

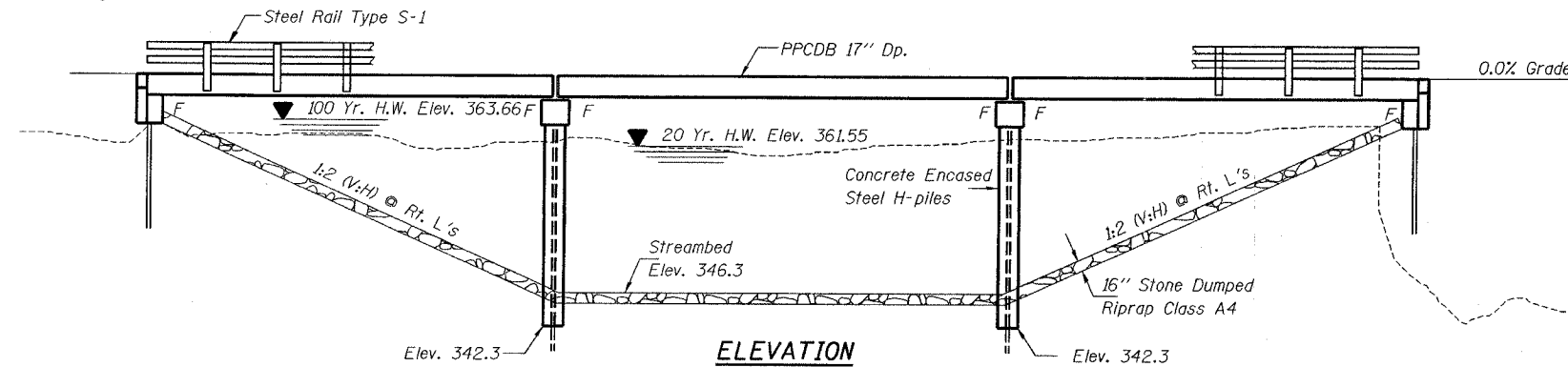
B.M. - #1-2-60d Nails set in North side power pole on South side Morgan School Road, +600' South of intersection Morgan School Road and Morgan Lane (Elev. 361.43)

Existing Structure- S.N. 091-3075 was built in 1900 as a single span steel multi-beam bridge. The structure is 38'-8" back to back abutments and 17'-6" out-to-out. The substructure is timber pile bents. The superstructure is a timber deck with 12" steel beams. The existing structure is being replaced by a 3 simple span structure, S.N. 091-3221 on pile bent abutments and piers. Salvage-NONE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO.
		UNION	24	1A
FED. ROAD DIST. NO. 7				ILLINOIS
Contract No. 99214				9 SHEETS

* 03-01176-00-BR

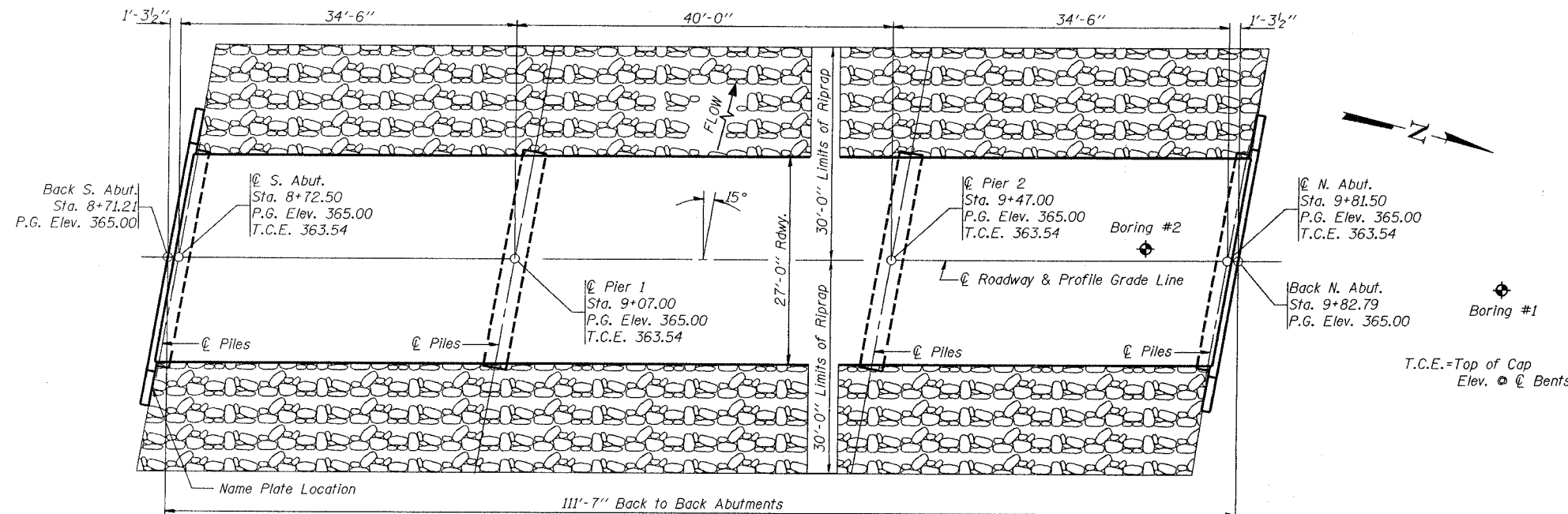


GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60, (II. Modified). See Special Provisions.
The Contractor shall drive two steel HP12 x 53 test piles in permanent locations, one each at Pier 1 and the North abutment, as directed by the Engineer before ordering the remaining piles.
The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
A corrosion inhibitor, in accordance with Article 1021.06 of the Standards Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Removal of Existing Structures	Each				1
Concrete Structures	Cu. Yd.		19.0	20.2	39.2
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	2970			2970
Steel Railing, Type S-1	Foot	220			220
Stone Dumped Riprap, Class A4	Ton			1600	1600
Reinforcement Bars	Pound		2020	2680	4700
Furnishing Steel Piles HP 12x53	Foot		520	540	1060
Driving Piles	Foot		520	540	1060
Test Pile Steel HP 12x53	Each		1	1	2
Name Plates	Each			1	1
Concrete Encasement	Cu. Yd.		20.7	3.4	24.1
Underwater Structure	Each				
Excavation Protection - Location 1	Each		1		1
Underwater Structure	Each				
Excavation Protection - Location 2	Each		1		1



DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications - 17th ed.

LOADING HS20-44

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

DESIGN STRESSES

FIELD UNITS

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

PRECAST PRESTRESSED UNITS

$f'_c = 5,000$ psi
 $f'_{ci} = 4,000$ psi
 $f'_s = 270,000$ psi (1/2" low-relaxation strands)
 $f_{si} = 201,960$ psi (1/2" low-relaxation strands)

SEISMIC DATA

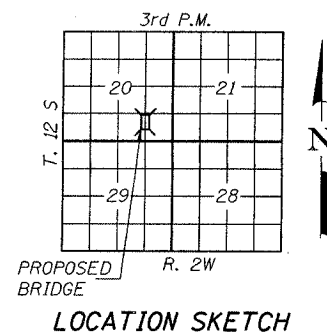
Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = .15g
Site Coefficient (S) = 1.0

PLAN

STATION 9+27
CANY CREEK
SEC. 03-01176-00-BR BUILT 2007
UNION COUNTY
LOADING HS20
STR. NO. 091-3221

LETTERING FOR NAME PLATE

Locate Name Plate at the Southeast Wingwall (See sheet 9 of 9)



LOCATION SKETCH

INDEX OF SHEETS

1. General Plan & Elevation
2. Superstructure Span 1 & 3
3. Superstructure Span 2
4. Steel Railing, Type S-1
5. South Abutment
6. North Abutment
7. Piers 1 & 2
8. Base Sht. for Steel H-Piles
9. Name Plate

DESIGNED J.F. Schiff	APRIL - 3	2007
CHECKED J.K. Klein	EXAMINED	
DRAWN SHANE SUMMER	PASSED	ENGINEER OF BRIDGE DESIGN
CHECKED JFS, JKK		Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2008

WATERWAY INFORMATION

Drainage Area = 6.89 sq. mi. Low Grade Elev. = 361.50 @ Sta. 12+60

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	20	3070	564	860	361.55				
Base	100	4540	564	882	363.66	0.66	0.23		
Overtopping									
Max. Calc.	500								

GENERAL PLAN AND ELEVATION

STR. NO. 091-3221
MORGAN SCHOOL ROAD
OVER CANY CREEK
SECTION 03-01176-00-BR
UNION COUNTY
STATION 9+27.00