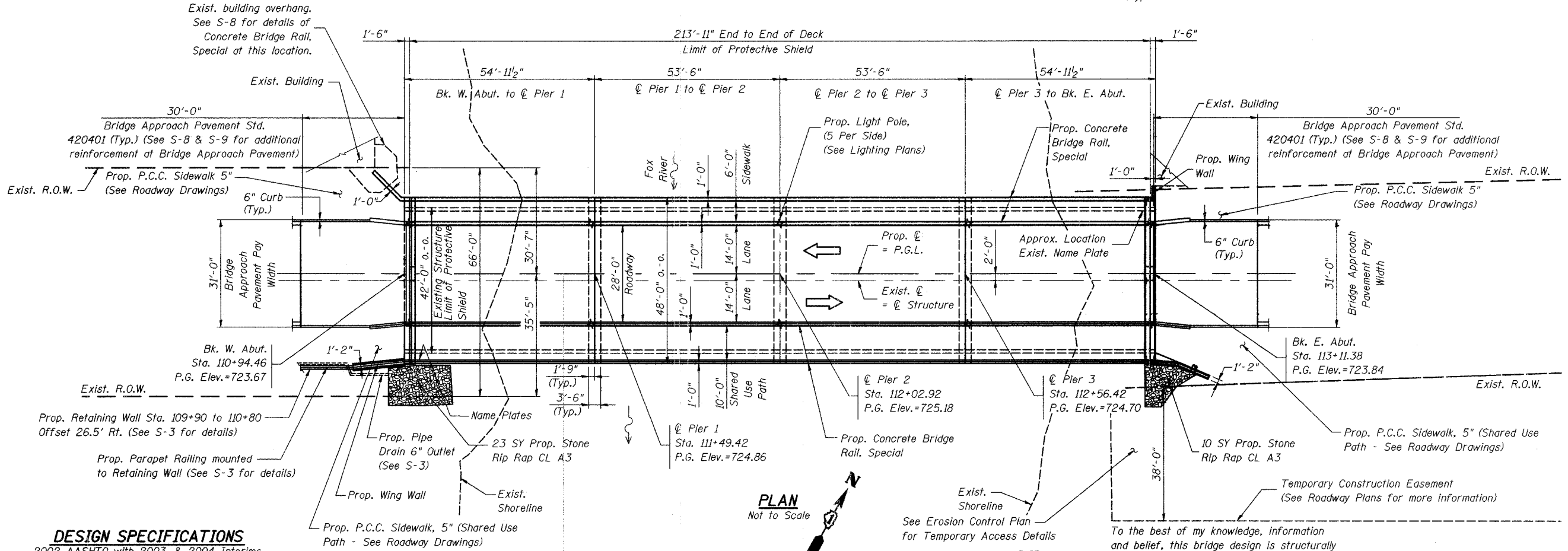
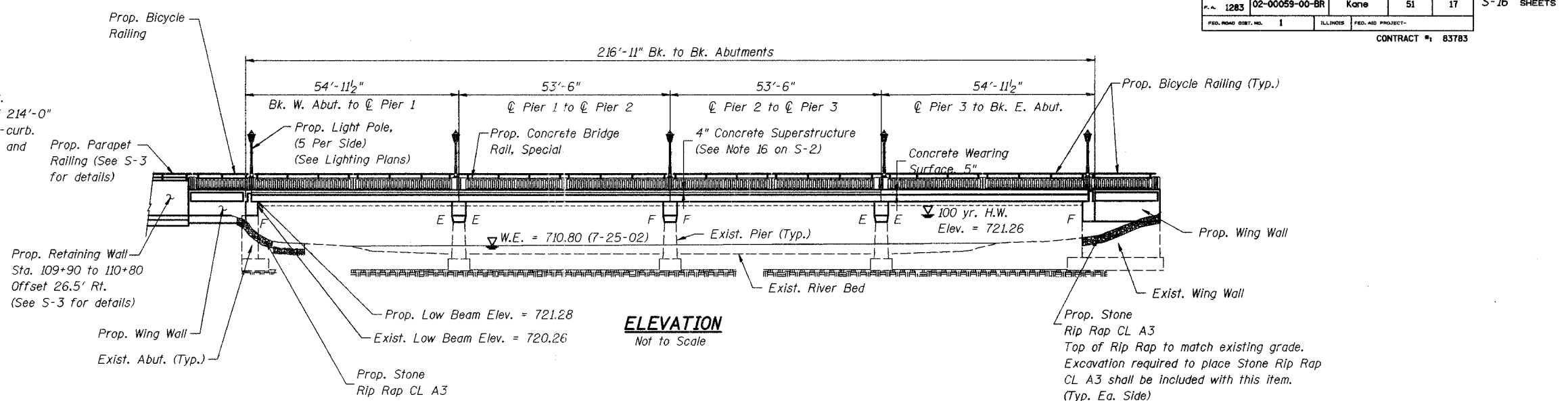


BM 1:
Cut square in concrete wall located at the Northwest corner of the Main Street Bridge over the Fox River. Approximately 19.0' Northwest of the centerline of Main Street.
Elevation = 727.79

Existing Structure - Bridge constructed in 1935.
Steel Beams with non-composite concrete deck.
Four (4) spans at 53'-6" for a total length of 214'-0"
The structure is 42'-0" o.-o., 30'-0" curb-to-curb.
The substructure consists of closed abutments and solid concrete piers founded on rock.

Salvage - Existing Superstructure to be removed and the existing substructure to be repaired and modified to accommodate proposed superstructure.
Salvage and re-install existing Name Plate at location indicated below.



DESIGN SPECIFICATIONS
2002 AASHTO with 2003, & 2004 Interims

LOADING HS20-44
65#/sq. ft. for wearing surface (included in contract)
25#/sq. ft. for future wearing surface.

DESIGN STRESSES

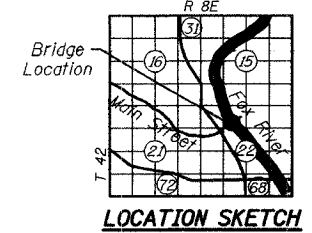
FIELD UNITS
f_c = 3,500 psi (Class SI)
f_c = 4,000 psi (Class BD)
f_y = 60,000 psi (Reinforcement Bars)

PRESTRESS UNITS
f_c = 5,000 psi
f_{ci} = 4,000 psi
f_{st} = 201,960 psi (1/2" φ Strands)
f_s = 270,000 psi (1/2" φ Strands)

SEISMIC DATA
Seismic Performance Category (SPC) = "A"
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

FOX RIVER BUILT 2005 BY VILLAGE OF CARPENTERSVILLE SEC. 02-00059-00-BR LOADING HS20 STR. NO. 045-6150

LETTERING FOR NAME PLATE
Proposed and Existing Name Plates to be placed at Corner of South West Parapet (See Std. 515001) (Salvage Existing Name Plate)
(Cost to salvage and re-install existing name plate shall be included under Name Plates)



WATERWAY INFORMATION

Drainage Area = 1,425 Sq. Mi.

Flood	Freq. Yr.	Q c.f.s.	Opening Sq. Ft. Exist.	Prop.	Nat. H.W.E.	Head-Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
Base	100	10,015	2,352	2,500	*721.50	0	0	*721.50	*721.50

* Elevation given in FEMA datum. To convert to survey datum, Subtract 0.24'.

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

General Plan and Elevation
Main Street Over Fox River
"Public Waters"
Village of Carpentersville
Section 02-00059-00-BR
SN. 045-6150
Kane County

DATE 02-25-2005



Robert S. Davis
Structural Engineer
Smith Engineering Consultants, Inc.