

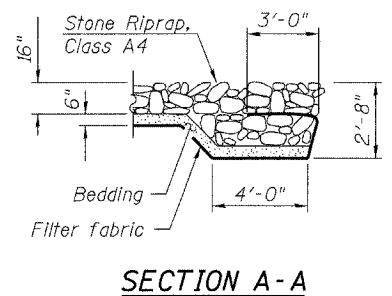
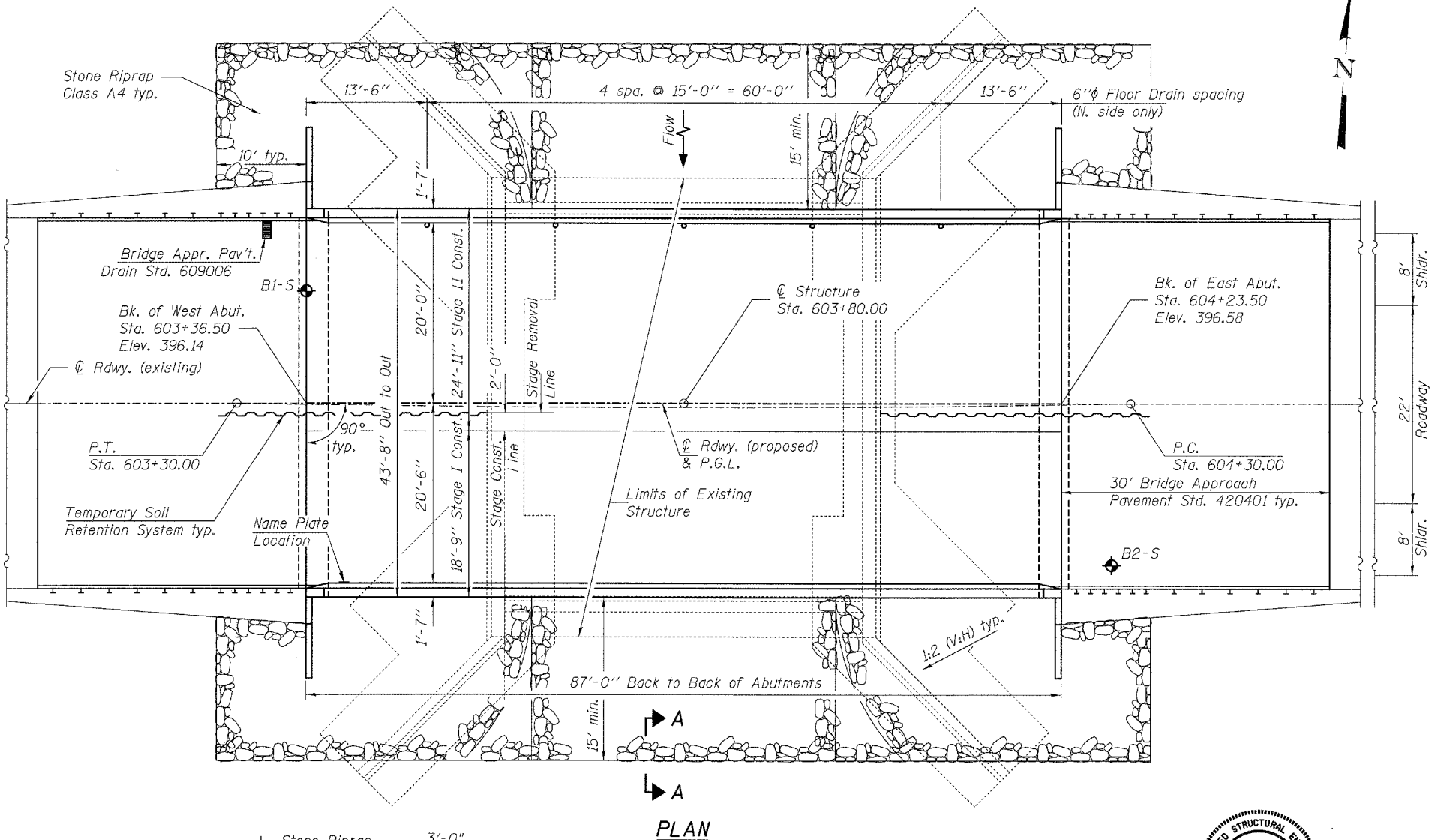
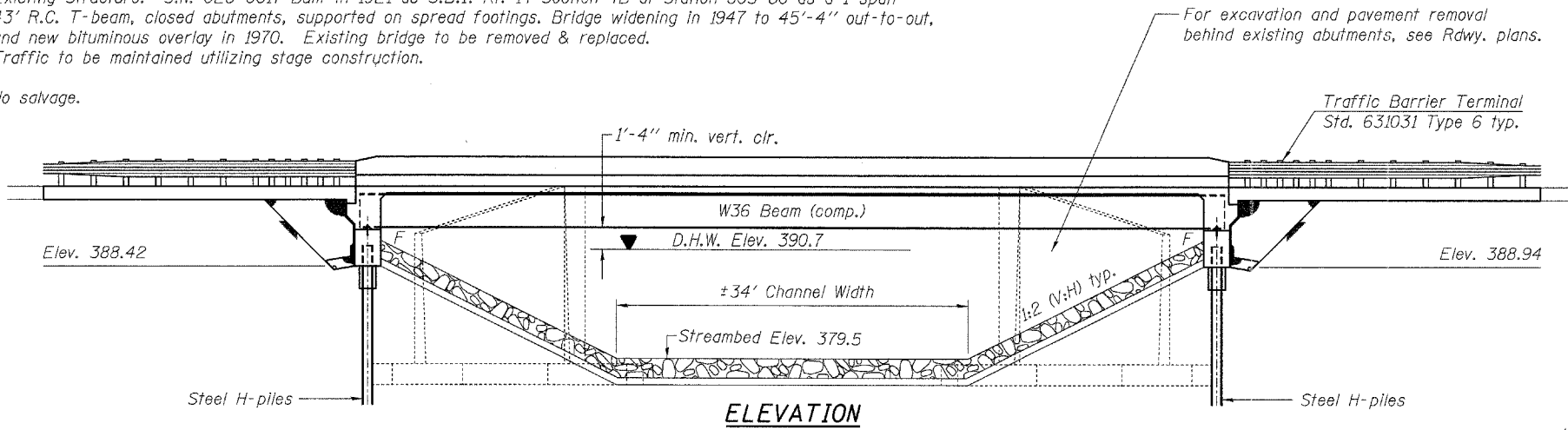
Bench Mark: Permanent survey marker 105 @ Sta. 603+00, 20 ft. Right Elev. 395.77'

Existing Structure: S.N. 028-0017 Built in 1921 as S.B.I. Rt. 14 Section 4B at Station 603+80 as a 1-span 43' R.C. T-beam, closed abutments, supported on spread footings. Bridge widening in 1947 to 45'-4" out-to-out, and new bituminous overlay in 1970. Existing bridge to be removed & replaced. Traffic to be maintained utilizing stage construction.

No salvage.

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.P. 869	104B-2	Franklin	56	41
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

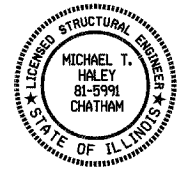
Contract # 98775



PLAN

SECTION A-A

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES



Michael S. [Signature]
Michael T. Haley
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2008
Date 5/8/07

INDEX OF SHEETS

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3. Stage Construction Details
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9. Framing Plan & Steel Details
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12. Temporary Concrete Barrier
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14. Steel Pile Details
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16. Soil Borings-2

LOADING HL-93

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

DESIGN SPECIFICATIONS

AASHTO LRFD Bridge Design Specifications
U.S. 3rd. Edition 2004 w/2005 Interims

DESIGN STRESSES

FIELD UNITS

- $f'_c = 3,500$ psi
- $f_y = 60,000$ psi (reinforcement)
- $f_y = 50,000$ psi (Structural Steel M270 Grade 50)

SEISMIC DATA

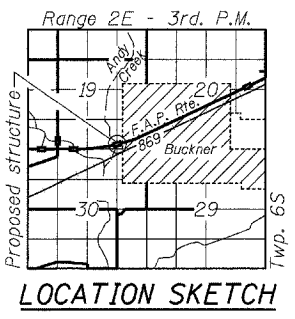
Seismic Performance Zone (SPZ) = 2
Bedrock Acceleration Coefficient (A) = 11.5
Site Coefficient (S) = 1.5

WATERWAY INFORMATION

Exist. Low Grade Elev. 395.4 @ Sta. 597+50
Prop. Low Grade Elev. 395.4 @ Sta. 597+50
Drainage Area = 16.83 sq. mi.

Flood Yr.	Freq.	Structure Number	Q-C.F.S.		Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater E.I.	
			Exist.	Prop.	Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
10		028-0076	1,380	1,575	418.7	532.8	389.4	0.1	0.1	389.5	389.5
		028-2013	880	685	209.3	209.3					
		Total	2,260	2,260	628.0	742.1					
Design	50	028-0076	2,054	2,475	469.0	631.9	390.7	0.3	0.1	391.0	390.8
		028-2013	1,226	805	209.3	209.3					
		Total	3,280	3,280	678.3	841.2					
Base	100	028-0076	2,366	2,860	488.4	671.8	391.2	0.4	0.1	391.6	391.3
		028-2013	1,344	850	209.3	209.3					
		Total	3,710	3,710	697.7	881.1					
Max. Calc.	500	028-0076	2,932	3,690	512.5	769.0	392.4	1.0	0.0	393.4	392.4
		028-2013	1,768	1,010	209.3	209.3					
		Total	4,700	4,700	721.8	978.3					

10-Year Velocity Through Existing Bridge = 3.3 fps 10-Year Velocity Through Prop. Bridge = 3.5 fps



Design Scour Elevation (feet)	W. Abutment	E. Abutment
	388	389

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN
ILLINOIS ROUTE 14 OVER
ANDY CREEK
F.A.P. ROUTE 869 - SECTION 104B-2
FRANKLIN COUNTY
STATION 603+80.00
STRUCTURE NO. 028-0076

REVISIONS

NAME	DATE

LIN ENGINEERING, LTD.
Consulting Engineers
Chatham, Illinois

Designed By: JGT
Checked By: MTH
Date: 12/06

Drawn By: AJF
File: 028-0076.DGN