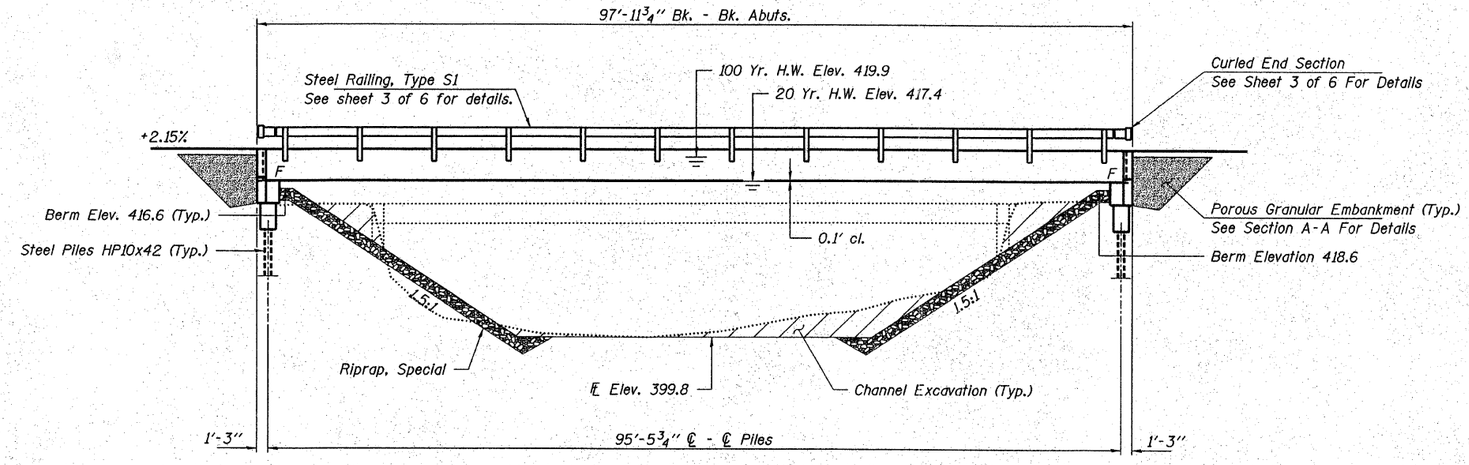
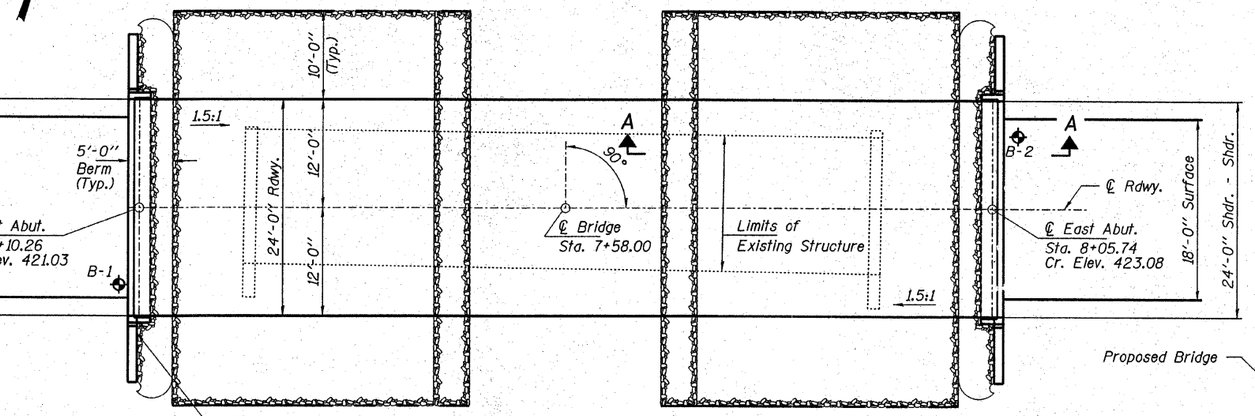
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 8	04-00112 -00-BR	RICHLAND	14	4
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 95515		

Sheet 1 of 6



ELEVATION



PLAN

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f'ci = 5,000 psi
f's = 270,000 psi (½"ϕ low lax. strands)
fsi = 201,960 psi (½"ϕ low lax. strands)
fy = 60,000 psi (Reinf.)

Loading HS 20-44
Design Specifications: 2002 AASHTO & all applicable interims.
25#/Sq. Ft. included in dead load for future wearing surface.

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.09g
Site Coefficient (S) = 1.0

WATERWAY DATA

Drainage Area	.028 Sq. Mi.
Existing Opening (20 yr)	890 Sq. Ft.
Req'd Opening (20 yr)	1094 Sq. Ft.
Proposed Opening (20 yr)	1094 Sq. Ft.

BUILT 200_ BY
RICHLAND COUNTY
SEC. 04-00112-00-BR
STR. NO. 080-3213
LOADING HS 20

NAME PLATE

See Std. 515001

GENERAL NOTES

Layout of riprap may be varied in the field to suit ground conditions as directed by the Engineer.

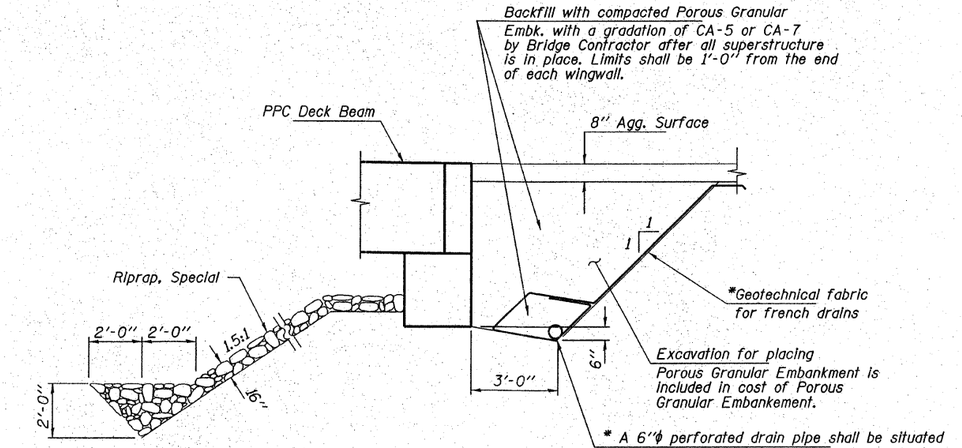
The Contractor shall drive test pile to 110% of the nominal required bearing specified in production locations at the West Abutment, as approved by the Engineer before ordering the remainder of piles.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Standard Specifications.

Excavation required to construct the Abutments shall be included in the cost of Concrete Structures. No additional compensation will be allowed for Structure Excavation.

All proposed construction activities shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act. The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions.

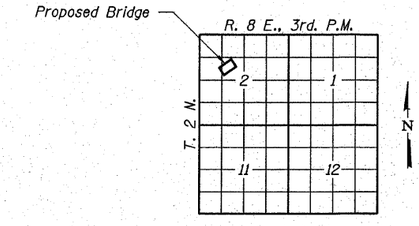
See Sheet 6 for Borings.



SECTION A-A

Note: See Special Provisions for Riprap, Special.

* Cost included with unit price for Porous Granular Embankment.



LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Precast Prestressed Concrete Deck Beams (42" Depth)	Sq. Ft.	2,320		2,320
Concrete Structures	Cu. Yd.		21.6	21.6
Reinforcement Bars	Pound		2,900	2,900
Steel Railing, Type S1	Foot	188		188
Furnishing Steel Piles HP10x42	Foot		330	330
Test Pile Steel HP10x42	Each		1	1
Driving Piles	Foot		330	330
Concrete Encasement	Cu. Yd.		2.6	2.6
Name Plates	Each		1	1
Riprap, Special	Ton			311
Porous Granular Embankment	Ton			165
Channel Excavation	Cu. Yd.			130
Removal of Existing Structure	L Sum			1

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 "AASHTO Standard Specifications for Highway Bridges".

APR 0 2 2007

ILLINOIS STRUCTURAL NO. 081-5011

LICENSED STRUCTURAL ENGINEER
JEFFREY L. BANE
081-5011
SPRINGFIELD, IL
STATE OF ILLINOIS

Expires 11-30-08

HAMPTON, LENZINI & RENWICK, INC.
CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS
3085 STEVENSON DRIVE, SUITE 201
SPRINGFIELD, ILLINOIS 62703
(217) 546-3400
HLR
ELGIN • SPRINGFIELD

PROJECT NUMBER: 12-81-0002-i	DATE: 04/02/07
DESIGNED: T.P.L	CHECKED: J.L.B.	DRAWN: P.J.L

GENERAL PLAN AND ELEVATION

SECTION 04-00112-00BR
COUNTY HIGHWAY 8
RICHLAND COUNTY
STRUCTURE NO. 080-3213 / STATION 7+58