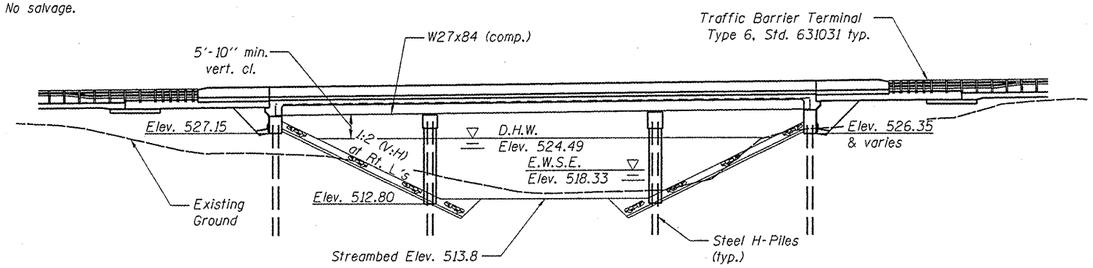
Benchmark: Chiseled square on the NE corner of north concrete rail of box culvert, west of Veterans Rood and Pleasant Hill Road intersection. Elev. 538.96

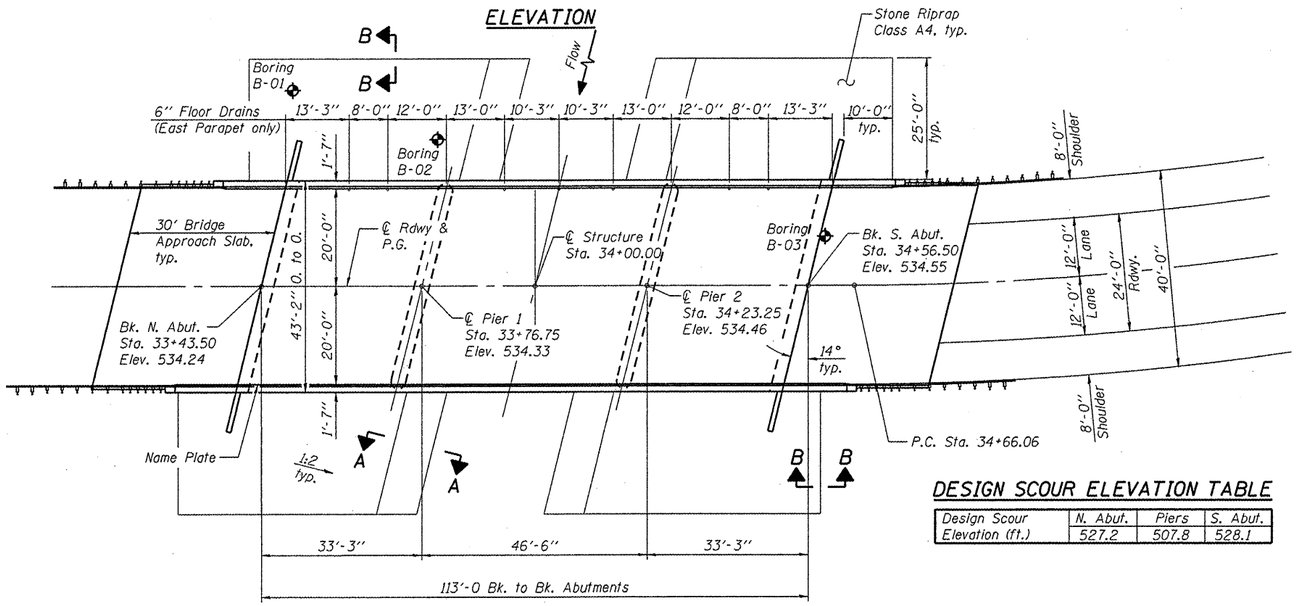
Existing Structure: S.N. 090-3104 was built in 1953. The original structure was a two-span continuous I-beam superstructure on closed abutments. In June 1980, the north abutment washed out. Later that same year, the bridge was reconstructed by adding a third span with a new pier and open abutment. The existing structure is 27'-6" wide and 124'-4" long. Structure is to be removed and replaced with a 3-span composite W27 steel beam bridge on open integral abutments on a new alignment. Traffic is to be maintained over existing bridge during construction.

No salvage.

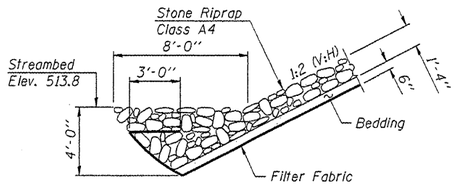
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



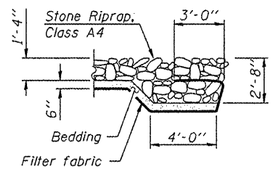
ELEVATION



PLAN



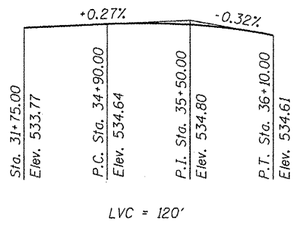
SECTION A-A



SECTION B-B

FARM CREEK
BUILT 20__ BY
FONDULAC ROAD DISTRICT
TAZEWELL COUNTY
SEC. 06-07109-00-BR
T.R. 156 STA. 34+00
STR. NO. 090-3244 LOADING HL-93

NAME PLATE
See Std. 515001



PROFILE GRADE

INDEX OF SHEETS

CURVE DATA

Δ = 20° 27' 20" (LT.)
D = 9° 23' 34"
T = 110.06'
L = 217.78'
E = 9.85'
R = 610.00'
S.E. = 8.0%
P.C. = Sta. 34+66.06
P.T. = Sta. 36+83.84
P.I. = Sta. 35+76.12

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	N. Abut.	Piers	S. Abut.
	527.2	507.8	528.1

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications with 2008 Interims

LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50W)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = .114
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = .180
Soil Site Class = D

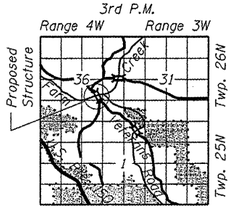
WATERWAY INFORMATION

Drainage Area = 38.5 sq. mi.
Exist. Low Grade Elev. 533.18 ft. @ Sta. 38+65
Prop. Low Grade Elev. 533.74 ft. @ Sta. 31+52.01

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Natural H.W.E. Exist.	Natural H.W.E. Prop.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Ten-Year	10	2906	392	481	522.98	522.68	0.90	0.88	523.88	523.56
Design	50	5122	533	616	524.94	524.49	1.56	1.20	526.50	525.69
Base	100	6221	587	664	525.64	525.10	1.92	1.42	527.56	526.52
Max. Calc.	500	9216	719	784	527.29	526.55	2.74	0.18	530.03	526.73

10-Year Velocity Through Existing Structure = 8.6 fps
10-Year Velocity Through Proposed Structure = 6.9 fps

DESIGNED	JAE
CHECKED	BAS
DRAWN	SGM
CHECKED	BAS



LOCATION SKETCH

STATE OF ILLINOIS
BRYAN A. SWANSON
081-006716
PEORIA, IL
REGISTERED STRUCTURAL ENGINEER

Bryan Swanson
Date Signed: 8-16-11
Exp. Date: 11-30-12

MAURER ▲ STUTZ, INC. ENGINEERS SURVEYORS

GENERAL PLAN AND ELEVATION
VETERANS ROAD OVER FARM CREEK
T.R. 156 SEC. 06-07109-00-BR
TAZEWELL COUNTY
STATION 34+00.00
STRUCTURE NO. 090-3244

SHEET NO. 1	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
22 SHEETS	156	06-07109-00-BR	TAZEWELL	53	21
			CONTRACT NO. 89472		
	FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		