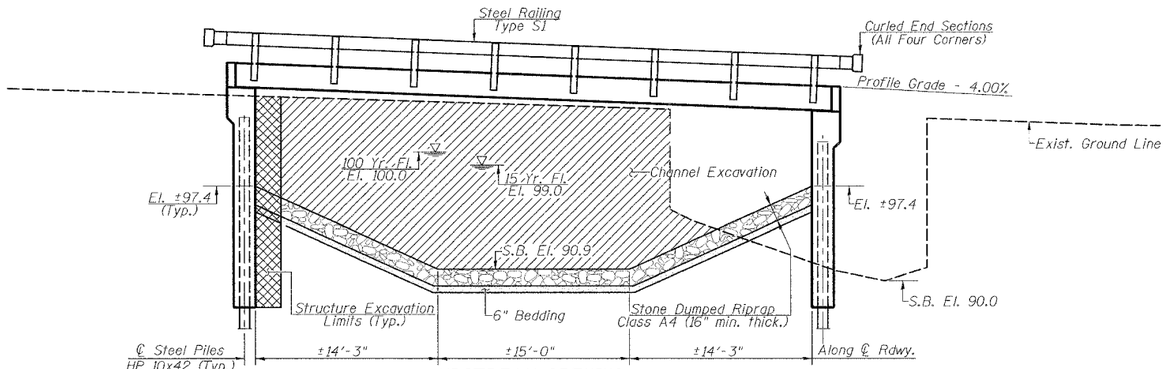
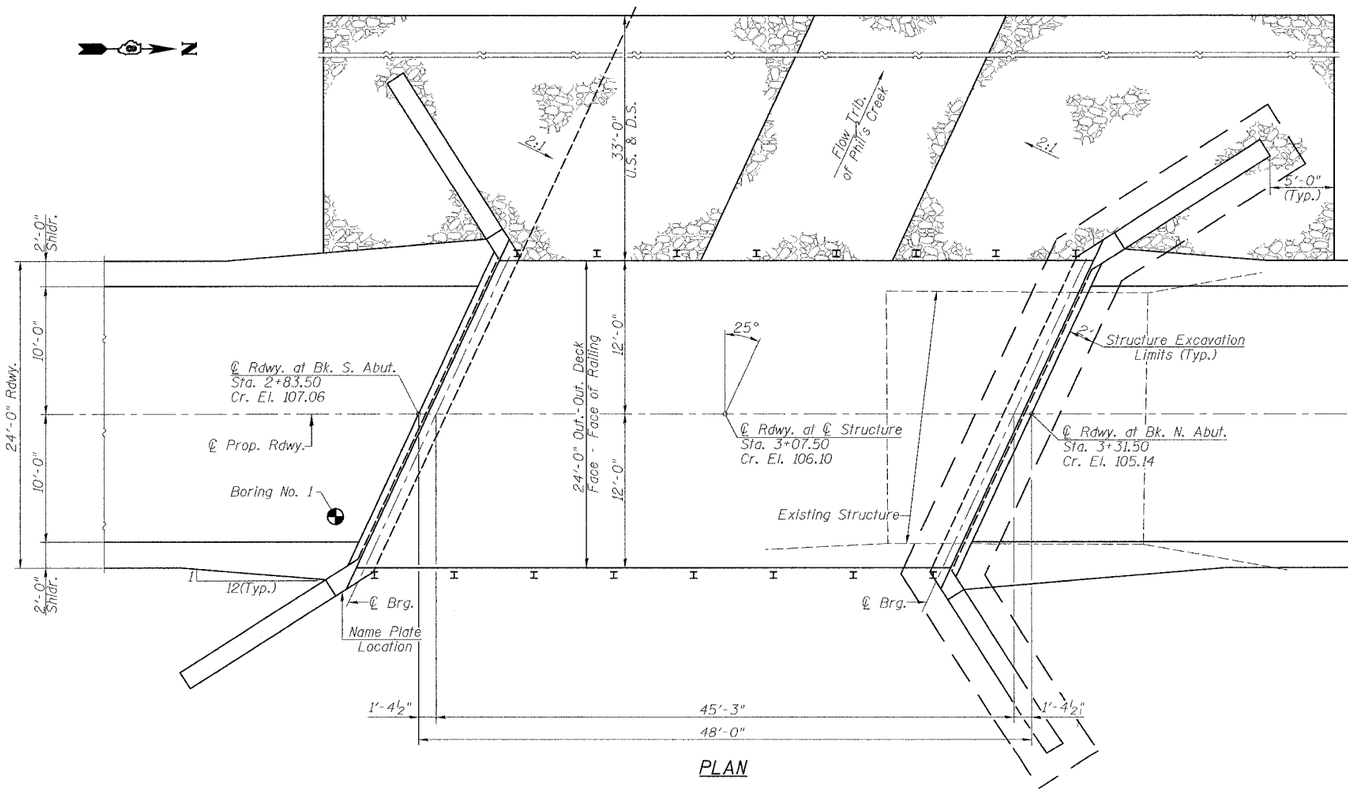
Existing Structure: Single span poured concrete deck bridge on steel stringers founded on closed concrete abutments. ±20'-0" Out.-Out. deck, ±20'-6" Bk.-Bk. abutments. Steel channel rail posts with no railing. 0° skew. Existing Structure No. 042-3049.

BM #1 - 60d Nail & Washer in Power Pole
16' Rt. Sta. 4+22.5 El. 100.00 (Assumed)

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
50	05-03104-00-BR	JERSEY	12	4
		CONTRACT NO. 97334		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



UPSTREAM OPENING
(Looking Downstream)



PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Dumped Riprap, Class A4	Ton			421
Filter Fabric	Sq. Yd.			632
Structure Excavation	Cu. Yd.			262
Concrete Structures	Cu. Yd.		104.4	104.4
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1117		1117
Reinforcement Bars	Pound		15260	15260
Steel Railing, Type S-1	Foot	96		96
Furnishing Steel Piles HP 10x42	Foot		696	696
Driving Piles	Foot		696	696
Test Pile, Steel HP 10x42	Each		2	2
	Each		1	1
Underwater Structure Excavation Protection - Location 1	Each			1
Underwater Structure Excavation Protection - Location 2	Each			1

WATERWAY INFORMATION

Drainage Area = 1.91Sq. Mi. Pr. Low Grade Elev. 101.82 @ Sta. 5+00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Natural H.W.E.	Head - ft. Exist.	Head - ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	15	908	162	284	99.7	1.1	0.0	100.8	99.7
Base	100	1507	241	359	100.9	2.5	0.5	103.4	101.4
Exist. Overtop.	30	1122							
Prop. Overtop.	40	1208							
Max. Calc.	500	2012	255	430	101.6	2.3	0.8	103.9	102.4

DESIGN STRESSES

FIELD UNITS

fc = 1400 psi
vc = 56.2 psi
fs = 24000 psi
n = 9

PRECAST PRESTRESSED UNITS

1/2"℄ Strands: f'c = 5000 psi; f'ci = 4000 psi; f's = 270000 psi; f'si = 201960 psi

GENERAL NOTES

See Proposal for Boring Data.
Reinforcement bars shall conform to the requirements of ASTM A706, Grade 60. (Illinois Modified) See Special Provision.
The layout of the riprap slopewall may be varied to suit conditions in the field as determined by the Engineer.
The contractor shall drive one test pile in a permanent location at each abutment as directed by the Engineer in the field prior to ordering the remainder of piles.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications.

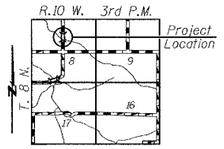
LOADING HS 20-44

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

TRIBUTARY OF PHILS CREEK
BUILT 200 BY
JERSEY COUNTY
SECTION 05-03104-00-BR
STA. 3+07.50
STR. NO. 042-3144 LOADING HS 20

NAME PLATE

(Standard 515001)



LOCATION PLAN

MARK A. HENDERSON 5513 LICENSED STRUCTURAL ENGINEER STATE OF ILLINOIS

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "A.A.S.H.T.O. Standard Specifications For Highway Bridges".

Mark A Henderson 2/19/08
Expiration Date 11/30/2008

FILE NAME = $FILE_N$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	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

SCALE: 3/16" = 1' | SHEET NO. 4 OF 12 SHEETS | STA. 1+40.00 TO STA. 5+10.00

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
50	05-03104-00-BR	JERSEY	12	4
		CONTRACT NO. 97334		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		