

Benchmarks: 1.) BM #1: Chiseled "□" on the top of the southwest wingwall Sta. 402+49/18' RT. Elevation = 623.25.

Existing Structure: SN 029-0009, built in 1924 as Section 12B, rebuilt in 1975 as Section 12 BR. The superstructure consists of 11 precast prestressed concrete deck beams with guardrail attached to the exterior beams and bituminous wearing surface. The substructure consists of reinforced concrete closed abutments and reinforced concrete vertical cantilever wingwalls supported by spread footings on untreated timber piles. The back-to-back of abutments dimension measures 37'-4 3/4" and the out-to-out dimension measures 33'-0". The span length is 35'-7 1/4" with no skew. One lane of traffic will be maintained utilizing stage construction.

No Salvage.

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

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications, 4th Edition (2009 Interim Revisions)

DESIGN STRESSES

FIELD UNITS:
f'c = 3,500 psi (Cast-In-Place)
fy = 60,000 psi (Reinforcement)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.108 g
Design Spectral Acceleration at 0.2 sec. (SDs) = 0.164 g
Soil Site Class = D

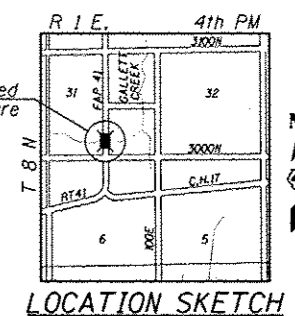
STATION 402+26.20
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 574 SECTION 12BR-1
LOADING HL-93
STR. NO. 029-0072

NAME PLATE
See Std. 515001

Exp: 10/30/2012



Gerald B. Rothert
Date: 8/16/2012



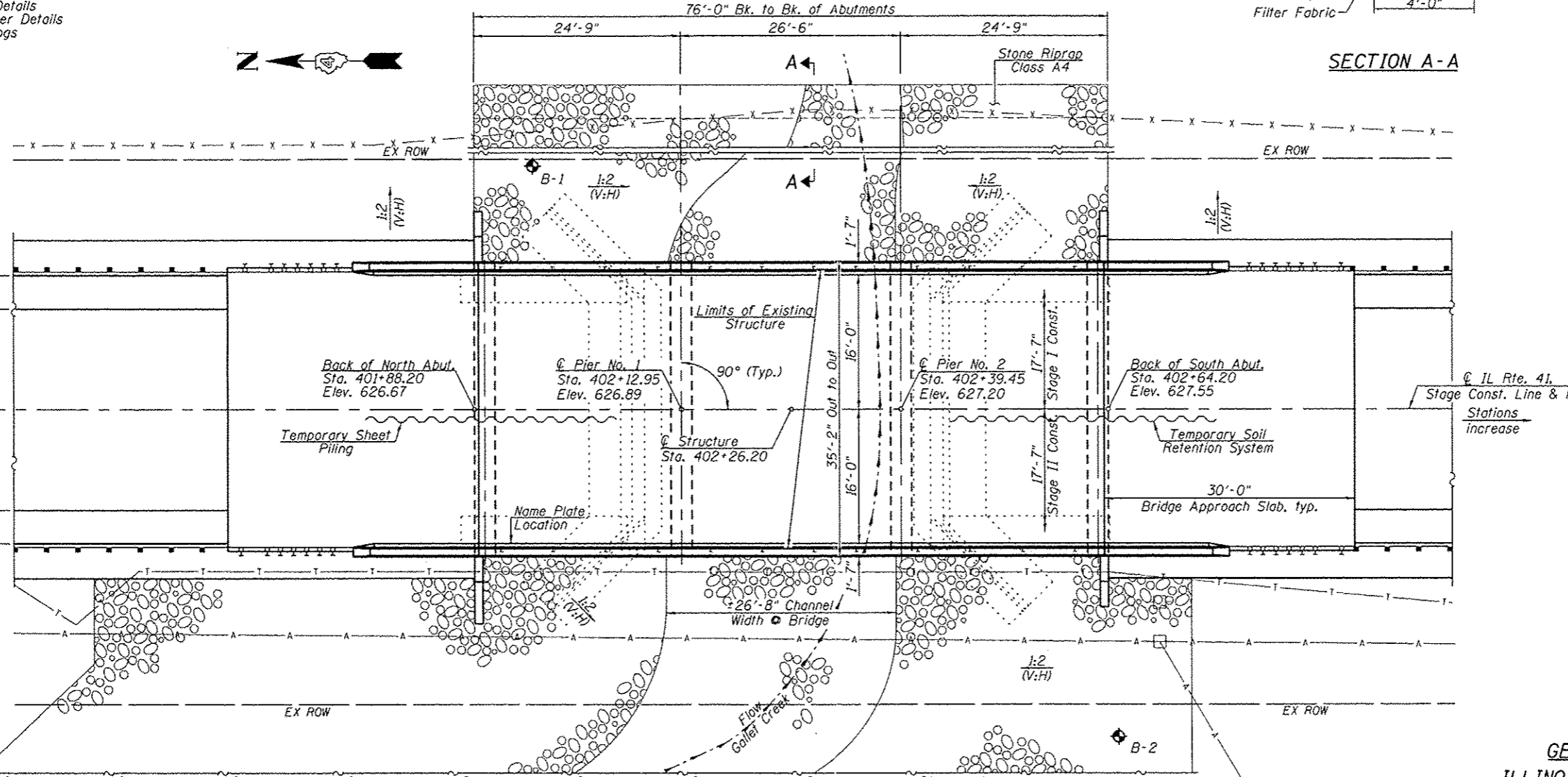
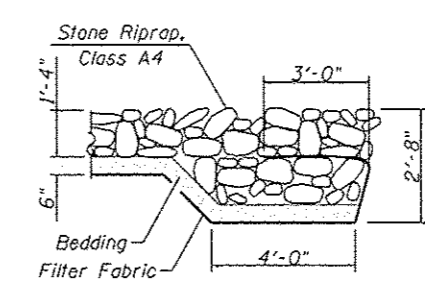
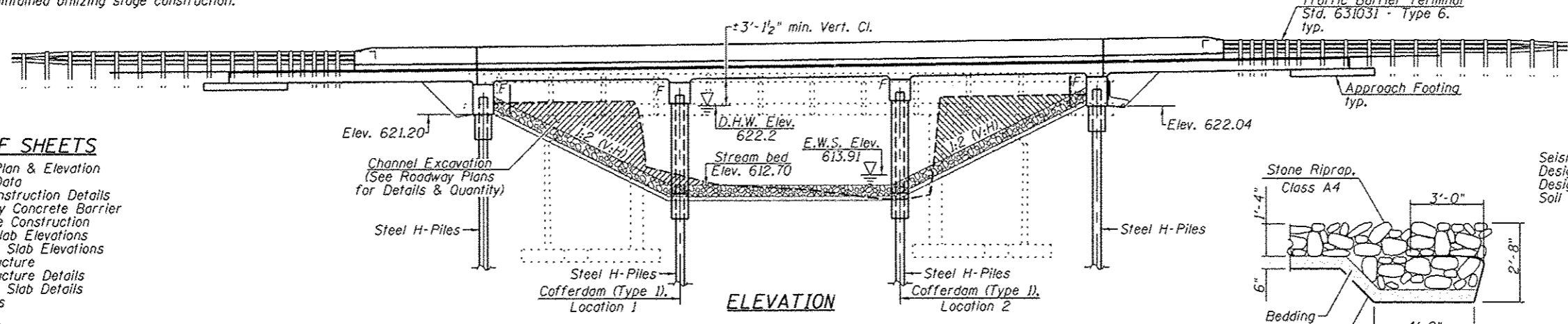
APPROVED
For Structural Adequacy Only

D. Carl Remy
Engineer of Bridges & Structures

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 41 OVER GALLET CREEK
F.A.P. ROUTE 574 SECTION 12BR-1
FULTON COUNTY
STATION 402+26.20
STRUCTURE NO. 029-0072

INDEX OF SHEETS

- 1 - General Plan & Elevation
- 2 - General Data
- 3 - Stage Construction Details
- 4 - Temporary Concrete Barrier For Stage Construction
- 5 - Top of Slab Elevations
- 6 & 7 - Approach Slab Elevations
- 8 - Superstructure
- 9 - Superstructure Details
- 10 & 11 - Approach Slab Details
- 12 & 13 - Abutments
- 14 & 15 - Piers
- 16 - HP Pile Details
- 17 - Bar Splicer Details
- 18 & 19 - Boring Logs



PLAN

Note: See Roadway Plans for riprap layout.

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	Allen Henderson & Associates, Inc. Civil and Structural Engineers Springfield, IL, 62703 Phone: (217)544-8033 IL Design Firm No. 184-001907	GENERAL PLAN & ELEVATION		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE =	DRAWN -	CHECKED -	REVISED -		STRUCTURE NO. 029-0072		574	12BR-1	FULTON	62	24
PLOT DATE =	CHECKED -	REVISED -	REVISED -		SHEET NO. 1 OF 19 SHEETS		CONTRACT NO. 68732				
							ILLINOIS FED. AID PROJECT				