B.M. 3206 -
Cut on top SE wingwall of bridge over Mink Creek and 200' S. of Renwick Rd.
Elev. 606.27

Existing Structure -
The three span I-55 structures were built in 1994 as part of the state of Illinois F.A.I 55, Sec. 27B-1BR(89). The northbound (S.N. 099-4615) and southbound (S.N. 099-4616) carry freeway traffic over Mink Creek. The continuous slab superstructure consists of three equal span lengths of 25'-0". Both structures are 77'-8" long from bk. to bk. of abutments and 45'-2" wide. The reinforced concrete deck slab is 12" thick. The abutments and piers are founded on steel piles with reinforced concrete encasement. The existing concrete deck shall be partially removed and widened. The road shall be kept open with two lanes of traffic in each direction at all times utilizing stage construction.

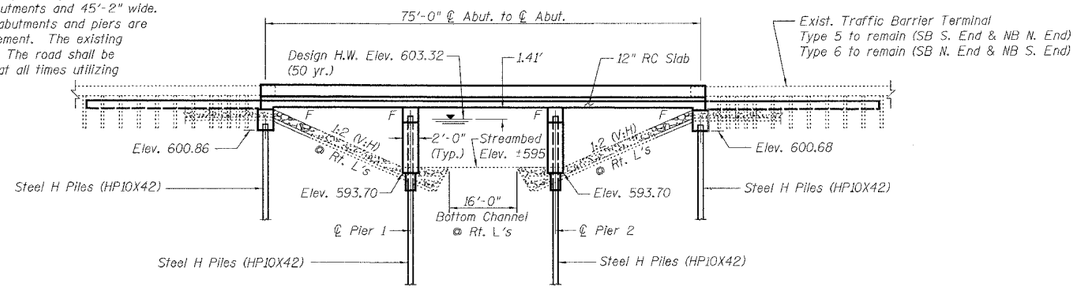
Salvage -
None

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

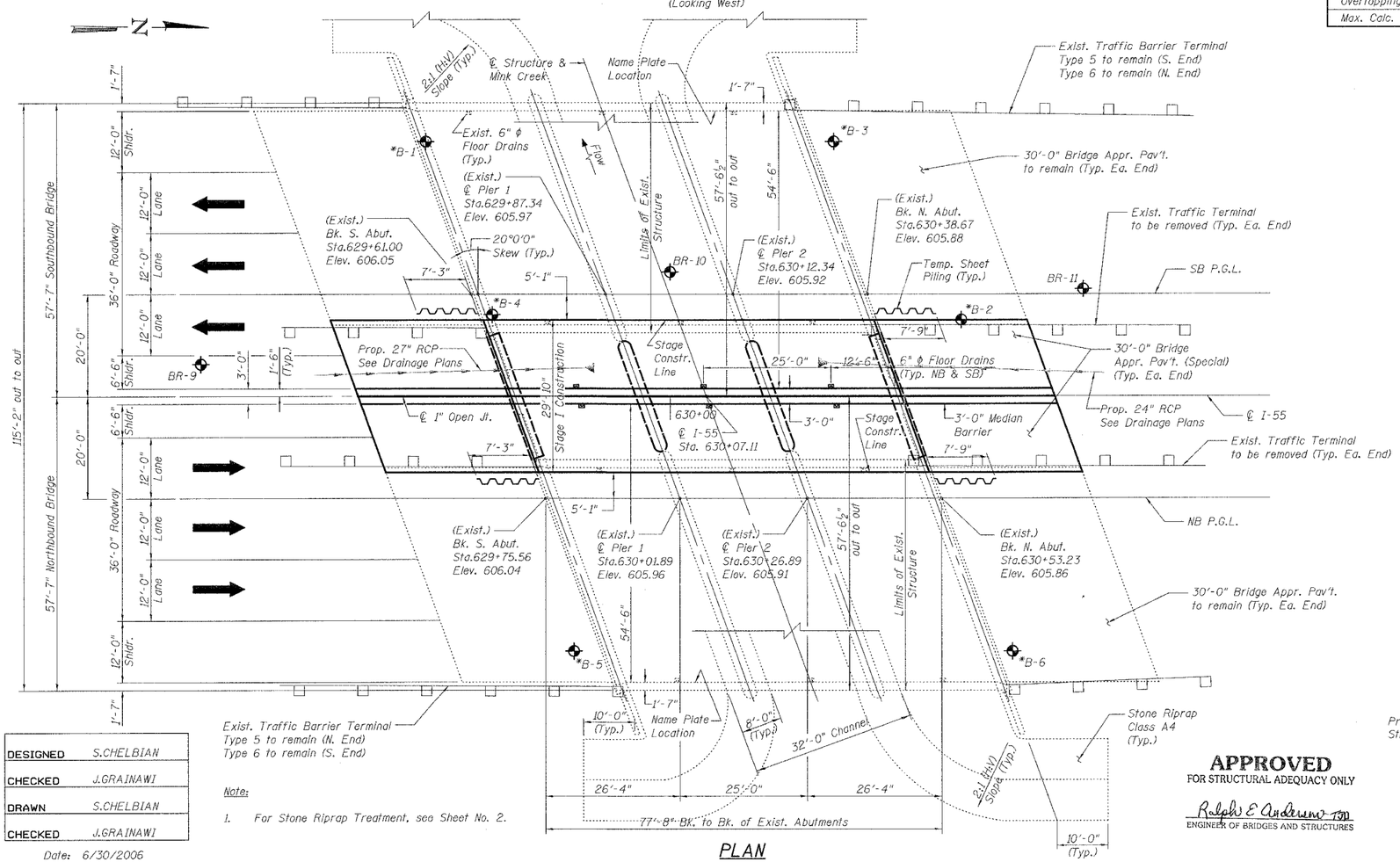
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55	**	WILL	505	374
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
16 SHEETS

** SECTION 2006-032 BY
CONTRACT NO. 60B86



ELEVATION VIEW
(Looking West)



PLAN

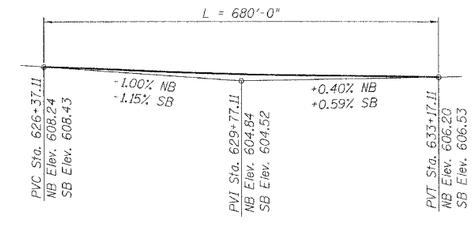
SCOPE OF WORK

1. Partially remove and widening both the northbound and southbound approach pavements to the inside median.
2. Widen the northbound and southbound bridges to the inside median with new cast-in-place reinforced 12" concrete slab.
3. Widening the existing substructure elements. Completely remove the existing northbound and southbound inside wingwalls in accordance with the Standard Specifications.
4. Add new 16" riprap slopewall at new construction and maintain existing slopewall.
5. Repair all substructure defects with formed concrete repair and/or epoxy crack seal.
6. Utilize stage construction as noted herein.

WATERWAY INFORMATION

Existing Low Grade Elev. 605.67' @ Sta. 631+00.00
Drainage Area = 9.0 sq. mi. Proposed Low Grade Elev. 606.11' @ Sta. 631+75.50

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	1095	270.9	271.7	603.16	0.20	0.24	603.36	603.40
Design	50	1565	279.8	280.6	603.32	0.41	0.46	603.73	603.78
Base	100	1739	296.7	297.5	603.61	0.44	0.51	604.05	604.12
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	2212	339.0	339.9	604.33	0.53	0.61	604.86	604.94



NB & SB PROFILE GRADE OF I-55

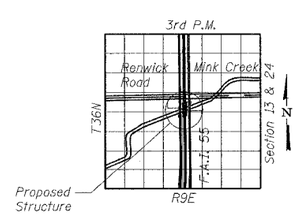
DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)

LOADING HS20-44 & ALT.
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO

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

LEGEND
* B-1 - Soil Boring Location (1993)
BR-1 - Soil Boring Location (2006)



LOCATION SKETCH

STATE OF ILLINOIS
JAMAL I. GRAINAWI
81-5161
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER

Signed Jamal Grainawi
Jamal I. Grainawi, S.E. Il. Lic. No. 081-005161
Expires 11-30-2006
Date 6/30/06

DESIGNED	S.CHELBIAN
CHECKED	J.GRAINAWI
DRAWN	S.CHELBIAN
CHECKED	J.GRAINAWI

Date: 6/30/2006

Note:
1. For Stone Riprap Treatment, see Sheet No. 2.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES

PARSONS BRINCKERHOFF

GENERAL PLAN & ELEVATION
I-55 OVER MINK CREEK
FAI ROUTE 55-SEC. 2006-032 BY
WILL COUNTY
STATION 630+07.11
S.N. 099-4615 (NB)
S.N. 099-4616 (SB)

6/30/2006 3:47:27 PM G:\18617A\Struct\Cadd\Pre-Final\MINK CREEK\Final Bridge Contract\092203-60B86-000-000-001.dgn