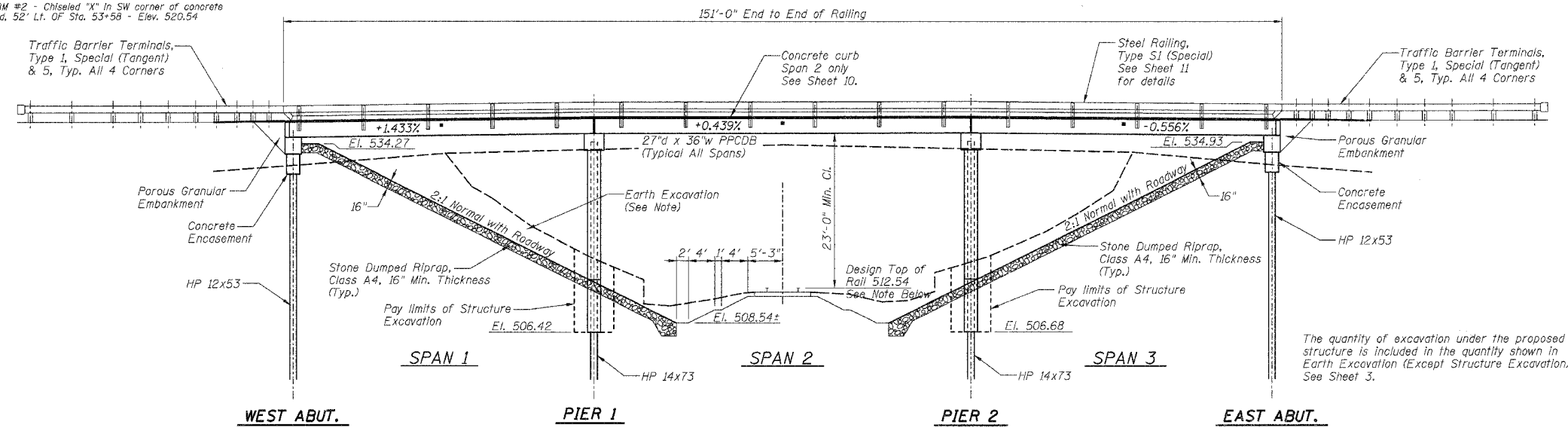


TBM #1 - RR Spike in north face of 36" Maple, 74.9' Rt. of Sta. 49+12.5 - Elev. 524.15
 TBM #2 - Chiseled "X" in SW corner of concrete pad, 52' Lt. of Sta. 53+58 - Elev. 520.54

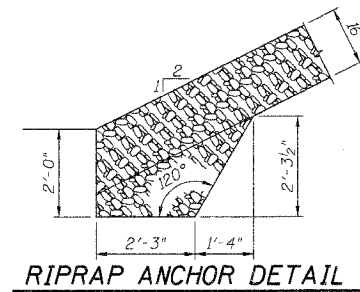
Existing Structure: Seven (7) span bridge with timber deck on timber pile bent piers and abutments, 104' long x 16' wide. To be removed. See Special Provisions.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 293	96-10120-01-BR	CLAY	13	8
FED. ROAD DIST. NO. 7		ILLINOIS	FEDERAL AID PROJECT	
CONTRACT NO. 95514				



BILL OF MATERIALS (BRIDGE ONLY)

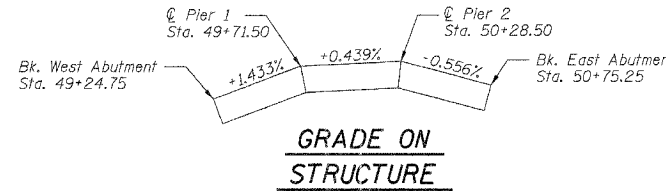
ITEM	UNIT	SUB	SUPER	TOTAL
POROUS GRANULAR EMBANKMENT	TON	34	-	34
STONE DUMPED RIPRAP, CLASS A4	TON	345	-	345
REMOVAL OF EXISTING STRUCTURES	EACH	-	1	1
STRUCTURE EXCAVATION	CU YD	150	-	150
CONCRETE STRUCTURES	CU YD	152.6	-	152.6
CONCRETE ENCASEMENT	CU YD	2.8	-	2.8
PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	-	3576	3576
REINFORCEMENT BARS	POUND	14120	-	14120
STEEL RAILING, TYPE S1 (SPECIAL)	FOOT	-	302	302
FURNISHING STEEL PILES HP12X53	FOOT	361	-	361
FURNISHING STEEL PILES HP14X73	FOOT	464	-	464
DRIVING PILES	FOOT	825	-	825
TEST PILE STEEL HP12X53	EACH	1	-	1
TEST PILE STEEL HP14X73	EACH	2	-	2
NAME PLATES	EACH	1	-	1
RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	-	1	1



ELEVATION

Design Top of Rail Elev. 512.54 was established to eliminate a depressed portion of the existing rail in the immediate vicinity of the existing structure. Actual top of rail of time of field survey (09/06/05) = Elev. 511.30

Final ditch grades to be established in the field by Illinois Central Railroad Engineers. Elevations shown are standard for Illinois Central Railroad road bed cross section Drawing No. 185.



GENERAL NOTES

See Specifications for Soil Borings.

See Section 502 of the Standard Specifications for Structural Excavation.

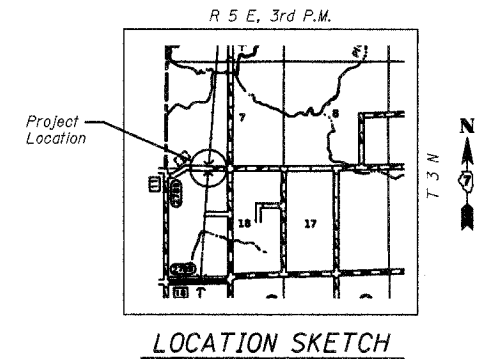
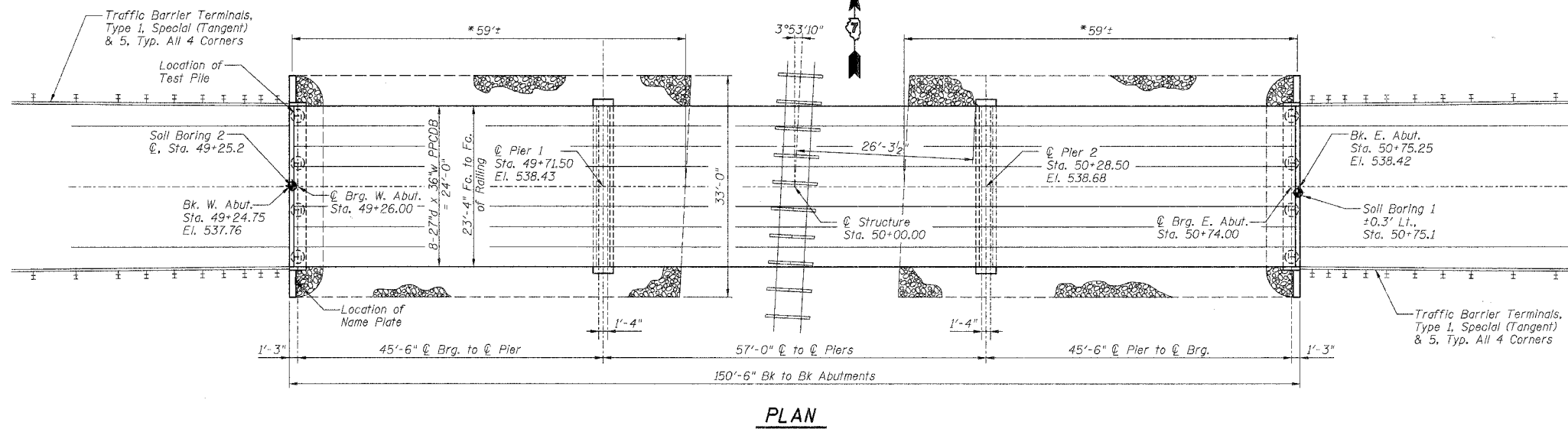
The Contractor shall drive one (1) Steel HP12X53 Test Pile in a production location at the West Abutment and one (1) Steel HP14X73 Test Pile in a production location at each Pier as directed by the Engineer before ordering the remainder of the piles.

The Contractor is hereby advised that very stiff soils will be encountered prior to the location of anticipated refusal. See the Soil Borings for further information.

Reinforcement Bars shall conform to AASHTO M-31 or M-322, Grade 60.

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

Do not scale these drawings.



CN / IC RAILROAD
 BUILT 200_ BY
 CLAY COUNTY
 SEC. 96-10120-01-BR
 LOADING HS-20
 STRUCTURE NO. 013-9918

NAME PLATE

(See State Standard 515001 for details)

SEISMIC DATA

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

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi

DESIGN SPECIFICATIONS

AASHTO - 2002 17th Edition

LOADING HS 20-44

Allow 25#/sq. ft. for future wearing surface.

DESIGN STRESSES

PRECAST PRESTRESSED UNITS

$f'_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 270,000$ psi ($\frac{1}{2}$ " strands)
 $f'_{si} = 189,000$ psi ($\frac{1}{2}$ " strands)

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
 CENTRALIA, ILLINOIS
 ILLINOIS LICENSED STRUCTURAL
 ENGINEER NO. 81-4853
 EXPIRES NOV. 30, 2008

GENERAL PLAN AND ELEVATION

TR 293 BRIDGE OVER
 CN / IC RAILROAD
 SECTION 96-10120-01-BR
 CLAY COUNTY, ILLINOIS

Sheet 8 of 13
 Job No. 51005

04/03/2007

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