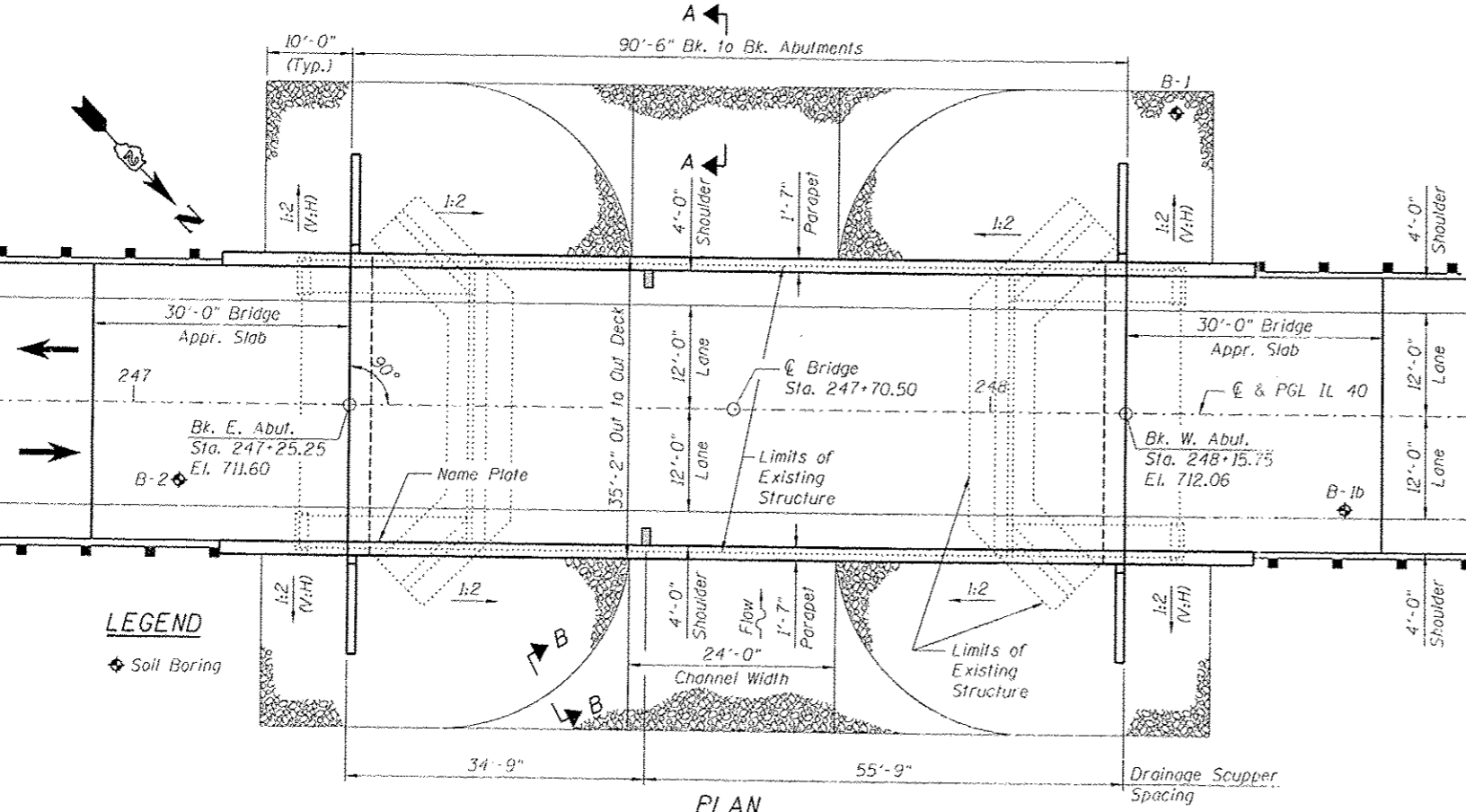
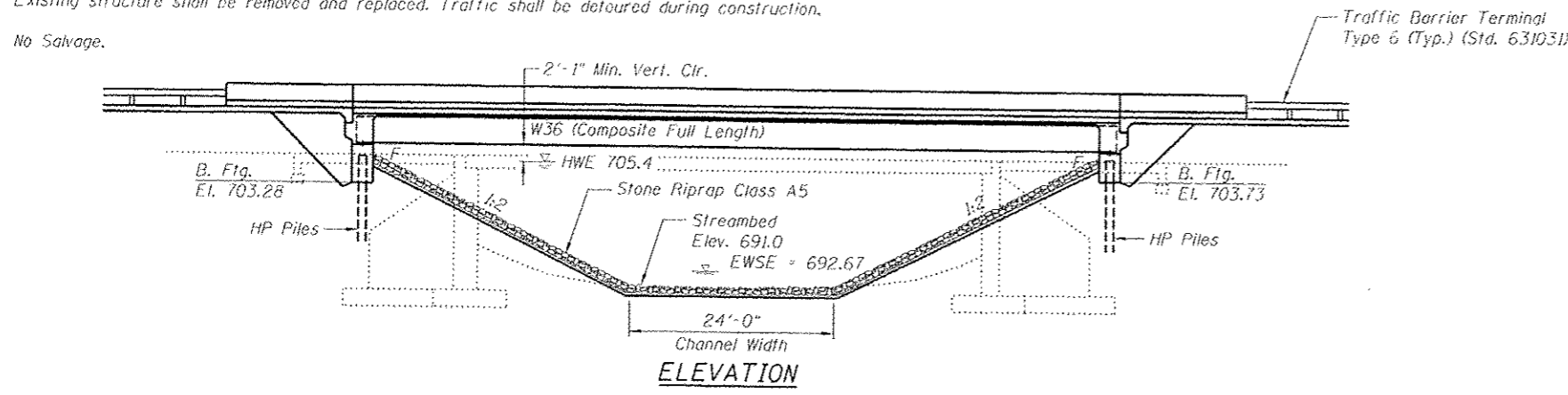


Bench Mark: Top of ROW marker, Sta. 235+96.37, 32.57' RI., Elev. 740.68

Existing Structure: S.N. 008-0014 originally constructed in 1926 as SBI Route 40 Section 5-B. It was originally a single span reinforced concrete deck girder superstructure built on closed abutments. In 1971 the superstructure was replaced with PPC deck beams built on reconstructed abutment caps as SBI 40, Section 5BR-1. In 1996, the HMA wearing surface was removed and replaced with a 5" concrete overlay. In 2009, bridge railings and six PPC deck beams were replaced as FAP Route 646, Section (5 BR-1)D. Bk. to Bk. abutments is 62'-9 3/4" and Out to Out of deck is 33'-0".

Existing structure shall be removed and replaced. Traffic shall be detoured during construction.

No Salvage.



LEGEND
 ♦ Soil Boring

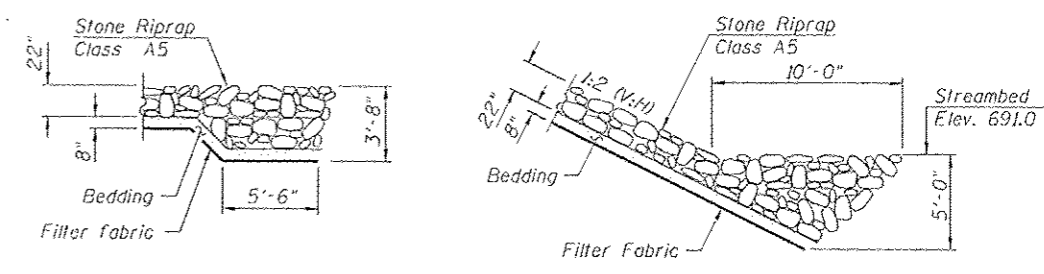
LOADING HL-93
 Allow 50#/sq. ft. for future wearing surface

DESIGN SPECIFICATIONS
 2010 AASHTO LRFD Bridge Design Specifications With 2010 Interims

DESIGN STRESSES

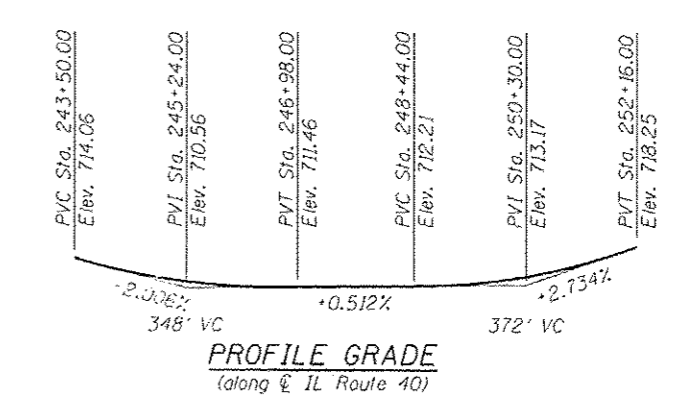
FIELD UNITS
 $f_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50W)

SEISMIC DATA
 Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration @ 1.0 sec $S_{d1} = 0.058$
 Design Spectral Acceleration @ 0.2 sec $S_{d5} = 0.097$
 Soil Site Class = C

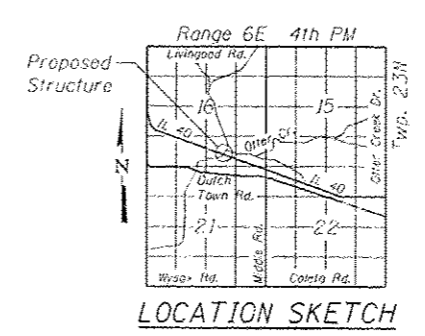


SECTION A-A

SECTION B-B



PROFILE GRADE
 (along IL Route 40)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 40 OVER OTTER CREEK
FAP 646 - SEC. 5BR-3
CARROLL COUNTY
STA. 247+70.50
STRUCTURE NO. 008-0051

APPROVED
 For Structural Adequacy Only
De Carl Ruyter
 Engineer of Bridges & Structures



De Carl Ruyter 10-11-13
 Signature
 November 30, 2014
 Expires

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
S.N. 008-0051

F.A.P. RTE. 646	SECTION 5BR-3	COUNTY CARROLL	TOTAL SHEETS 84	SHEET NO. 24
			CONTRACT NO. 64DB4	
ILLINOIS FED. AID PROJECT				

ZROKA Engineering
 Zroka Engineering, P.C.
 4216 North Hermitage
 Chicago, IL 60613

USER NAME = SHW	DESIGNED - PMM	REVISIONS -
PLOT SCALE = 0:2.0000 1" = 10'	CHECKED - DAZ	REVISIONS -
PLOT DATE = 10/16/2013	DRAWN - SAW	REVISIONS -
	CHECKED - PMM	REVISIONS -

SHEET NO. 1 OF 19 SHEETS