

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
**PLANS FOR
PROPOSED LOCAL AGENCY IMPROVEMENT
FEDERAL-AID BRRP PROJECT**

SUMMARY OF QUANTITIES
CONSTRUCTION TYPE CODE: X080-2A

CODE NO.	ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	154
20300100	CHANNEL EXCAVATION	CU YD	89
20700220	POROUS GRANULAR EMBANKMENT	CU YD	115
25001000	SEEDING CLASS 2, SPECIAL	ACRE	0.3
25100630	EROSION CONTROL BLANKET	SQ YD	246
35101400	AGGREGATE BASE COURSE, TYPE B	TON	232.8
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	167.0
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	120
50300225	CONCRETE STRUCTURES	CU YD	16.8
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS-17"	SQ FT	329
50500405	FURNISHING & ERECTING STRUCTURAL STEEL	POUND	5003
50700305	HARDWARE	POUND	2540
50800105	REINFORCEMENT BARS	POUND	4320
50901005	STEEL RAILING, TYPE SM	FOOT	66.3
51201000	FURNISHING METAL PILE SHELLS, 12"	FOOT	266
51202500	DRIVING & FILLING SHELLS	FOOT	266
51203200	TEST PILE - METAL SHELLS	EACH	1
51204900	PERMANENT STEEL SHEET PILING	SQ FT	2896
51500100	NAME PLATES	EACH	1
54213870	STEEL END SECTIONS, 15"	EACH	2
54200220	PIPE CULVERTS, CLASS D, TYPE I 15"	FOOT	32
67100100	MOBILIZATION	L SUM	1
70103700	TRAFFIC CONTROL COMPLETE	L SUM	1

* SEE SPECIAL PROVISIONS

INDEX OF SHEETS

- 1 = COVER SHEET
- 2 = GENERAL NOTES, SCHEDULES, AND TYPICAL SECTION
- 3 = PLAN AND PROFILE
- 4 = GENERAL PLAN AND ELEVATION
- 5 = EAST AND WEST ABUTMENT DETAILS
- 6 = DECK BEAM DETAILS
- 7 = STEEL BRIDGE RAIL, TYPE SM
- 8 = PILE DETAILS
- 9 = CROSS SECTIONS

NAME AND ADDRESS OF UTILITIES	TYPE
COMED 123 Energy Avenue Rockford, IL 61109 Attn: Public Improvements (815) 490-2320	ELECTRIC
NICOR GAS 1844 W. Ferry Road Naperville, IL 60563 Attn: Scott Stogsdill (630) 983-8676 X2362	GAS
VERIZON 112 W. Elm Street Sycamore, IL 60178 Attn: Mike Brodzik (815) 895-1532	TELEPHONE
SBC 2404 8th Avenue Rockford, IL 61108 Attn: Steven Jones (815) 394-7270	TELEPHONE
MediaCom 2506 1/2 N. Bloomington Streator, IL 61365 Attn: Dale Peters (815) 672-5071	CABLE

LOCATION MAP SCALE 0 1 2 MILES

PLAN & PROFILE
HORIZONTAL 0 5 10 15 20 40 FT.
VERTICAL 0 5 10 FT.
CROSS SECTIONS
HORIZONTAL 0 5 10 FT.
VERTICAL 0 5 10 FT.

**BRIDGE REPLACEMENT &
REHABILITATION PROGRAM**

T.R. 59
SECTION 01-22113-00-BR /OGLE COUNTY
SECTION 01-09115-00-BR /WINNEBAGO COUNTY
PROJECT BROS-141(62)
JOB NO. C-92-069-06
CONTRACT NO. 85386
2006

STANDARDS

- 000001-04 STANDARD SYMBOLS, ABBREVIATIONS, & PATTERNS
- 280001-02 TEMPORARY EROSION CONTROL SYSTEMS
- 515001-02 NAME PLATE FOR BRIDGES
- 542401 METAL END SECTION FOR PIPE CULVERT
- 702001-06 TRAFFIC CONTROL DEVICES
- BLR-21-6 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
- BLR-22-4 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

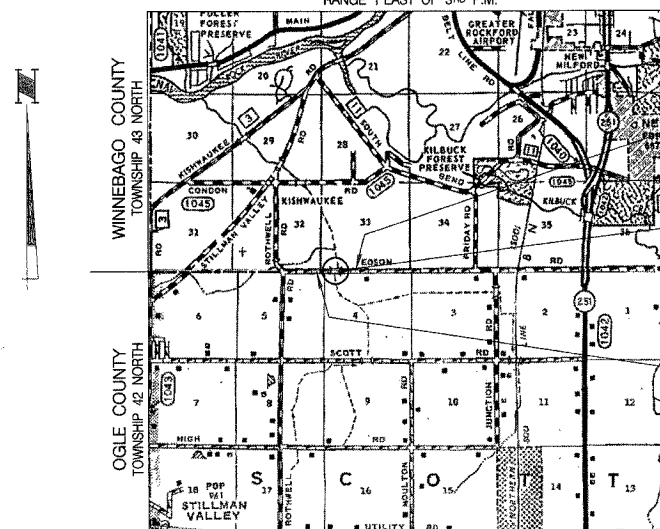
ATTENTION CONTRACTORS

THE ILLINOIS DEPARTMENT OF TRANSPORTATION BUREAU OF MATERIALS AND PHYSICAL RESEARCH, "PROJECT PROCEDURES GUIDE" IS APPLICABLE TO THIS PROJECT.

HIGHWAY CLASSIFICATION: LOCAL ROAD
DESIGN SPEED: 30 mph
ADT = <100 (2006) 1% TRUCKS
3 R GUIDELINES



NET LENGTH 300 FT. = 0.057 MILES
RANGE 1 EAST OF 3RD P.M.



LOCATION MAP

SECTION ENDS AT STA. 11+50

PROPOSED STRUCTURE (S.N. 071-3327)
A SINGLE SPAN (1 @ 32'-0") 17" PRECAST, PRESTRESSED CONCRETE DECK BEAM STRUCTURE ON CLOSED STEEL SHEET PILE ABUTMENTS @ STA. 10+00, SKEWED 0°.

SECTION BEGINS AT STA. 8+50



Brian K. Conwell
DATE: MARCH 7/2006
EXPIRES 11/30/06

APPROVED: *[Signature]* 20_06
LOCAL AGENCY OFFICIAL
APPROVED: *[Signature]* 20_06
LOCAL AGENCY OFFICIAL
PASSED: *[Signature]* 4-18 20_06
DISTRICT ENGINEER OF LOCAL ROADS & STREETS
APPROVED: *[Signature]* 4-18 20_06
FOR BIDDING: *[Signature]*
DISTRICT ENGINEER
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREPARED BY
**WILLET
HOFMANN &
ASSOCIATES, INC.**
CONSULTING ENGINEERS
Land Surveying - Transportation - Structural
Environmental - Architecture
809 East Second Street
Dixon, Illinois 61021
Phone: 815-284-3381

PROJECT	SECTION	COUNTY	SHEETS	TOTAL SHEETS
01-22113-00-BR	01-09115-00-BR	Ogle	9	2
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- BROS-141(62)	

GENERAL NOTES

Existing Structures (Including Foundations, Walls, Cisterns, Wells Or Other Underground Structures) Within The Right Of Way Shall Be Removed In Accordance With Article 501.02 And 501.03 Of The Standard Specifications. Without Additional Compensation, Unless Otherwise Noted In The Plans Or Special Provisions.

The Contractor Shall Seed All Disturbed Areas Within The Project Limits.

No Overhaul Has Been Computed And None Shall Be Paid For From Any Source.

The Final Top Four Inches Of Soil In Any Right-Of-Way Area Disturbed By The Contractor Must Be A Cohesive Soil Capable Of Supporting Vegetation.

The Contractor Shall Be Responsible For Protecting Utility Property During Construction Operations As Outlined In Article 107.31 Of The Standard Specifications.

The Utilities Located Within The Project Limits Or Immediately Adjacent To The Project Construction Limits Include:

Nicor Gas 1844 W. Ferry Road Naperville, IL. 60563 Attn: Scott Slogdill (630) 983-8676 X2362	Verizon 112 W. Elm Street Sycamore, IL. 60178 Attn: Mike Brodzik (815) 895-1532
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COMED 123 Energy Avenue Rockford, IL. 61109 Attn: Public Improvements (815) 490-2320	MediaCom 2506 1/2 N. Bloomington Streator, IL. 61365 Attn: Dale Peters (815) 672-5071
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SBC
2404 8th Avenue
Rockford, IL. 61108
Attn: Steven Jones
(815) 394-7270

A Minimum Of 48 Hours Advance Notice Is Required For Non-Emergency Work.

A Nationwide 404 Permit Has Been Issued For This Project And The Conditions Of That Permit Must Be Adhered To.

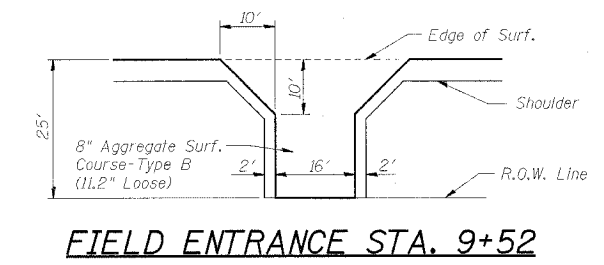
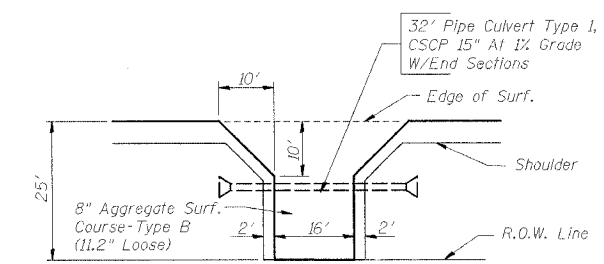
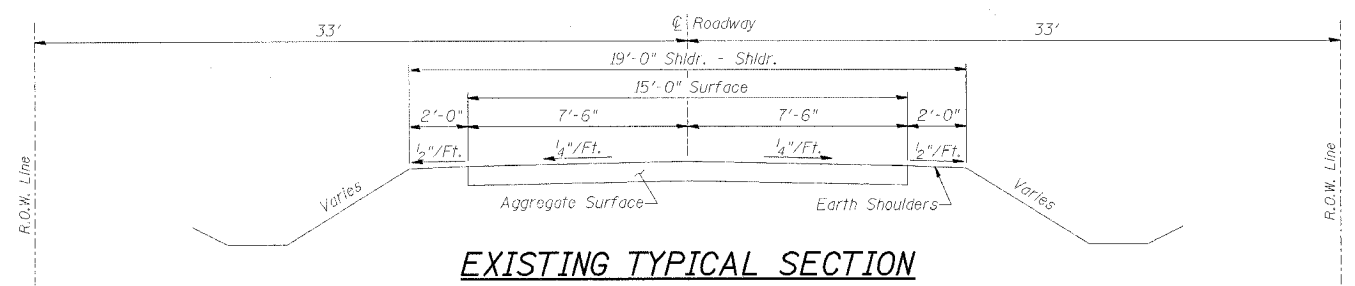
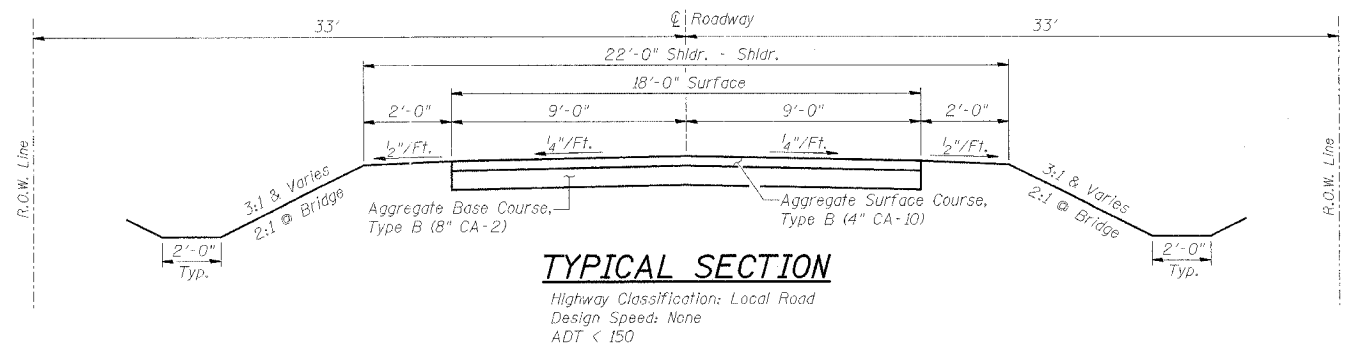
When Mulch With Emulsified Asphalt Is Applied, It Will Be The Contractor's Responsibility To Cover Or Protect All Traffic Signs, Guardrail And Curbs. Any Signs, Guardrail Or Curbs Which Become Covered With Asphaltic Material Shall Be Cleaned By The Contractor At His Own Expense.

Where Section Or Subsection Monuments Are Encountered, The Engineer Shall Be Notified Before Such Monuments Are Removed. The Contractor Shall Protect And Carefully Preserve All Property Markers, Monuments And Right-Of-Way Pins Until The Owner, An Authorized Surveyor, Or Agent Has Witnessed Or Otherwise Referenced Their Location.

Existing Mail Boxes, Street Signs And Traffic Signs That Are Within The Construction Limits Shall Be Removed And Reset By The Contractor. Cost Of Removing And Resetting To Be Included In The Contract Unit Price Bid Per Cubic Yard For Earth Excavation.

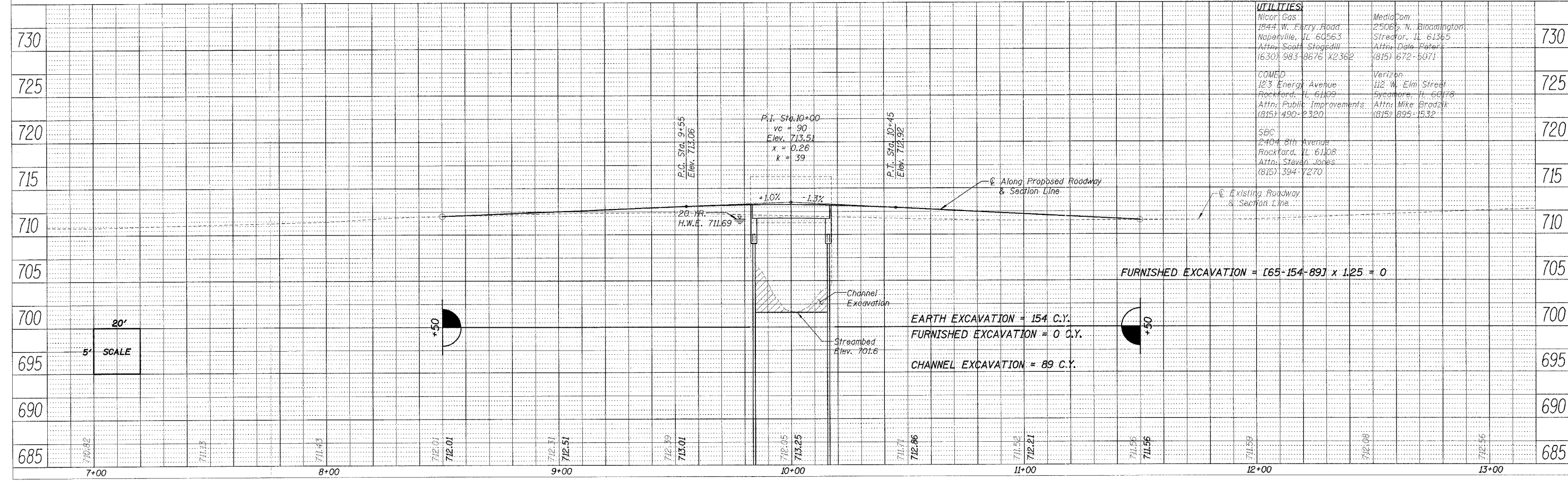
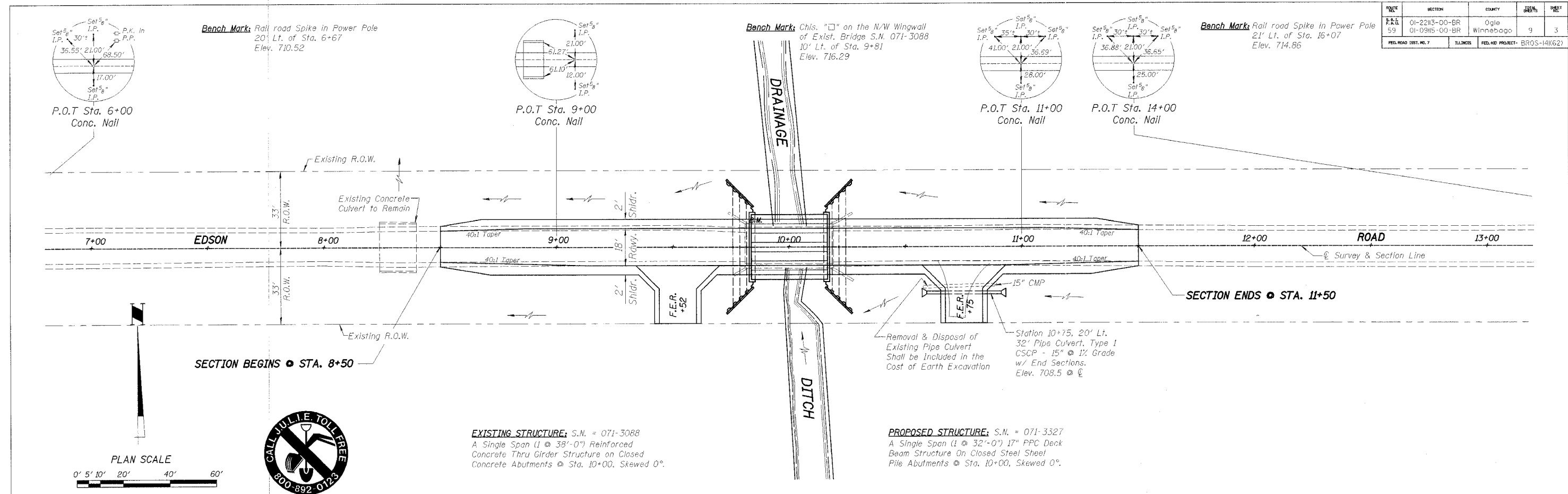
SCHEDULE OF QUANTITIES

LOCATION	ACRE	REMARKS
SEEDING CLASS II, SPECIAL		
LT & RT STA. 8+50 - STA. 11+50	0.3	
EROSION CONTROL BLANKET		
LOCATION	SO YD	REMARKS
RT STA. 9+77	62	AROUND WINGWALL
LT STA. 9+77	62	AROUND WINGWALL
RT STA. 10+23	62	AROUND WINGWALL
LT STA. 10+23	62	AROUND WINGWALL
TOTAL	248 SO YD	
AGGREGATE BASE COURSE, TYPE B		
LOCATION	TON	REMARKS
STA. 8+50 - STA. 9+10	50.1	TAPER, 8" DEPTH
STA. 9+10 - STA. 9+82.75	66.3	8" DEPTH
STA. 10+17.25 - STA. 10+90	66.3	8" DEPTH
STA. 10+90 - STA. 11+50	50.1	TAPER, 8" DEPTH
TOTAL	232.8 TON	
AGGREGATE SURFACE COURSE, TYPE B		
LOCATION	TON	REMARKS
STA. 8+50 - STA. 9+10	25.1	TAPER, 4" DEPTH
STA. 9+10 - STA. 9+82.75	33.1	4" DEPTH
F.E.R. STA. 9+52	25.3	FIELD ENTRANCE, 8" DEPTH
STA. 10+17.25 - STA. 10+90	33.1	4" DEPTH
STA. 10+90 - STA. 11+50	25.1	TAPER, 4" DEPTH
F.E.R. STA. 10+75	25.3	FIELD ENTRANCE, 8" DEPTH
TOTAL	167.0 TON	
STEEL END SECTIONS 15"		
LOCATION	EACH	REMARKS
RT. STA. 10+59	1	
RT. STA. 10+91	1	
TOTAL	2 EACH	
PIPE CULVERTS, CLASS D, TYPE 1 - 15"		
LOCATION	FOOT	REMARKS
F.E.R. STA. 10+59 - 10+91	32	FIELD ENTRANCE
TOTAL	32 FOOT	



GENERAL NOTES, SCHEDULES, AND TYPICAL SECTION
SECTION 01-22113-00-BR
SECTION 01-09115-00-BR
EDSON ROAD OVER DRAINAGE DITCH
SCOTT/ROCKFORD ROAD DISTRICTS
OGLE/WINNEBAGO COUNTY
WHA # 1164D01

DATE	SECTION	COUNTY	SHEET
01-22-13-00-BR	Ogle	9	3
01-09-15-00-BR	Winnebago		
FED. ROAD DIST. NO. 7		FED. AID PROJECT - BR05-141(62)	



Existing Structure No. 071-3088
 A Single Span (1 @ 38'-0") Reinforced Concrete Thru Girder Structure on Closed Concrete Abutments @ Sta. 10+00. Skewed 0°. To Be Removed. No Salvage Except Nameplate & Nameplate Shall Become Property Of The County.

BENCH MARK: Railroad Spike In Power Pole
 20' Lt. Of Sta. 6+67, Elev.=710.52

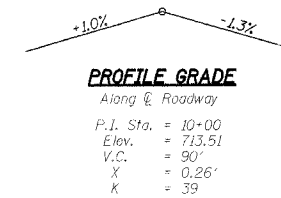
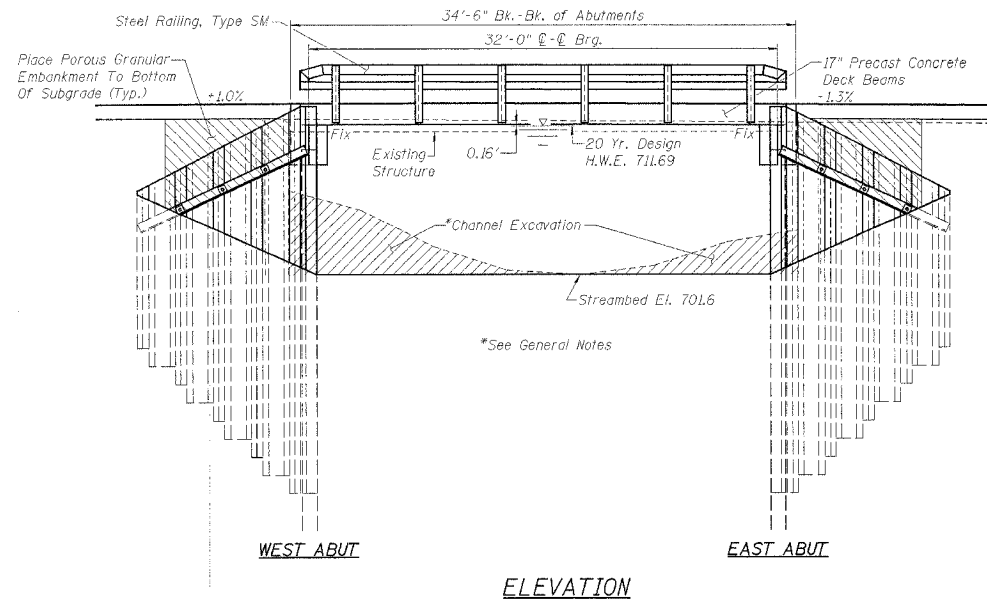
BENCH MARK: Chiseled "□" On The Northwest Wingwall of Exist. Bridge S.N. 071-3088
 10' Lt. Of Sta. 9+81, Elev.=716.29

BENCH MARK: Railroad Spike In Power Pole
 21' Lt. Of Sta. 16+07, Elev.=714.86

PROJECT	SECTION	COUNTY	SHEETS	TOTAL
59	01-2213-00-BR	Ogle	9	4
	01-0915-00-BR	Winnebago		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT- BROS-141(62)	

BILL OF MATERIAL - BRIDGE

ITEM	UNIT	SUB	SUPER	TOTAL
Porous Granular Embankment	Cu. Yd.		115	115
Removal Of Existing Structures	Each			1
Channel Excavation	Cu. Yd.	89		89
Structure Excavation	Cu. Yd.	120		120
Concrete Structures	Cu. Yd.	16.8		16.8
Precast Prestressed Concrete Deck Beams - 17"	Sq. Ft.		929	929
Furnishing & Erecting Structural Steel	Pound	5003		5003
Steel Railing, Type SM	Foot		66.3	66.3
Hardware	Pound	2540		2540
Reinforcement Bars	Pound	4320		4320
Furnishing Metal Pile Shells - 12"	Foot	266		266
Driving and Filling Shells	Foot	266		266
Test Pile - Metal Shells	Each	1		1
Permanent Steel Sheet Piling	Sq. Ft.	2896		2896
Name Plates	Each		1	1



GENERAL NOTES

See Proposal For Boring Data.
 Reinforcement Bars Shall Conform To The Requirements Of AASHTO M-31, M-42, Or M-53 Grade 60.
 Backfill Shall Be Placed Behind Abutments After Deck Beams Are Set And Grouted And Tie-Rods In Place. Refer To Article 502.10 Of The Standard Specifications.
 Contractor Shall Drive One Metal Shell Test Pile In A Permanent Location At The East Abutment As Directed By Engineer Before Ordering The Remainder Of Piles.
 Permanent Steel Sheet Piling For Abutments Is Based On The Use Of PZ-22 Sheet Piling. The Substitution Of An Alternate Type Of Steel Sheet Piles Must Be Approved By The Engineer And Must Have Equal Or Greater Section Properties. (Minimum Sx = 18.1 Cubic Inches Per Foot Of Wall) No Additional Compensation For Alternate Will Be Allowed.
 See Special Provisions For Field Painting Of Exposed Portions Of Permanent Steel Sheet Piling, Walkers, & 1/4" Cap Plate.
 Channel To Be Transitioned To Fit Proposed Structure Inside Right Of Way. Cost Shall Be Included In Price Per Cubic Yard For "Channel Excavation".
 A Calcium Nitrate Corrosion Inhibitor, As Covered In The Special Provisions, Shall be used in the Concrete for Precast Prestressed Concrete Deck Beams.

DRAINAGE DITCH
 BUILT 2006 BY
 SCOTT ROAD DIST./OGLE COUNTY
 ROCKFORD ROAD DIST./WINNEBAGO COUNTY
 SECTION 01-2213-00-BR
 SECTION 01-0915-00-BR
 T.R. 59 STA. 10+00
 STR. NO. 071-3327 LOADING HS20

NAME PLATE LETTERING
 Refer To STD. 515001

DESIGN STRESSES FIELD (LOAD FACTOR)
 $f'_c = 3,500$ P.S.I.
 $f_y = 60,000$ P.S.I. (Reinf.)
 $f_y = 36,000$ P.S.I. (Struct. Steel)

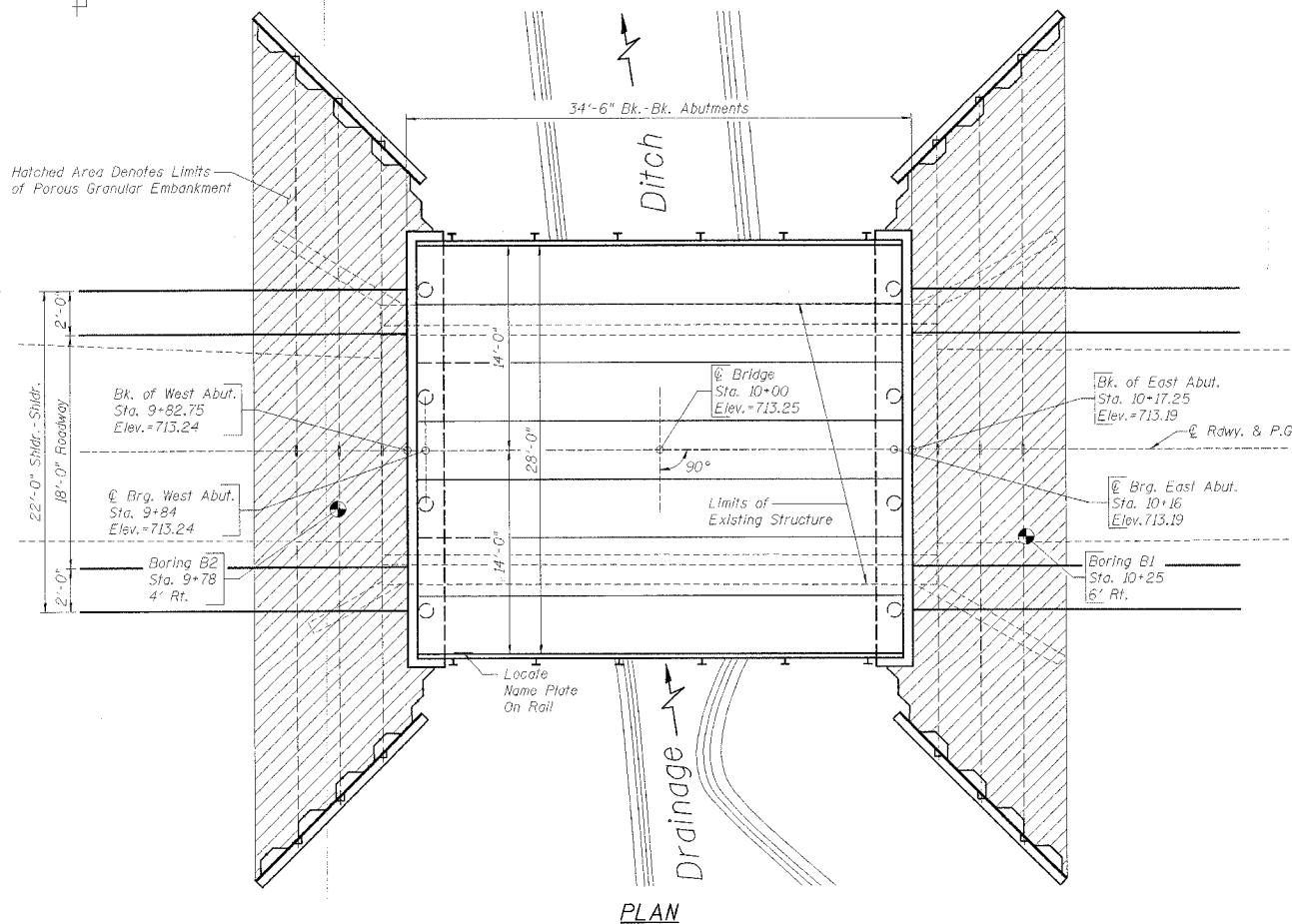
PRECAST PRESTRESSED UNITS
 $f'_c = 5,000$ psi
 $f'_a = 4,000$ psi
 $f'_s = 270,000$ psi (1/2" ϕ STRANDS)
 $f'_s = 189,000$ psi (1/2" ϕ STRANDS)

DESIGN SPECIFICATIONS
 Designed in accordance with AASHTO Spec. dated 2002.

LOADING HS20-44
 Allow 50#/#/Sq. Ft. for future wear surface.

WATERWAY INFORMATION

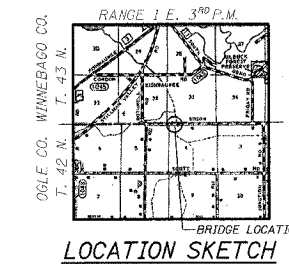
Drainage Area	14.55 Sq. Mi.
Design Discharge (20 Yr.)	1900 C.F.S.
Existing Opening	270 Sq. Ft.
Required Opening	313 Sq. Ft.
Proposed Opening	313 Sq. Ft.
Created Head (20 Yr.)	< 0.5'
100 Yr. Discharge	2750 C.F.S.
Created Head (100 Yr.)	< 1.0'
High Water Elev. (100 Yr.)	712.4 Ft.



"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 and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges."



Brian K. Converse
 DATE: MARCH 7, 2006
 EXPIRES 11/30/2006



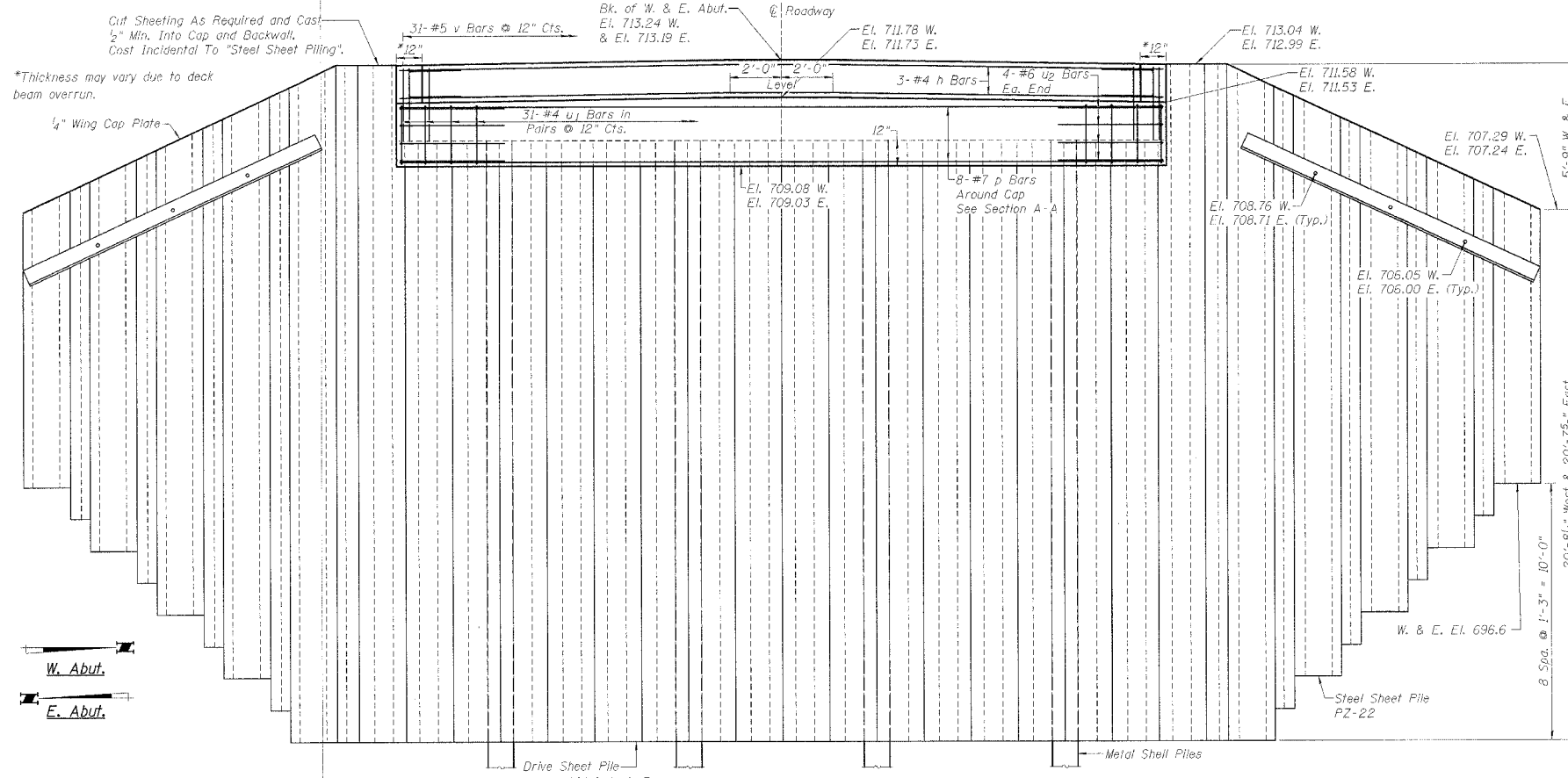
GENERAL PLAN & ELEVATION
 SECTION 01-2213-00-BR
 SECTION 01-0915-00-BR
 EDSON ROAD OVER DRAINAGE DITCH
 SCOTT/ROCKFORD ROAD DISTRICTS
 OGLE/WINNEBAGO COUNTY

WILLET
 HOFMANN &
 ASSOCIATES, Inc.
 Consulting Engineers

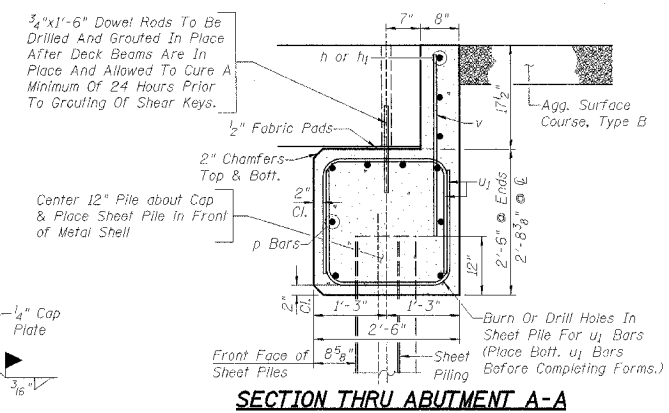
DESIGNED BY:
 B.K. CONVERSE
 DATE: 7/02
 CHECKED BY:
 M.R. LESLIE
 DATE: 12/05
 DRAWN BY:
 F.D. LACHAT
 DATE: 1/03

WHA # 1164001

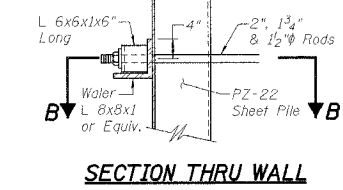
PROJECT	SECTION	COUNTY	SHEET	TOTAL SHEETS
59	01-2213-00-BR 01-0915-00-BR	Ogle Winnebago	9	5
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT: BR05-14H(62)	



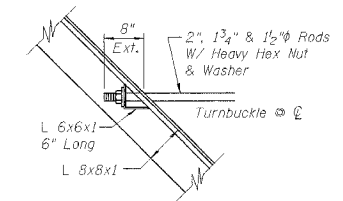
ELEVATION VIEW



SECTION THRU ABUTMENT A-A



SECTION THRU WALL



SECTION B-B

PILE DATA (WEST & EAST ABUTS.)

Type.....	12" Metal Shell
Capacity.....	45 Ton
No. Required.....	West - 4
	East 3 + 1 Test pile
Est. Length.....	35' West Abut.
	42' East Abut.

BILL OF MATERIAL - W. & E. ABUTMENTS

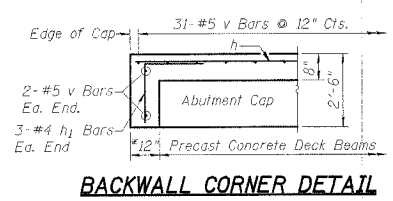
Bar	No.	Size	Length	Shape
h	6	#4	29'-8"	—
h ₁	12	#4	4'-0"	—
p	16	#7	29'-8"	—
u ₁	124	#4	6'-6"	□
u ₂	16	#6	10'-1"	□
v	70	#5	3'-6"	—
Concrete Structures			Cu. Yd.	16.8
Reinforcement Bars			Pound	4320
Permanent Steel Sheet Piling			Sq. Ft.	2896
Hardware			Pound	2540
Furnishing & Erecting Structural Steel			Pound	5003
Structure Excavation			Cu. Yd.	120
Porous Granular Embankment			Cu. Yd.	115
Test Pile - Metal Shell			Each	1
Furnishing Metal Shell Piles-12"			Foot	266
Driving & Filling Shells			Foot	266

NOTES:
All Hardware Shall Be Hot Dipped Galvanized In Accordance With A.A.S.H.T.O. M-232.

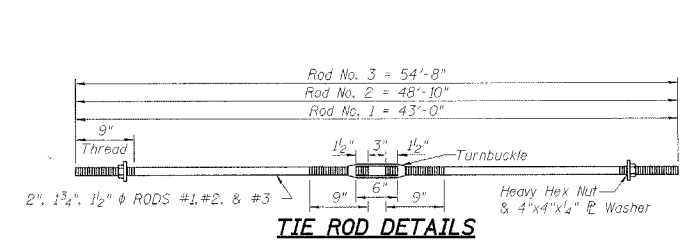
Cost Of Fabricating Corner Detail, 3/8" Plate & 7/8" Bolt Shall Be Included In The Cost Per Sq. Ft. For Permanent Steel Sheet Piling.

L 8"x8"x 1" Water, 1/4" Cap Plate & Connection Angles Shall Be Included For Payment As Furnishing & Erecting Structural Steel.

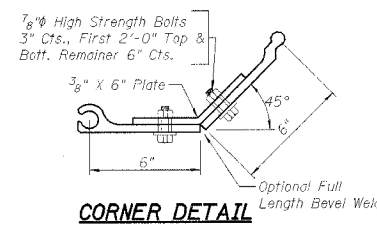
WEST & EAST ABUTMENT DETAILS
SECTION 01-2213-00-BR
SECTION 01-0915-00-BR
EDSON ROAD OVER DRAINAGE DITCH
SCOTT/ROCKFORD ROAD DISTRICTS
OGLE/WINNEBAGO COUNTY
WHA # 1164001



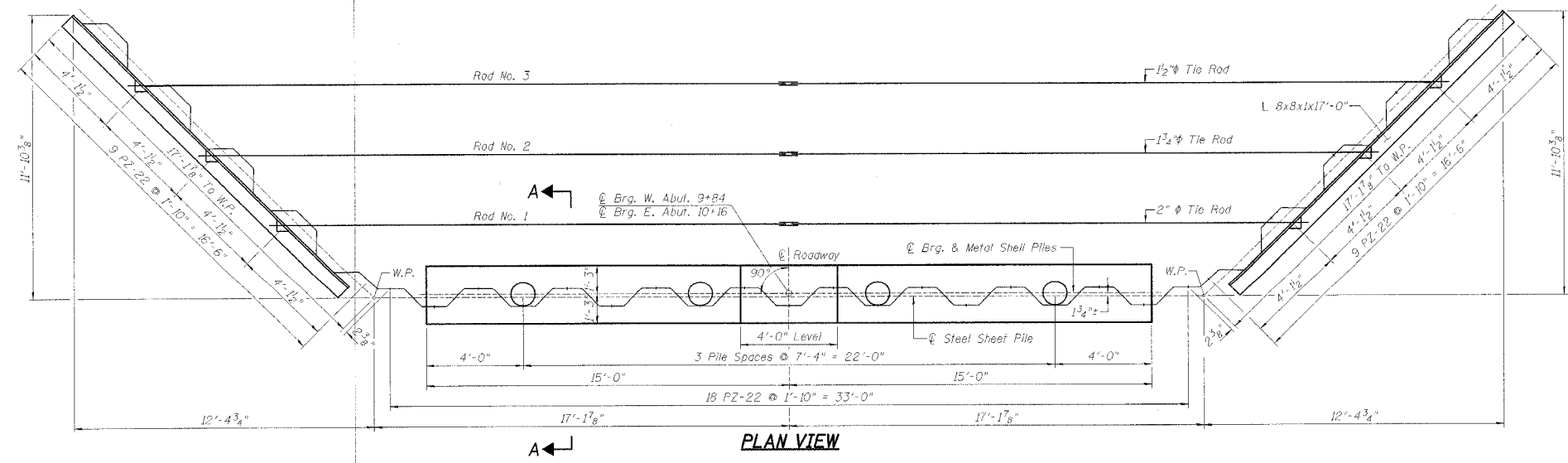
BACKWALL CORNER DETAIL



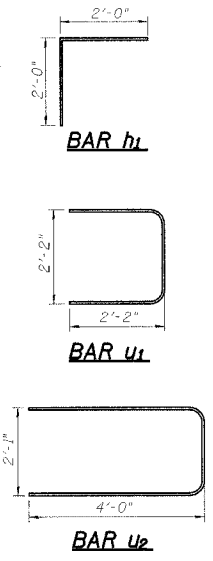
TIE ROD DETAILS



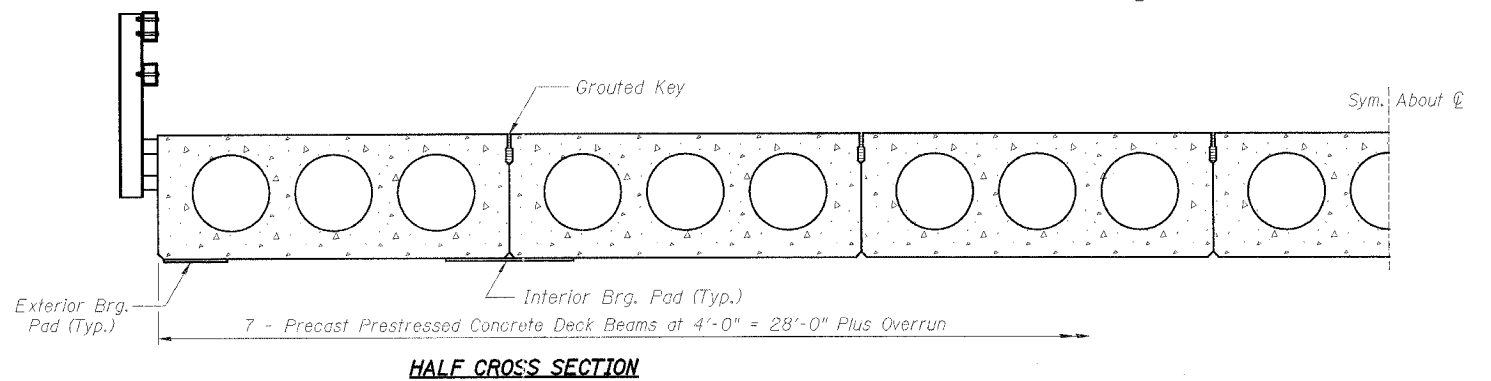
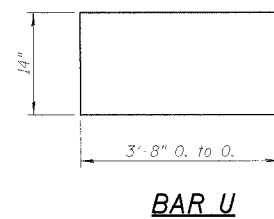
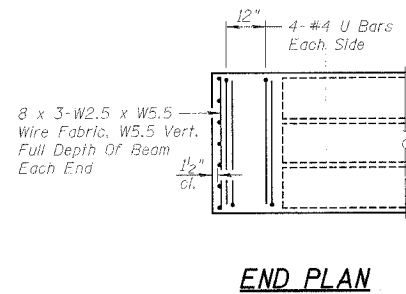
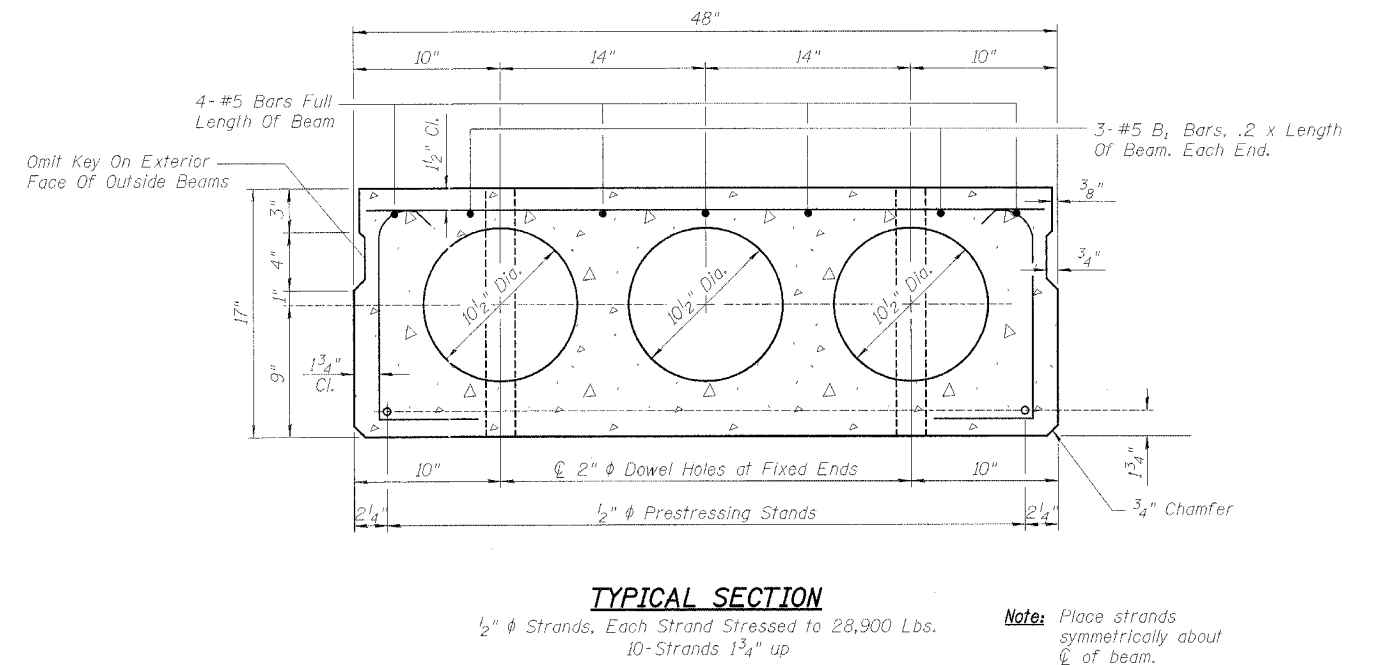
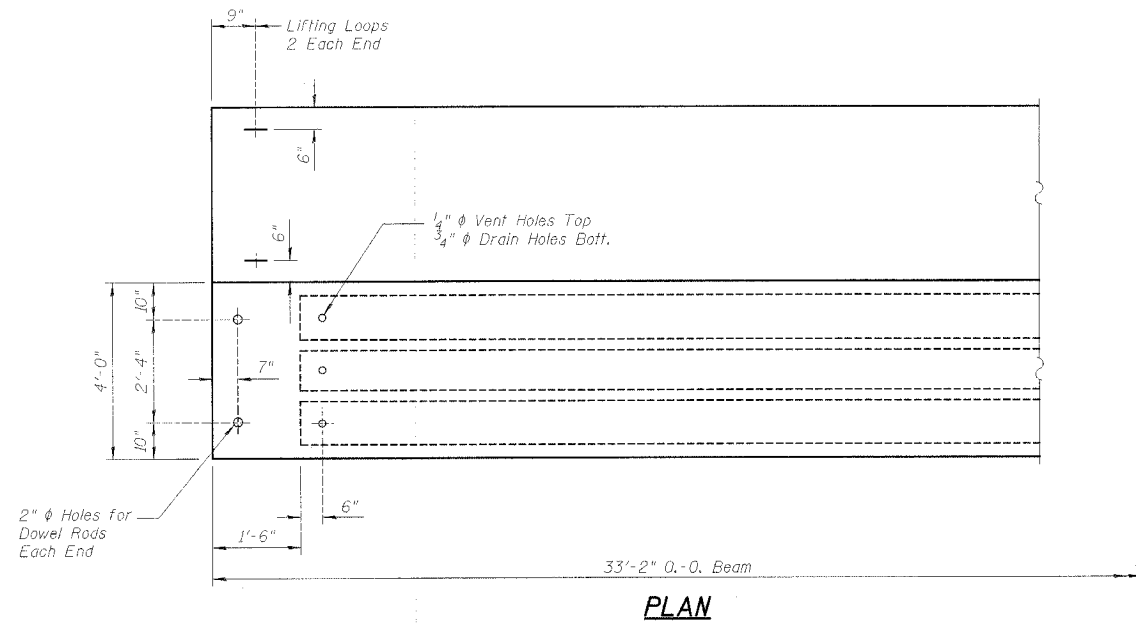
CORNER DETAIL



PLAN VIEW

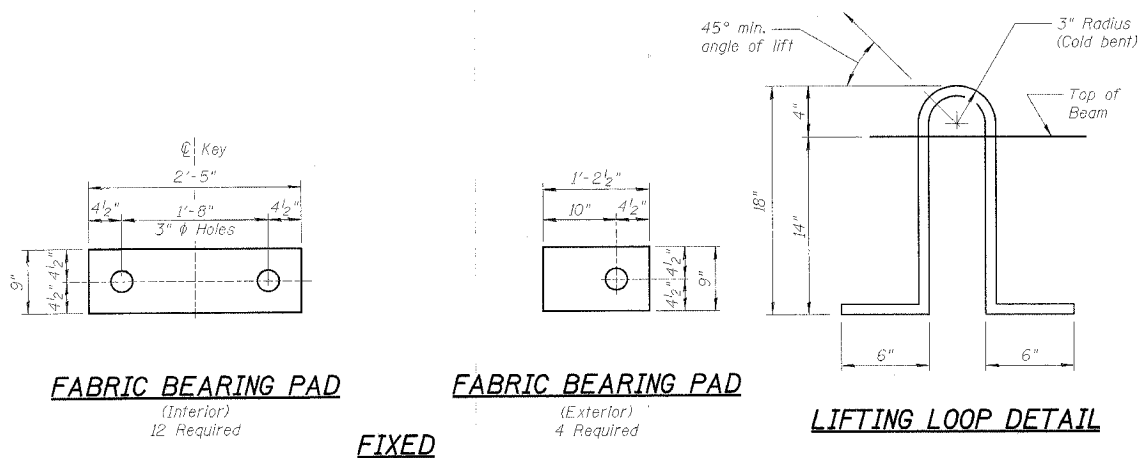


PROJECT	SECTION	COUNTY	SHEETS	SHEET
59	01-22113-00-BR 01-09115-00-BR	Ogle Winnebago	9	6
FED. ROAD DIST. NO. 7	IL LINKS	FED. AID PROJECT	BR05-141(62)	



NOTES

- 1.) Prestressing steel shall be uncoated high strength, stress-relieved 7-wire strand, Grade 270.
- 2.) The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- 3.) Lifting loops shall be 2 - 1/2" ϕ - 270 ksi strands, as shown.
- 4.) Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42, or M-53 Grade 60.
- 5.) The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.
- 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 top of the beam and the bottom edge of the key.
- 7.) A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.
- 8.) Required Release Strength, f'_{ci} , shall be 4000 p.s.i.
- 9.) An equal substitution of the low-relaxation strands for the stress-relieved strands will be permitted.

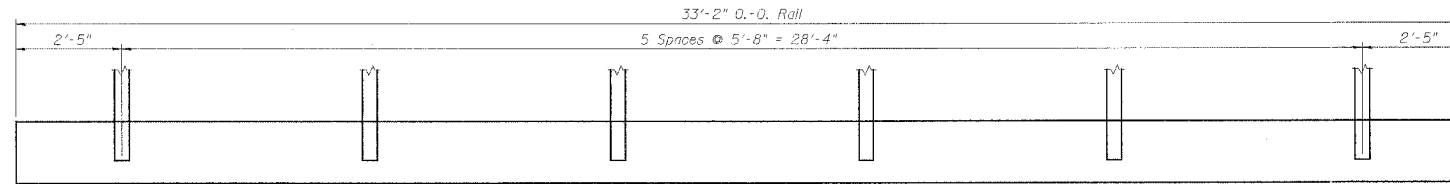


BILL OF MATERIAL

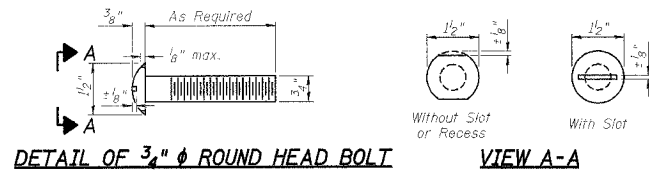
Precast Prestressed Concrete Deck Beams-17"	Sq. Ft.	929
---------------------------------------------	---------	-----

DECK BEAM DETAILS
SECTION 01-22113-00-BR
SECTION 01-09115-00-BR
EDSON ROAD OVER DRAINAGE DITCH
SCOTT/ROCKFORD ROAD DISTRICTS
OGLE/WINNEBAGO COUNTY
WHA # 1164D01

ROUTE	SECTION	COUNTY	SHEET	TOTAL SHEETS
59	01-22113-00-BR 01-09115-00-BR	Ogle Winnebago	9	7
FED. ROAD DIST. NO. 7	ILL. PROJ.	FED. AID PROJECT-	BROS-141(62)	

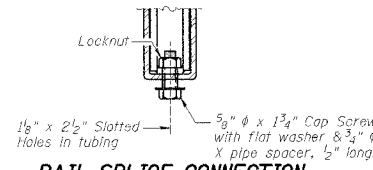


ELEVATION VIEW

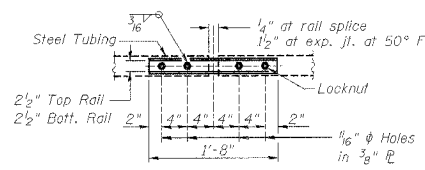


DETAIL OF 3/4" φ ROUND HEAD BOLT

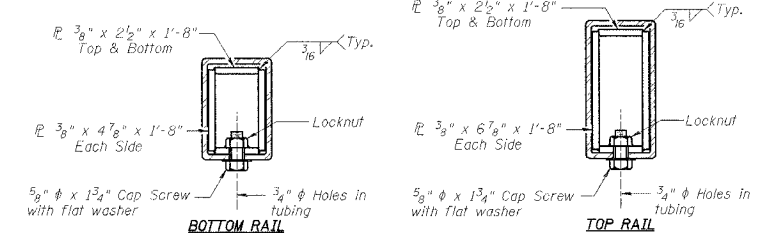
VIEW A-A



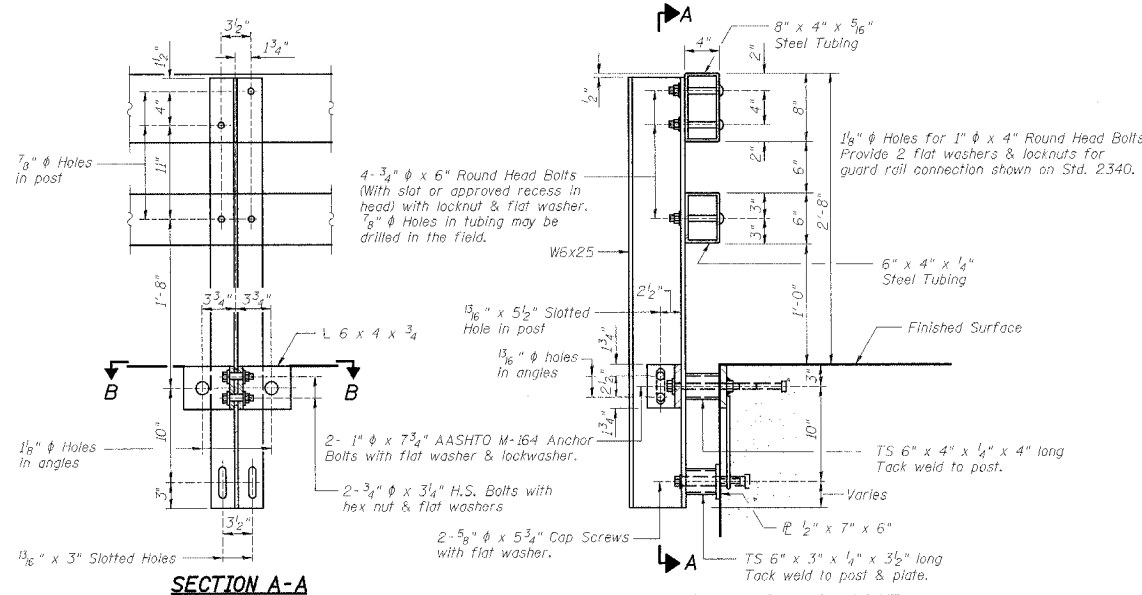
RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE P. TYPICAL

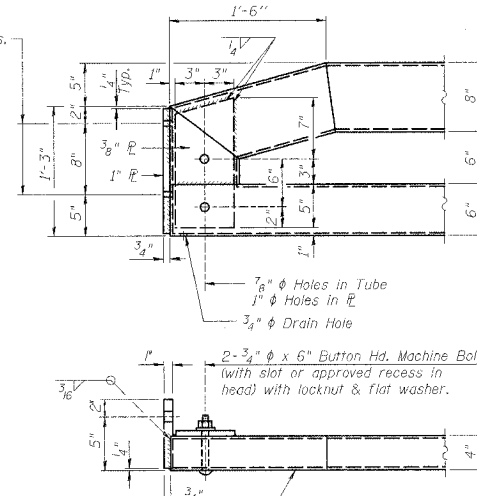


SECTIONS AT RAIL SPLICE



SECTION A-A

SECTION AT RAIL POST



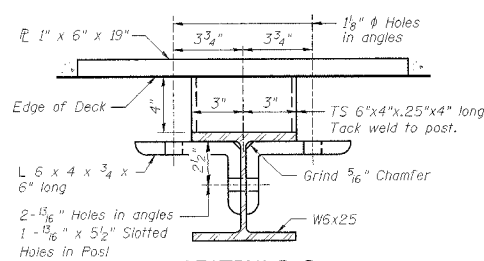
END OF RAIL DETAILS

NOTES

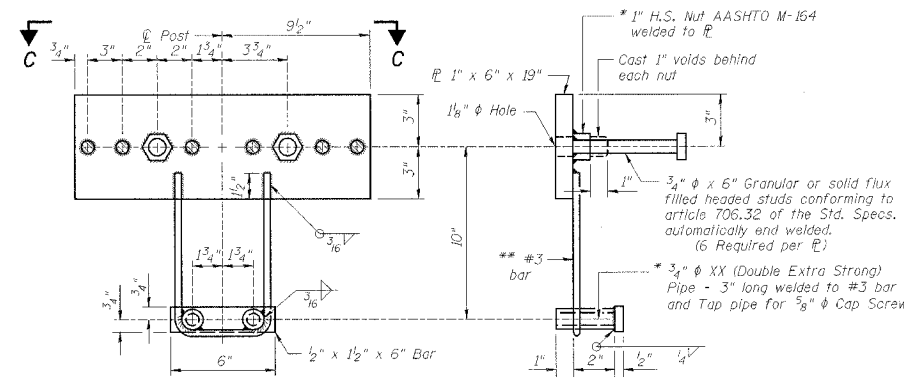
Hollow structural steel tubing shall conform to the requirements of ASTM designation A-500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft-lbs at 0° F.
 All other steel shapes and plates shall conform to the requirements of AASHTO M-270 Grade 36 except posts and angles shall conform to AASHTO M-270, Grade 50.
 Bolts, cap screws, and nuts shall conform to the requirement of ASTM designation A-307 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 in accordance with AASHTO M-232.
 All posts, railing, rail splices, anchor devices, and angles shall be galvanized after shop fabrication in accordance with AASHTO M-111 and ASTM A-385. Galvanized rail shall not be painted.
 Railing shall be in accordance with Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for STEEL BRIDGE RAIL, TYPE SM.
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span PPC Deck bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cast incidental to STEEL BRIDGE RAIL, TYPE SM.
 Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.
 The 3/4" φ high strength bolts used to connect the 6" x 4" x 3/4" angles to the post shall be tightened in accordance with Article 505.04(f)(3) of the Standard Specifications. The 1" φ 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" φ cap screws in bottom of posts shall be tightened to a snug fit only.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Bridge Rail, Type SM	Foot	66.3

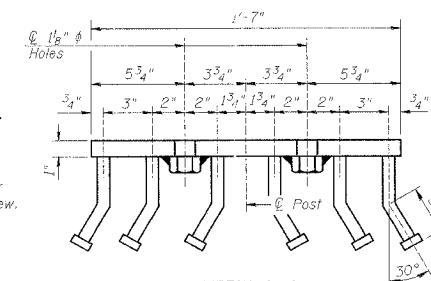


SECTION B-B



ANCHOR DEVICE

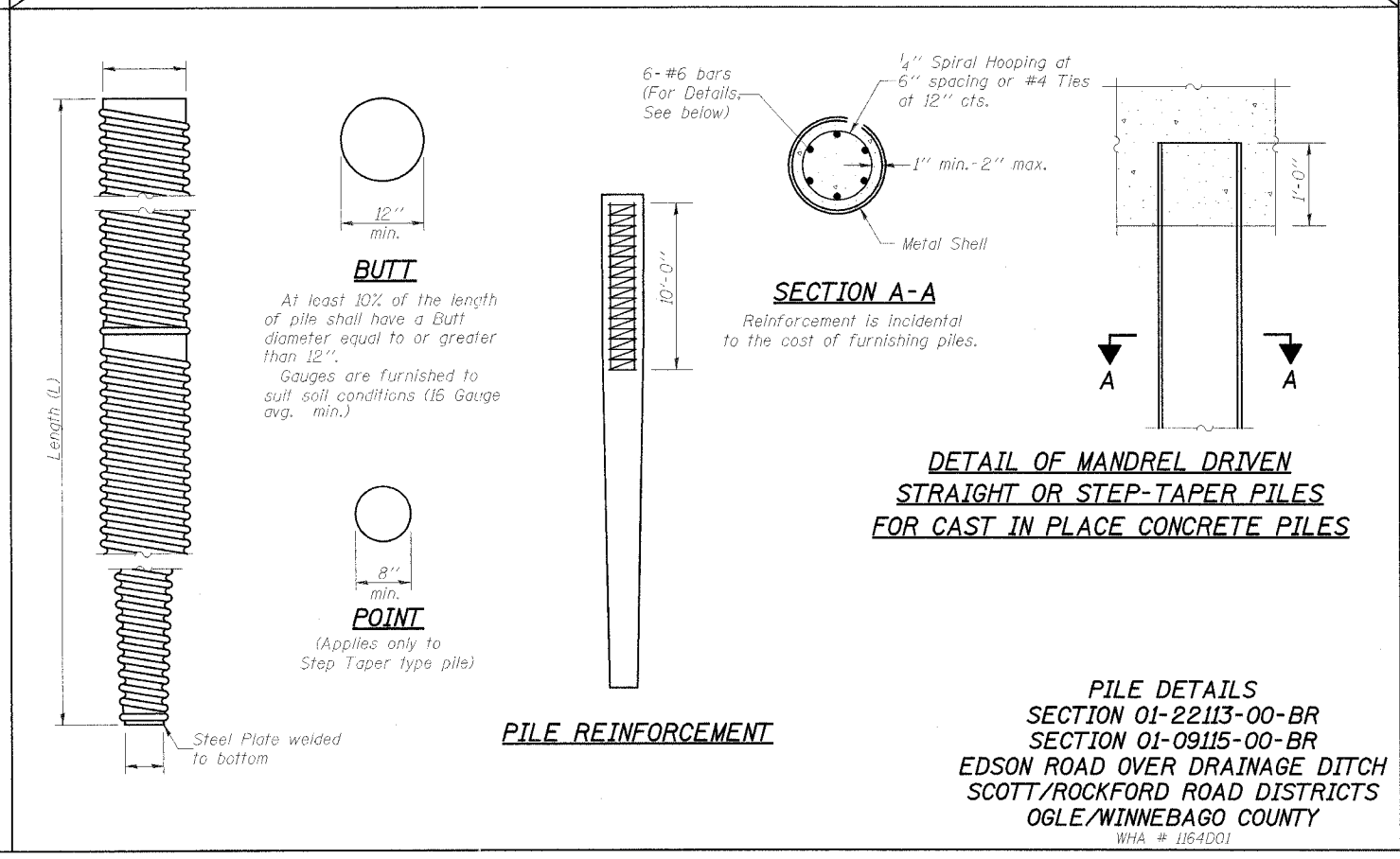
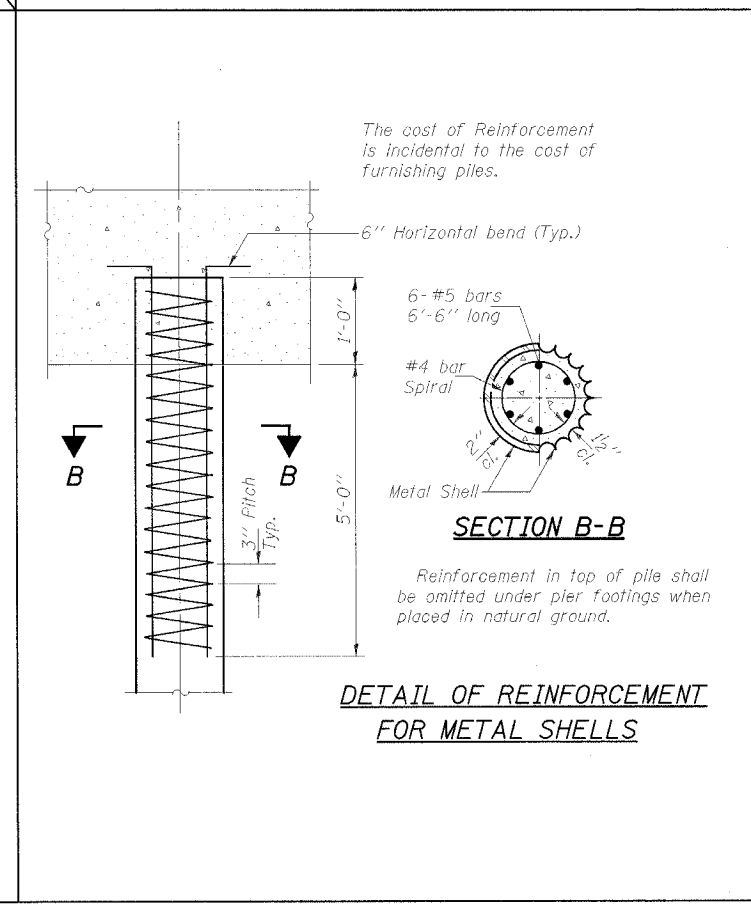
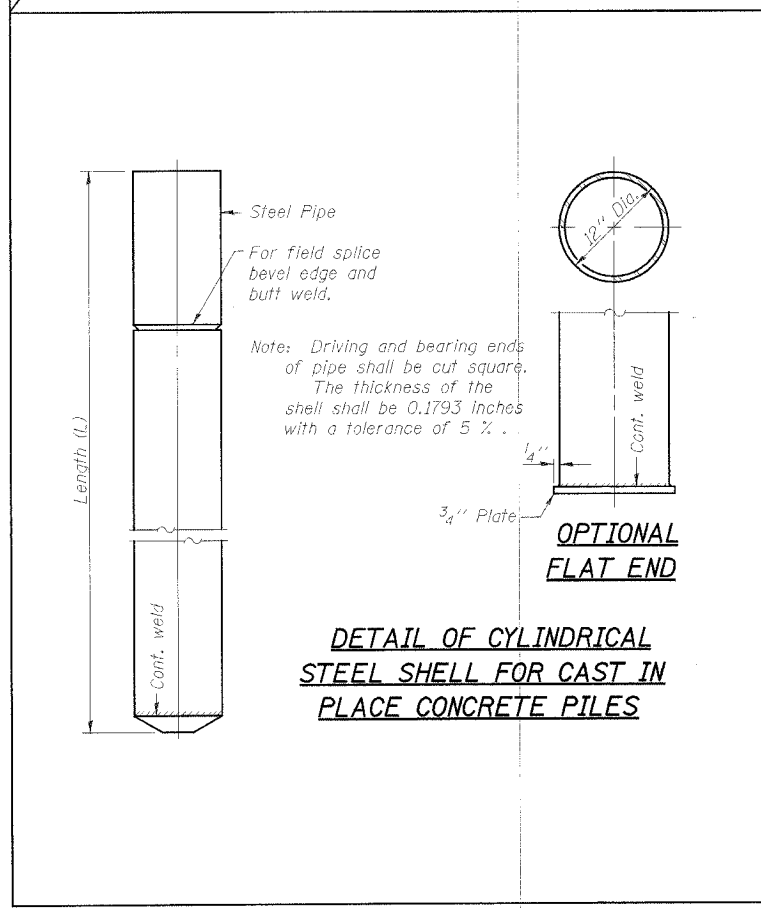
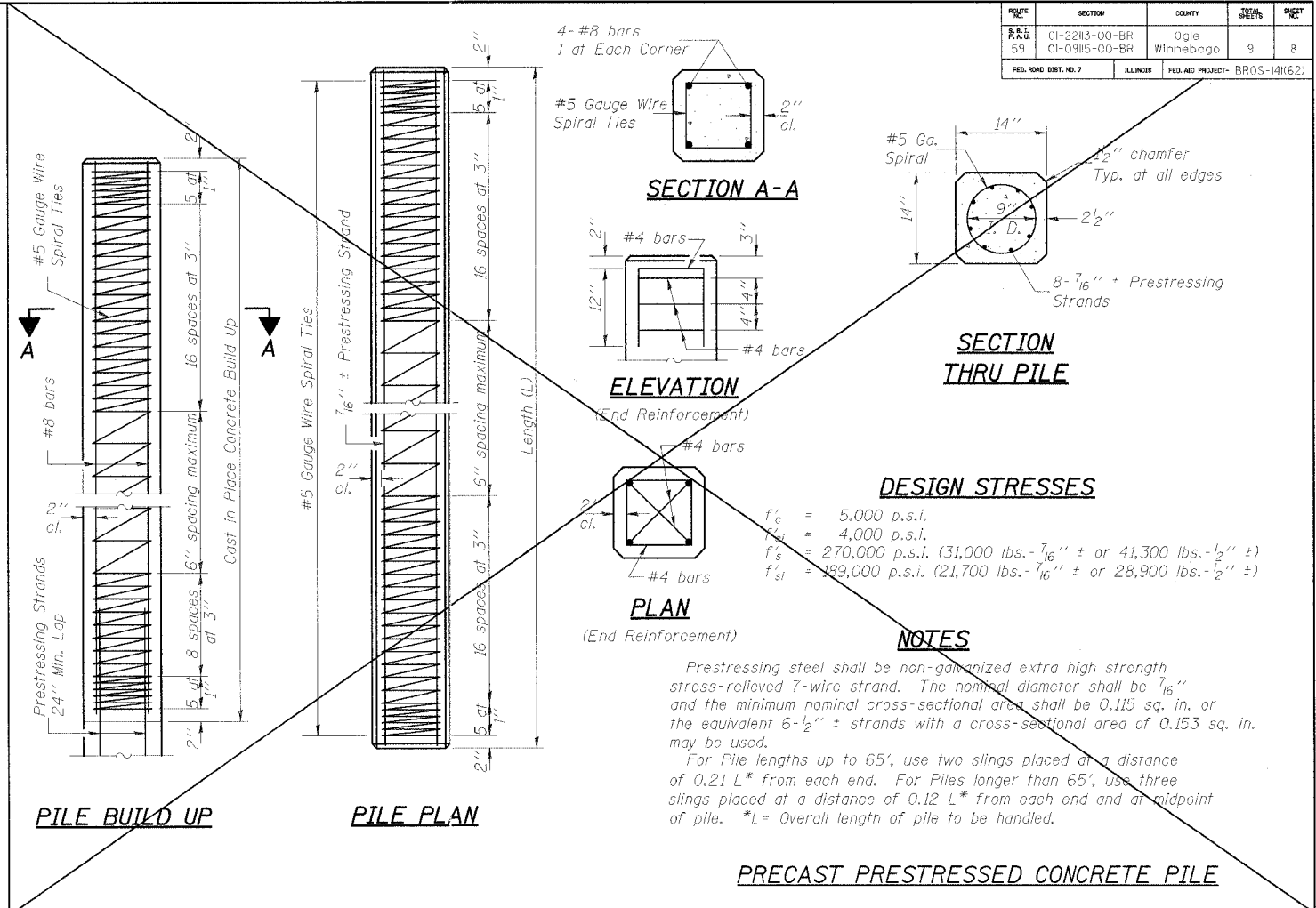
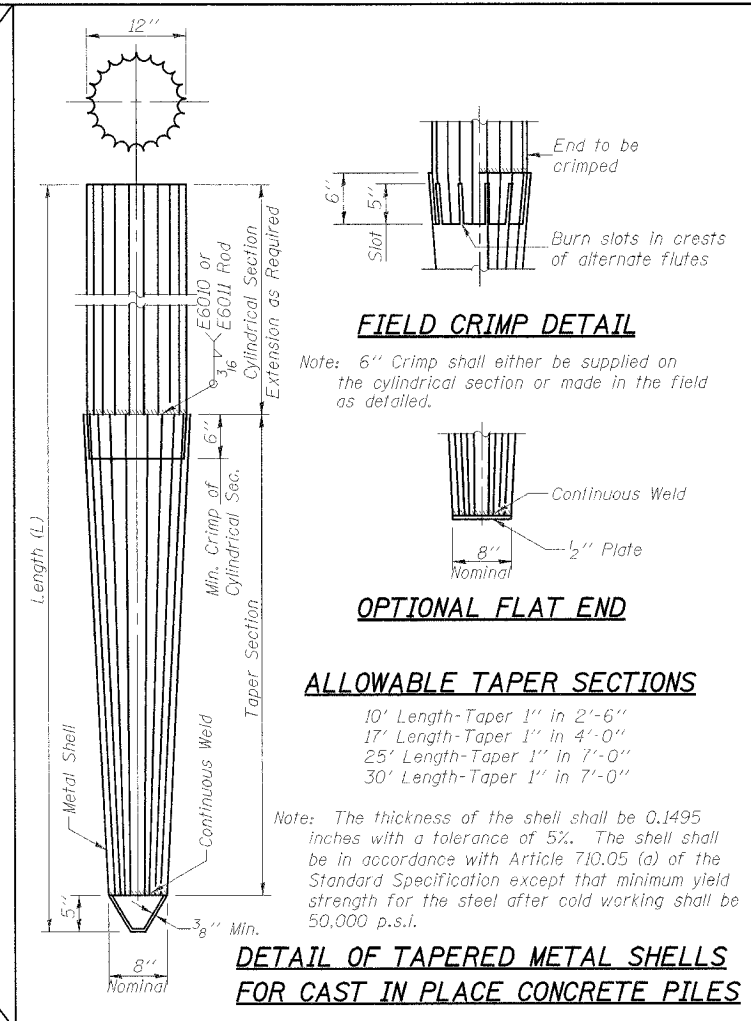
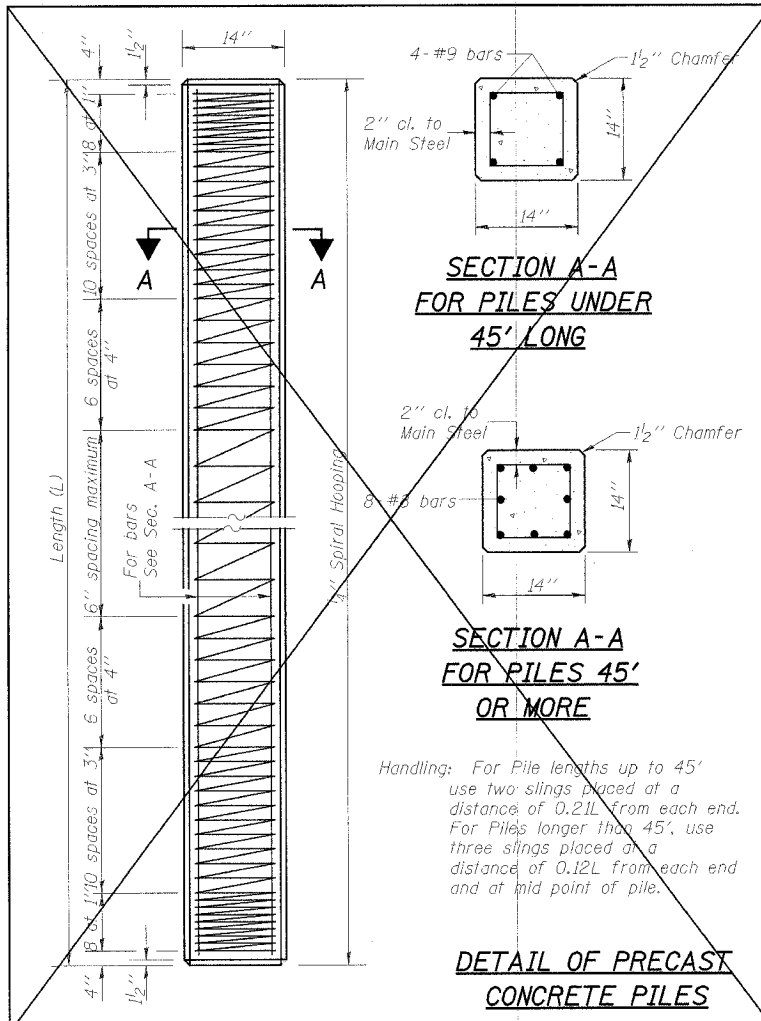
* Threaded areas shall be plugged or blocked off during casting or lowering of the lower inserts. Galvanized after fabrication.
 ** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".

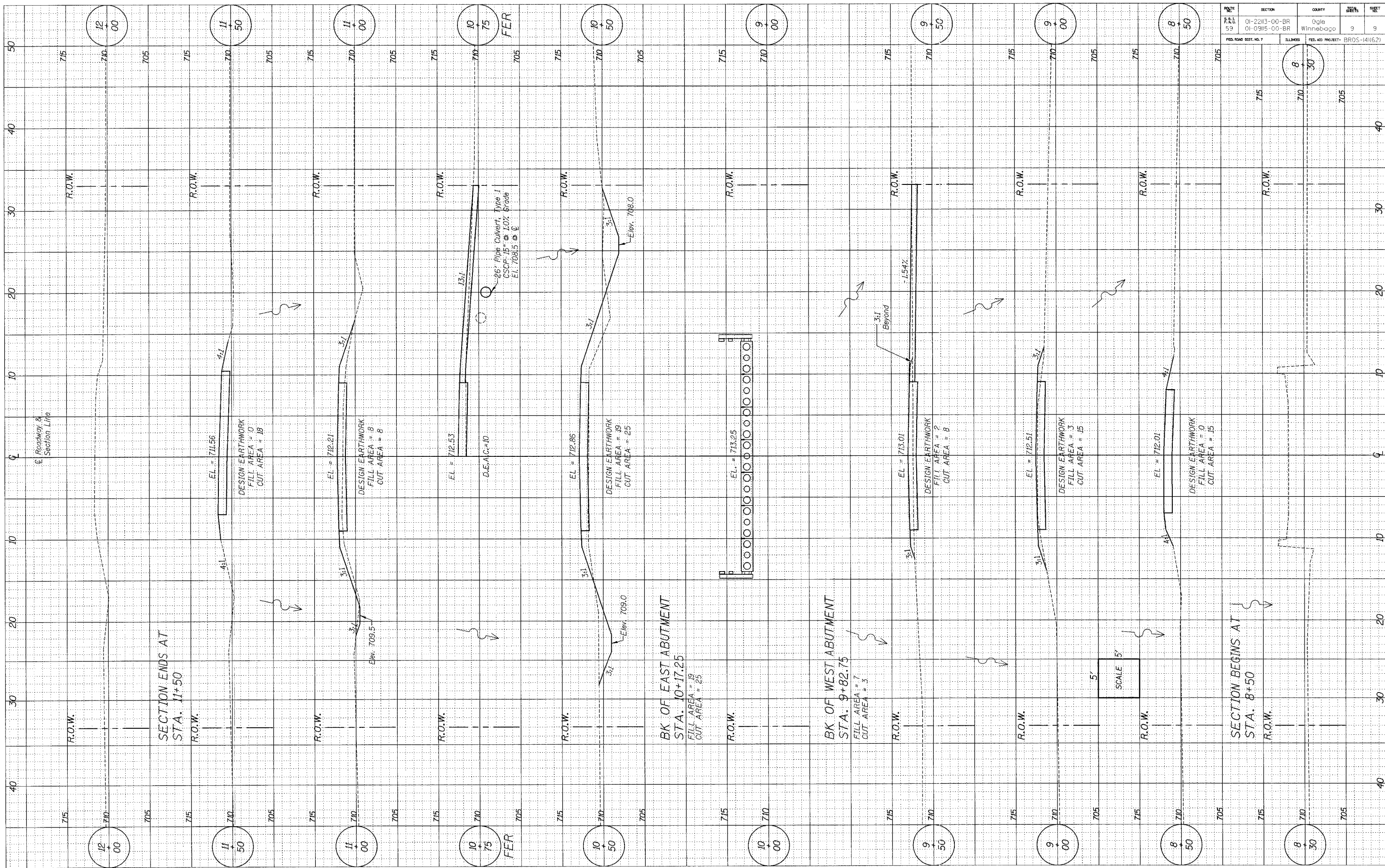


VIEW C-C

STEEL BRIDGE RAIL, TYPE SM
 SECTION 01-22113-00-BR
 SECTION 01-09115-00-BR
 EDSON ROAD over DRAINAGE DITCH
 SCOTT/ROCKFORD ROAD DISTRICTS
 OGLE/WINNEBAGO COUNTY
 WHA # 1164001

PROJECT	SECTION	COUNTY	SHEET	OF	SHEET
59	01-2213-00-BR 01-0915-00-BR	Ogle Winnebago	9	8	
FED. ROAD DIST. NO. 7	ALLIANCE	FED. AID PROJECT	BROS-141(62)		





PROJECT NO. 53	SECTION 01-2213-00-BR 01-0315-00-BR	COUNTY Ogle Winnebago	SHEET 9	SHEET 9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT - BR05-14(62)		