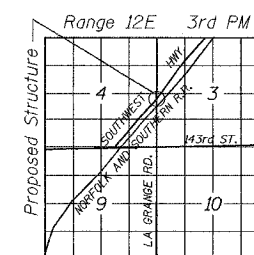
DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (Structural Steel) (M270 Gr. 50)
PRECAST UNITS
 $f'_c = 4,500$ psi (Precast Face Panels)



CURVE DATA

IL. 7 (Southwest Highway)
 $\Delta = 8^\circ 08' 26''$ (LT)
 $D = 1^\circ 59' 38''$
 $R = 2,873.70'$
 $T = 204.49'$
 $L = 408.30'$
 $E = 7.27'$
 $S.E. = 2.46\%$
 $T.R. = 48.00'$
 $S.E. RUN = 59.00'$
 $P.C. STA = 1518+19.28$
 $P.T. STA = 1522+27.58$
 $PI STA. = 1520+23.77$
 $S.E. attained from Sta. 1518+50.00 to Sta. 1522+27.58$



LOCATION SKETCH

PROFILE GRADE U.S. ROUTE 45
Along Future PGL of N.B. and S.B. Lanes

GENERAL PLAN
BEAM AND BEARING FABRICATION
IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

B Bollinger, Lach & Associates, Inc.

LEGEND

- Indicates Boring Location
- ▨ Reinforced Soil Mass

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Richard A. Adams
ENGINEER OF BRIDGES AND STRUCTURES



DATE SIGNED: 8-29-05
EXP. DATE: 11-30-06