

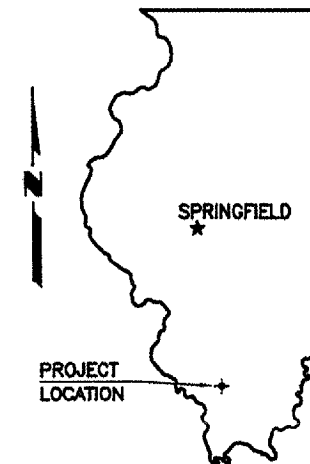
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
HIGHWAY BRIDGE PROGRAM

TOWNSHIP ROUTE 328 (ELKVILLE WATER ROAD)
SECTION 02-05115-00-BR
PROJECT NO. BROS-077(39)
JOB NO. C-99-532-04
TRIBUTARY TO LITTLE MUDDY RIVER

JACKSON COUNTY

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 328	02-05115-00-BR	JACKSON	11	1
PROJECT NO. BROS-077(39)			CONTRACT NO. 99243	



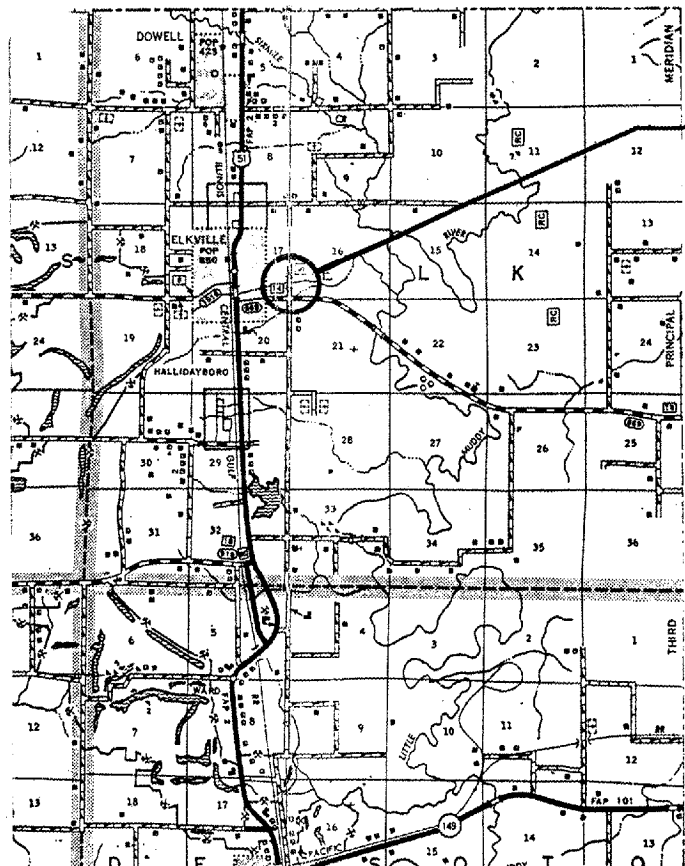
INDEX OF SHEETS

1. COVER SHEET
 2. PLAN AND PROFILE
 3. GENERAL PLAN AND ELEVATION
 4. SUPERSTRUCTURE
 5. DECK BEAMS 17" X 36"
 6. DECK BEAMS 17" X 48"
 7. ABUTMENTS
 8. STEEL RAILING
 9. NAME PLATE
 10. PILE DETAILS
 11. CROSS SECTIONS
- STANDARDS 280001-03 TEMPORARY EROSION CONTROL
702001-06 TRAFFIC CONTROL DEVICES
BLR 21-6 TRAFFIC CONTROL

SUMMARY OF QUANTITIES

CODE NO.	PAY ITEM	UNIT	TOTAL
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	32
20200100	EARTH EXCAVATION	CU YD	83
20300100	CHANNEL EXCAVATION	CU YD	8
20400100	BORROW EXCAVATION	CU YD	746
25000200	SEEDING, CLASS 2	ACRE	0.3
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	27
25000500	PHOSPHOROUS FERTILIZER NUTRIENT	POUND	27
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	27
25000700	AGRICULTURAL GROUND LIMESTONE	TON	1.2
25100120	MULCH, METHOD 2	TON	0.6
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	97
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	630
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50105225	PIPE CULVERT REMOVAL (SPECIAL)	FOOT	70
50200100	STRUCTURE EXCAVATION	CU YD	34
50300225	CONCRETE STRUCTURES	CU YD	16.6
50300280	CONCRETE ENCASEMENT	CU YD	2.1
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	840
50800105	REINFORCEMENT BARS	POUND	2220
50900205	STEEL RAILING, TYPE S1	FOOT	70
51201400	FURNISHING STEEL PILESP10X42	FOOT	309
51202305	DRIVING PILES	FOOT	309
51203400	TEST PILE HP10X42	EACH	1
51500100	NAME PLATES	EACH	1
54200220	PIPE CULVERTS, CLASS D, TYPE1 15"	FOOT	20
60300305	FRAMES & LIDS TO BE ADJUSTED	EACH	1
67100100	MOBILIZATION	L SUM	1

X080-2A



LOCATION MAP

SCALE: 1" = 2 MILES

NET LENGTH OF IMPROVEMENT = 500.00 FT. = 0.0947 MILES

CLASSIFICATION : LOCAL ROAD
ADT : 25
DESIGN SPEED : 30 MPH

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
J.U.L.I.E. - 1-800-892-0123
CONTACT 48 HOURS BEFORE EXCAVATING



Edward W. Miller
Edward W. Miller
PROFESSIONAL ENGINEER
#062-025277
EXPIRES NOV. 30, 2005

E. MILLER ENGINEERING, INC.
CONSULTING ENGINEERS
HARRISBURG, ILLINOIS

CONTRACT NO. 99243

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED *Brian Tuttle* 4/25/2006
HIGHWAY COMMISSIONER ELK TOWNSHIP

APPROVED *Earl G. ...* 5/2/2006
JACKSON COUNTY ENGINEER

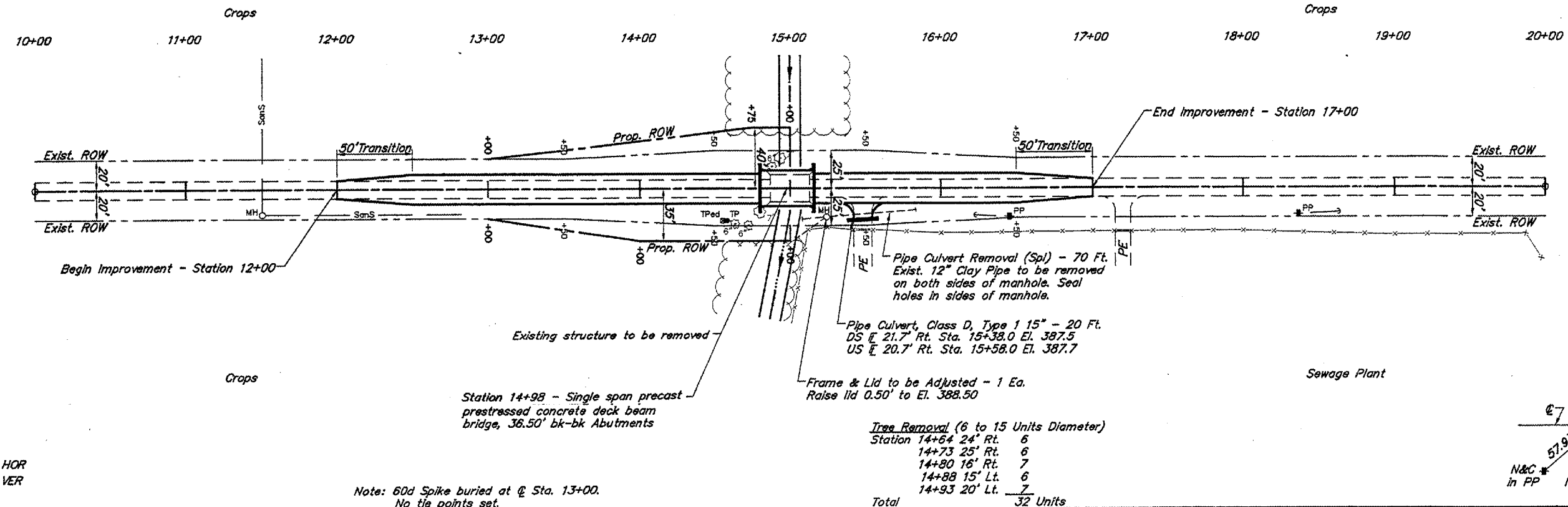
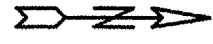
PASSED *Oct. 23, 2006*
Dev. W. Hall
ENGINEER OF LOCAL ROADS AND STREETS

APPROVED *Mary C. Lamie* 10/26/06
MARY C. LAMIE, P.E.
DEPUTY DIRECTOR OF HIGHWAYS
REGION FIVE ENGINEER

B.M. - Center of Manhole Cover
 19' Rt. Sta. 15+24
 Assumed Elev. 388.00

Existing Structure - Concrete deck
 with concrete parapets on
 closed concrete abutments.
 18.1' W x 26.0' L.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 32B	02-05115-00-BR	JACKSON	11	2
PROJECT NO. BROS-077(39)			CONTRACT NO. 99243	

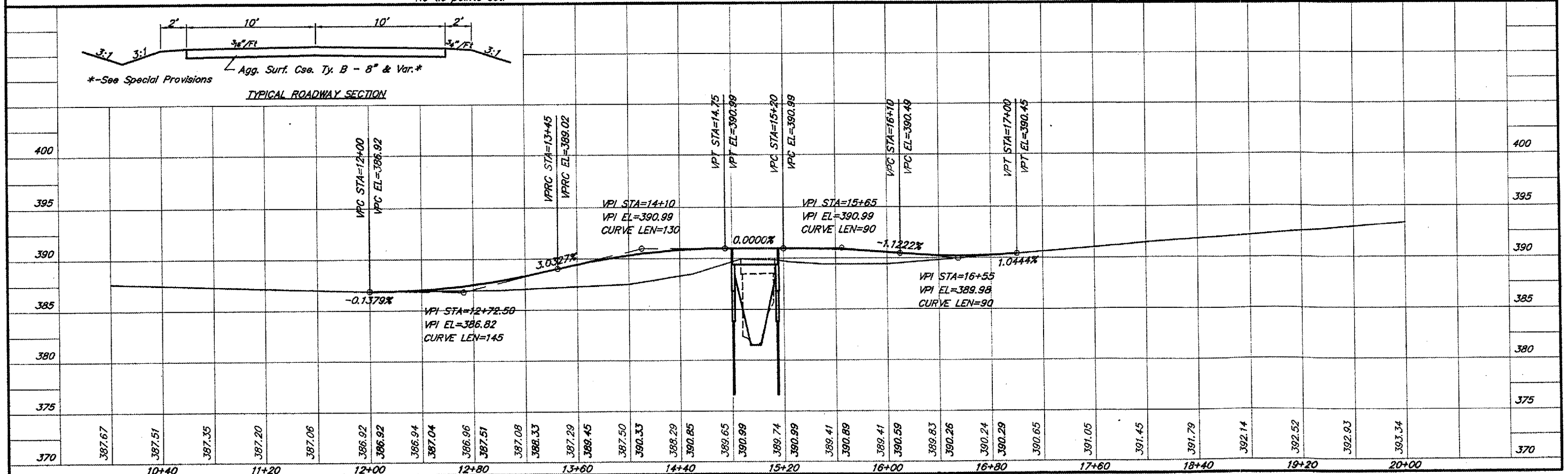
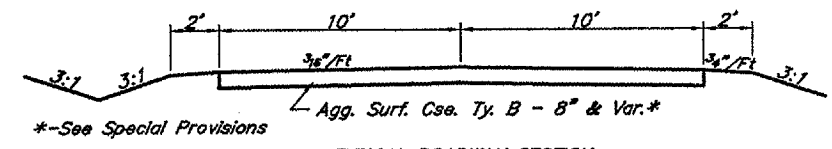
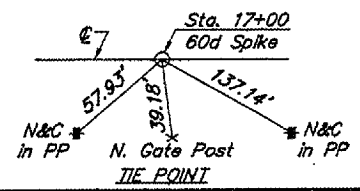


SCALES:
 1" = 80' HOR
 1" = 10' VER

Note: 60d Spike buried at @ Sta. 13+00.
 No tie points set.

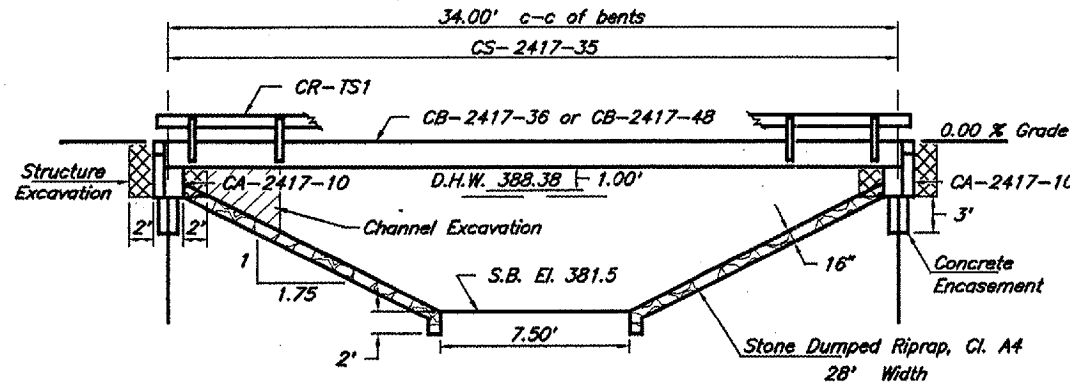
Tree Removal (6 to 15 Units Diameter)

Station 14+64 24' Rt.	6
14+73 25' Rt.	6
14+80 16' Rt.	7
14+88 15' Lt.	6
14+93 20' Lt.	7
Total	32 Units



B.M. - Center of the Manhole Cover
19' Rt. of Station 15+24
Assumed Elev. 388.00

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 328	02-05115-00-BR	JACKSON	11	3
PROJECT NO. BROS-077(39)			CONTRACT NO. 99243	



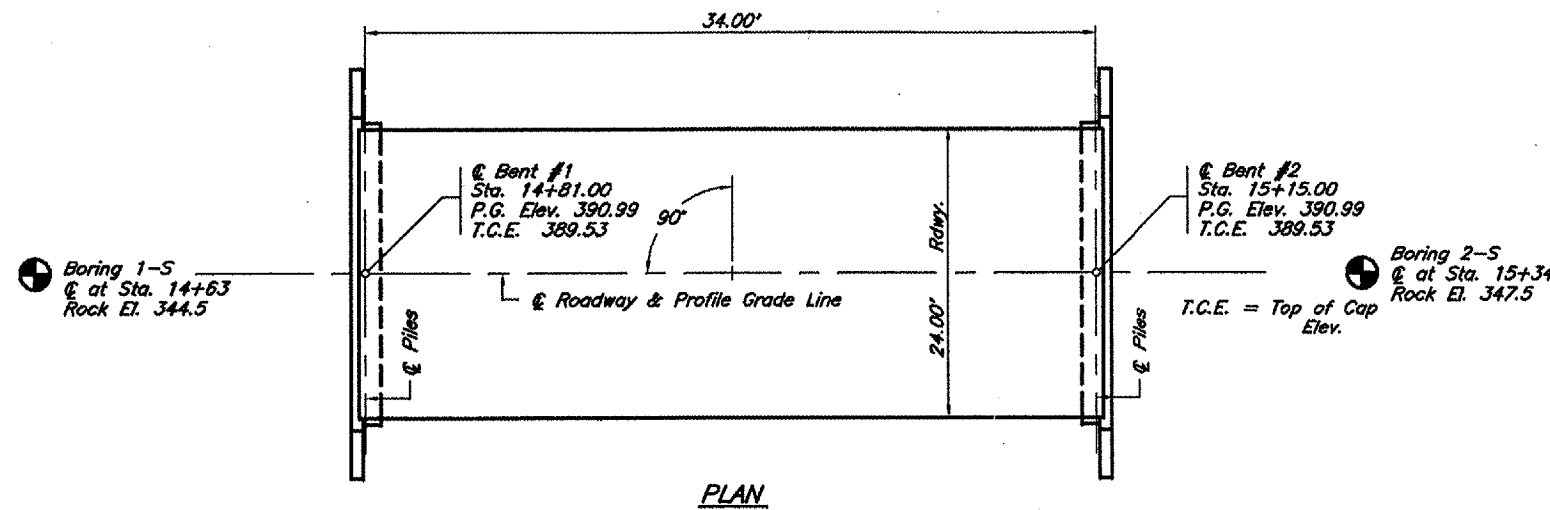
Existing Structure - Concrete deck with concrete parapets on closed concrete abutments 18.1'W x 26.0'L

GENERAL NOTES

- Steel H piles shall meet AASHTO M270 Grade 50 specifications.
- Test Piles shall be driven to 110% of the Nominal Required Bearing indicated in the pile data.
- The Contractor shall drive one test pile, as specified, in a permanent location as directed by the Engineer before ordering the remaining piles.
- See special provisions for boring logs.
- A Corrosion inhibitor, as covered in the Standard Specifications, shall be used in the precast prestressed concrete deck beams.
- The Bituminous Concrete Surface Course and the Waterproofing Membrane System shown on the plans shall not be provided.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Removal of Existing Structures	Each				1
Concrete Structures	Cu. Yds.			16.6	16.6
P.P. Conc. Dk. Bm. 17" Dp.	Sq. Ft.	840			840
Steel Railing, Type S1	Foot	70			70
Reinforcement Bars	Pound			2220	2220
Furnishing Steel Piles HP10X42	Foot			309	309
Driving Piles	Foot			309	309
Test Pile Steel HP10X42	Each			1	1
Concrete Encasement	Cu. Yds.			2.1	2.1
Name Plates	Each			1	1
Structure Excavation	Cu. Yds.			34	34
Channel Excavation	Cu. Yds.			8	8
Stone Dumped Riprap, Class A4	Tons			97	97



PILE DATA (2-ABUTS.)

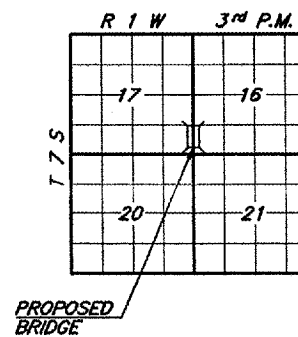
Type & Size : HP10X42
Nominal Required Bearing : 333 kips
Allowable Resistance Available : Refusal
Estimated Length : 45 Feet Bent #1, 43 Feet Bent #2
Number Required : 8 (Includes 1 Test Pile located in Bent #2)

TRIBUTARY TO LITTLE MUDDY RIVER
SEC. 02-05115-00-BR BUILT 20__

JACKSON COUNTY
LOADING HS20
STR. NO. 039-3260

LETTERING FOR NAME PLATE

Locate Name Plate at southeast Corner of Bridge (See Std. CN)



LOCATION SKETCH

WATERWAY INFORMATION

Drainage Area = 1.420 Sq. Mi.		Low Grade Elev. = 386.92		At Sta. 12+00		
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist. Prop.	Natural H.W.E.	Head-Ft. Exist. Prop.	Headwater El. Exist. Prop.
Design	15	537	133.8* 134.3	388.38	0.00 0.00	388.38 388.38
Base	100	835	136.7* 150.0	388.88	0.00 0.72	388.88 389.60
Overtopping	2+	245	98.8	386.92	0.00	386.92
Max. Calc.	500	1072	158.9	389.16		1.54 390.70

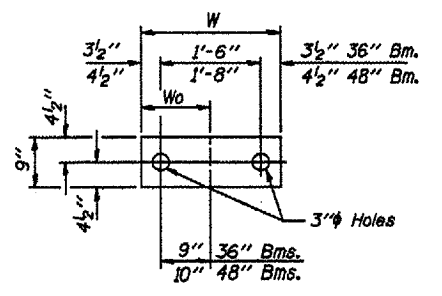
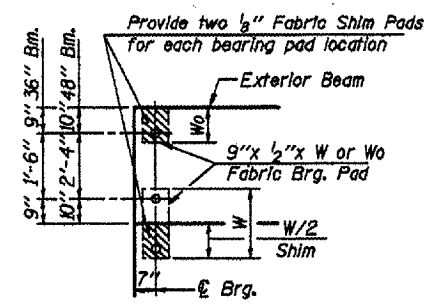
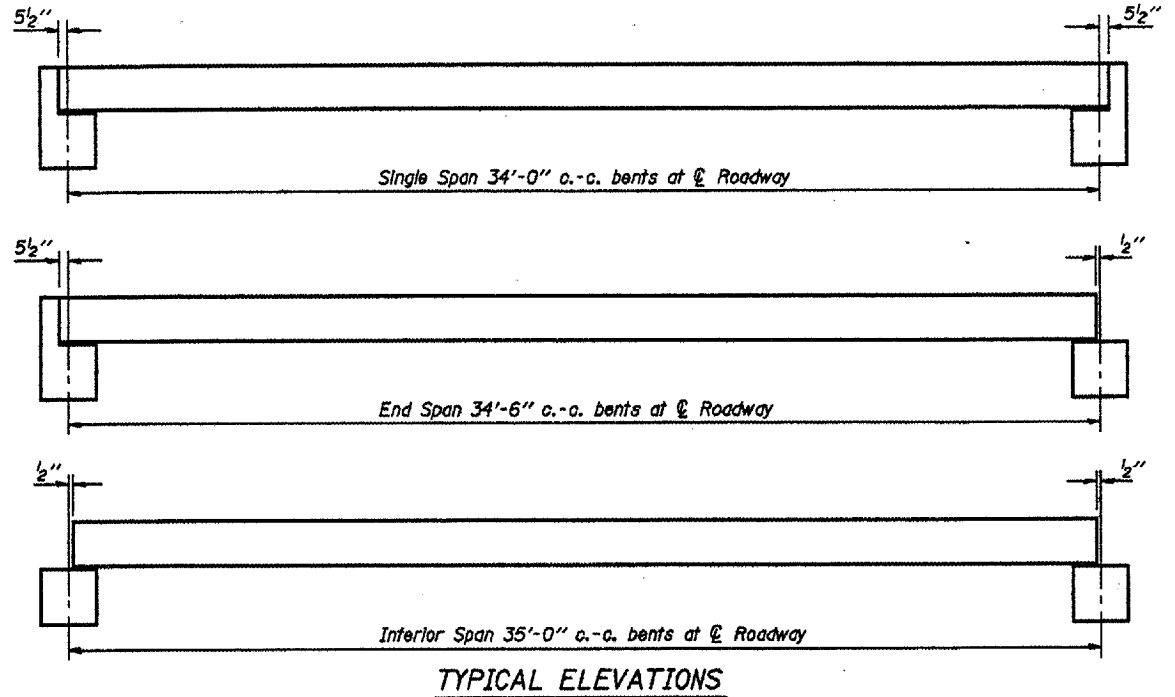
Over the road flow area Exist. $Q_{(15)}$ 552.7 $Q_{(100)}$ 879.4
Note: No over road flow used in calculations for the proposed structure to allow for future raising of the approach roadways.

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications - 17th ed.

LOADING HS20-44
Allow 25#/sq. ft. for future wearing surface

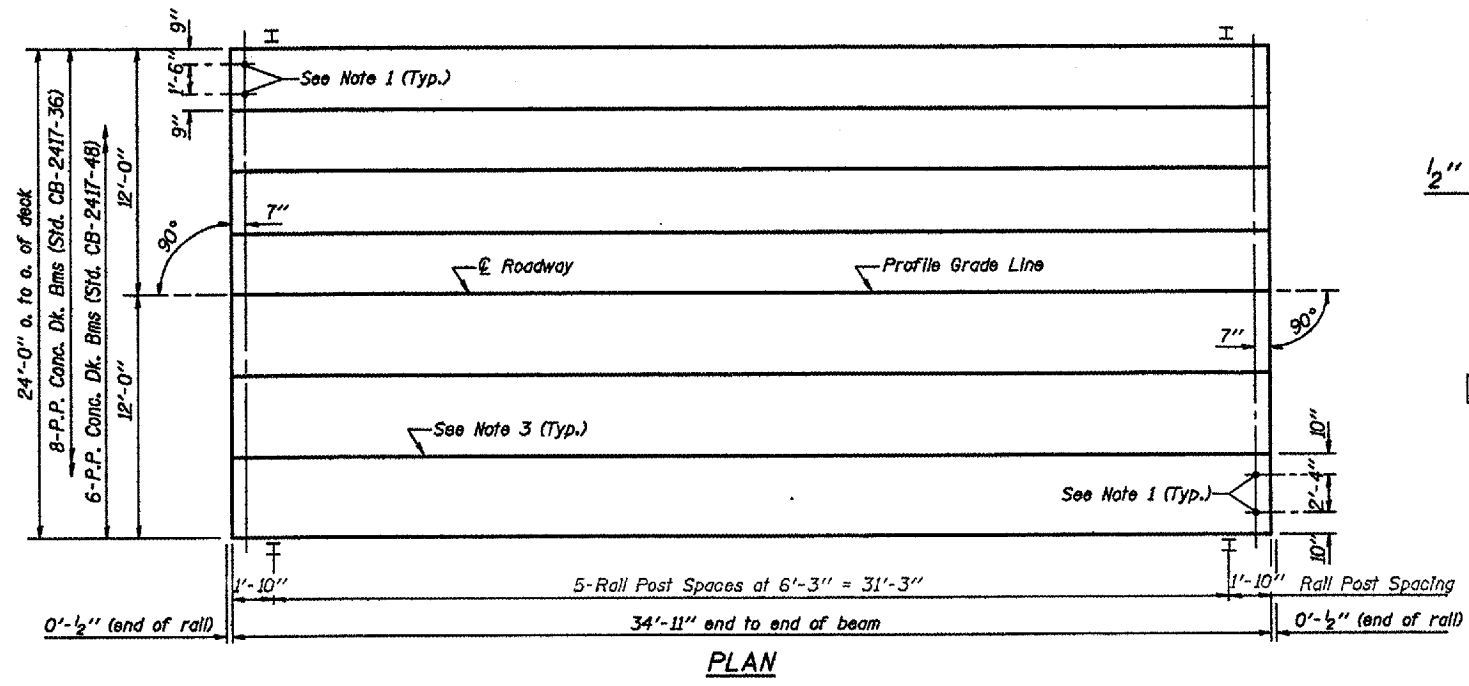
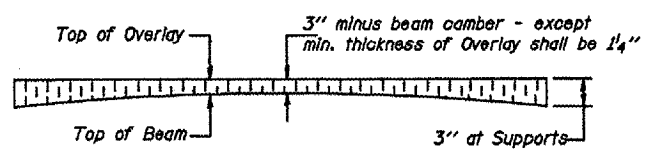
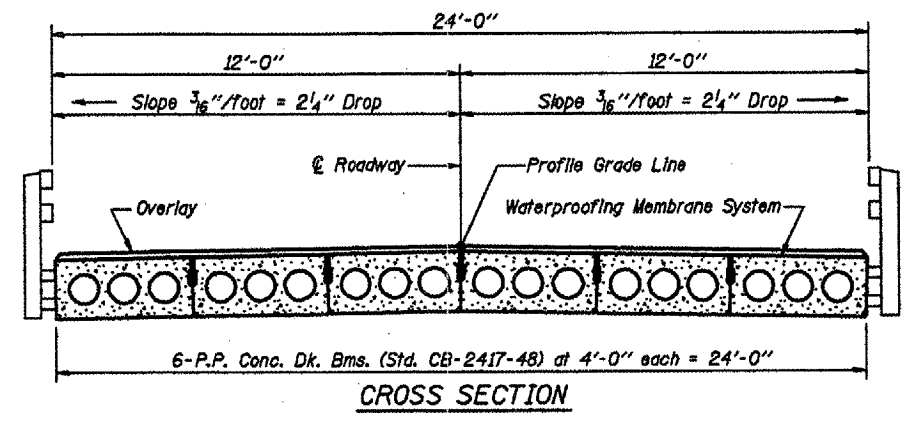
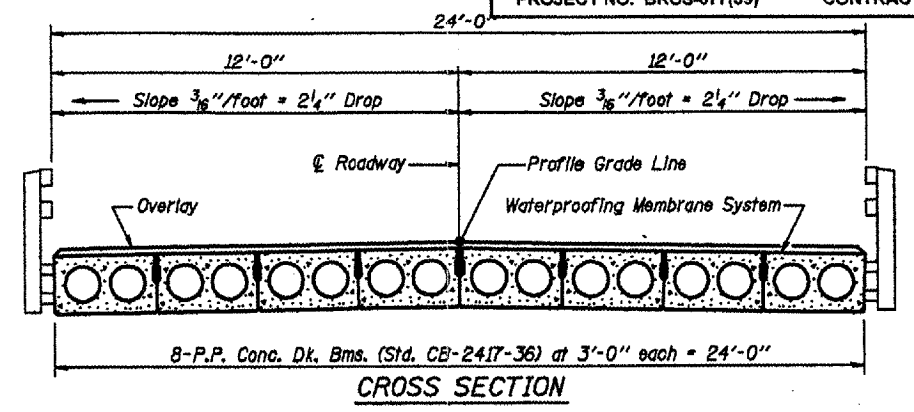
SEISMIC DATA
Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 12.0%
Site Coefficient (S) = 1.0

GENERAL PLAN & ELEVATION
TOWNSHIP ROUTE 328
TRIBUTARY TO LITTLE MUDDY RIVER
SECTION 02-05115-00-BR
JACKSON COUNTY
STATION 14+98



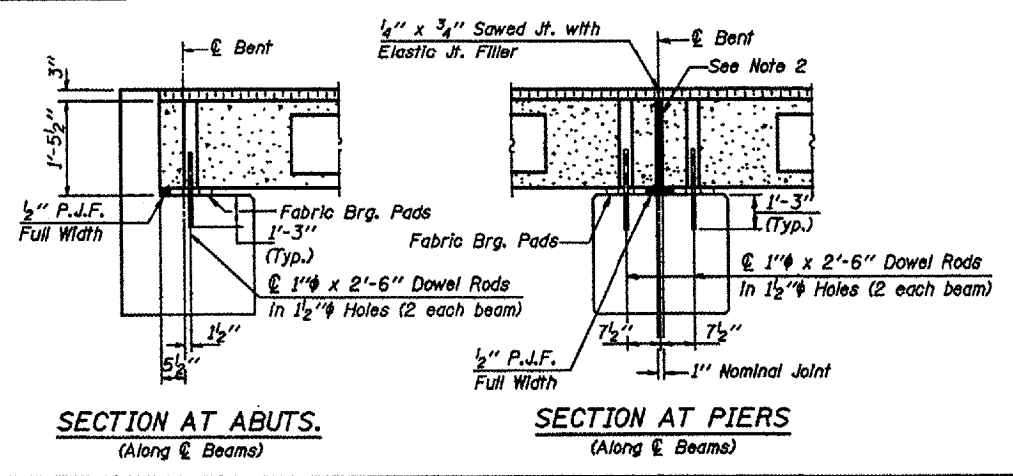
Beam	W	W _o
36"	2'-1"	1'-0 1/2"
48"	2'-5"	1'-2 1/2"

1/2" FABRIC BRG. PAD DETAILS



NOTES

- After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
- Nominal 1" Joint at \mathcal{C} Pier shall be filled with non-shrink grout.
- Longitudinal keys shall be grouted.



QUANTITIES FOR ONE SPAN

P.P. Conc. Dk. Bm. 17" Dp.	840 Sq. Ft.
Steel Rolling	70 Ft.
Waterproofing Membrane System	93.3 Sq. Yds.
Portland Cement Mortar	245 Ft. 36"
Fairing Course	175 Ft. 48"

Note: Quantity of overlay for one span = 13.1 Tons

P.P.C. DECK BEAM SUPERSTRUCTURE			
24' RDWY.	17" BMS.	35' SPAN	0° SKEW
STANDARD CS-2417-35			

Illinois Department of Transportation

PASSED APRIL 4, 2005

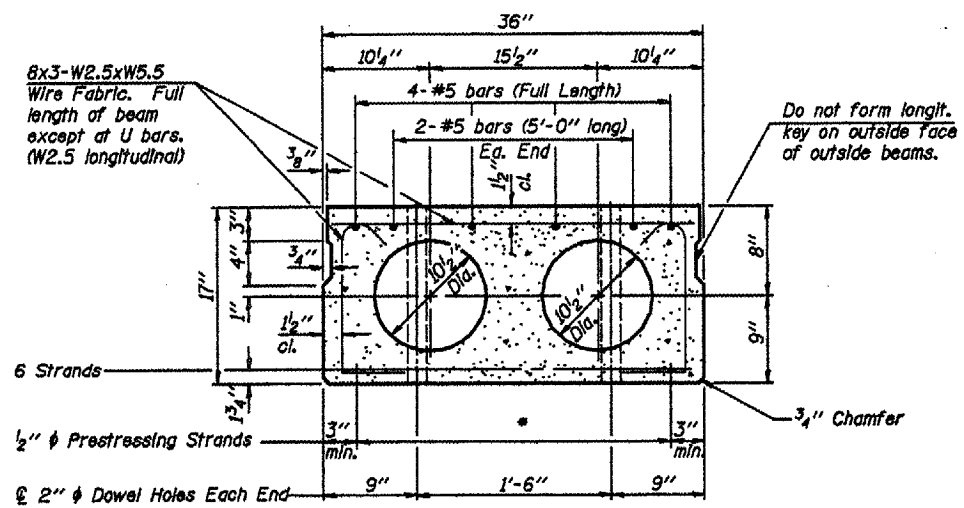
Thomas J. [Signature]

Engineer of Design

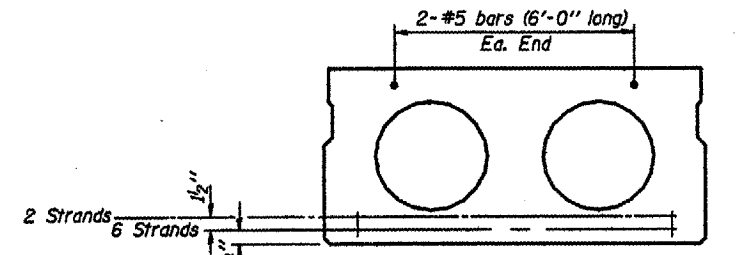
APPROVED APRIL 4, 2005

Ralph E. [Signature]

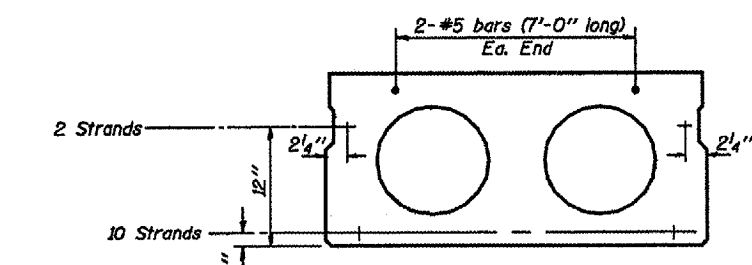
Engineer of Bridges and Structures



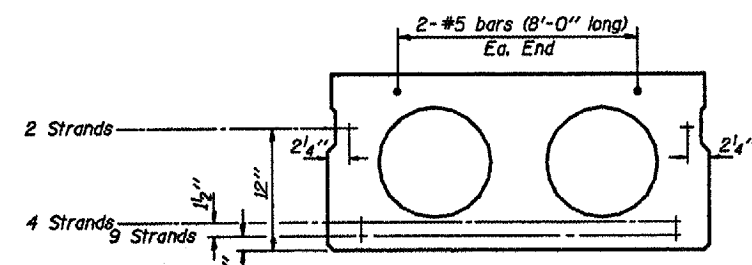
CROSS SECTION
(25' SPAN)



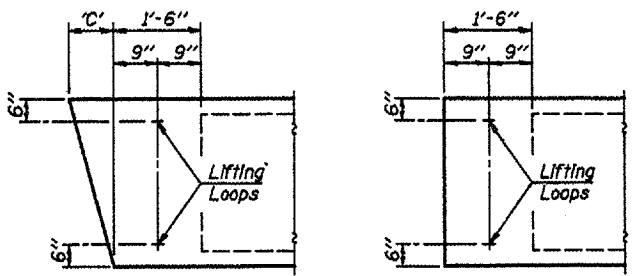
CROSS SECTION
(30' SPAN)



CROSS SECTION
(35' SPAN)



CROSS SECTION
(40' SPAN)



END BLOCK DETAILS

Each beam shall have four Lifting Loops, two at each end of beam cast in locations shown above. Loops shall be burned off after beams have been erected.

DIMENSION 'C'

Skew Angle 'D'	0°	5°	10°	15°	20°	25°	30°
Dimension 'C' (Inches)	0	3 1/8	6 3/8	9 5/8	13 3/8	16 3/4	20 3/4

*** TRANSVERSE STRAND PLACEMENT GUIDELINES**

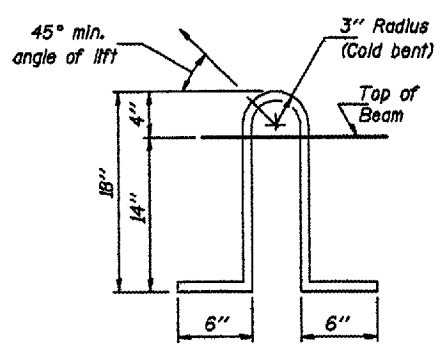
1. Place strands symmetrically about centerline of beam.
2. The minimum distance from center to center of strands in all directions shall be 2".
3. The minimum clearance from strand to dowel hole shall be 1/2".
4. The minimum clearance from strand to void shall be 1/2".

Vertical placement of strands shall not be adjusted to satisfy the above guidelines.

NOTES

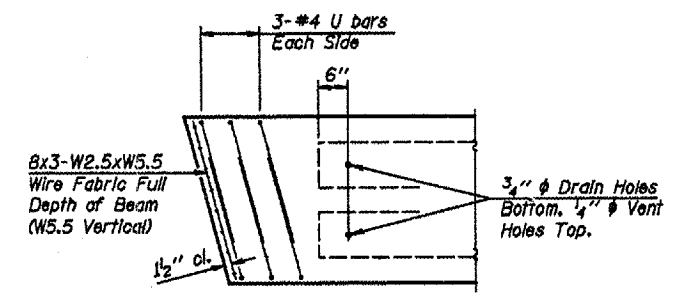
1. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.
2. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 square inches.
3. Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322, Grade 60.
4. Rail Post anchor devices shall be cast into outside beam as elsewhere specified.
5. When a Waterproofing Membrane System is specified, the top surface of the beams shall be screeded with a straightedge and finished with a hand float. The finished surface shall be free of depressions or high spots with sharp corners and the top edge of keys shall be rounded or chamfered a minimum of 1/4".
6. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between the top of the beam and the bottom edge of the key.

NOTE
The std. reinf. and dimensions shown on the 25' span cross section is typical for all spans, except as shown.

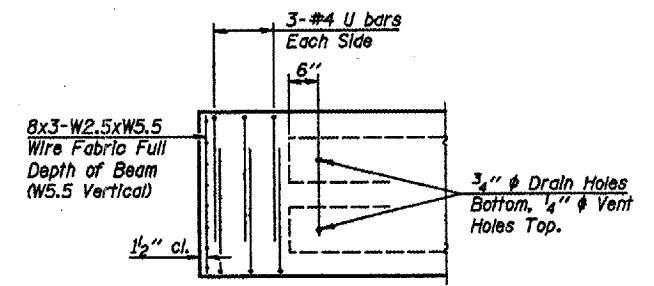


LIFTING LOOP DETAIL

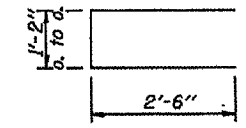
Lifting loops shall be 2, 1/2" #270 ksi strands, as shown. Alternate approved lifting devices are also acceptable.



END REINFORCEMENT
(SKEWED)



END REINFORCEMENT
(RIGHT ANGLE)



BAR U

MIN. BAR LAP

#5 bars = 1'-8"

DESIGN STRESSES

- $f'_c = 5,000$ p.s.i.
- $f'_d = 4,000$ p.s.i.
- $f'_s = 270,000$ p.s.i. (1/2" # Strand)
- $f_{sd} = 201,960$ p.s.i. (1/2" # Strand)
- $f_y = 60,000$ p.s.i.

Illinois Department of Transportation

PASSED APRIL 4, 2005

Theresa S. [Signature]

Engineer of Bridge Design

APPROVED APRIL 4, 2005

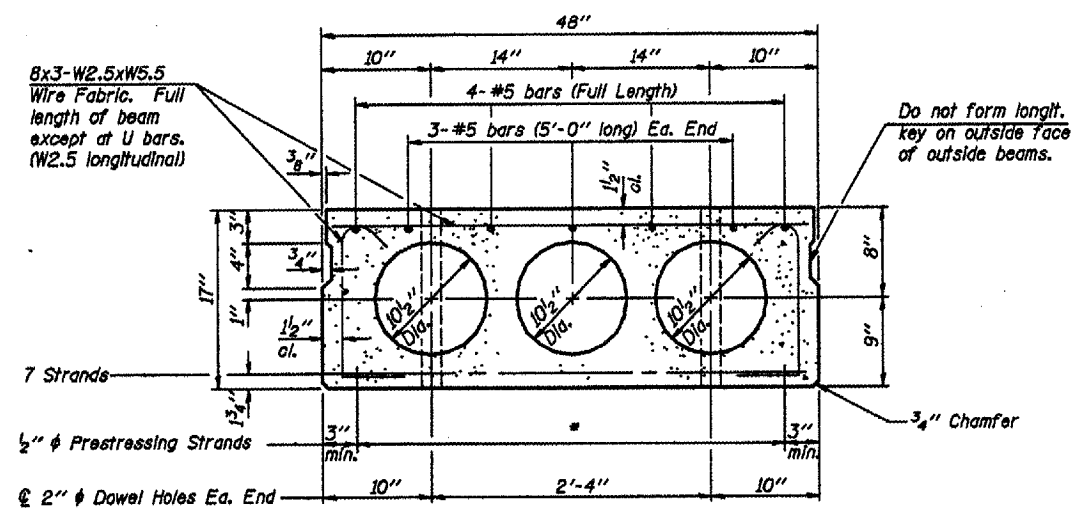
Ralph E. [Signature]

Engineer of Bridges and Structures

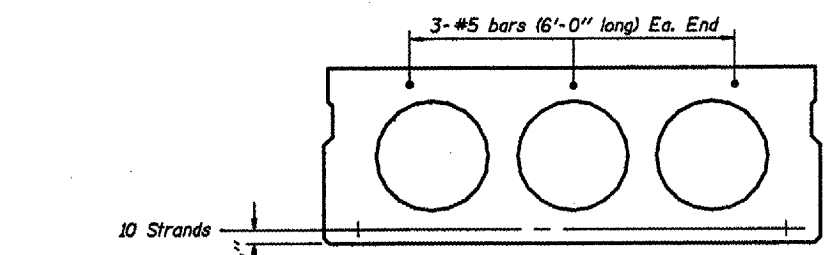
P.P.C. DECK BEAM DETAILS

24' ROADWAY | 17" x 36" BEAMS

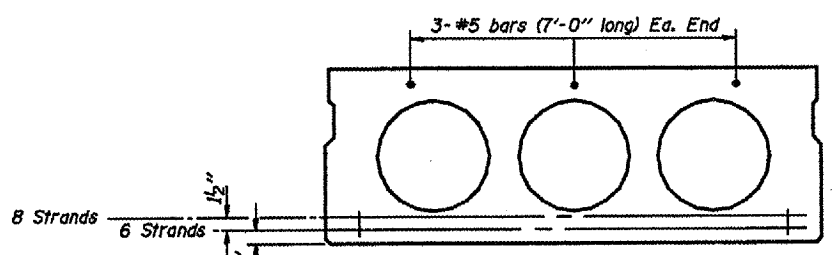
STANDARD CB-2417-36



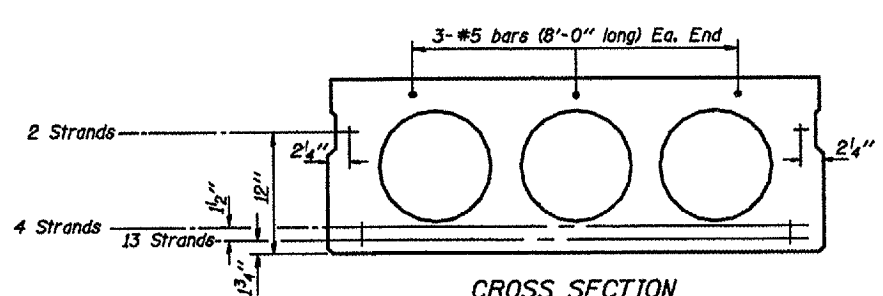
CROSS SECTION
(25' SPAN)



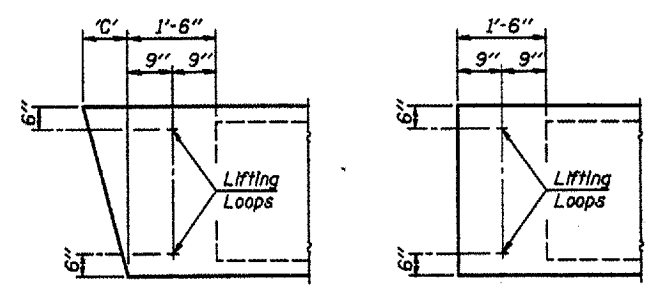
CROSS SECTION
(30' SPAN)



CROSS SECTION
(35' SPAN)



CROSS SECTION
(40' SPAN)



END BLOCK DETAILS

Each beam shall have four Lifting Loops, two at each end of beam cast in locations shown above. Loops shall be burned off after beams have been erected.

DIMENSION 'C'

Skew Angle 'D'	0°	5°	10°	15°	20°	25°	30°
Dimension 'C' (Inches)	0	4 1/4	8 1/2	12 1/8	17 1/2	22 3/8	27 3/4

*** TRANSVERSE STRAND PLACEMENT GUIDELINES**

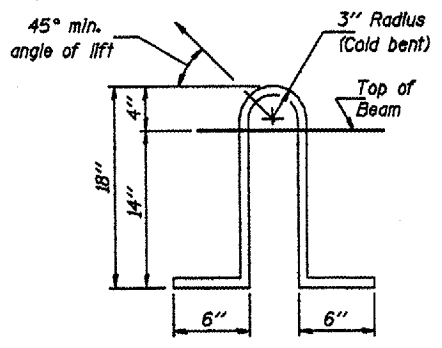
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Vertical placement of strands shall not be adjusted to satisfy the above guidelines.

NOTES

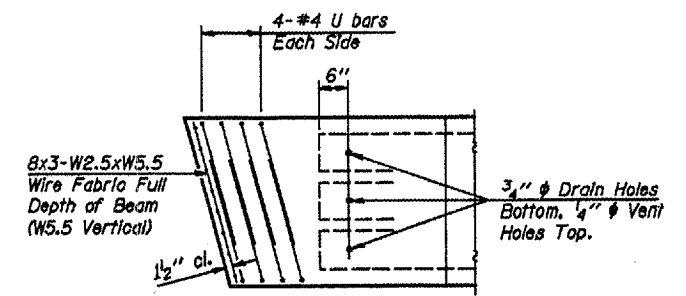
1. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270.
2. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 square inches.
3. Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322, Grade 60.
4. Rail Post anchor devices shall be cast into outside beam as elsewhere specified.
5. When a Waterproofing Membrane System is specified, the top surface of the beams shall be screeded with a straightedge and finished with a hand float. The finished surface shall be free of depressions or high spots with sharp corners and the top edge of keys shall be rounded or chamfered a minimum of 1/4".
6. Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between the top of the beam and the bottom edge of the key.

NOTE
The std. reinf. and dimensions shown on the 25' span cross section is typical for all spans, except as shown.

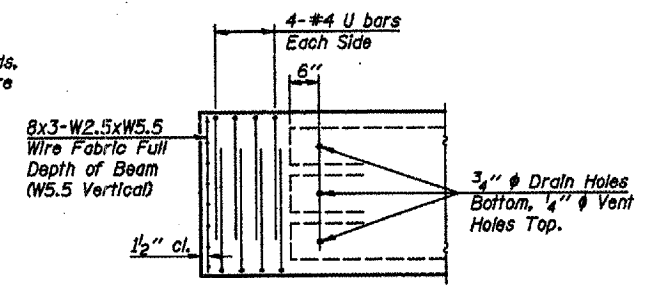


LIFTING LOOP DETAIL

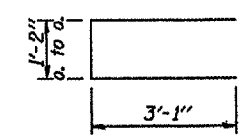
Lifting loops shall be 2. 1/2" #270 ksi strands, as shown. Alternate approved lifting devices are also acceptable.



END REINFORCEMENT
(SKEWED)



END REINFORCEMENT
(RIGHT ANGLE)



BAR U

MIN. BAR LAP

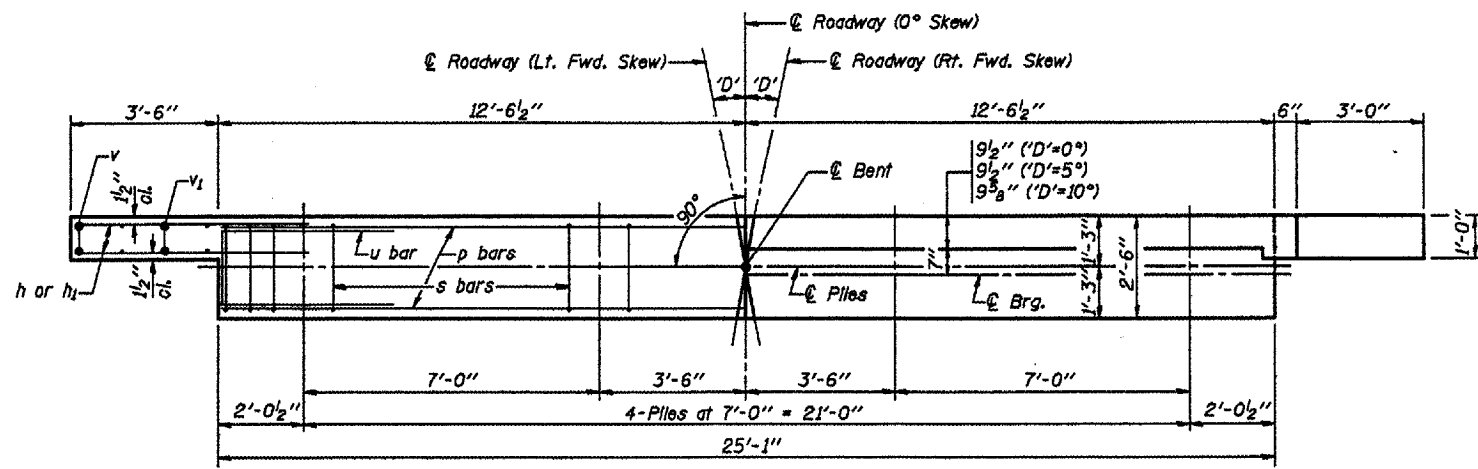
#5 bars = 1'-8"

DESIGN STRESSES

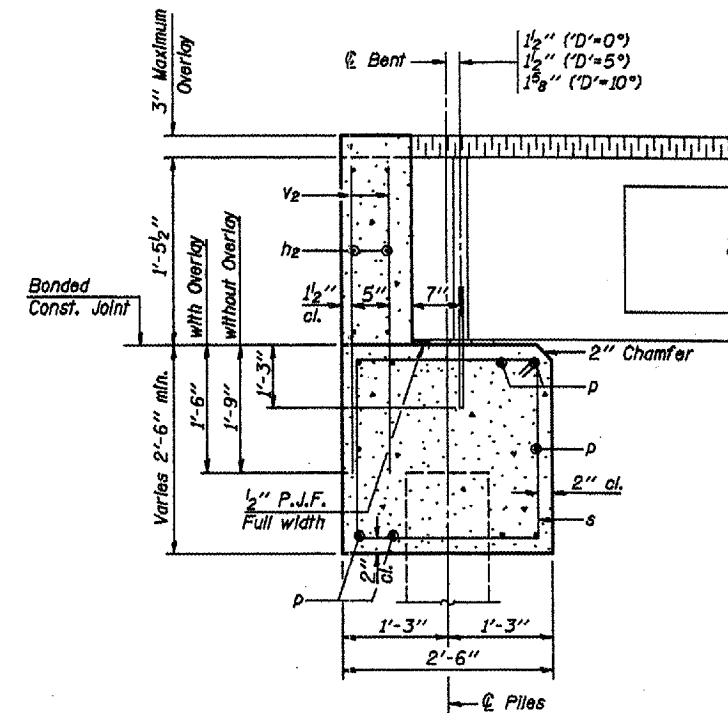
- $f'_c = 5,000$ p.s.i.
- $f'_a = 4,000$ p.s.i.
- $f'_s = 270,000$ p.s.i. (1/2" # Strand)
- $f_{st} = 201,960$ p.s.i. (1/2" # Strand)
- $f_y = 60,000$ p.s.i.

Illinois Department of Transportation
 PASSED APRIL 4, 2005
 Theresa S. Klemm, P.E.
 Engineer of Bridge Design
 APPROVED APRIL 4, 2005
 Ralph E. Anderson
 Engineer of Bridges and Structures

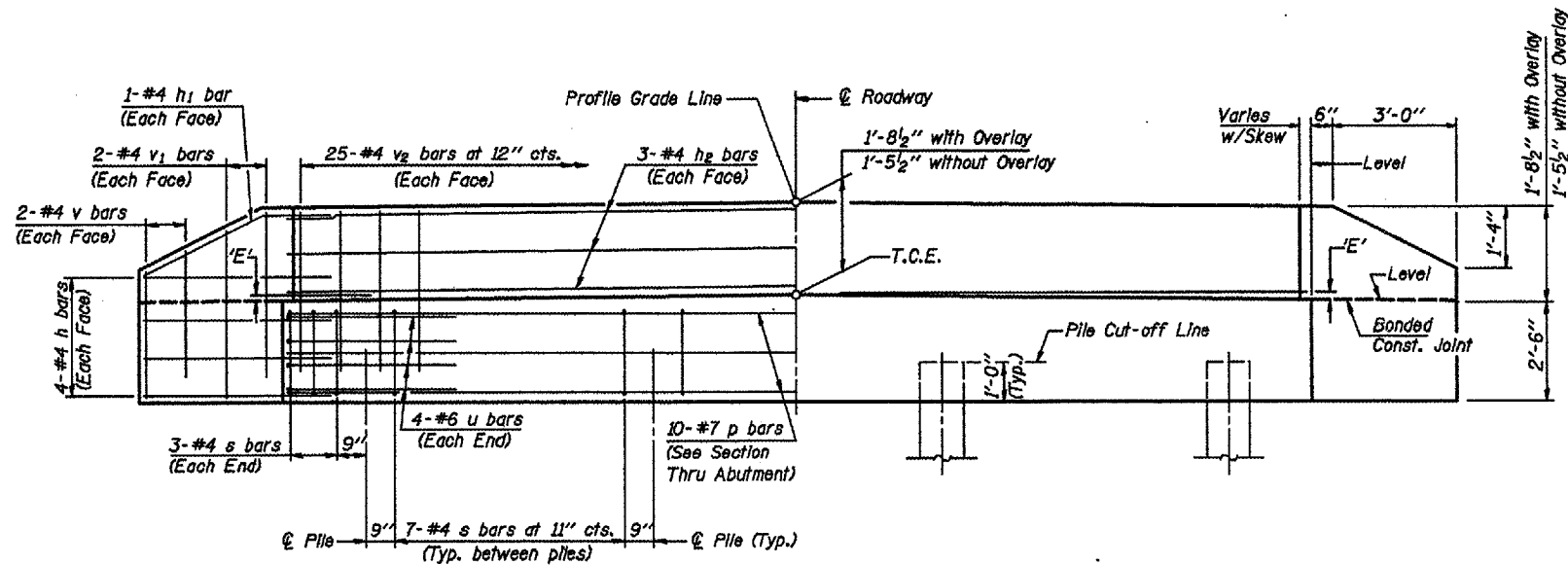
P.P.C. DECK BEAM DETAILS
 24' ROADWAY | 17" x 48" BEAMS
 STANDARD CB-2417-48



PLAN
(D=Designated Skew Angle)



SECTION THRU ABUTMENT
(At Right Angles)



ELEVATION

DIMENSION 'E'

GRADE	'D'=0°		'D'=5°		'D'=10°	
	UPGRADE END	DOWNGRADE END	UPGRADE END	DOWNGRADE END	UPGRADE END	DOWNGRADE END
0%	2 ³ / ₈ "	2 ³ / ₈ "	2 ³ / ₈ "	2 ³ / ₈ "	2 ³ / ₈ "	2 ³ / ₈ "
Over 0% to 1%	2 ³ / ₈ "	2 ³ / ₈ "	2 ¹ / ₄ "	2 ³ / ₈ "	2 ¹ / ₂ "	2 ¹ / ₂ "
Over 1% to 2%	2 ³ / ₈ "	2 ³ / ₈ "	2 ¹ / ₂ "	2 ¹ / ₂ "	1 ⁷ / ₈ "	2 ³ / ₄ "
Over 2% to 3%	2 ³ / ₈ "	2 ³ / ₈ "	2"	2 ⁵ / ₈ "	1 ⁵ / ₈ "	3"
Over 3% to 4%	2 ³ / ₈ "	2 ³ / ₈ "	1 ⁷ / ₈ "	2 ³ / ₄ "	1 ³ / ₈ "	3 ¹ / ₄ "

NOTES

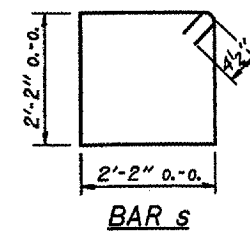
- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.
- Space reinforcement in cap to miss anchor bolts.

MAXIMUM PILE LOADS

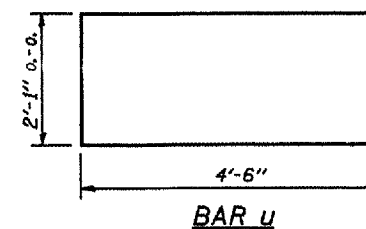
SPAN	TONS
25'	25
30'	26
35'	28
40'	30

DESIGN STRESSES

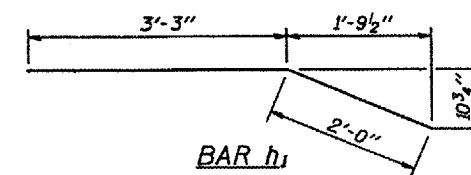
f'c = 3,500 psi
fy = 60,000 psi



BAR s



BAR u



BAR h1

BILL OF MATERIAL FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h	16	#4	5'-0"	—
h1	4	#4	5'-3"	—
h2	6	#4	24'-9"	—
p	10	#7	24'-9"	—
s	27	#4	9'-5"	□
u	8	#6	11'-1"	—
v	8	#4	2'-6"	—
v1	8	#4	3'-5"	—
v2	50	#4	3'-1"	—
Concrete Structures			8.3 Cu. Yds.	
Reinforcement Bars			1110 Lb.	

P.P.C. DECK BEAMS PILE BENT ABUTMENT	
24' RDWY.	17" BMS. 'D'=0°, 5° OR 10°
STANDARD CA-2417-10	

Illinois Department of Transportation

PASSED APRIL 4, 2005
Theresa S. [Signature]
Engineer of Bridge Design

APPROVED APRIL 4, 2005
[Signature]
Engineer of Bridge and Structures

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 328	02-06115-00-BR	JACKSON	11	8
PROJECT NO. BROS-077(39)			CONTRACT NO. 99243	

NOTES

Hollow structural steel tubing shall conform to the requirements of ASTM designation A500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft.-lbs. at 0° F.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36 except posts and angles shall conform to AASHTO M 270 Grade 50.

Boots, cap screws, and nuts shall conform to the requirement of ASTM designation A307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M 164.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232.

All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication according to AASHTO M-111 and ASTM A 385. Galvanized rail shall not be painted.

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for STEEL RAILING, TYPE S-1.

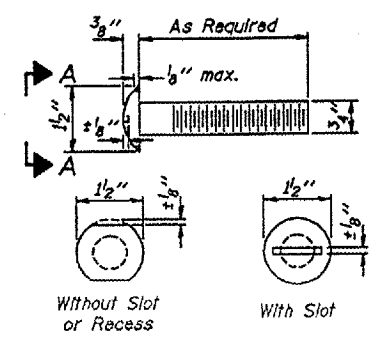
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with STEEL RAILING, TYPE S-1.

All field drilled holes shall be coated with an approved zinc rich paint before erection.

The 1/2" x 7" x 6" plates that come in contact with concrete shall either receive two coats of asphalt paint conforming to Section 1060.07 Type II, or 1/2" fabric bearing pads shall be placed between the plates and concrete.

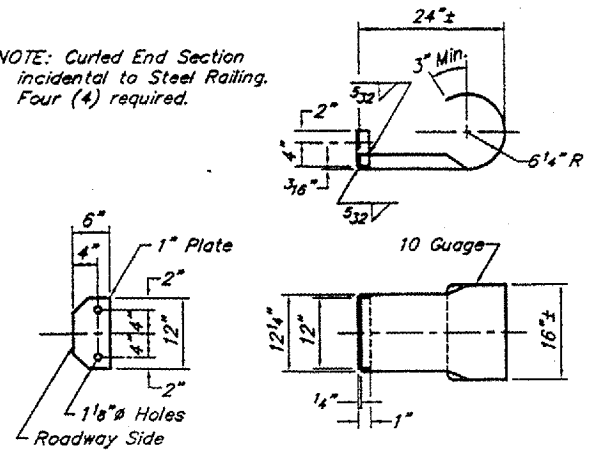
The 3/4" high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened according to Article 505.04 (FX2) of the Standard Specifications. The 1" high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/8 turn. The 5/8" cap screws in bottom of posts shall be tightened to a snug fit only.

The maximum allowable rail post spacing shall be 10'-6". The rail post spacing shown elsewhere in the plans is based on the allowable spacing for another type of rail. When this type of rail is used, the number of posts may be decreased and the post spacing increased to provide equal post spaces of 10'-6" or less.

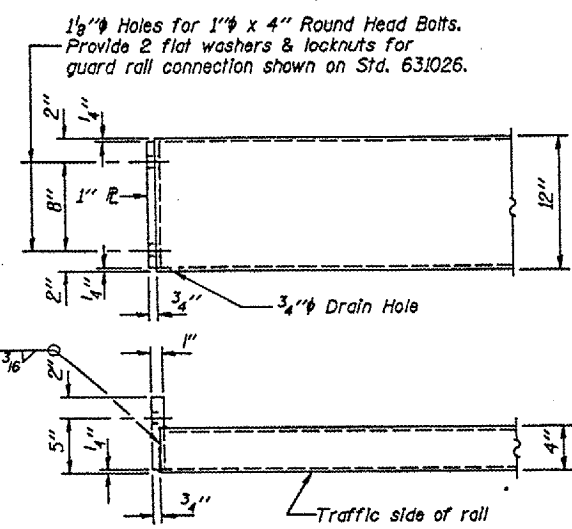


**VIEW A-A
ROUND HEAD BOLT**

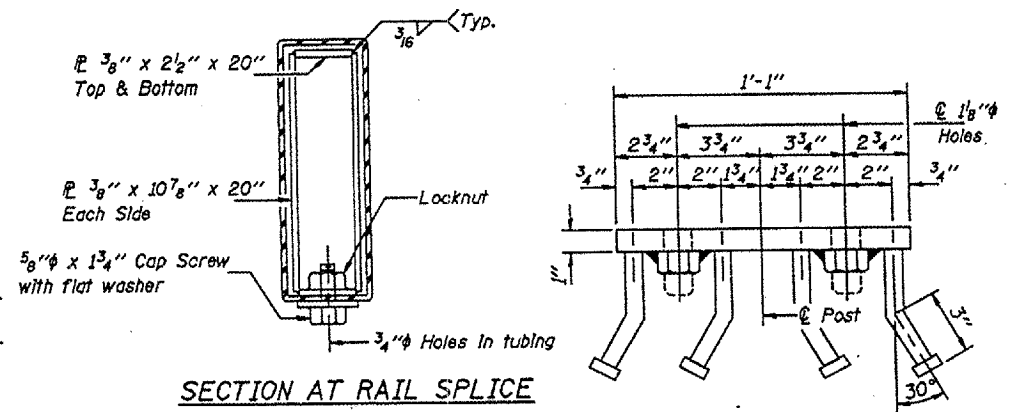
NOTE: Curled End Section incidental to Steel Railing. Four (4) required.



CURLLED END SECTION DETAILS

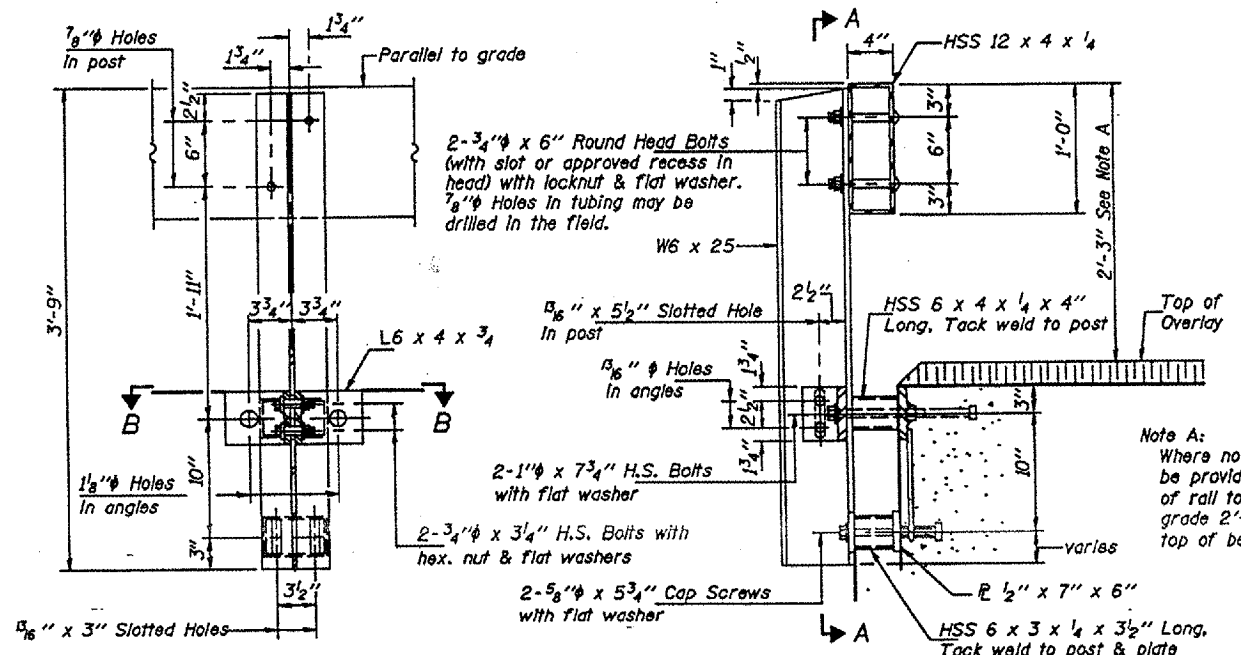


END OF RAIL DETAILS

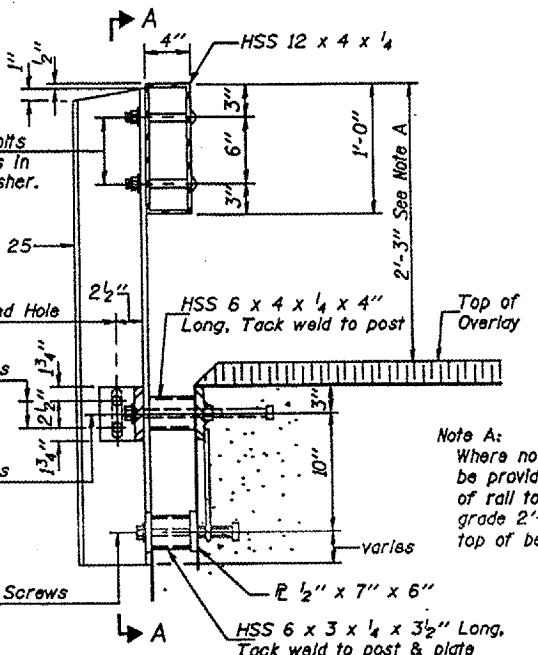


SECTION AT RAIL SPLICE

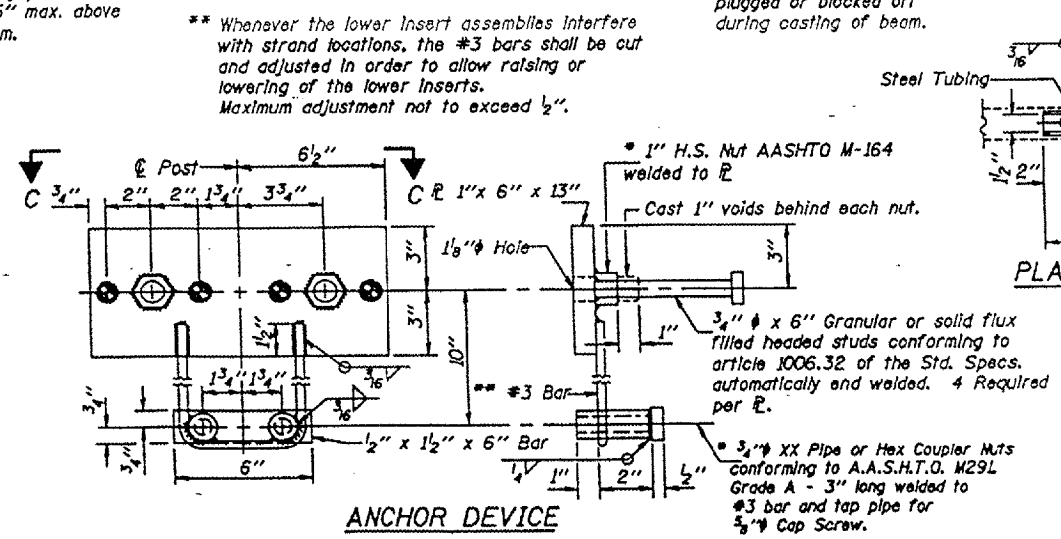
VIEW C-C



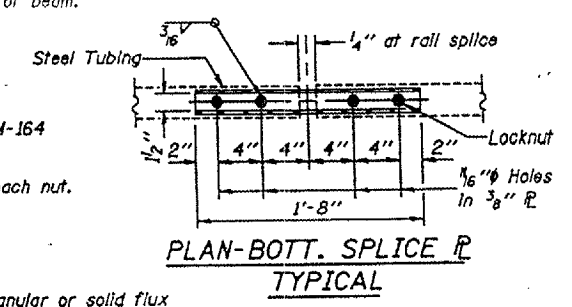
SECTION A-A



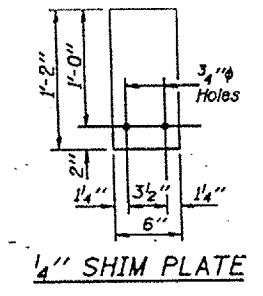
SECTION AT RAIL POST



ANCHOR DEVICE



**PLAN-BOTT. SPLICE R
TYPICAL**

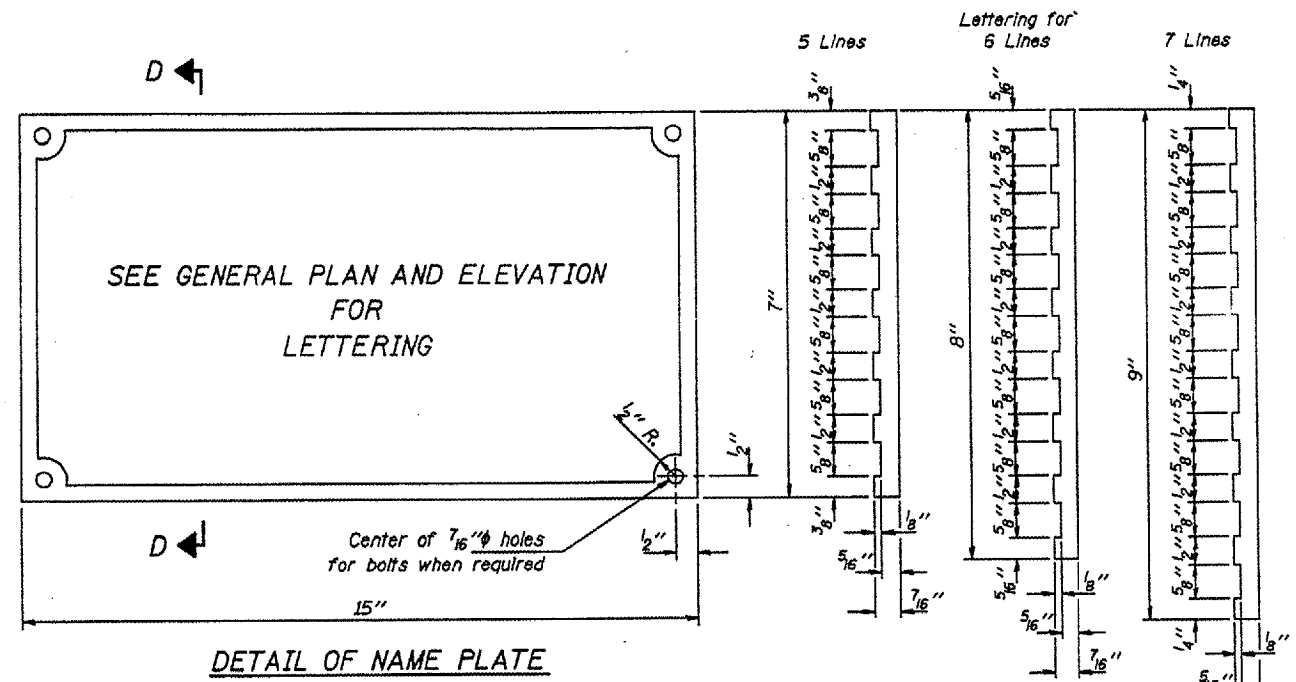


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Illinois Department of Transportation
 PASSED APRIL 4, 2005
 Approved by: *Theresa S. Remington*
 Engineer of Bridge Design
 APPROVED APRIL 4, 2005
 Approved by: *Ralph E. Anderson*
 Engineer of Bridges and Structures

**STEEL RAILING, TYPE S-1
STANDARD CR-TS1**

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 328	02-05115-00-BR	JACKSON	11	9
PROJECT NO. BROS-077(39)			CONTRACT NO. 99243	

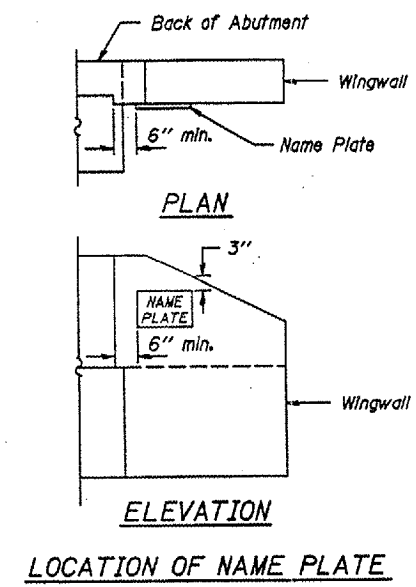


SEE GENERAL PLAN AND ELEVATION FOR LETTERING

DETAIL OF NAME PLATE

Material: Best quality brass or bronze.
 Border & Lettering: Raised 1/8 inch. Square cut and not tapered. Top surface polished.
 Fastenings: Four lugs at least three inches long, cast on back of plate.

SECTIONS D-D



LOCATION OF NAME PLATE

Illinois Department of Transportation

PASSED APRIL 4, 2005
Thomas D. Hennig
 Engineer of Design

APPROVED APRIL 4, 2005
Ralph E. Anderson
 Engineer of Bridges and Structures

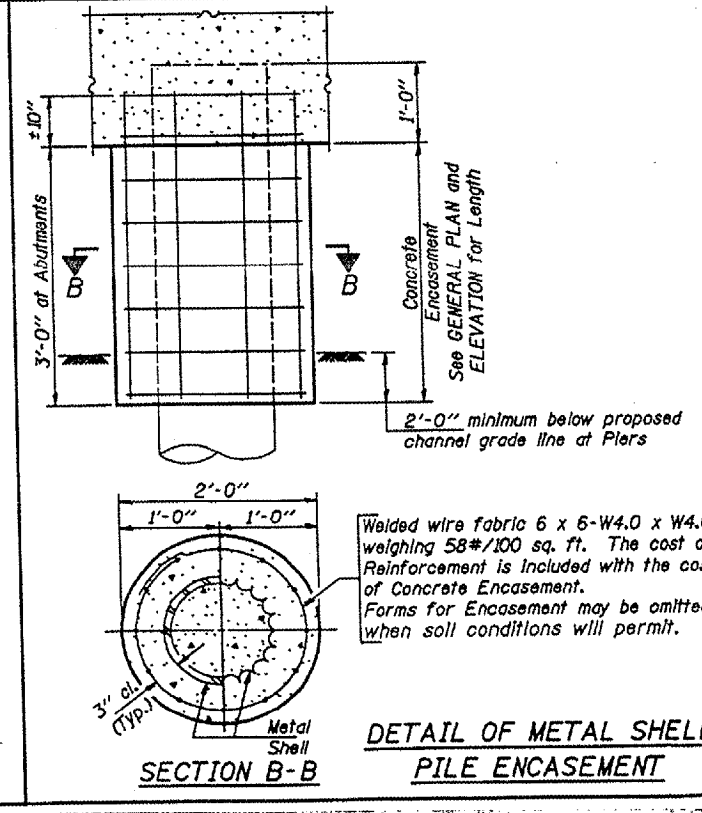
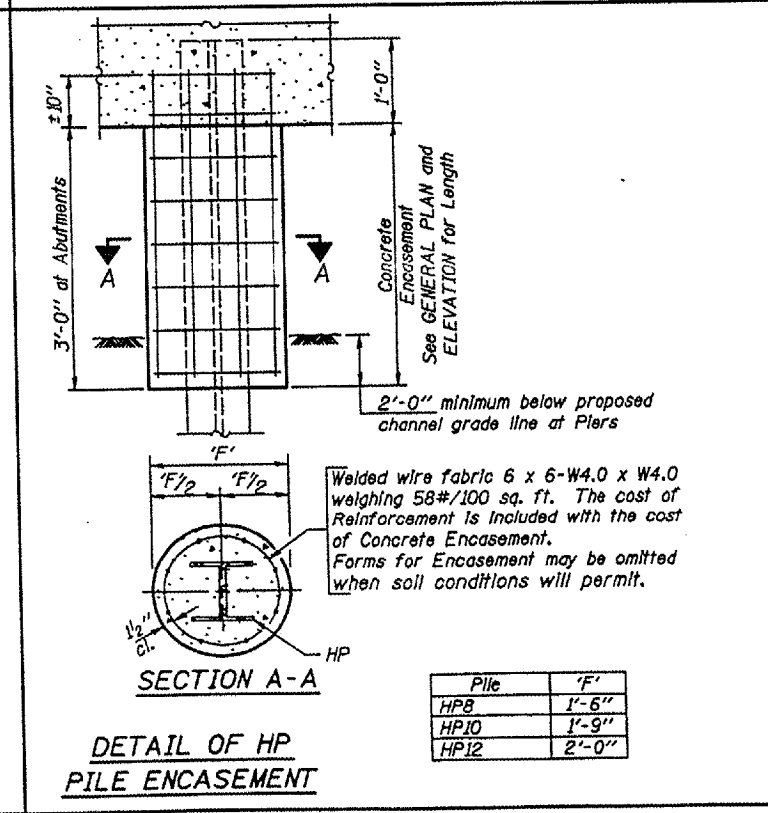
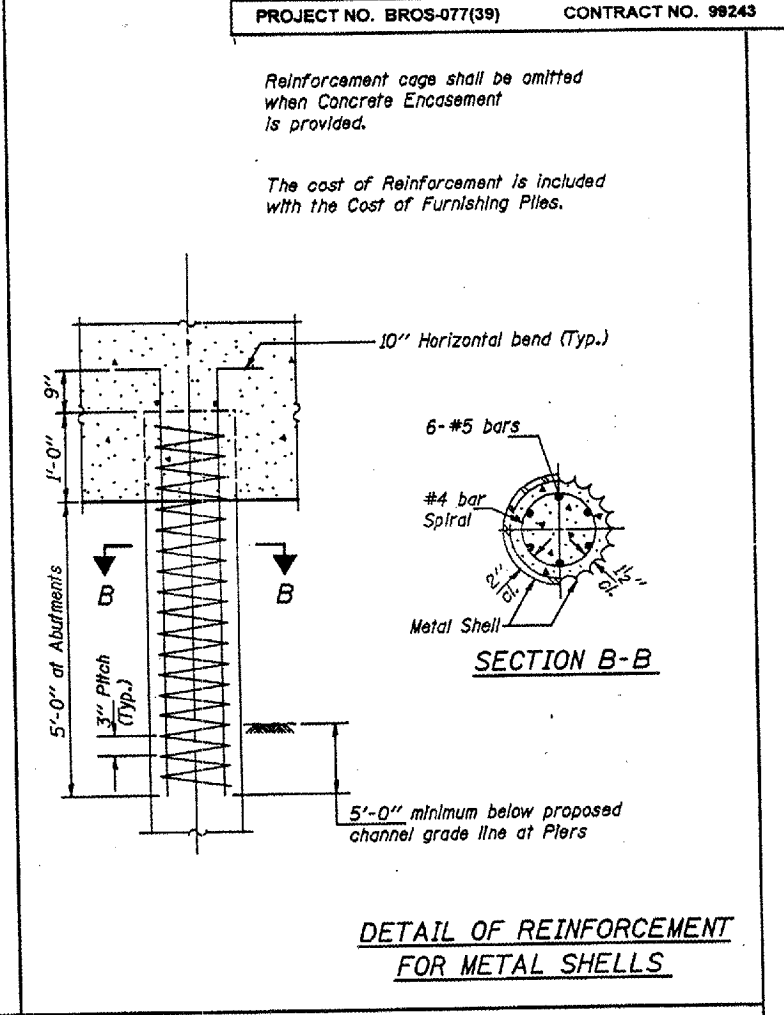
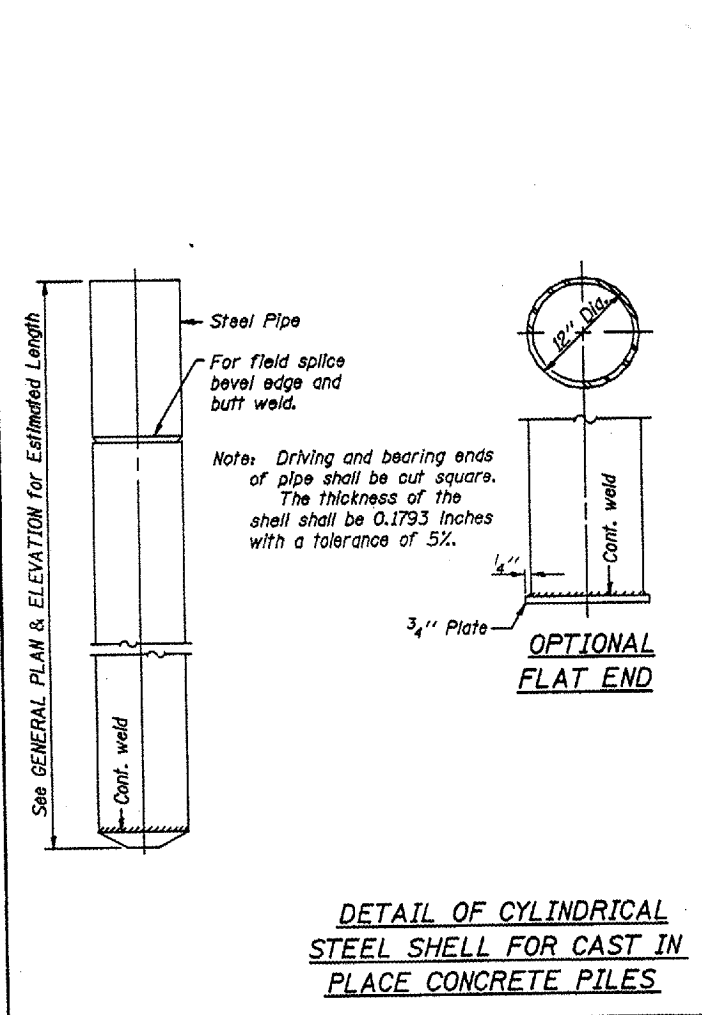
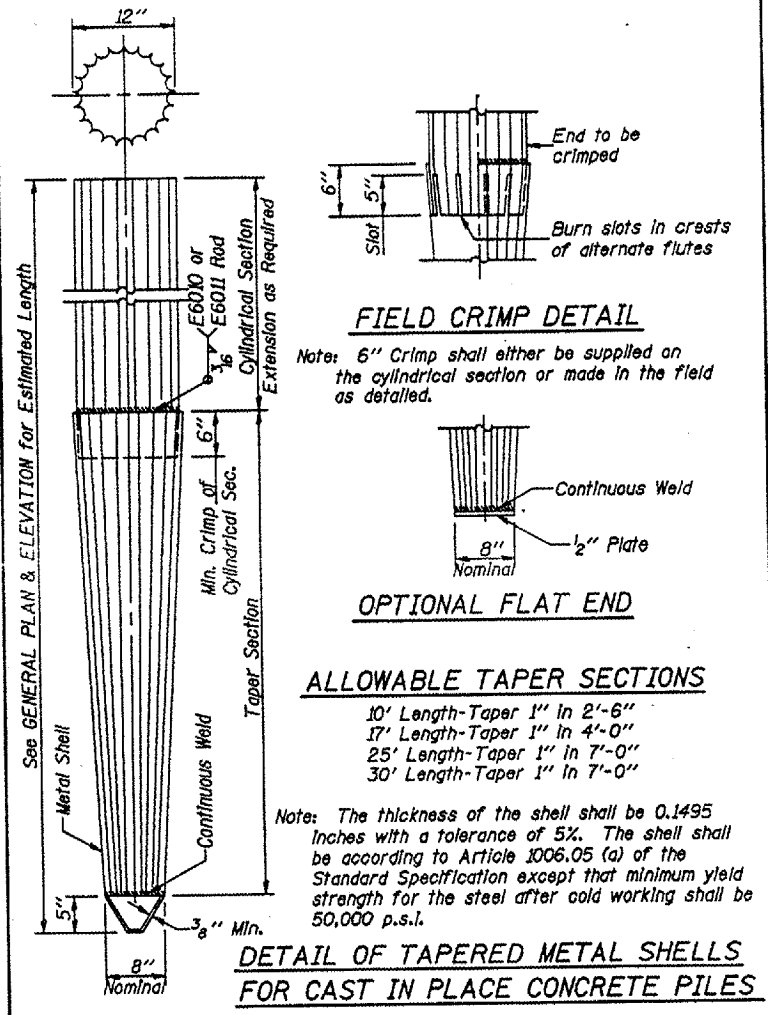
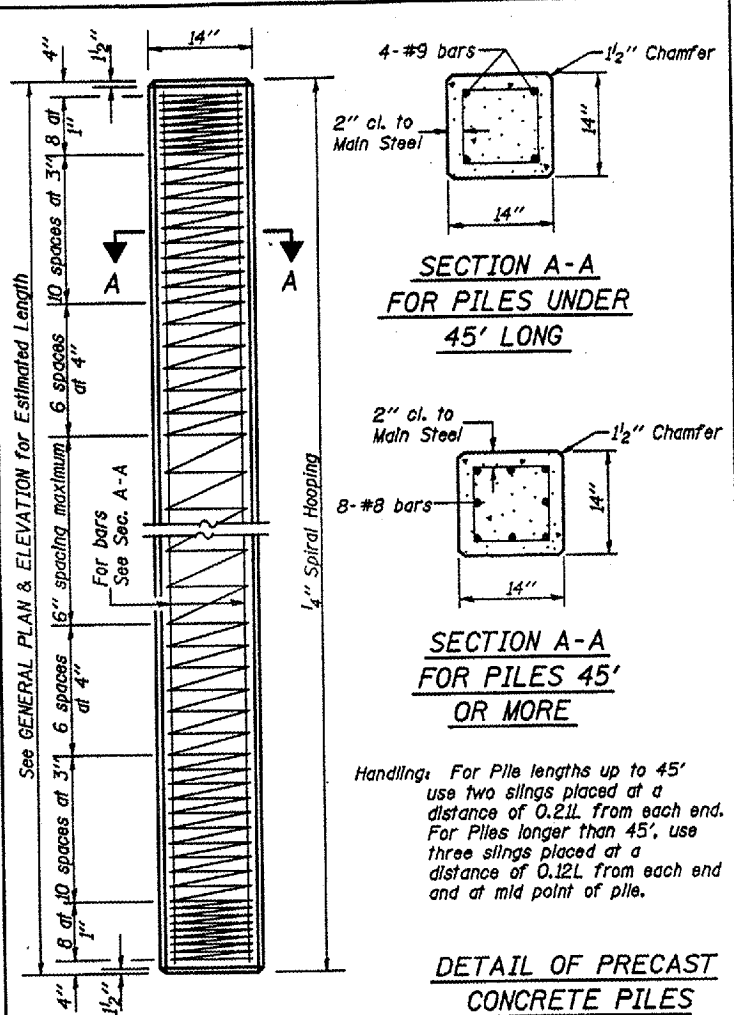
DESIGNED F-1-B

NAME PLATE
 STANDARD CN

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 328	02-05115-00-BR	JACKSON	11	10
PROJECT NO. BROS-077(39)			CONTRACT NO. 98243	

Reinforcement cage shall be omitted when Concrete Encasement is provided.

The cost of Reinforcement is included with the Cost of Furnishing Piles.



QUANTITIES/FT. OF ENCASEMENT (STEEL PILES)

Pile Size	Item	Quantity
HP8	Concrete Encasement	0.063 C.Y.
HP10	Concrete Encasement	0.086 C.Y.
HP12	Concrete Encasement	0.112 C.Y.

(METAL SHELL PILES)

Pile Size	Item	Quantity
12" Dia.	Concrete Encasement	0.087 C.Y.

PILE DETAILS

STANDARD CX-1

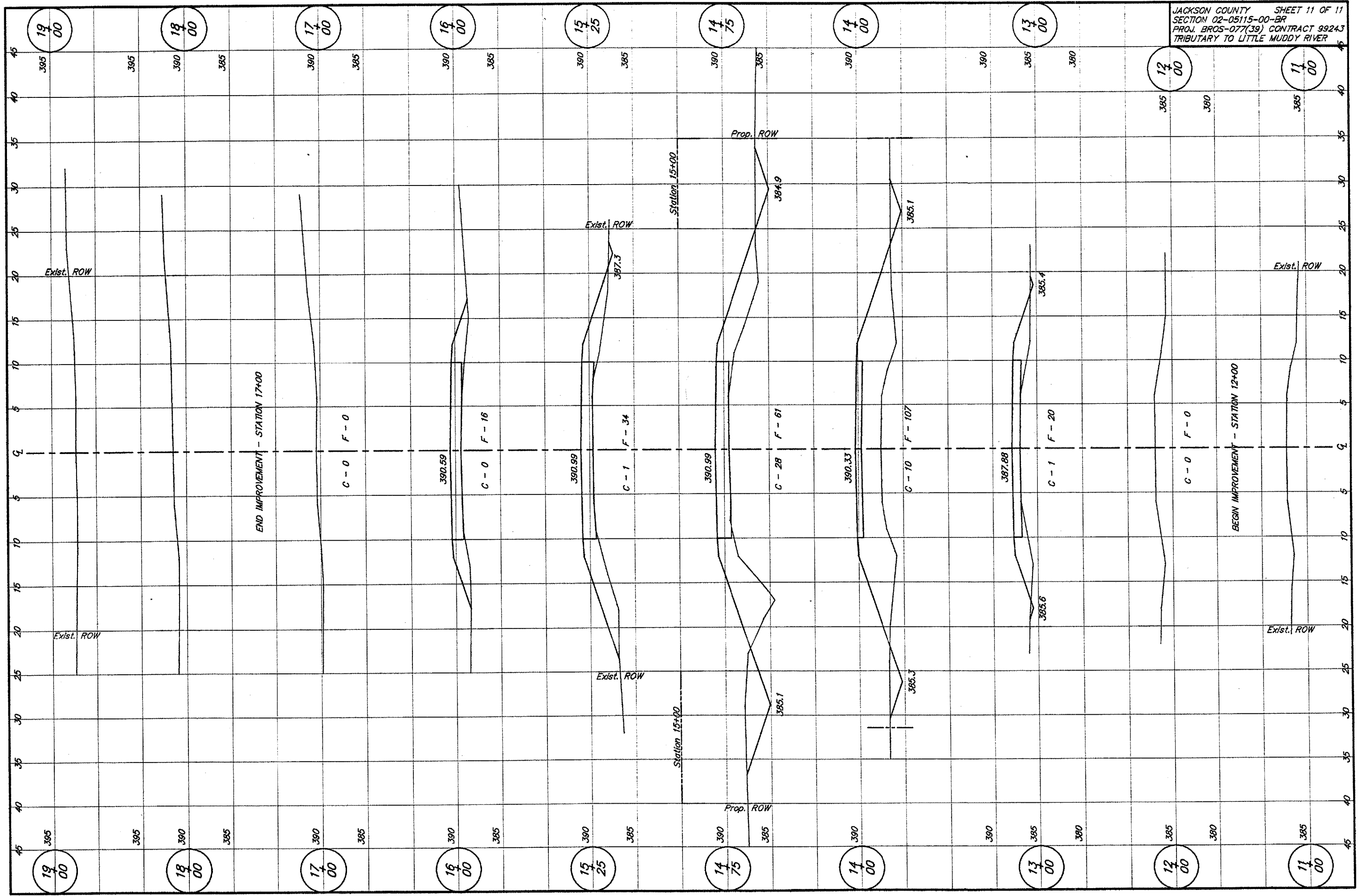
Illinois Department of Transportation

PASSED FEBRUARY 1, 2000

Theresa N. Nussle
Engineer of Bridge Design

APPROVED FEBRUARY 1, 2000

Robert E. Anderson
Engineer of Bridges and Structures



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