CONTRACT NO. 62712

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 B	COOK	108	29
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
35 SHEETS

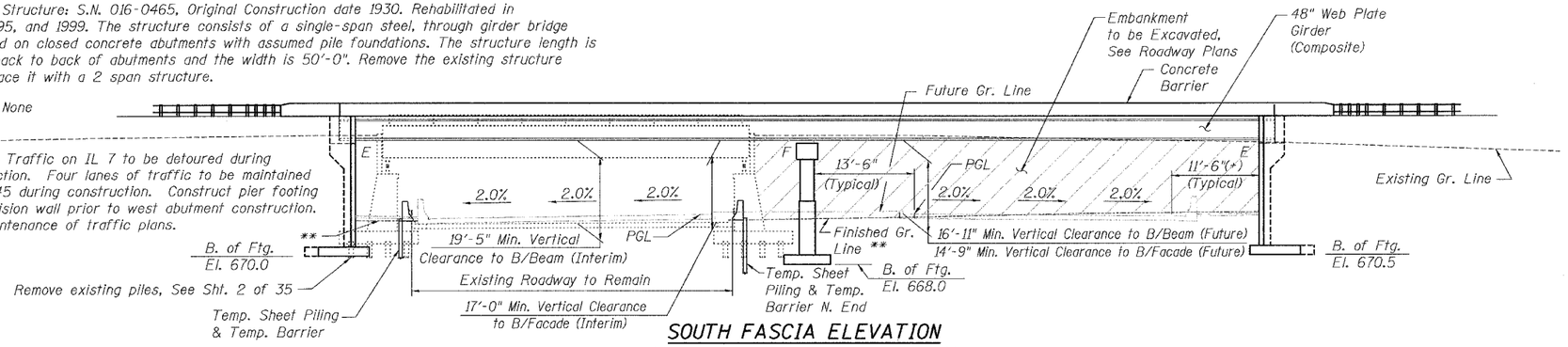
Bench Mark: Top of Brass Disk in West Curb of US Rte. 45 (LaGrange Rd.) Approximately 675' North of the Centerline of IL Rte. 7 (Southwest Highway). Elev. 689.07.

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 50'-0". Remove the existing structure and replace it with a 2 span structure.

Salvage: None

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

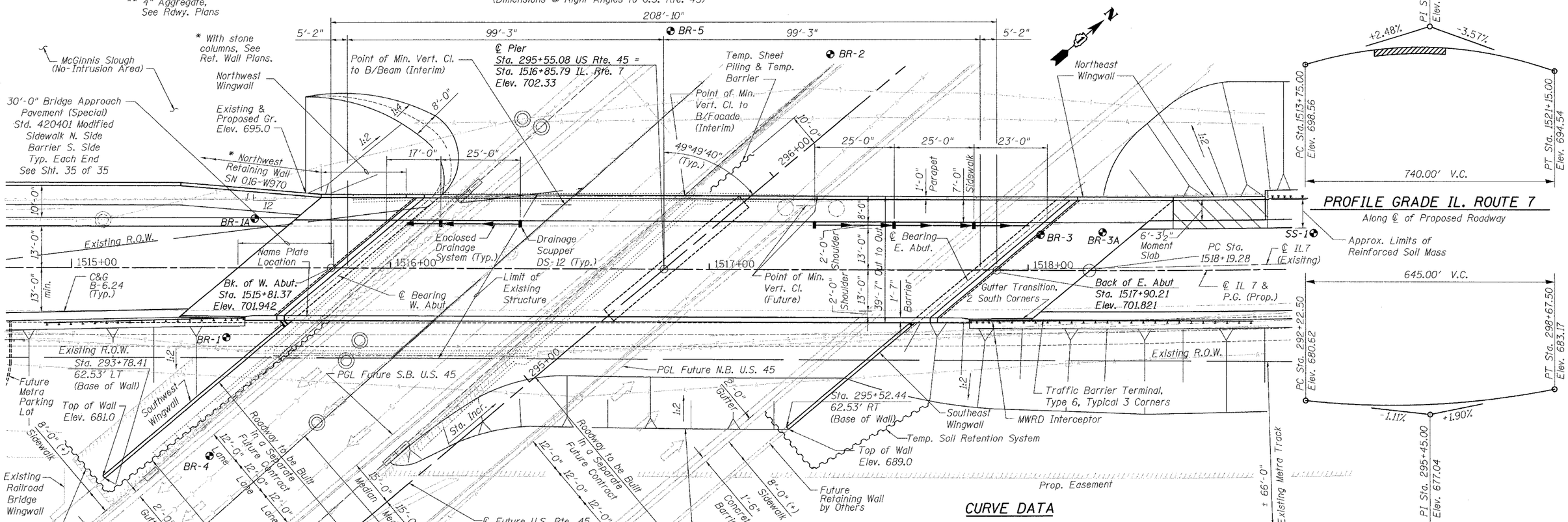
Staging: Traffic on IL 7 to be detoured during construction. Four lanes of traffic to be maintained on US 45 during construction. Construct pier footing and collision wall prior to west abutment construction. See maintenance of traffic plans.



SOUTH FASCIA ELEVATION

(Dimensions @ Right Angles to U.S. Rte. 45)

** 4" Aggregate, See Rdwy. Plans



PLAN

LEGEND

- Indicates Boring Location
- Reinforced Soil Mass

DESIGN SPECIFICATIONS

AASHTO (2002)

LOADING HS20-44

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

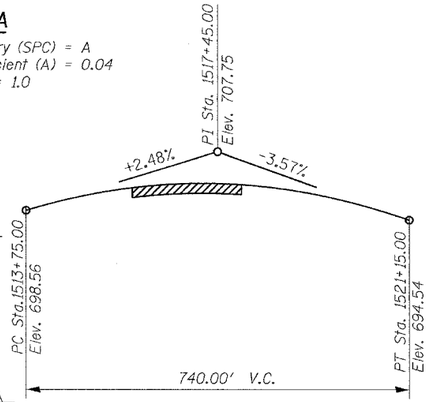
SEISMIC DATA

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)



PROFILE GRADE IL. ROUTE 7

Along ℄ of Proposed Roadway

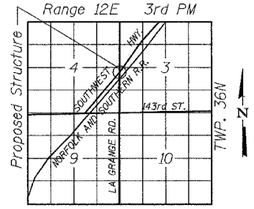
PROFILE GRADE U.S. ROUTE 45

Along Future PGL of N.B. and S.B. Lanes

CURVE DATA

IL. 7 (Southwest Highway)
Δ = 8° 08' 26" (LT)
D = 1° 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



DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

Bollinger, Lach & Associates, Inc.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS — JOEL L. TRIDLE — 5051 — OAK BROOK — LICENSED STRUCTURAL ENGINEER

DATE SIGNED: 3-09-06
EXP. DATE: 11-30-06

GENERAL PLAN

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

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