Benchmark: Railroad spike in Power Pole south of Structure Elev. 594.35.

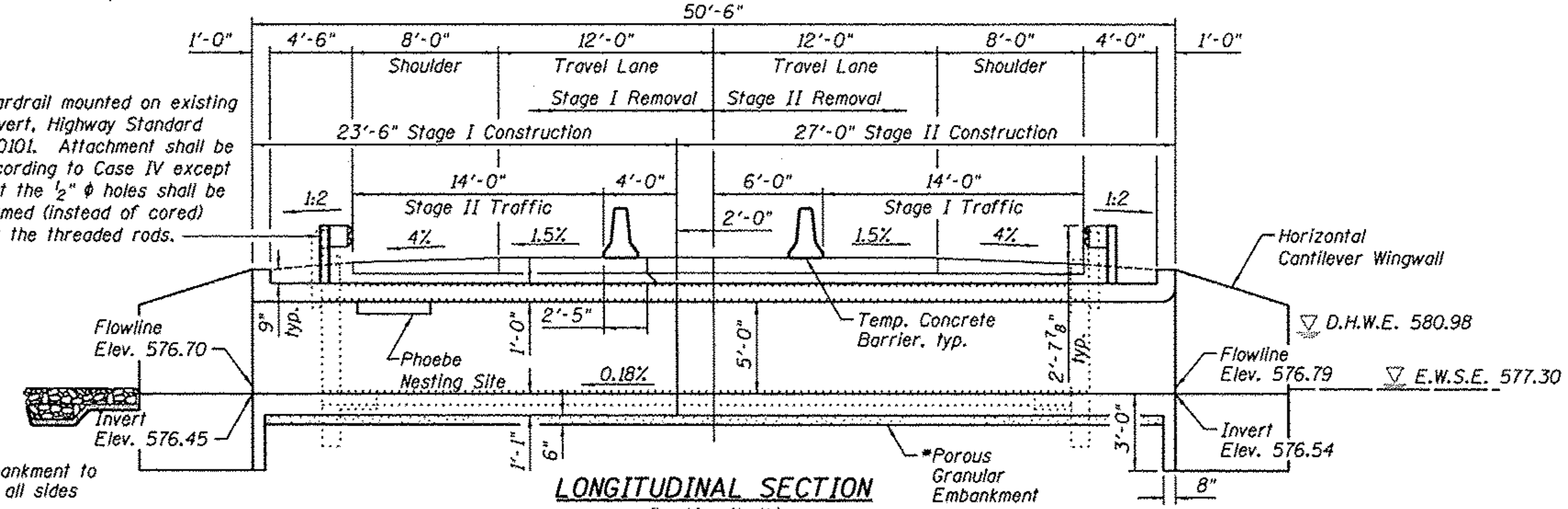
Existing Structure: SN 081-2001 built as Route 80 Section 128 in 1931 as a double 12′ x 5′ reinforced concrete box culvert with a 42′-0″ out to out length. Existing structure to be removed and replaced. Traffic to be maintained utilizing stage construction.

~~No Salvage~~

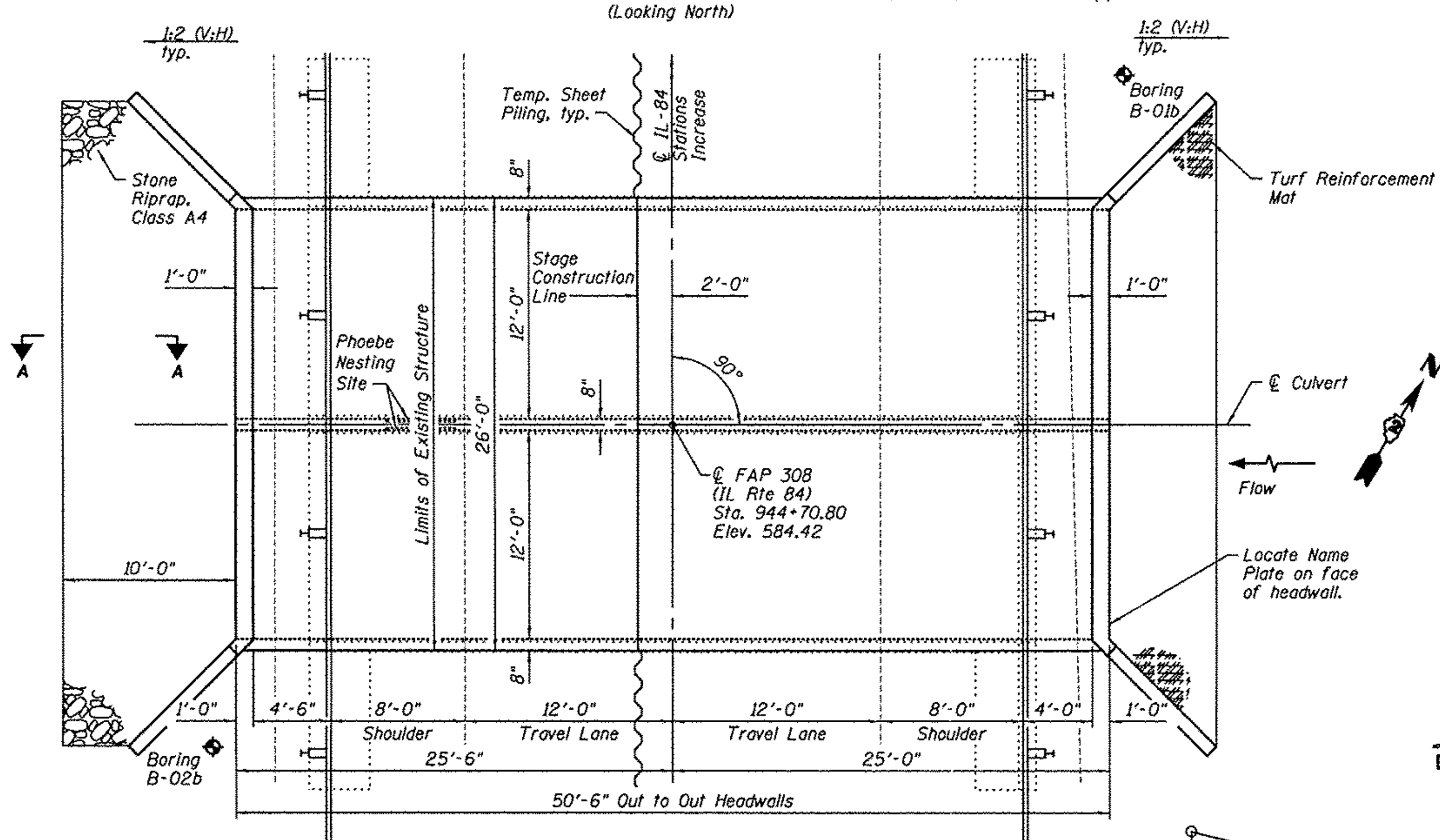
Precast alternate is not allowed.

Guardrail mounted on existing culvert, Highway Standard 630101. Attachment shall be according to Case IV except that the ½″ ϕ holes shall be formed (instead of cored) for the threaded rods.

* Porous Granular Embankment to extend 2′-0″ beyond all sides of the Box Culvert



LONGITUDINAL SECTION
(Looking North)



PLAN

INDEX OF SHEETS

1 General Plan and Elevation
2 Stage Construction and Temporary Sheet Piling
3 Temporary Concrete Barrier For Stage Construction
4 Culvert Details
5 Bar Splicer Assembly and Mechanical Splicer Details
6-7 Soil Boring Logs

CURVE DATA

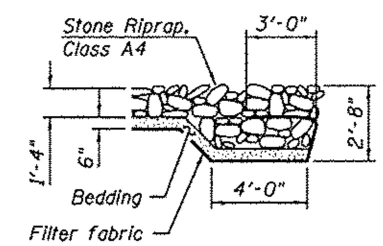
Δ = 18° 14′ 31″ (RT)
D = 1° 0′ 0″
T = 919.88′
L = 1,824.19′
E = 73.37′
R = 5,729.56′
S.E. = 0.0135′/ft.
P.C. = Sta. 925+11.60
P.T. = Sta. 943+35.79
P.I. = Sta. 934+31.48

STATION 994+70.80
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 308 SEC. 110T
LOADING HL-93
STRUCTURE NO. 081-2038

NAME PLATE
See Std. 515001

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

DESIGN SPECIFICATIONS
2010 AASHTO LRFD Bridge Design Specifications, 5th Edition with 2010 Interim Revisions



SECTION A-A

DESIGN STRESSES
FIELD UNITS

f′c = 3,500 psi
fy = 60,000 psi (Reinforcement)

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

ANTHONY J. STANDISH
081-005819
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS
exp 11/2012

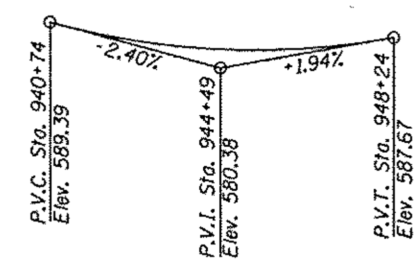
WATERWAY INFORMATION

Drainage Area = 1.54 sq. mi. Low Grade Elev. 584.32 @ Sta. 944+88									
Flood	Freq.	Q	Opening Sq. Ft.		Nat.	Head - Ft.		Headwater Elev.	
	Yr.	C.F.S.	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
	10	408	81	81	580.18	0.59	0.57	580.77	580.75
Design	50	681	100	100	580.94	1.18	1.16	582.12	582.10
Base	100	809	111	111	581.40	1.32	1.29	582.72	583.69
Overtop Existing	371	1050	120	120	582.30	2.02	N/A	584.32	N/A
Overtop Proposed	371	1050	120	120	582.30	N/A	2.02	N/A	584.32
Max. Calc.	500	1131	120	120	582.61	2.11	2.11	584.72	584.72

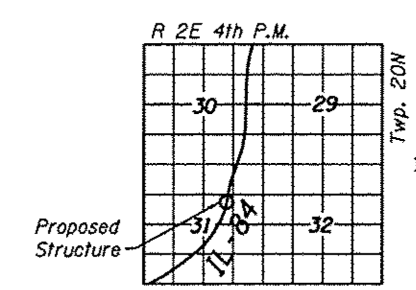
DESIGN SCOUR ELEVATION TABLE

	Upstream	Downstream
Design Scour Elevation (ft.)	573.54	573.45

Rev. 10-26-12



PROFILE GRADE
(F.A.P. 308 Along ℄ of Roadway)



LOCATION SKETCH

GENERAL PLAN & ELEVATION
IL- 84 OVER DRAINAGE DITCH
F.A.P. RTE. 308 - SEC. 110T
ROCK ISLAND COUNTY
STATION 944+70.80
STRUCTURE NO. 081-2038

STRAND ASSOCIATES® IDFPR NO. 184-001273 1170 SOUTH HOUBOLT ROAD JOLIET, ILLINOIS 60431 (815) 744-4200	USER NAME = vanessom	DESIGNED RRD	REVISED -
		CHECKED AJS	REVISED -
	PLOT SCALE =	DRAWN BJF	REVISED -
	PLOT DATE = 10/1/2012	CHECKED RRD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 081-2038
SHEET NO. 1 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
308	110T	ROCK ISLAND	51	28
		CONTRACT NO. 64925		
		ILLINOIS FED. AID PROJECT		

FILE NAME = S:\JOL\6300--6399\6346\826\Micros\CADD Sheets\Structural\837074-64925-081-GPE.dgn