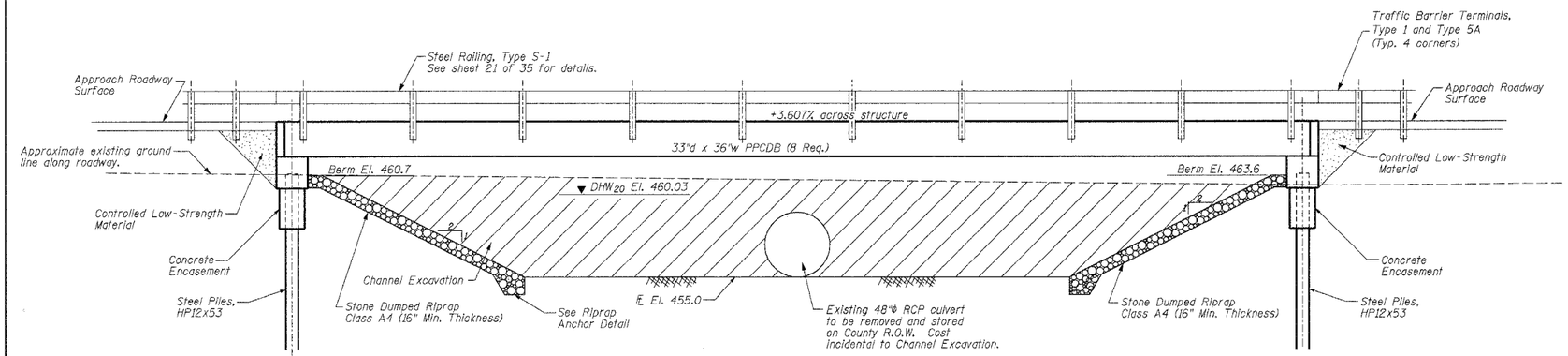
TBM 10-14-98"C" - Chiseled square on East end of 15"ϕ RCP,
29.70' Rt. of Sta. 29+29.96 - Elev. 457.51

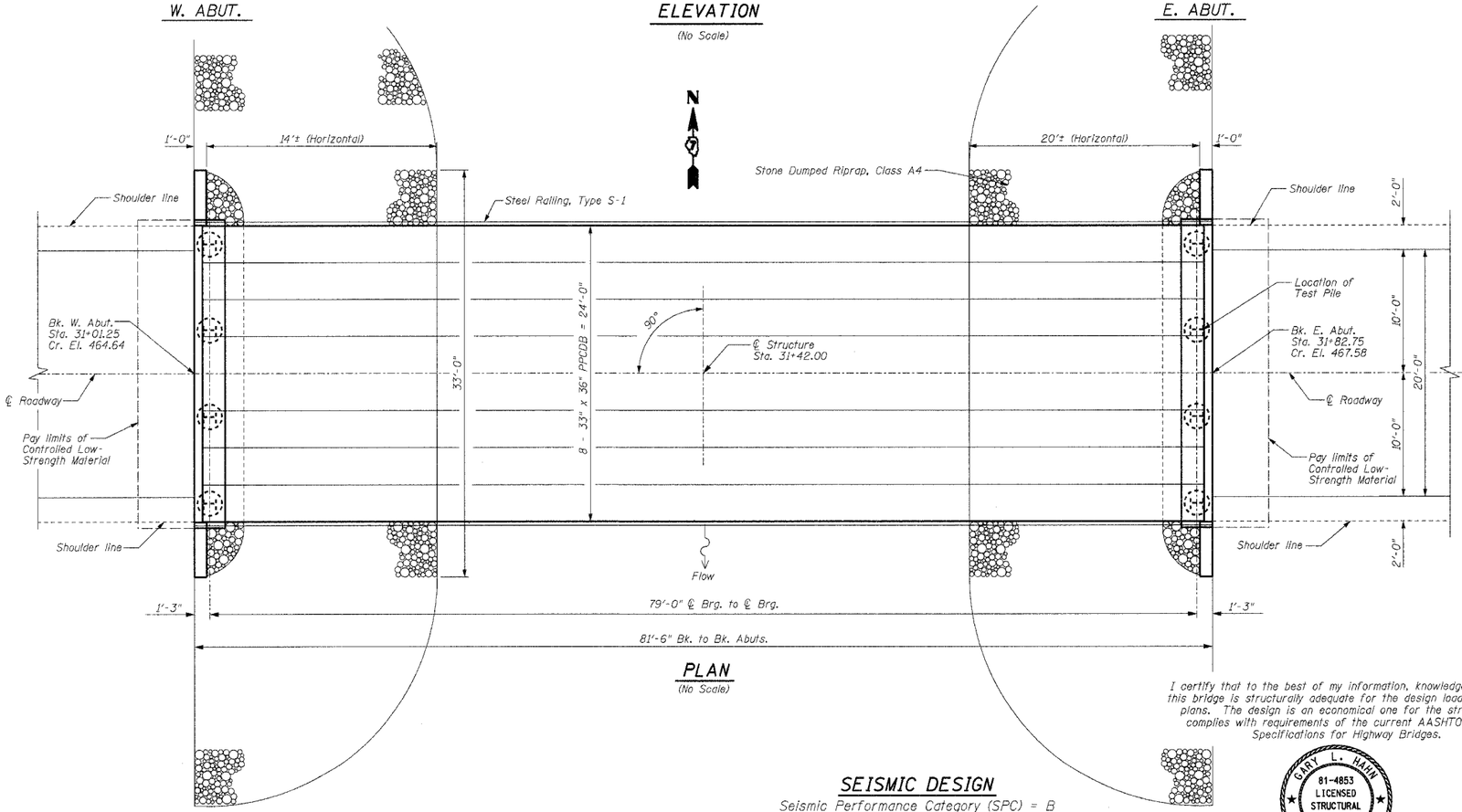
TBM 10-14-98"D" - Double 60d nails in South face of power pole,
34.88' Lt. of Sta. 38+62.96 - Elev. 463.44

Existing Structure: 48"ϕ RCP culvert x 52' long.
To be removed and stored on County R.O.W. Cost incidental to Channel Excavation.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 227	98-11120-00-BR	JEFFERSON	35	19
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
		CONTRACT NO. 95437		



ELEVATION
(No Scale)



PLAN
(No Scale)

BILL OF MATERIAL (BRIDGE ONLY)

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu Yd	-	1148	1148
Stone Dumped Riprap, Class A4	Ton	-	270	270
Concrete Structures	Cu Yd	-	18.4	18.4
PPCDB (33" Depth)	Sq Ft	1924	-	1924
Steel Railing, Type S-1	Foot	164	-	164
Reinforcement Bars	Pound	-	2700	2700
Furnishing Steel Piles HP12x53	Foot	-	352	352
Driving Steel Piles	Foot	-	352	352
Test Pile Steel HP12x53	Each	-	1	1
Name Plates	Each	-	1	1
Controlled Low-Strength Materials (CLSM)	Cu Yd	-	21.6	21.6

GENERAL NOTES

See Section 502 of the Standard Specifications for Structure Excavation.

The Contractor shall drive one (1) Steel HP12x53 Test Pile in a permanent location at the East Abutment as directed by the Engineer before ordering the remainder of the piles.

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-53 grade 60.

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

Channel excavation shall be excavated as shown within the limits of the proposed bridge, then tapered to the toe of the proposed embankment as directed by the Engineer. If the Engineer deems the material satisfactory, it may be used to construct the roadway embankment.

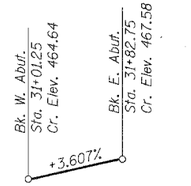
See Specifications for soil borings.

Do not scale these drawings.

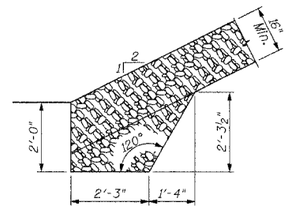
In addition to all other requirements of section 512 of the Standard Specifications, splices for Steel H-piles shall develop the full capacity of the steel's cross sectional area of the pile for tension, shear and bending forces. One approved method of achieving this requirement is full penetration butt welding of the entire cross section. Other types of splices meeting the full capacity requirement may be allowed subject to the approval of the Engineer. Any proposal by the Contractor to use an alternate splice method must include adequate documentation demonstrating that the full tension, shear and bending capacities will be met. Appropriate welder qualifications will be required for the positions and processes used in splicing all piles. Nondestructive testing of completed welds will be limited to visual inspection.

OVERFLOW TO CASEY FORK
BUILT 200_ BY
JEFFERSON COUNTY
SEC. 98-11120-00-BR
LOADING HS 20
STRUCTURE NO. 041-3733

NAME PLATE
(See State Standard 515001 for details)



PROFILE GRADE ACROSS STRUCTURE
Along ℄ Roadway



RIPRAP ANCHOR DETAIL

WATERWAY DATA
See Sheet 24 of 35

DESIGN STRESSES
FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi
PRECAST PRESTRESSED UNITS
f'_c = 6,000 psi
f'_{ci} = 5,000 psi
f'_s = 270,000 psi (½" ϕ strands)(Low Relaxation)
f'_{si} = 202,500 psi (½" ϕ strands)(Low Relaxation)

SEISMIC DESIGN
Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 0.10g
Site Coefficient (S) = 1.5

DESIGN SPECIFICATIONS
AASHTO - 2002 17th Edition

LOADING HS 20-44
Allow 25#/sq. ft. for future wearing surface.

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

GARY L. HAHN
81-4853
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS

Gary L. Hahn 5/25/05

Gary L. Hahn
Centralia, Illinois
Illinois Licensed Structural
Engineer No. 81-4853
Expires Nov. 30, 2006

GENERAL PLAN AND ELEVATION
PROPOSED OVERFLOW BRIDGE FOR CASEY FORK
TR 227 / STA. 31+42.00
SECTION 98-11120-00-BR
JEFFERSON COUNTY, ILLINOIS

Sheet 19 of 35
Job No. 52303

RHUTASEL and ASSOCIATES, INC.
CONSULTING ENGINEERS • LAND SURVEYORS
CENTRALIA, ILLINOIS FREEBURG, ILLINOIS

05/24/2005