

Bench Mark: BM #5 Set at Sta. 131+88.6, Elev 915.520. Square cut on the 3rd step from the road level on concrete stairs to brick pump house about 90' northwest of railroad bridge over IL. Routes 47 and 72, and U.S. Route 20

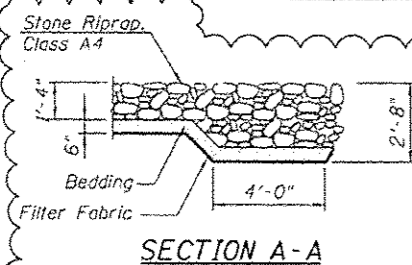
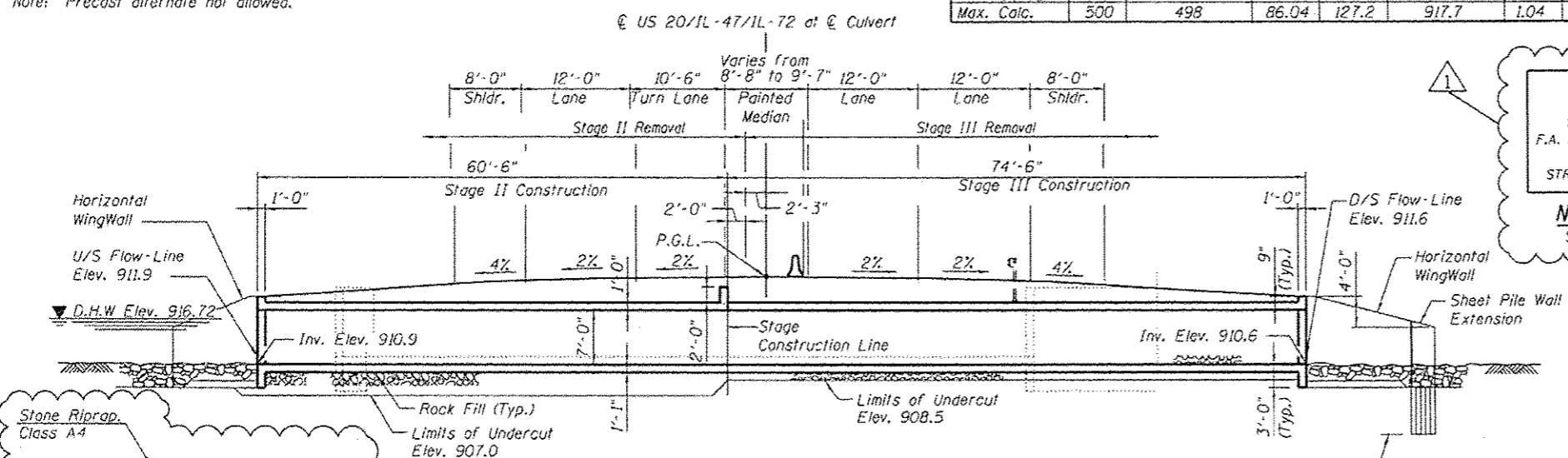
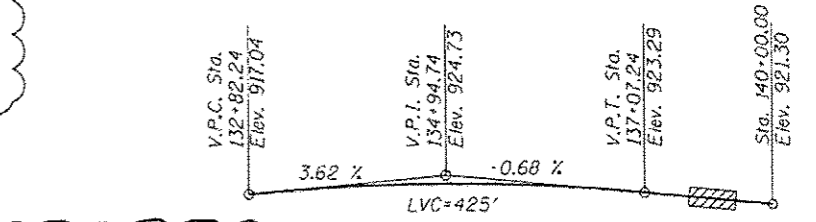
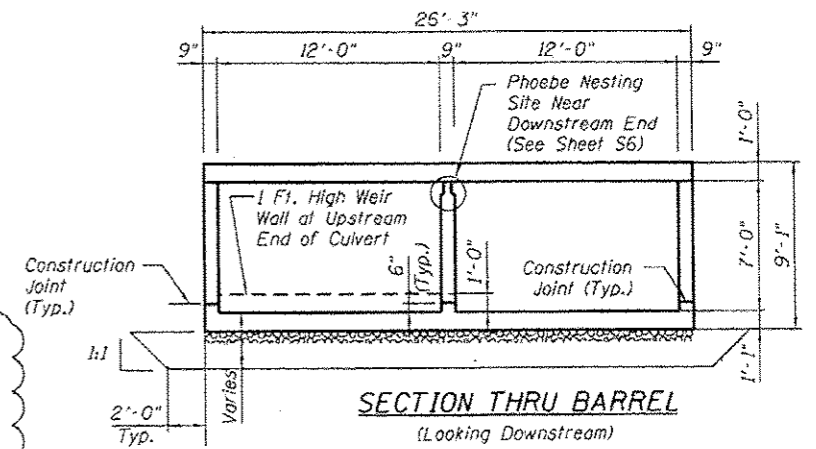
Existing Structure: SN 045-2029 was built in 1936 as part of S.B.I. Route 47, Section 106-S. A low flow profile was cut into the south barrel. The structure is a 2-cell cast-in-place concrete box culvert approximately 23.8 feet in width and 91.8 feet in length. The structure is skewed 32 degrees 15 minutes from the roadway centerline and carries four 12-foot traffic lanes and two variable width shoulders. Structure to be removed and replaced with a double-cell cast-in-place concrete box culvert. Traffic to be maintained utilizing stage construction.

No Salvage.

Note: Precast alternate not allowed.

WATERWAY INFORMATION

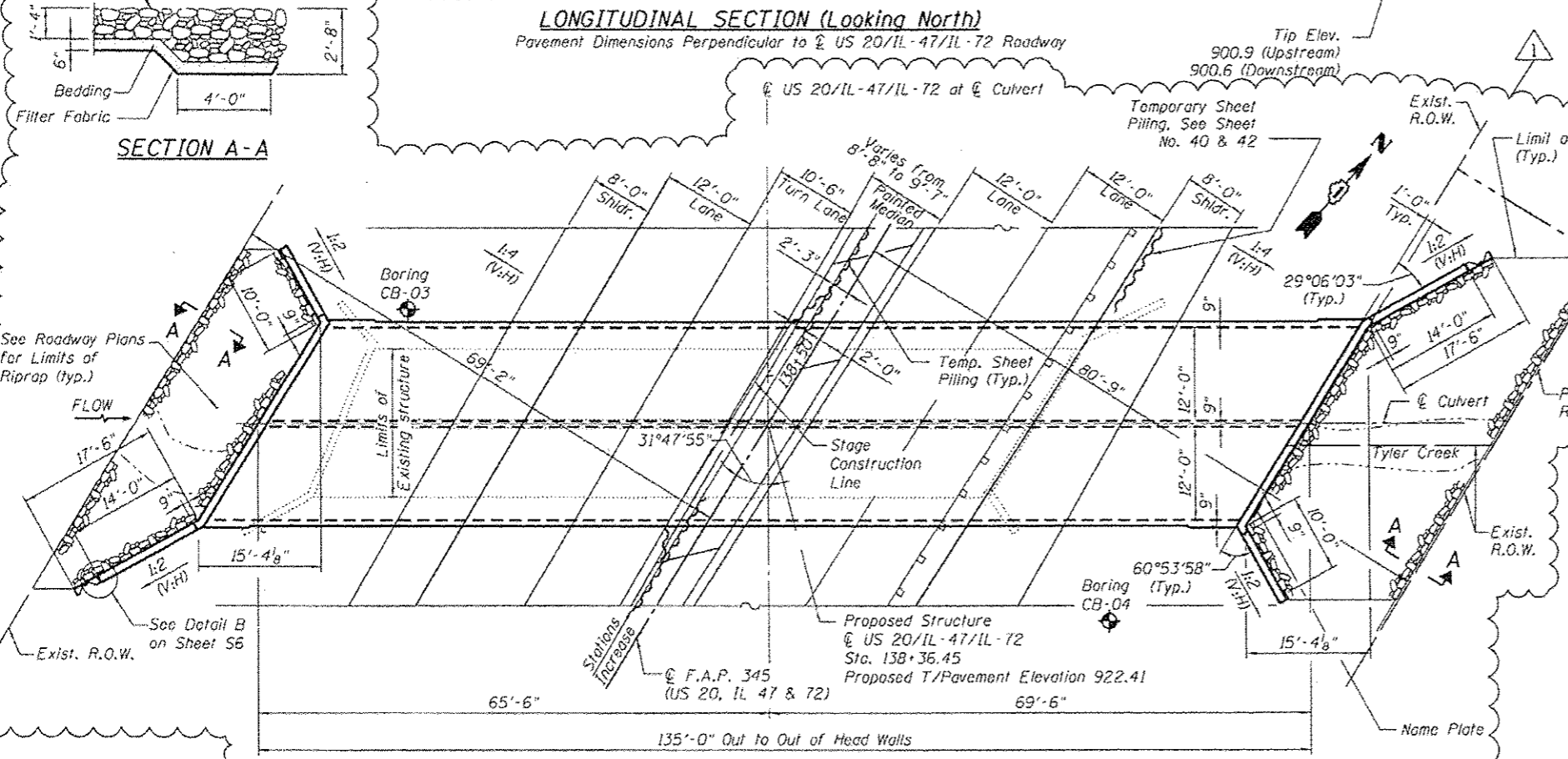
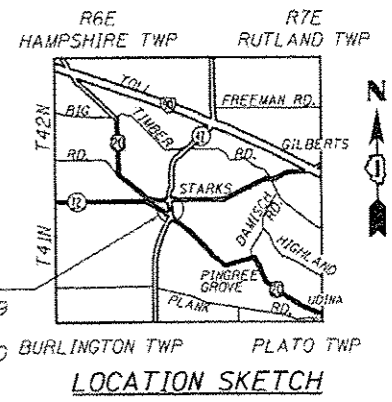
Drainage Area = 0.95 Sq. Mi.		Existing Low Grade Elev. = 921.10 ft. @ Sta. 140+23							
		Proposed Low Grade Elev. = 921.10 ft. @ Sta. 140+23							
Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft.		Natural H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	127	51.84	82.08	915.82	0	0	915.82	915.82
Base	50	245	67.5	103.7	916.72	0.24	0.15	916.96	916.87
Overtopping	100	335	74.88	113.5	917.13	0.60	0.44	917.73	917.57
Max. Calc.	500	498	86.04	127.2	917.7	1.04	0.83	918.74	918.53



STATION 138+36.45
BUILT 20... BY
STATE OF ILLINOIS
F.A. RT. 345 SEC. 106-S-N-1
LOADING HL-93
STRUCTURE NO. 045-2040
NAME PLATE
See Std. 515001

LOADING HL-93
Allow 50 #/Sq Ft. Future Wearing Surface
DESIGN SPECIFICATIONS
100T Bridge Manual January 2012,
100T Culvert Manual, All
Design Memoranda, and
2012 AASHTO LRFD Bridge Design
Specifications, 6th Edition
With 2013 Interims
DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

Notes:
1. For Index of Sheets, See Sheet S2.
2. For Total Bill of Materials, See Sheet S2.



APPROVED
For Structural Adequacy Only
Mehmet B. Civelek
Engineer of Bridges & Structures

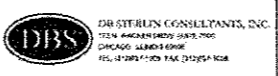
GENERAL PLAN
US RTE 20 / IL RTE 47 / IL RTE 72
OVER TYLER CREEK
F.A.P. ROUTE 345-SECTION 106-S-N-1
KANE COUNTY
STATION 138+36.45
STRUCTURE NO. 045-2040

Signed *Mehmet Basar Civelek*
Mehmet Basar Civelek, P.E., S.E.
Il. Lic. No. 081-005449
Expires 11-30-2014
Date 7-18-2014

ADDENDUM 1 7-18-14

DATE = \$DATES
FILE NAME = \$FILES

DESIGNED - MBC	REVISIONS - 6/12/14 BA
DRAWN - SSR	REVISIONS -
CHECKED - WPK	REVISIONS -
DATE - 7/7/14	REVISIONS -



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 045-2040
SHEET NO. 51 OF 59 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	106-S-N-1	KANE	167	104
				CONTRACT NO. 60T10
FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT				