

PLANS FOR PROPOSED SURFACE TRANSPORTATION PROGRAM OFF SYSTEM BRIDGE

(T.R. 97) 1650 E
SECTION 07-01161-00-BR
JOB NO. C-99-508-08 (SEQ #15657)
FED. PROJECT BROS-069(10)

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 97	07-01161-00-BR	HARDIN	15	1

FED PROJ. BROS-069(10)

15+1 = 16

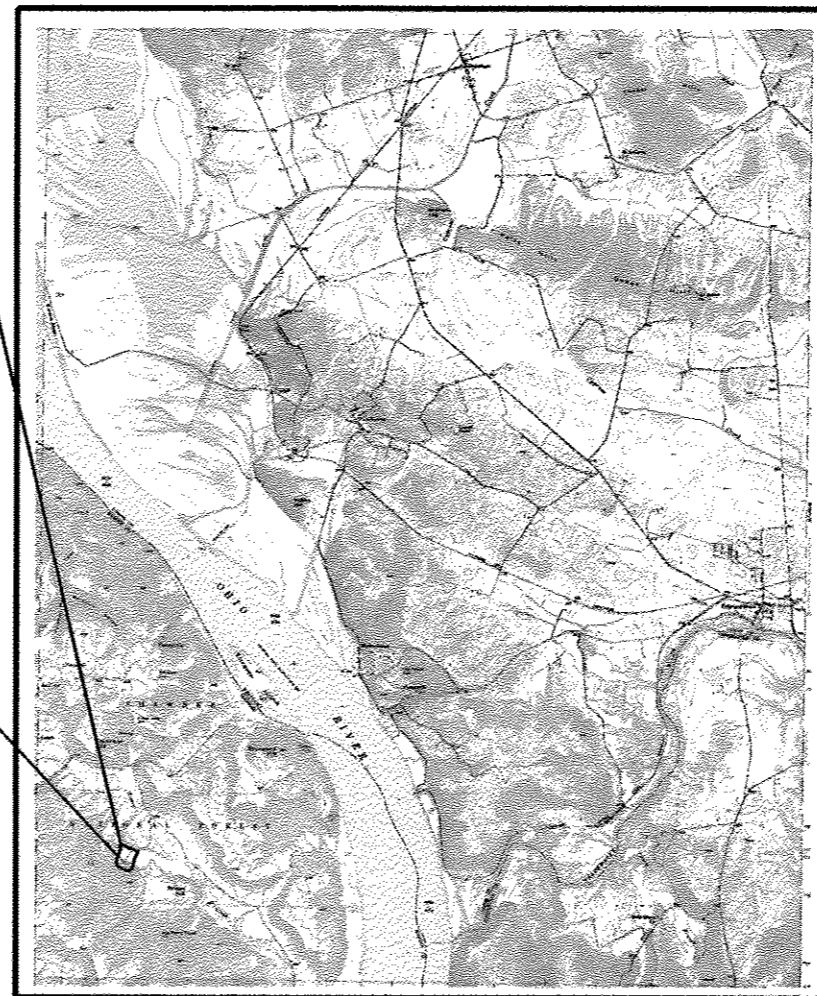
SUMMARY OF QUANTITIES

CODE	ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	225
20300100	CHANNEL EXCAVATION	CU YD	96
20400100	BORROW EXCAVATION	CU YD	95
20700110	POROUS GRANULAR EMBANKMENT	TON	210
25000200	SEEDING, CLASS 2	ACRE	0.21
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	20
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	20
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	20
25000700	AGRICULTURAL GROUND LIMESTONE	TON	1
25100105	MULCH METHOD 1	ACRE	0.21
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	50
28000400	PERIMETER EROSION BARRIER	FOOT	1300
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	300
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	230
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	50.5
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SO FT	1204
50800105	REINFORCEMENT BARS	POUND	6190
Δ 50900205	STEEL RAILING, TYPE S1	FOOT	101
51201600	FURNISHING STEEL PILES HP12X53	FOOT	385
51202305	DRIVING PILES	FOOT	385
51203600	TEST PILE STEEL HP 12X53	EACH	1
51500100	NAME PLATES	EACH	1
Δ 63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	2
Δ LR631020	TRAFFIC BARRIER TERMINAL, TYPE 1	EACH	2
67100100	MOBILIZATION	L. SUM	1

INDEX OF SHEETS

1. COVER SHEET, INDEX OF SHEETS, SUMMARY OF QUANTITIES
2. PLAN-PROFILE, TYPICAL SECTION
- 3-4. ROADWAY CROSS-SECTIONS
5. BRIDGE GENERAL PLAN AND ELEVATION
- 6-7. 21X48 PPC DECK BEAM
8. SUPERSTRUCTURE
9. STEEL RAILING, TY S-1
- 10-11. SOUTH ABUTMENT
12. NORTH ABUTMENT
13. HP PILE DETAILS
- 14-15. BORING LOGS
- 15-A SWPPP PLAN

PROJECT LOCATION
BEGINS STA. 1+50
ENDS STA. 4+50



STA. 3+00
PROPOSED SINGLE SPAN BRIDGE
21" P.P.C. DECK BEAMS 51.50'
BACK TO BACK ABUTMENTS

J.U.L.T.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123

STANDARDS: 280001-07
515001-03
701901-02
631026-05
BLR 23-4
BLR 21-9

CLASSIFICATION : LOCAL ROAD
2012 ADT : <100
DESIGN SPEED : 30 MPH

CONTRACT NO. 99491

PROJECT LOCATION MAP

NET LENGTH OF IMPROVEMENT = 300 LINEAL FEET = 0.057MILES

Δ SPECIALTY ITEMS



Michael L. Smith
MICHAEL L. SMITH
PROFESSIONAL ENGINEER
#062-040479
EXP. 11/30/2013

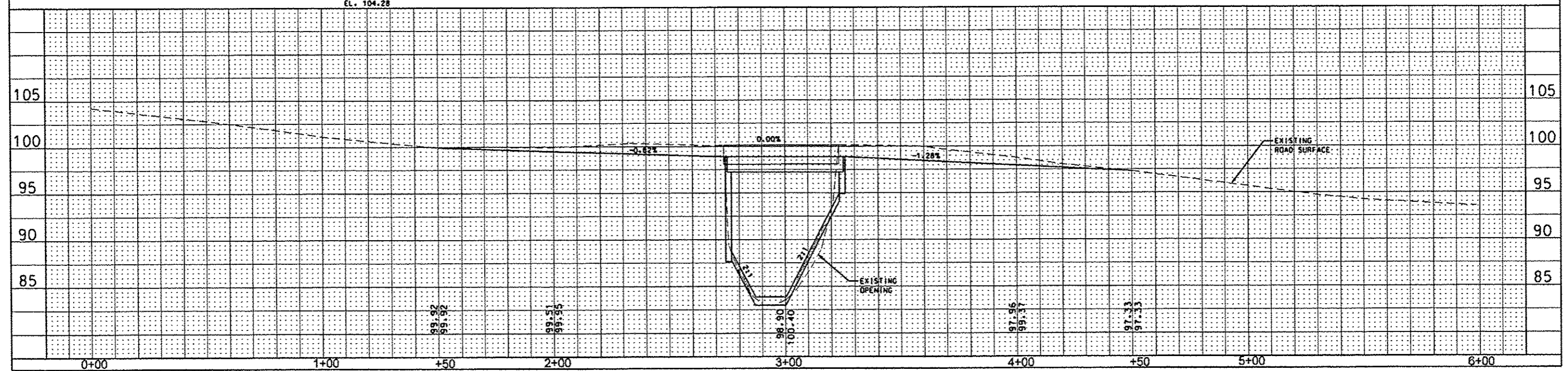
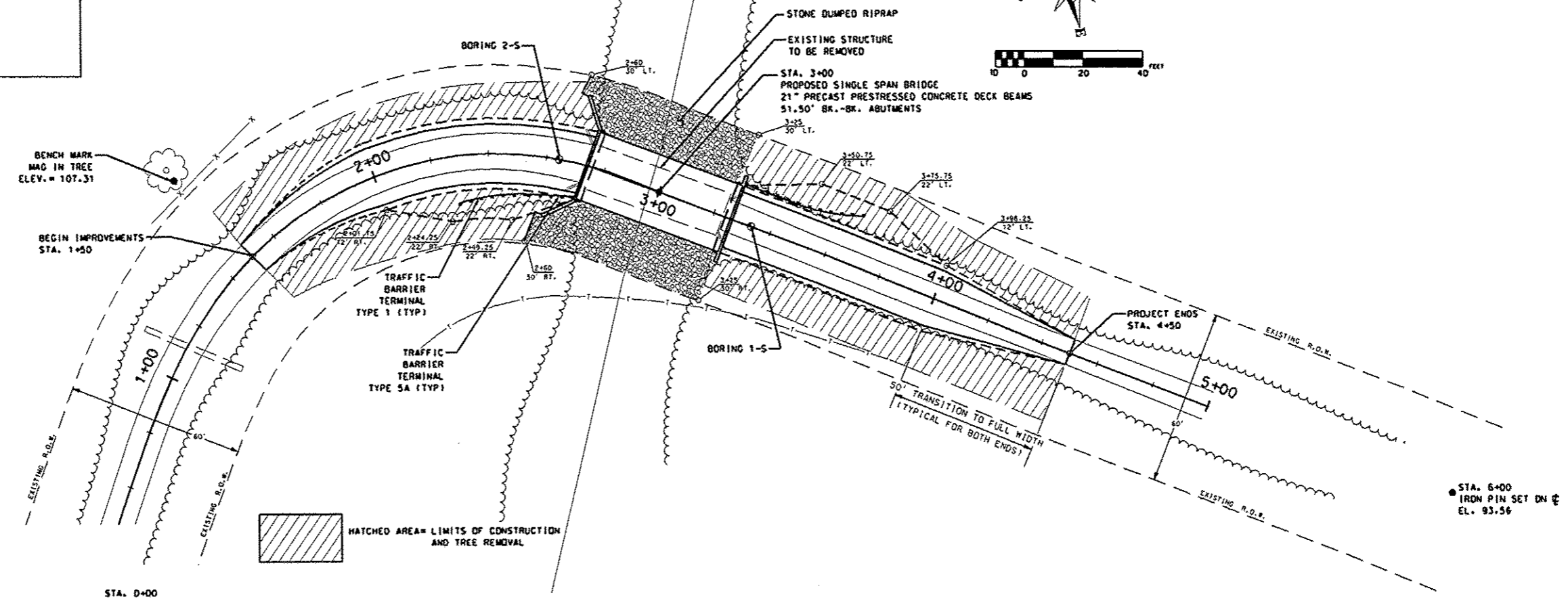
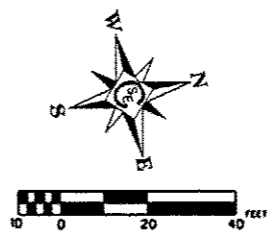
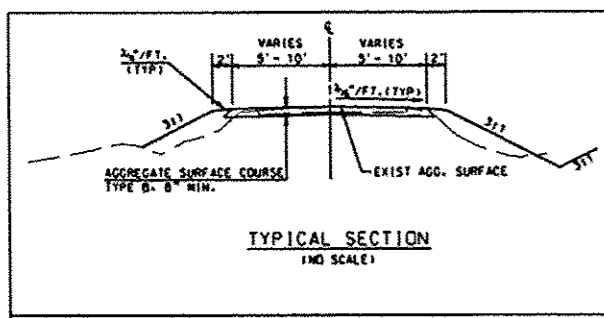
APPROVED: *[Signature]* 3/7/13
HARDIN COUNTY ENGINEER

PASSED: *[Signature]* 3/18/2013
DISTRICT 9 ENGINEER OF LOCAL ROADS AND STREETS

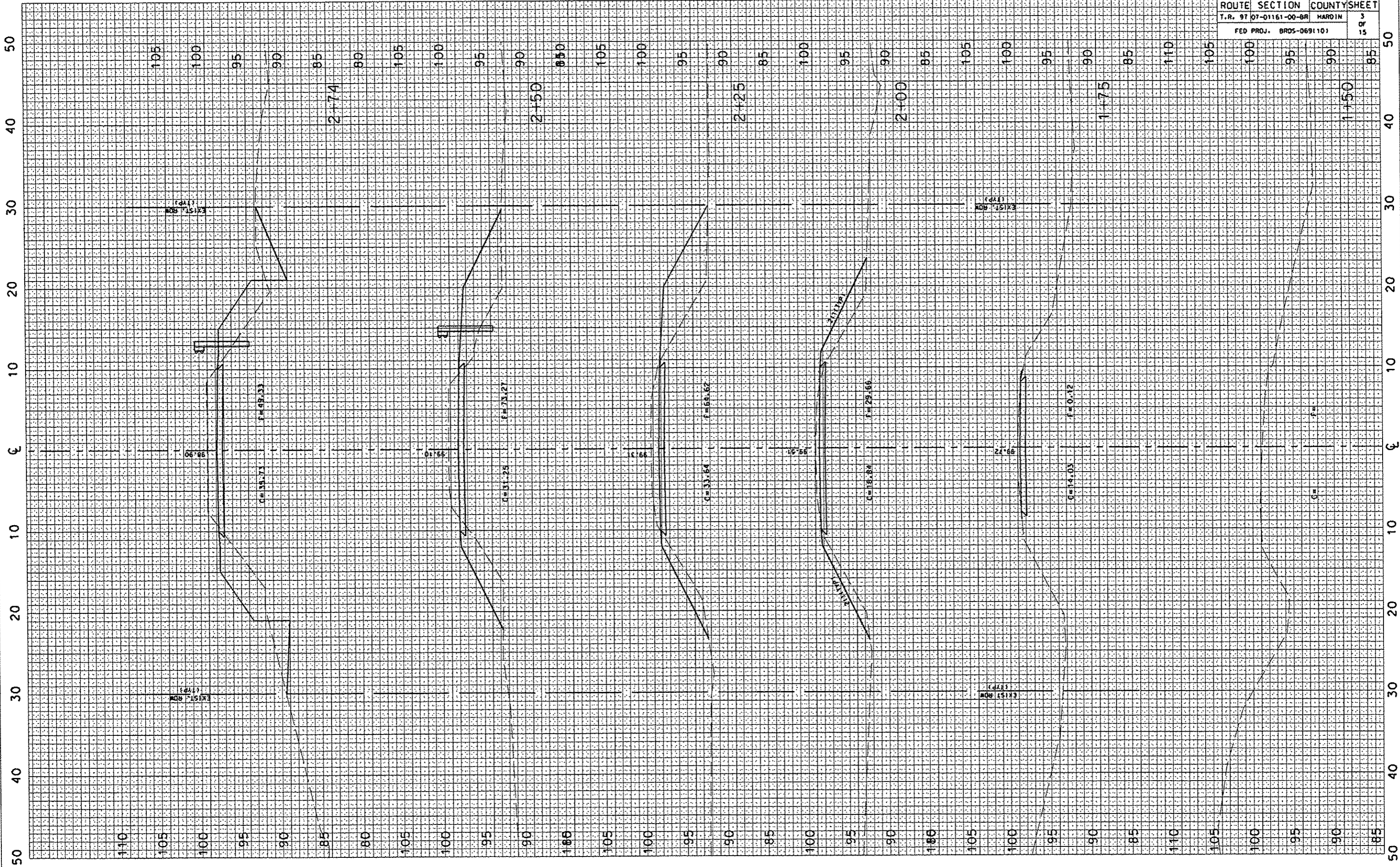
RELEASING FOR BID
BASED ON LIMITED
REVIEW: *[Signature]* 3/18/2013
DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER
ILLINOIS DEPARTMENT OF TRANSPORTATION

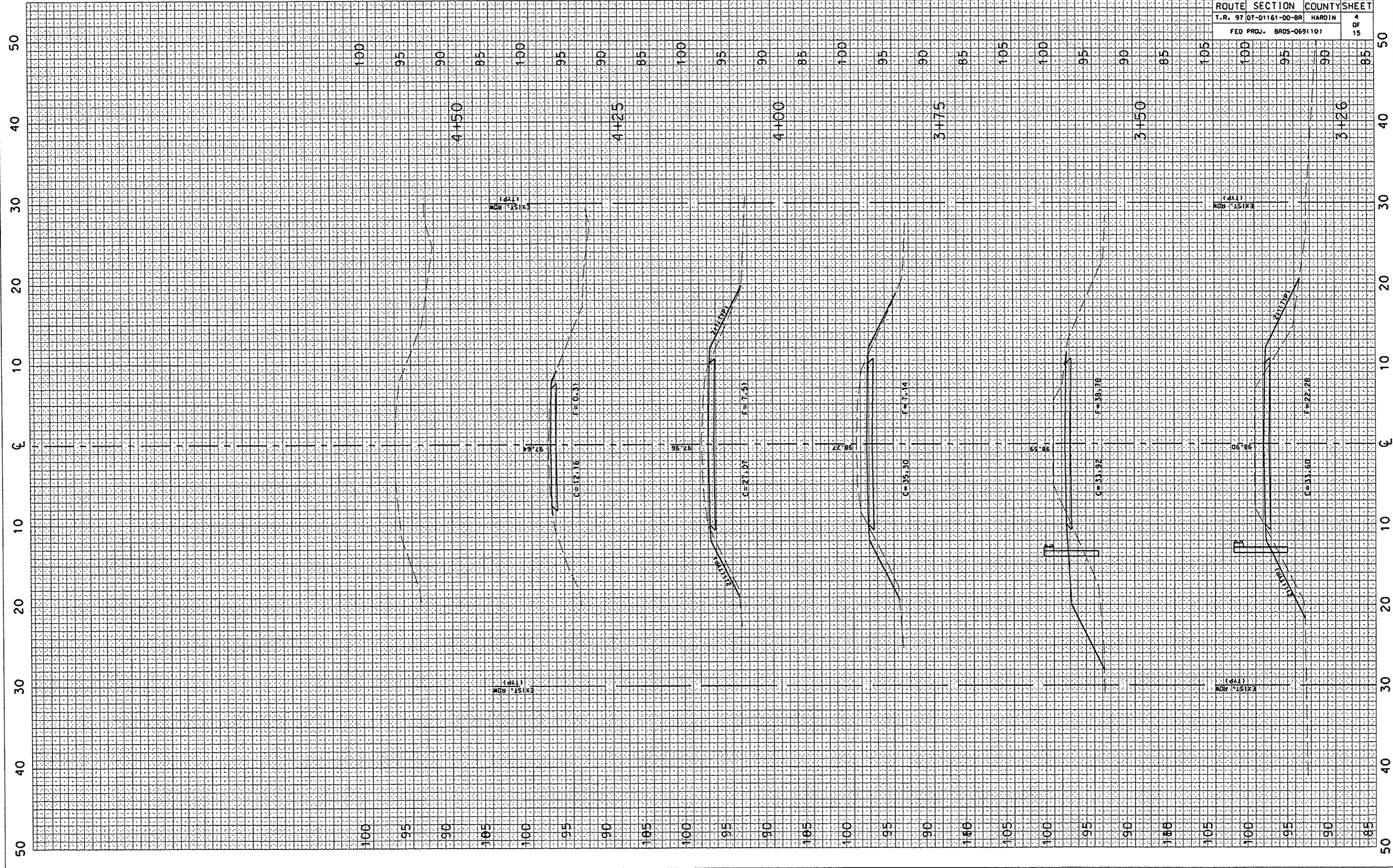
6 March 2013

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 97	07-01161-00-BR	HARDIN	15	2
FED PROJ. BROS-069(10)				



HANEY CREEK BRIDGE- SECTION 07-01161-00-BR





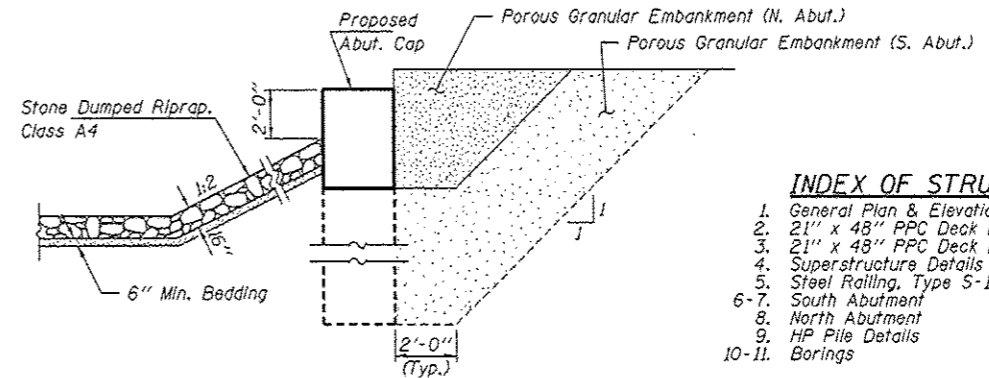
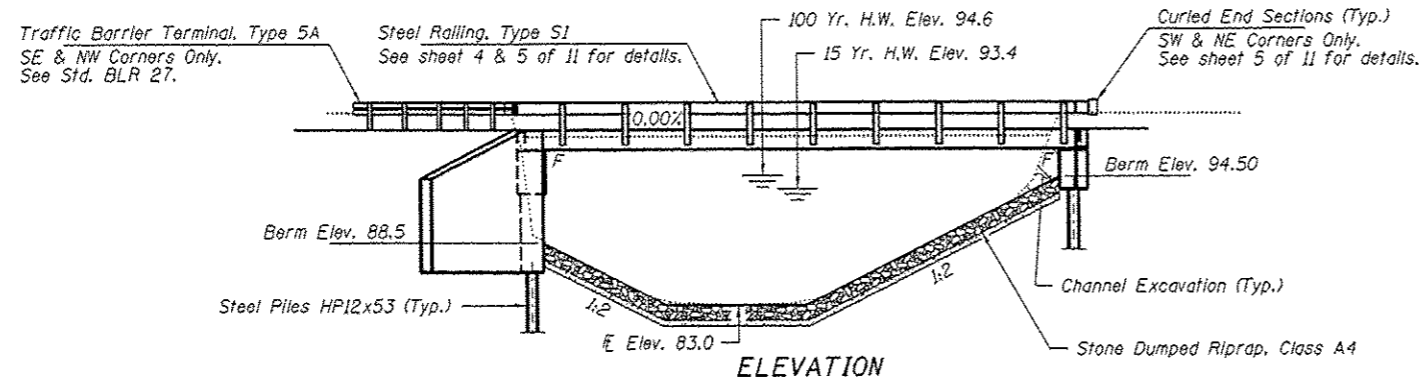
BENCHMARK: Mag Noll In Tree. Sta. 1+48 Lt., Elev. 107.31

EXISTING STRUCTURE: 15' x 50' wooden deck on steel I-Beams with wooden piles and abutments.

Salvage: See Special Provisions.

GENERAL NOTES

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
 The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at West Abutment or approved by the Engineer before ordering the remainder of piles.
 Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
 Excavation required to construct the Abutments shall be included in the cost of Concrete Structures. No additional compensation will be allowed for Structure Excavation.
 All proposed construction activities shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act.
 The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions.
 No In-Stream work will be allowed in the months of March, April or May of any year. See Special Provisions.

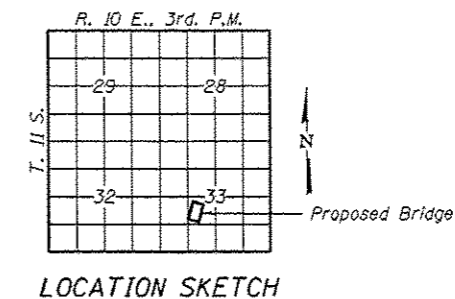
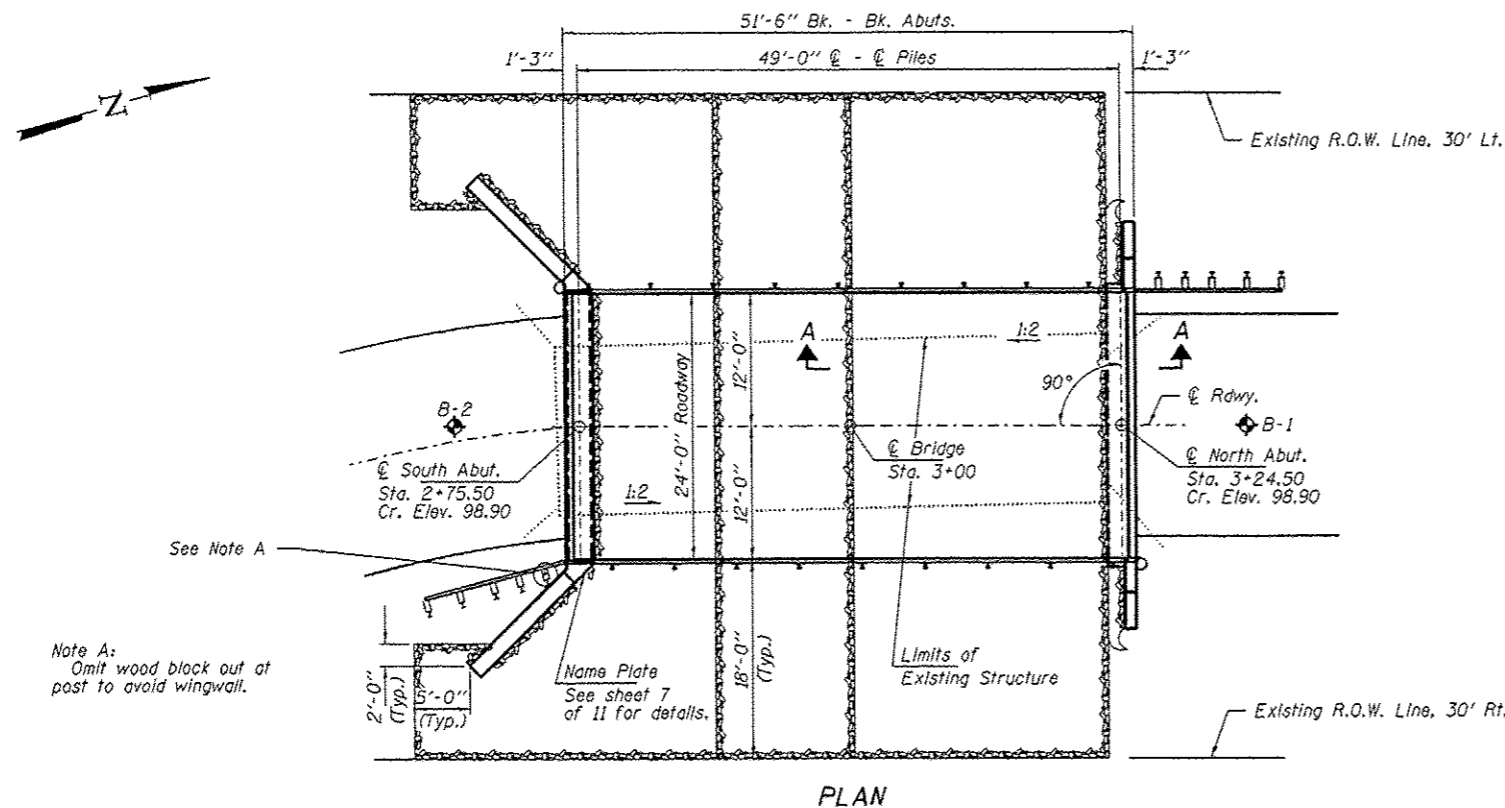


INDEX OF STRUCTURE SHEETS

1. General Plan & Elevation
2. 21" x 48" PPC Deck Beam
3. 21" x 48" PPC Deck Beam Details
4. Superstructure Details
5. Steel Railing, Type S-1
- 6-7. South Abutment
8. North Abutment
9. HP Pile Details
- 10-11. Borings

SECTION A-A

Note: See Special Provisions for Stone Dumped Riprap, Class A4.



HANEY CREEK
 BUILT 2011 BY
 HARDIN COUNTY
 SEC. 07-01161-00-BR
 STR. NO. 035-3052
 LOADING HL-93

NAME PLATE
 See Std. 515001

DESIGN STRESSES

FIELD UNITS

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

PRECAST PRESTRESSED UNITS

$f'_c = 6,000$ psi
 $f'_ci = 5,000$ psi
 $f_{pu} = 270,000$ psi ($1/2$ " low lax. strands)
 $f_{pbt} = 201,960$ psi ($1/2$ " low lax. strands)
 $f_y = 60,000$ psi (Reinf.)

LOADING HL-93

Design Specifications: 2010 AASHTO LRFD with all applicable Interims.
 50#/#Sq. Ft. Included in dead load for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
 Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.320g
 Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.743g
 Soil Site Class = D

WATERWAY INFORMATION

Drainage Area = 7.33 Sq. Mi.		Low Grade Elev. 92.9 @ Sta. 9+40								
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Prop.	Natural H.W.E. Exist.	Prop.	Head - Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
Design	15	2003	345.5	324.1	93.44	-	0.0	-	93.44	-
Base	100	3163	398.8	377.4	94.61	-	0.0	-	94.61	-
Max. Calc.	500	4078	429.8	406.67	95.24	-	0.0	-	95.24	-

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	S. Abut.	N. Abut.
	86.0	93.3

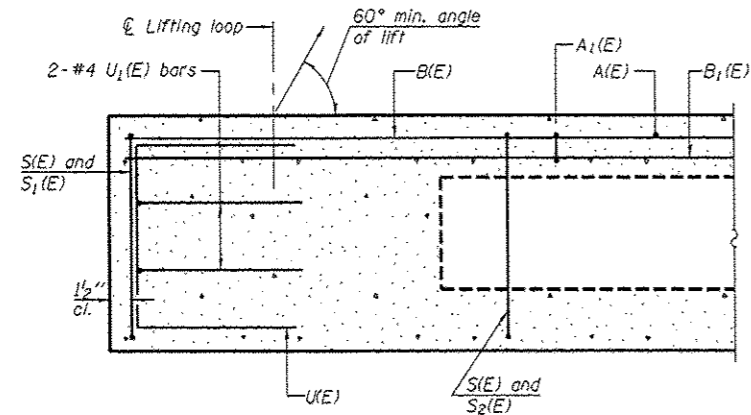
I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO LRFD Specifications."

Steven W. McGinnis 03/10/2013
 ILLINOIS STRUCTURAL ENGINEER NO. 081-6064

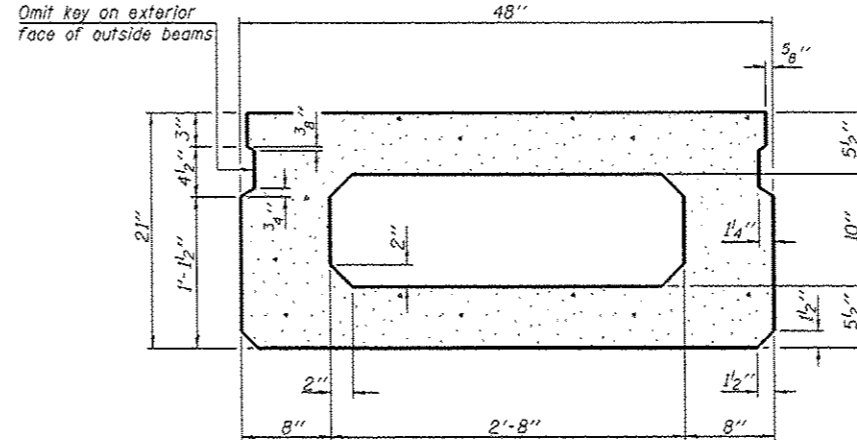


TOTAL BILL OF MATERIAL

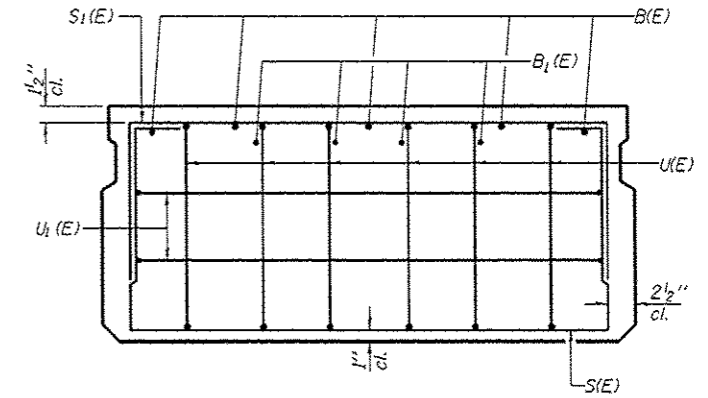
ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.			96
Porous Granular Embankment	Ton			210
Stone Dumped Riprap, Class A4	Ton			300
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		50.5	50.5
Precast Prestressed Concrete Deck Beams (21" Depth)	Sq. Ft.	1,204		1,204
Reinforcement Bars	Pound		6,190	6,190
Steel Railing, Type S1	Foot	101		101
Furnishing Steel Piles HP12x53	Foot		385	385
Driving Piles	Foot		385	385
Test Pile Steel HP12x53	Each		1	1
Name Plates	Each		1	1



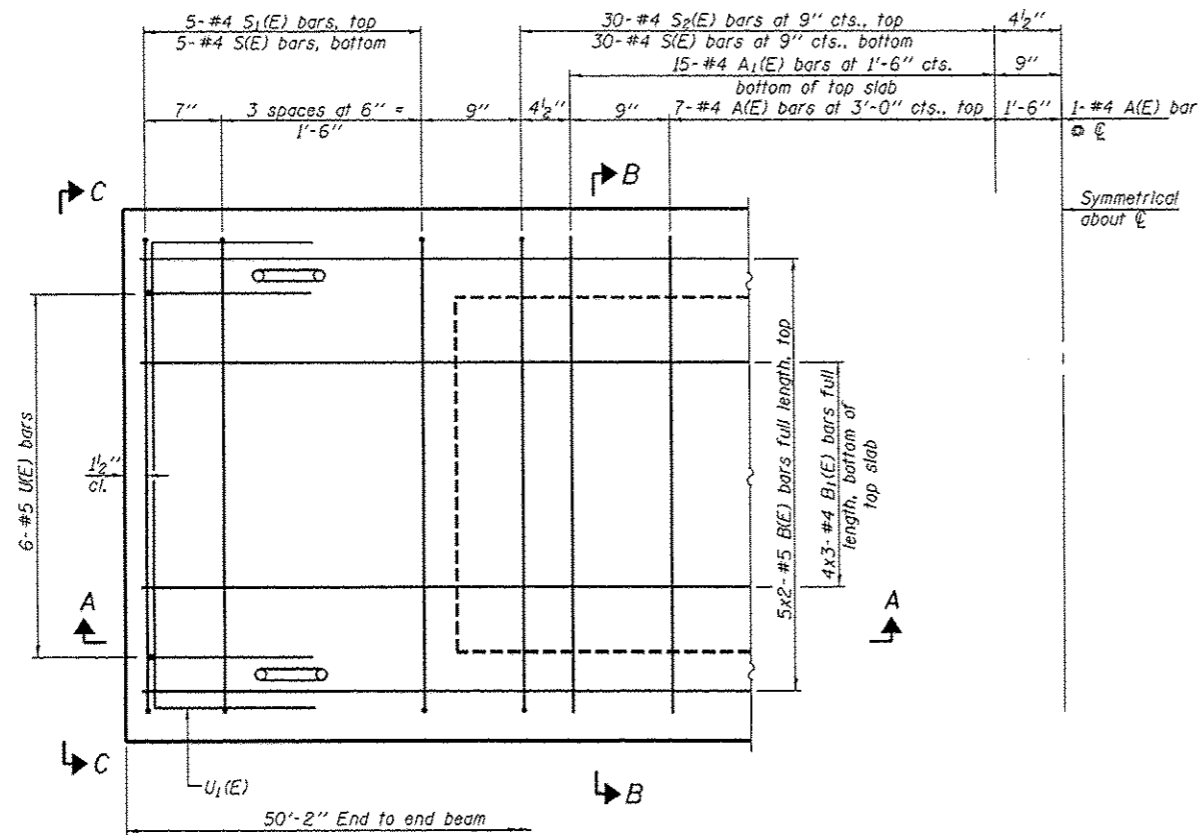
SECTION A-A



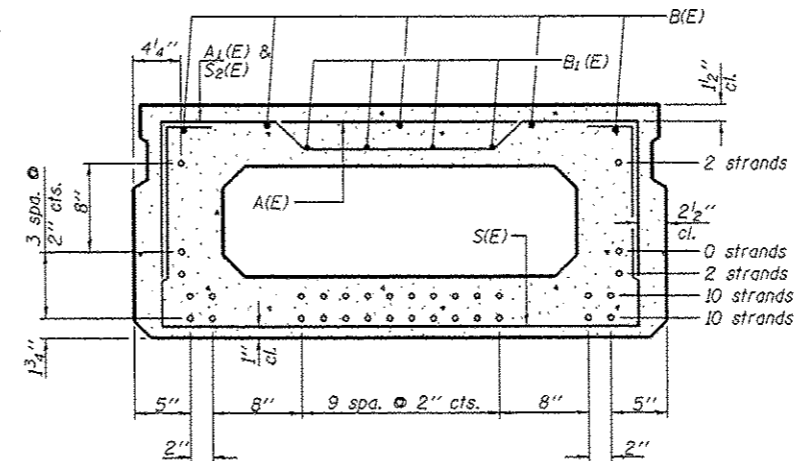
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B

(Showing reinforcement and permissible strand locations)
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For Information Only)

Bar	No.	Size	Length	Shape
A(E)	15	#4	3'-7"	—
A1(E)	30	#4	3'-10"	—
B(E)	10	#5	26'-3"	—
B1(E)	12	#4	18'-0"	—
S(E)	70	#4	7'-5"	⌌
S1(E)	10	#4	5'-11"	⌌
S2(E)	60	#4	6'-2"	⌌
U(E)	12	#5	4'-0"	⌌
U1(E)	4	#4	6'-0"	⌌

Note: See sheets 3 & 4 of 11 for additional details and Bill of Material.

Note:
Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.
Bars indicated thus 5x2-#5 etc. indicates 5 lines of bars with 2 lengths per line.

MINIMUM BAR LAP
#4 bar = 2'-0"
#5 bar = 2'-6"

PD-2148-0

7-1-10

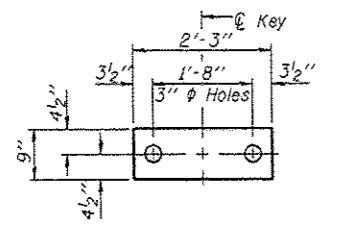
FILE NAME * 120957-ahb-bridge.dgn	USER NAME *	DESIGNED - D.W.T.	REVISED -
HAMPSON, LENZINI AND RENWICK, INC. 2003 STEVENSON DRIVE, SUITE 101 SPRINGFIELD, ILLINOIS 62767	PLOT SCALE *	CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FORM LS/HP/SE COMP. 184-000948	PLOT DATE * 3/1/2013	DRAWN - D.A.B.	REVISED -
		CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
HARDIN COUNTY HIGHWAY DEPARTMENT

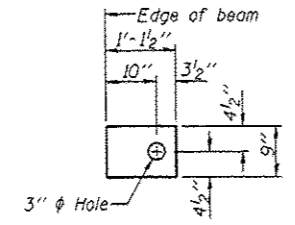
21" x 48" PPC DECK BEAM
STRUCTURE NO. 035-3052

SHEET NO. 2 OF 11 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
97	07-01161-00-BR	HARDIN	15	6
COUNTY UNIT ROAD DISTRICT			CONTRACT NO. 99491	
ILLINOIS FED. AID PROJECT				



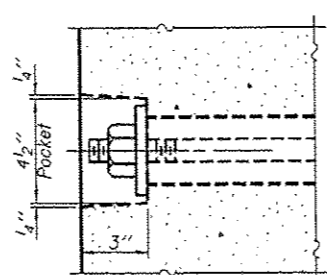
FABRIC BEARING PAD
(Interior - 2 Req'd.)



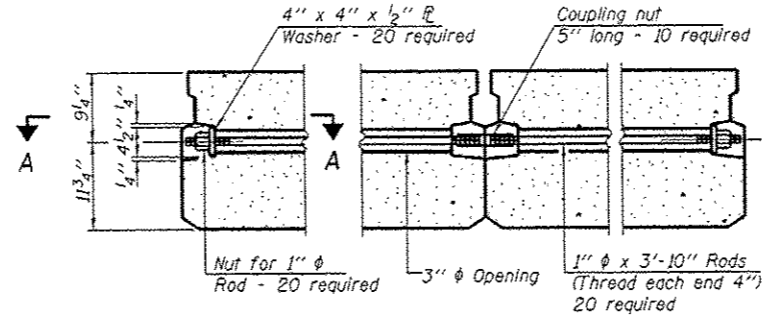
FABRIC BEARING PAD
(Exterior - 5 Req'd.)

FIXED

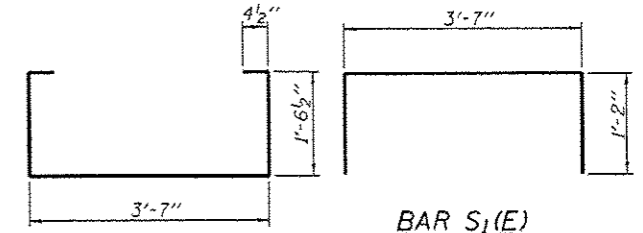
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pad shall be bonded to the substructure.



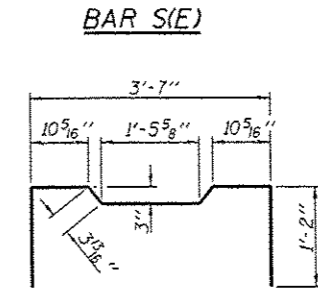
SECTION A-A



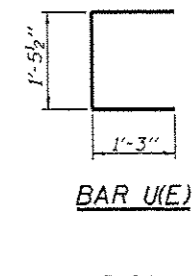
TYPICAL TRANSVERSE TIE ASSEMBLY



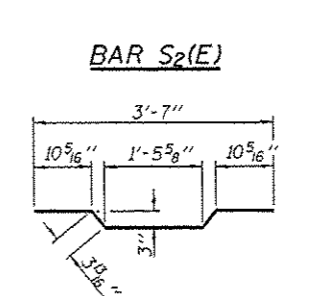
BAR S₁(E)



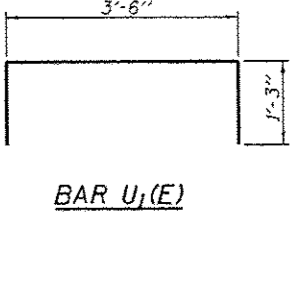
BAR S(E)



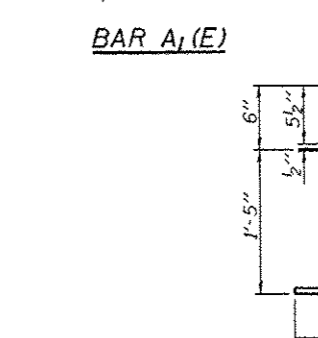
BAR U(E)



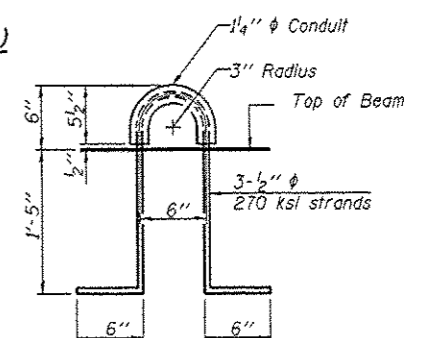
BAR S₂(E)



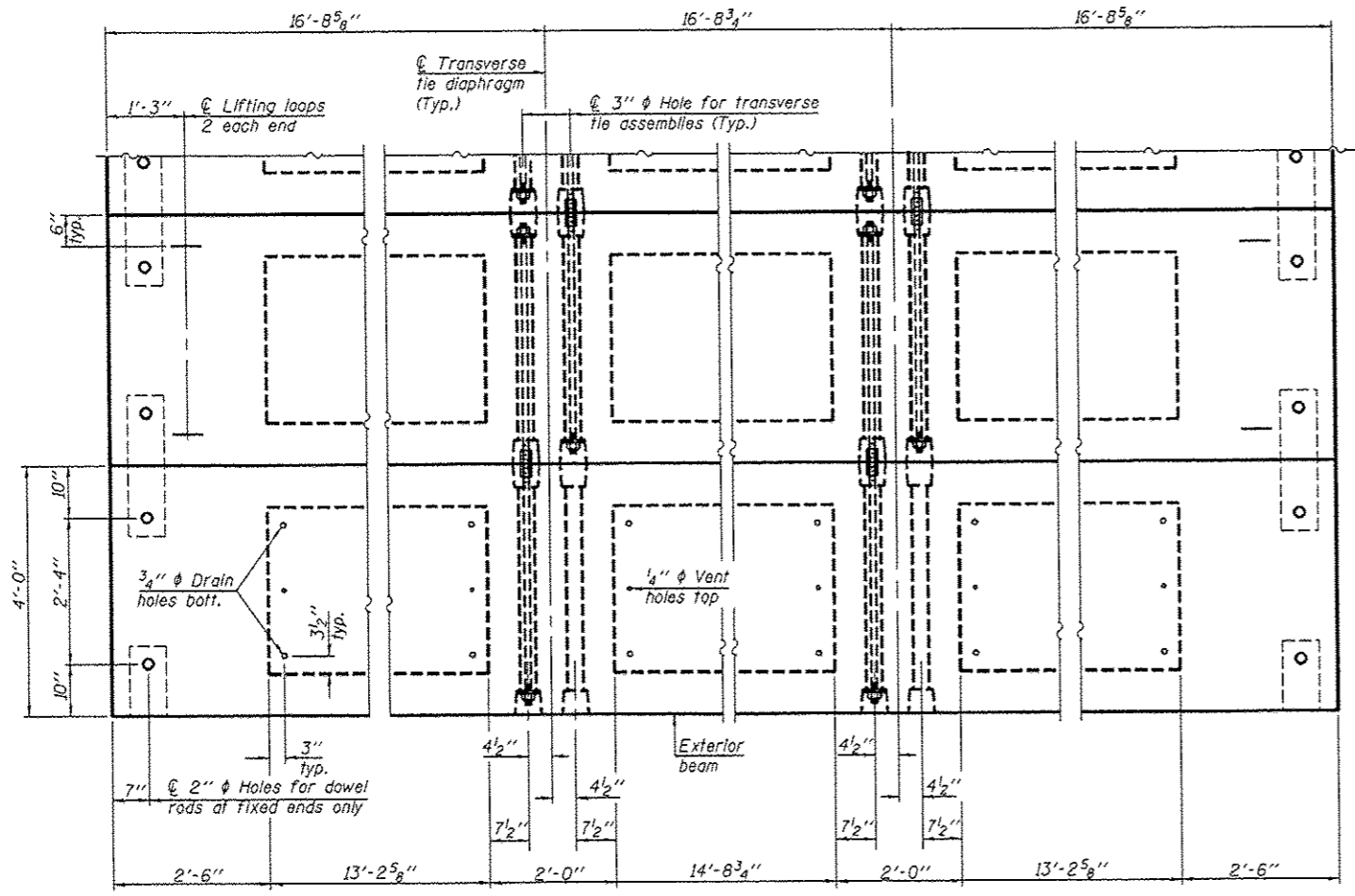
BAR U₁(E)



BAR A₁(E)



LIFTING LOOP DETAIL



PLAN VIEW

Note: Connect beams in pairs with the transverse tie configuration shown.

NOTES

- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
- Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
- Compressive strength of prestressed concrete at release, f'cl, shall be 5000 psi.
- All reinforcement shall be epoxy coated.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	1,204
---	---------	-------

PD-2148-0D

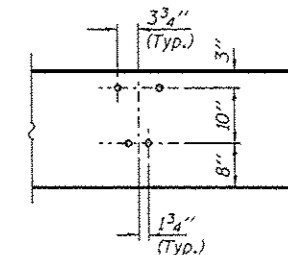
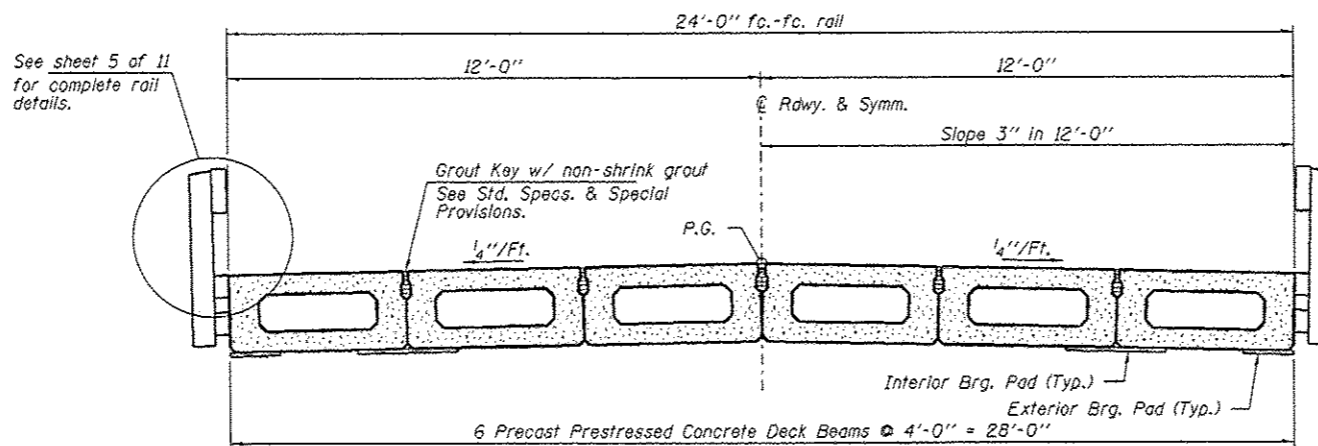
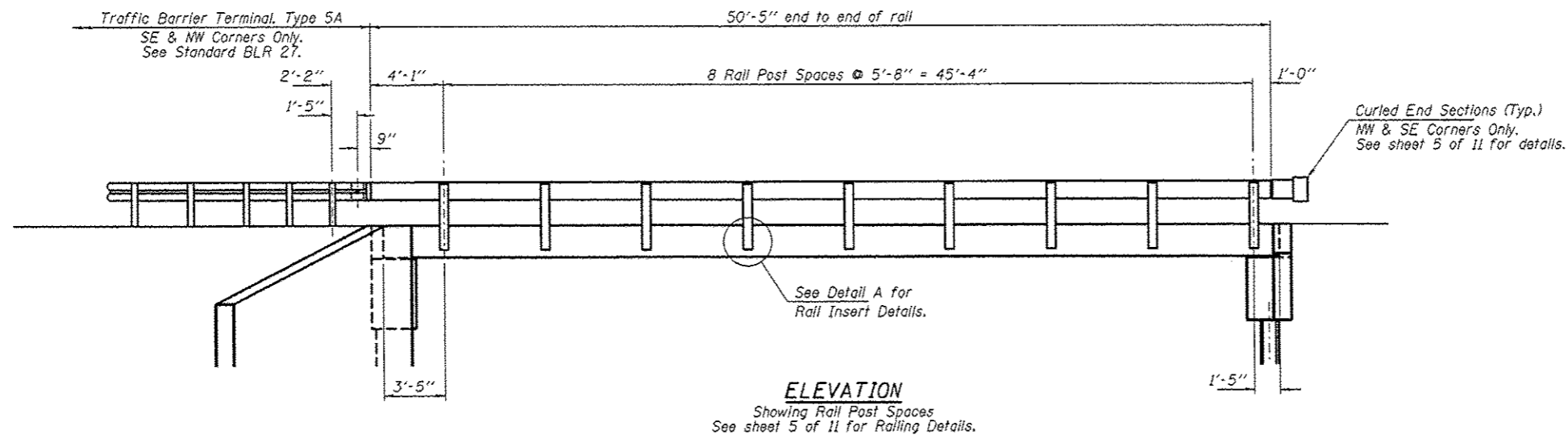
7-1-10

FILE NAME: 120057-shc-bridge.dgn	USER NAME:	DESIGNED - D.W.T.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		CHECKED - S.W.M.	REVISED -
1000 STEVENSON DRIVE, SUITE 201		DRAWN - D.A.B.	REVISED -
SPRINGFIELD, ILLINOIS 62761		CHECKED - S.W.M.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM			
LSI/PE/SE/COMP. 184000033	PLOT DATE: 3/1/2013		

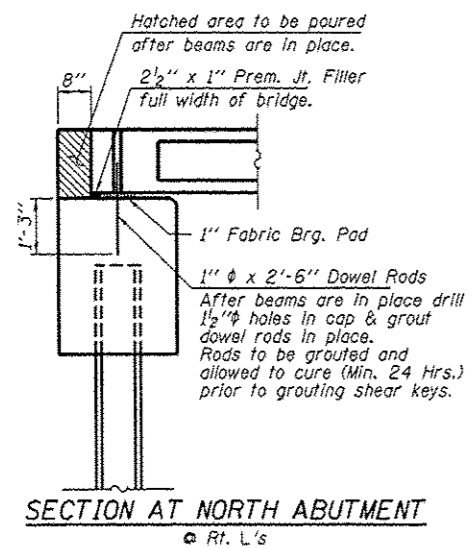
STATE OF ILLINOIS
HARDIN COUNTY HIGHWAY DEPARTMENT

21" x 48" PPC DECK BEAM DETAILS
STRUCTURE NO. 035-3052
SHEET NO. 3 OF 11 SHEETS

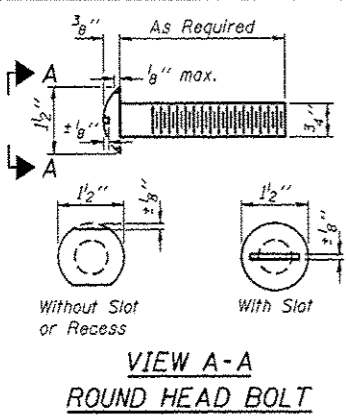
T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
97	07-01161-00-BR	HARDIN	15	7
COUNTY UNIT ROAD DISTRICT		CONTRACT NO. 99491		
ILLINOIS FED. AID PROJECT				



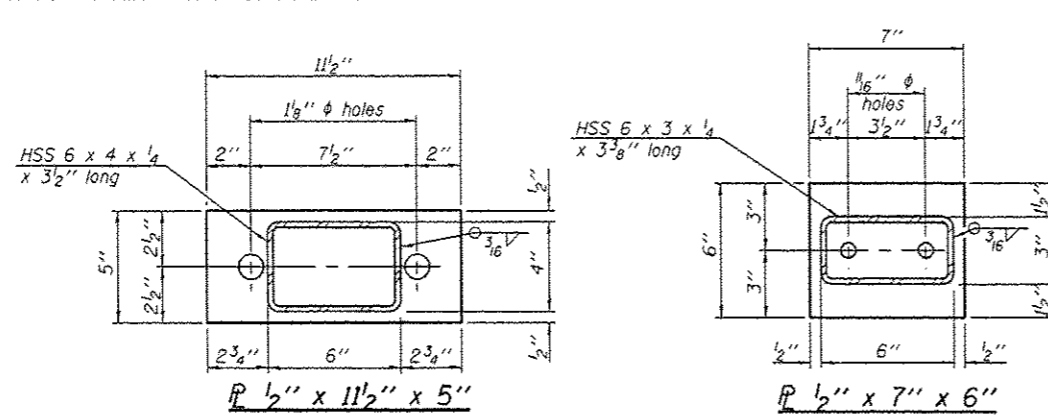
DETAIL A



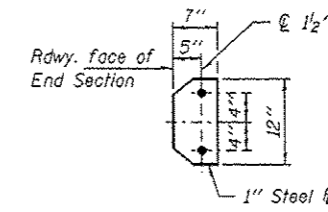
FILE NAME * 120057-ahb-bridge.dgn	USER NAME *	DESIGNED - D.W.T.	REVISED -	STATE OF ILLINOIS HARDIN COUNTY HIGHWAY DEPARTMENT	SUPERSTRUCTURE DETAILS STRUCTURE NO. 035-3052	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 2040 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62761	PLOT SCALE *	CHECKED - S.W.M.	REVISED -			97	07-01161-00-BR	HARDIN	15	8	
ILLINOIS PROFESSIONAL DESIGN FIRM 131 P.E. & S.E. CORP. 184-200916	PLOT DATE * 3/1/2013	DRAWN - D.A.B.	REVISED -			COUNTY UNIT ROAD DISTRICT	CONTRACT NO. 99491		ILLINOISIFIED, AHD PROJECT		
		CHECKED - S.W.M.	REVISED -			SHEET NO. 4 OF 11 SHEETS					



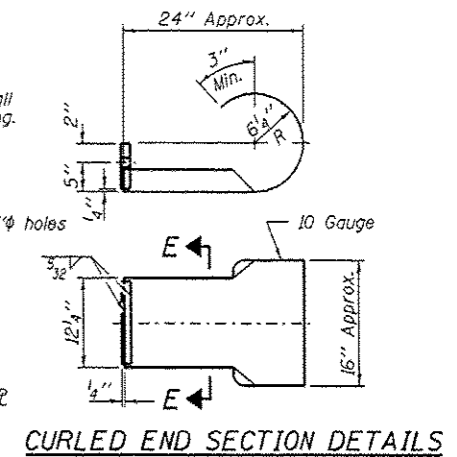
VIEW A-A
ROUND HEAD BOLT



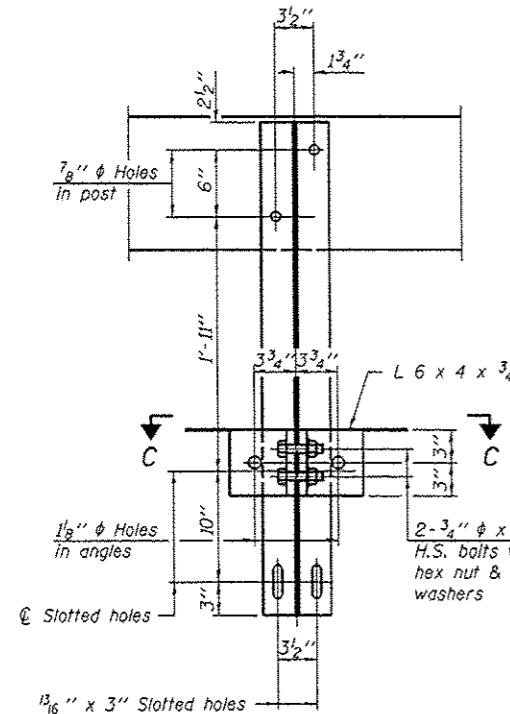
Note: Cost of curled end sections shall be included with the Steel Railing. (2 Required)



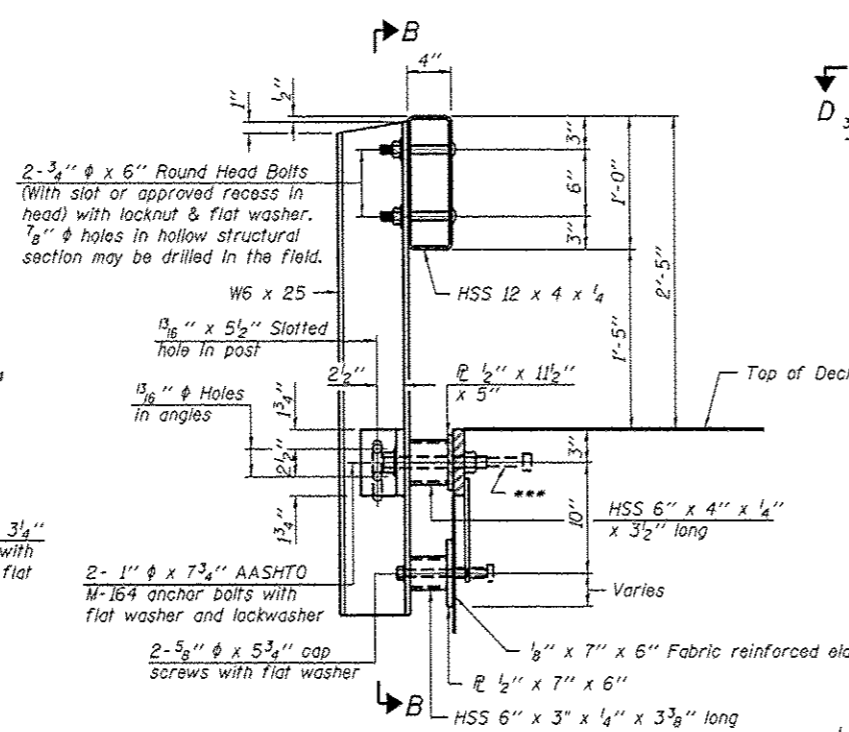
SECTION E-E



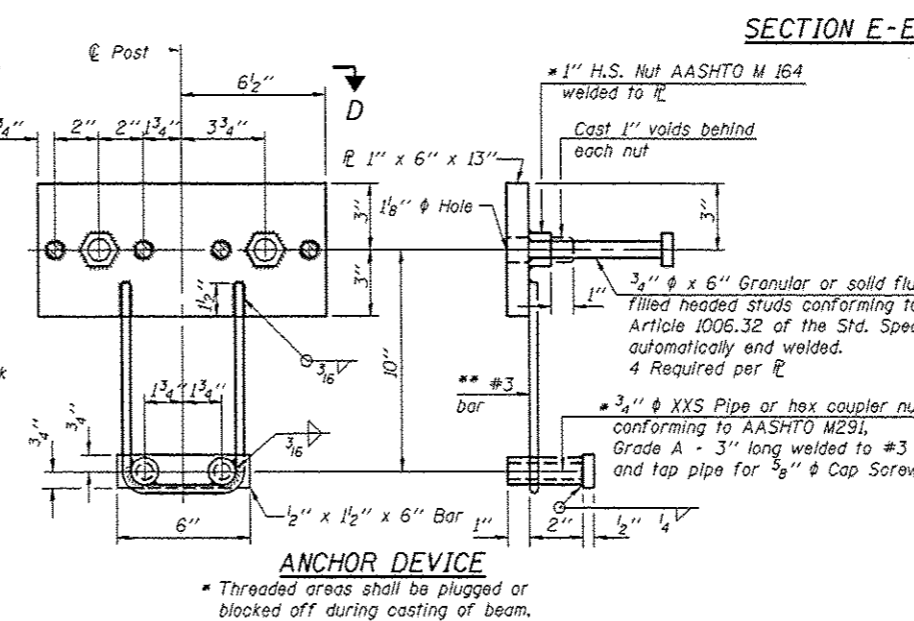
CURLED END SECTION DETAILS



SECTION B-B

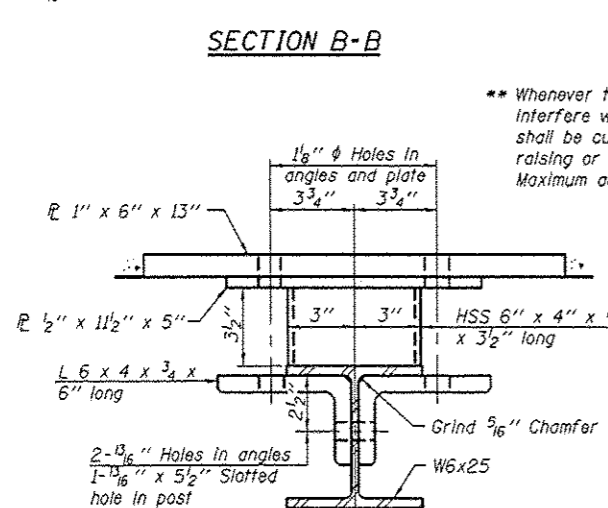


SECTION AT RAILING POST

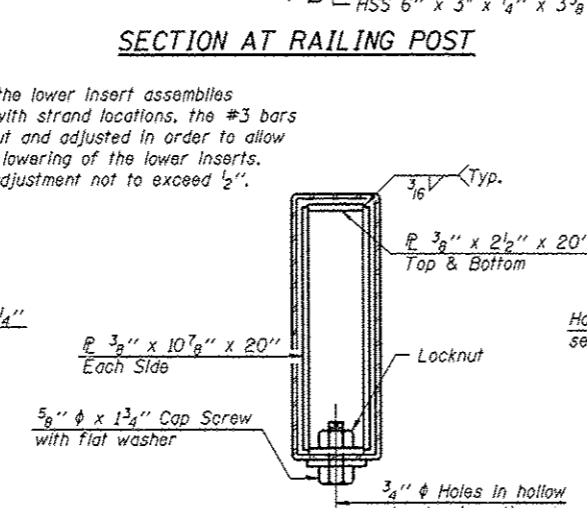


ANCHOR DEVICE

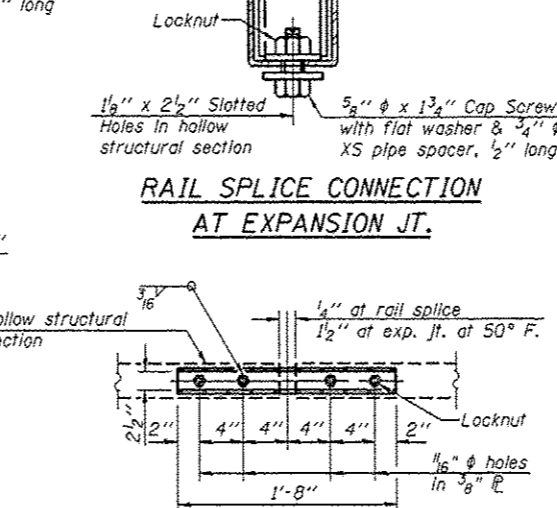
Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
For multi-span bridges, sufficient 1/4 inch x 6 inch x 1-2 inch galvanized steel shims shall be provided to align rail between adjacent spans. Cost Included with Steel Railing, Type S-1.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
*** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



SECTION C-C

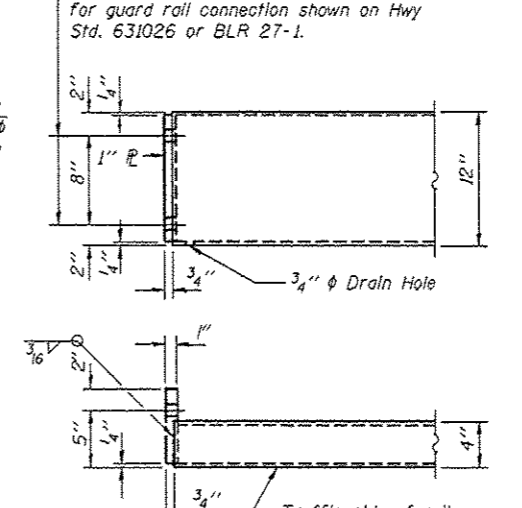


SECTIONS AT RAIL SPLICE

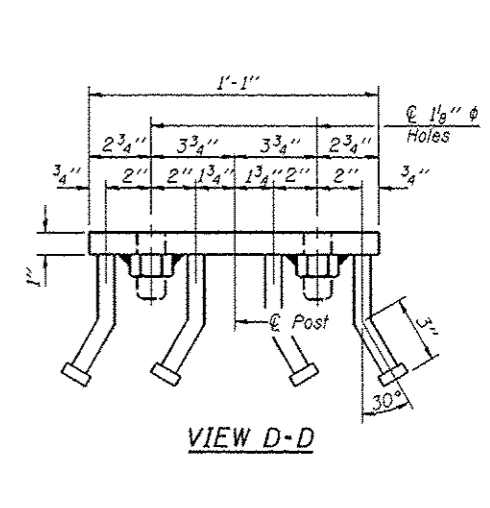


RAIL SPLICE CONNECTION AT EXPANSION JT.

PLAN-BOTT. SPLICE R TYPICAL



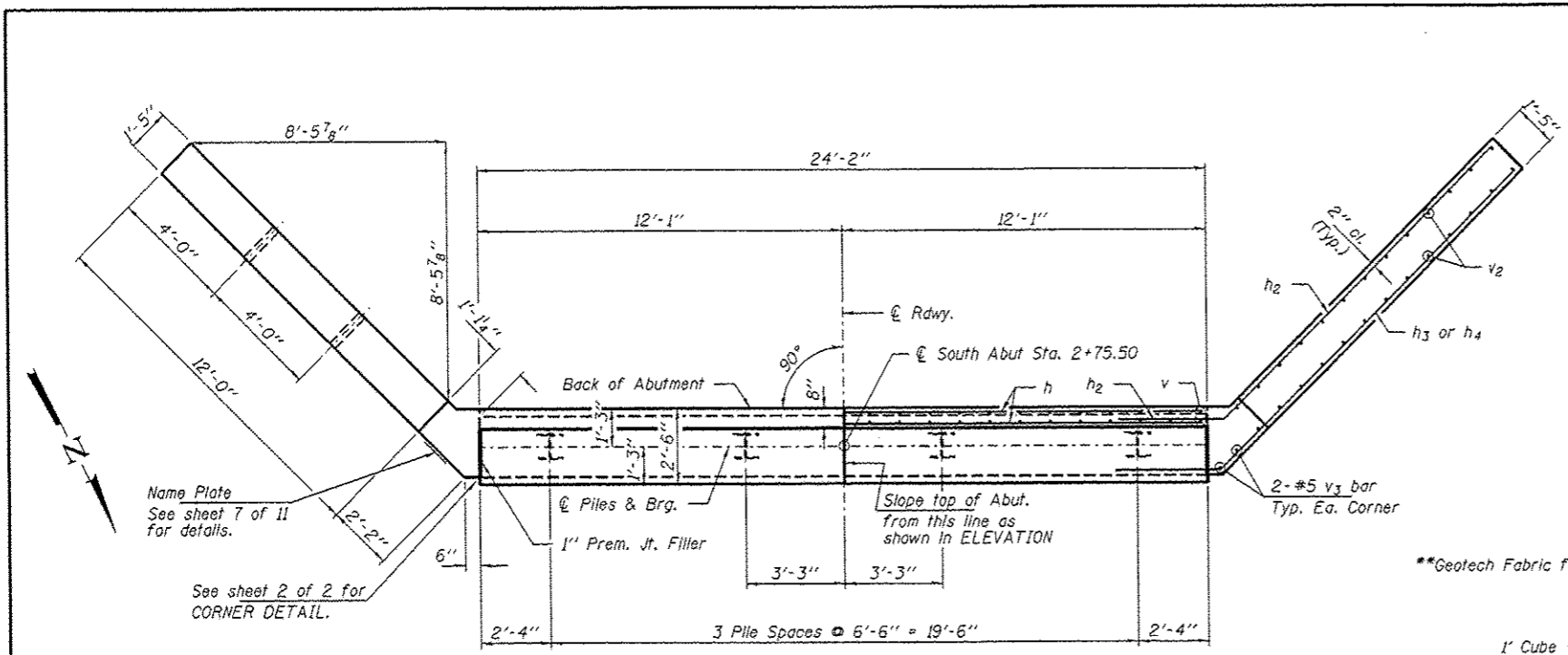
END OF RAIL DETAILS



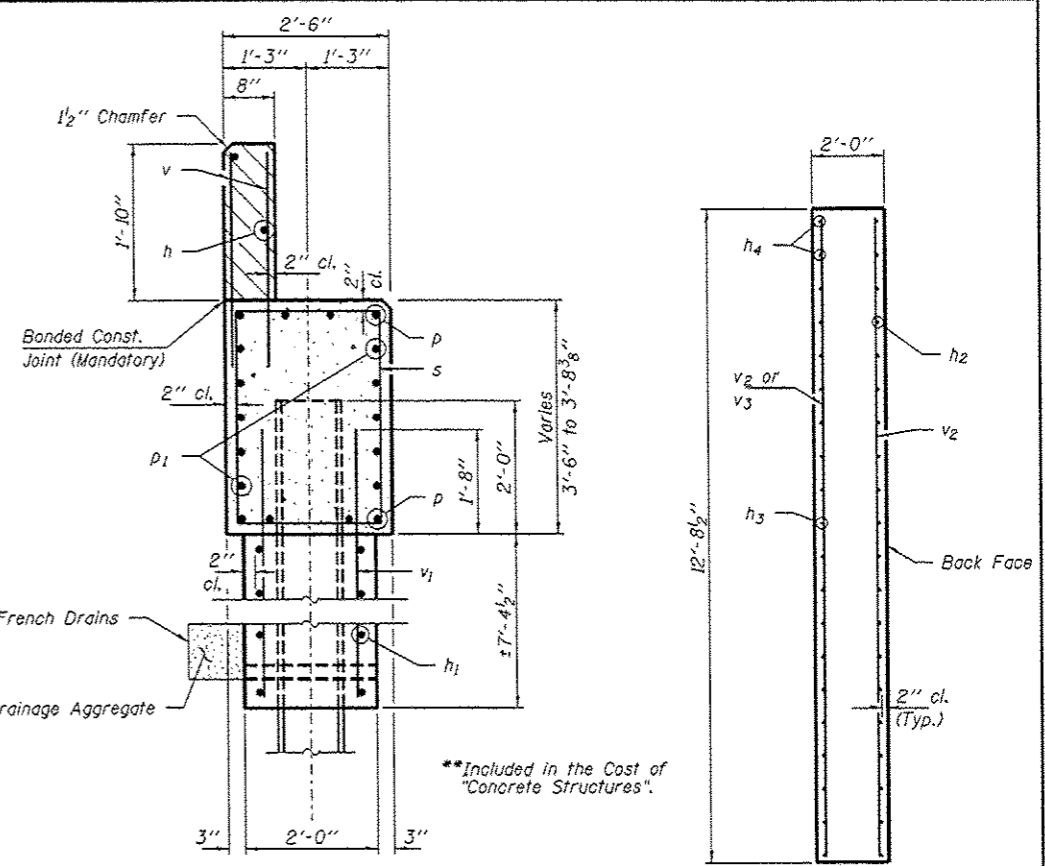
VIEW D-D

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	101

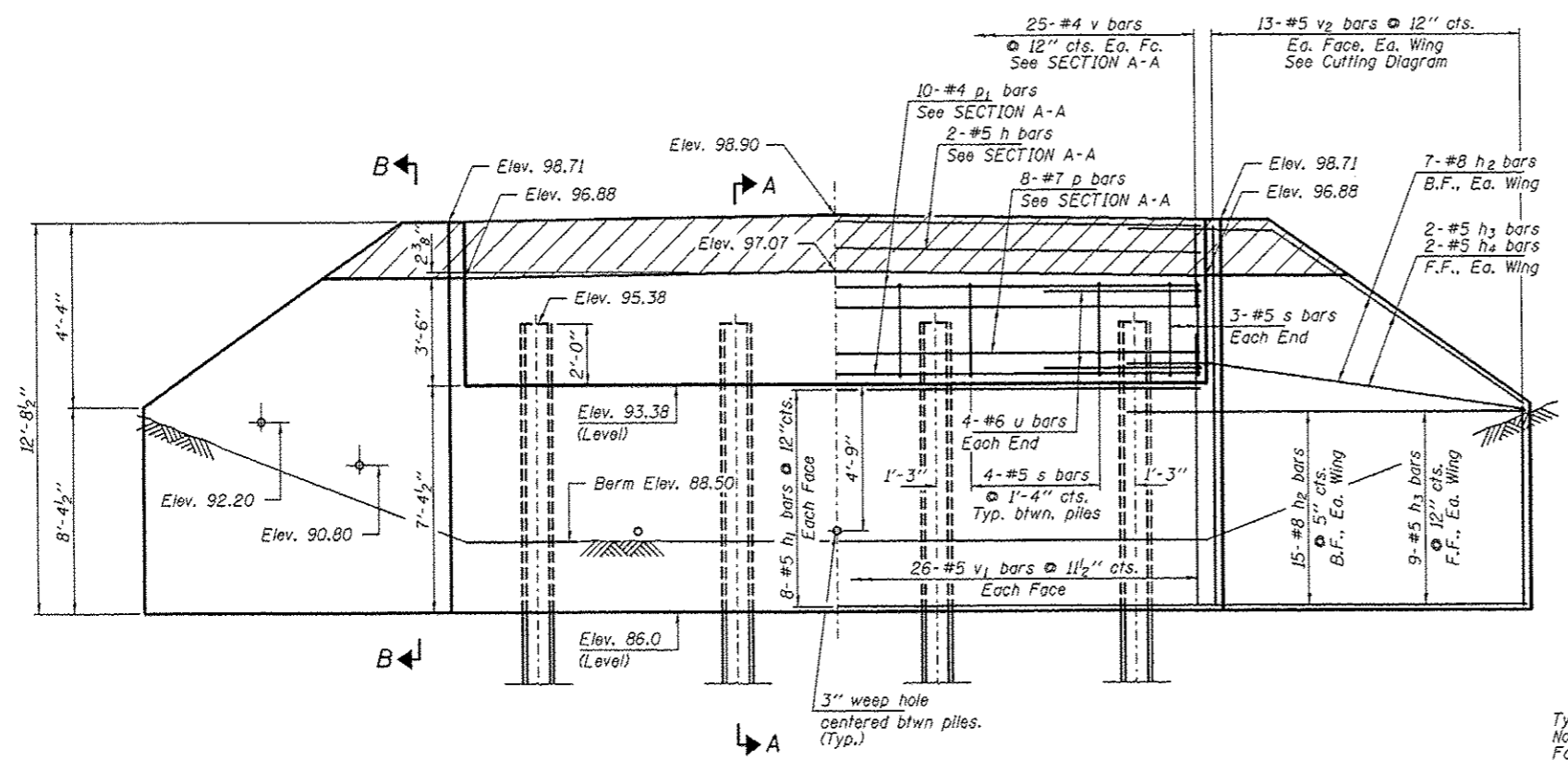


PLAN



SECTION A-A

SECTION B-B



ELEVATION
(Looking South)

PILE DATA

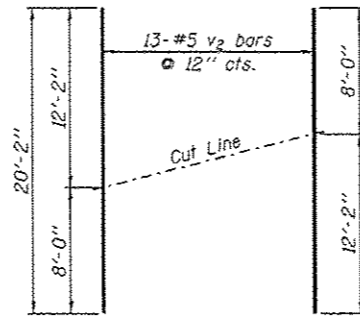
Type..... Steel HP12x53
 No. Req'd..... 4
 Factored Resistance Available (Rf)..... 230 Kips/Pile
 Nominal Required Bearing (Rn)..... 418 Kips/Pile
 Est. Length..... 55 Ft/Pile

BILL OF MATERIAL - S. ABUT.

BAR	NO.	SIZE	LENGTH	SHAPE
h	2	#5	23'-10"	—
h1	16	#5	23'-10"	—
h2	44	#8	16'-1"	—
h3	22	#5	17'-2"	—
h4	4	#5	12'-9"	—
p	8	#7	23'-10"	—
p1	10	#4	23'-10"	—
s	18	#5	11'-7"	□
u	8	#6	12'-1"	—
v	50	#4	2'-8"	—
v1	52	#5	8'-10"	—
v2	26	#5	20'-2"	—
v3	4	#5	12'-4"	—
Concrete Structures			Cu. Yd.	38.7
Reinforcement Bars			Pound	4,860
Steel Piles HP12x53			Foot	220

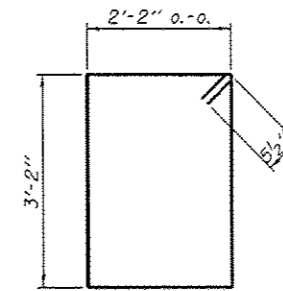
See sheet 7 of 11 for South Abutment Details.

FILE NAME * 120057-shr-bridge.dgn	USER NAME *	DESIGNED - D.W.T.	REVISIONS -	STATE OF ILLINOIS HARDIN COUNTY HIGHWAY DEPARTMENT	SOUTH ABUTMENT STRUCTURE NO. 035-3052	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3000 STEVENSON DRIVE, SUITE 201 BLOOMINGDALE, ILLINOIS 61710 ILLINOIS PROFESSIONAL DESIGN FIRM L&R P.C. CORP. 194.000000	PLLOT SCALE *	CHECKED - S.W.M.	REVISIONS -			97	07-01161-00-BR	HARDIN	15	10
PLLOT DATE * 3/1/2013	CHECKED - D.A.B.	REVISIONS -	COUNTY UNIT ROAD DISTRICT			CONTRACT NO. 99491				
CHECKED - S.W.M.	REVISIONS -	ILLINOIS FED. AID PROJECT								

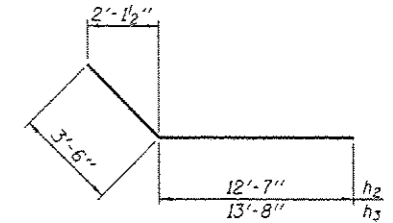


FIELD CUTTING DIAGRAM

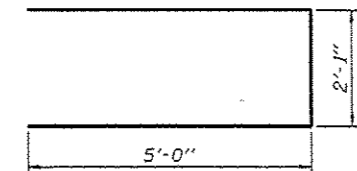
Order v_2 full length. Cut as shown and use remainder of bars in opposite face.



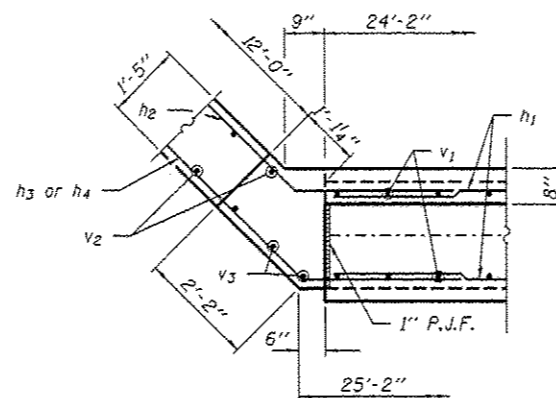
BAR s



BARS h_2 & h_3

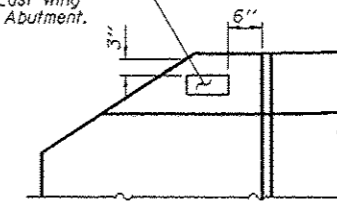


BAR u



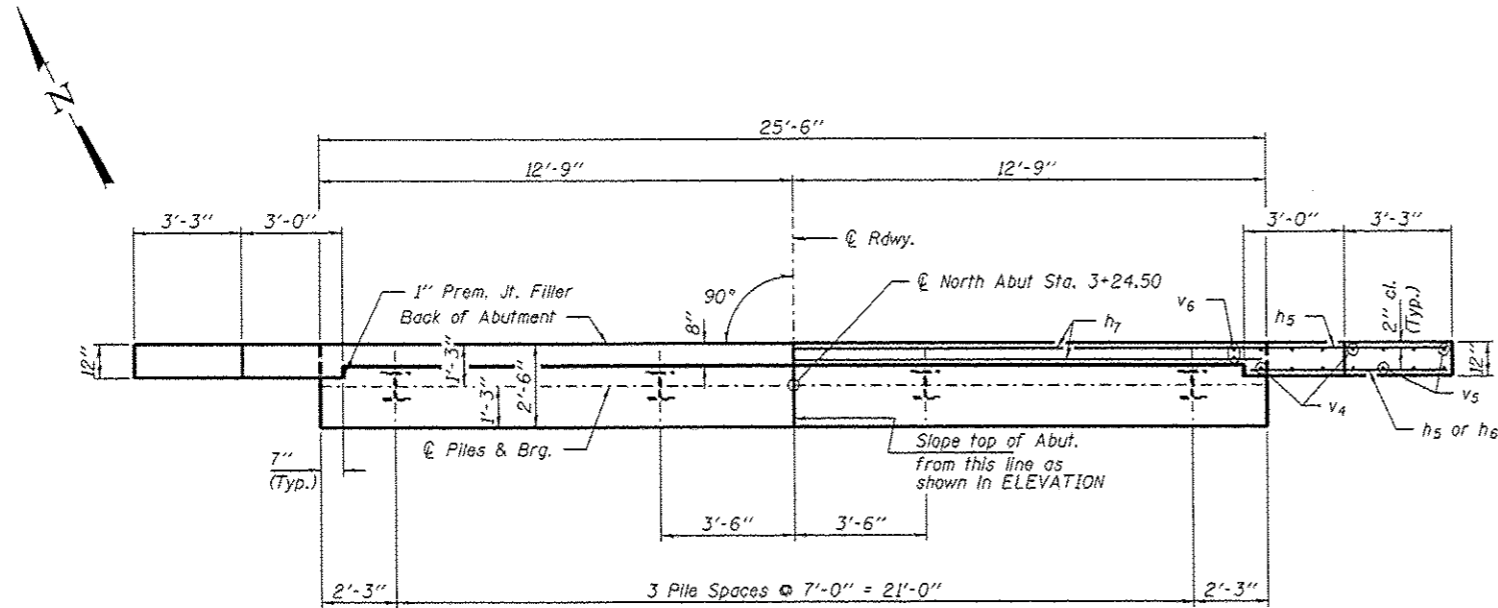
CORNER DETAIL

Set Name Plate in outside face of East Wing of South Abutment.

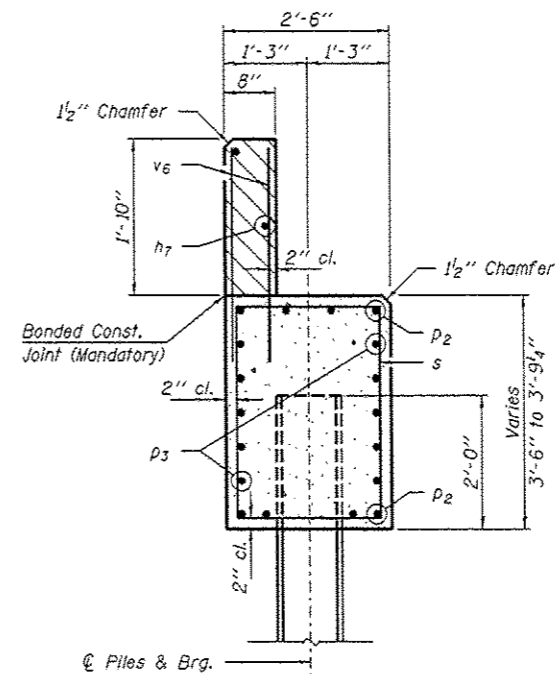


NAME PLATE LOCATION

FILE NAME * 120057-shr-bridge.dgn	USER NAME *	DESIGNED - D.W.T.	REVISED -	STATE OF ILLINOIS HARDIN COUNTY HIGHWAY DEPARTMENT	SOUTH ABUTMENT DETAILS STRUCTURE NO. 035-3052	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 300 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62761	PLOT SCALE :	CHECKED - S.W.M.	REVISED -			9T	07-01161-00-BR	HARDIN	15	11	
ILLINOIS PROFESSIONAL DESIGN FIRM L3 / P.E. / S.E. COMP. / 184-000000	PLOT DATE * 3/1/2013	DRAWN - D.A.B.	REVISED -			COUNTY UNIT ROAD DISTRICT	CONTRACT NO. 99491		ILLINOIS FED. AID PROJECT		
		CHECKED - S.W.M.	REVISED -			SHEET NO. 7 OF 11 SHEETS					

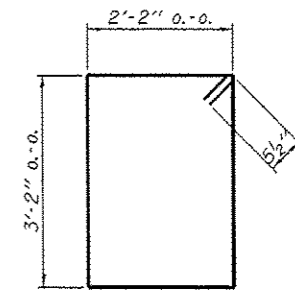


PLAN

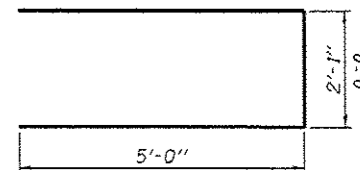


SECTION A-A

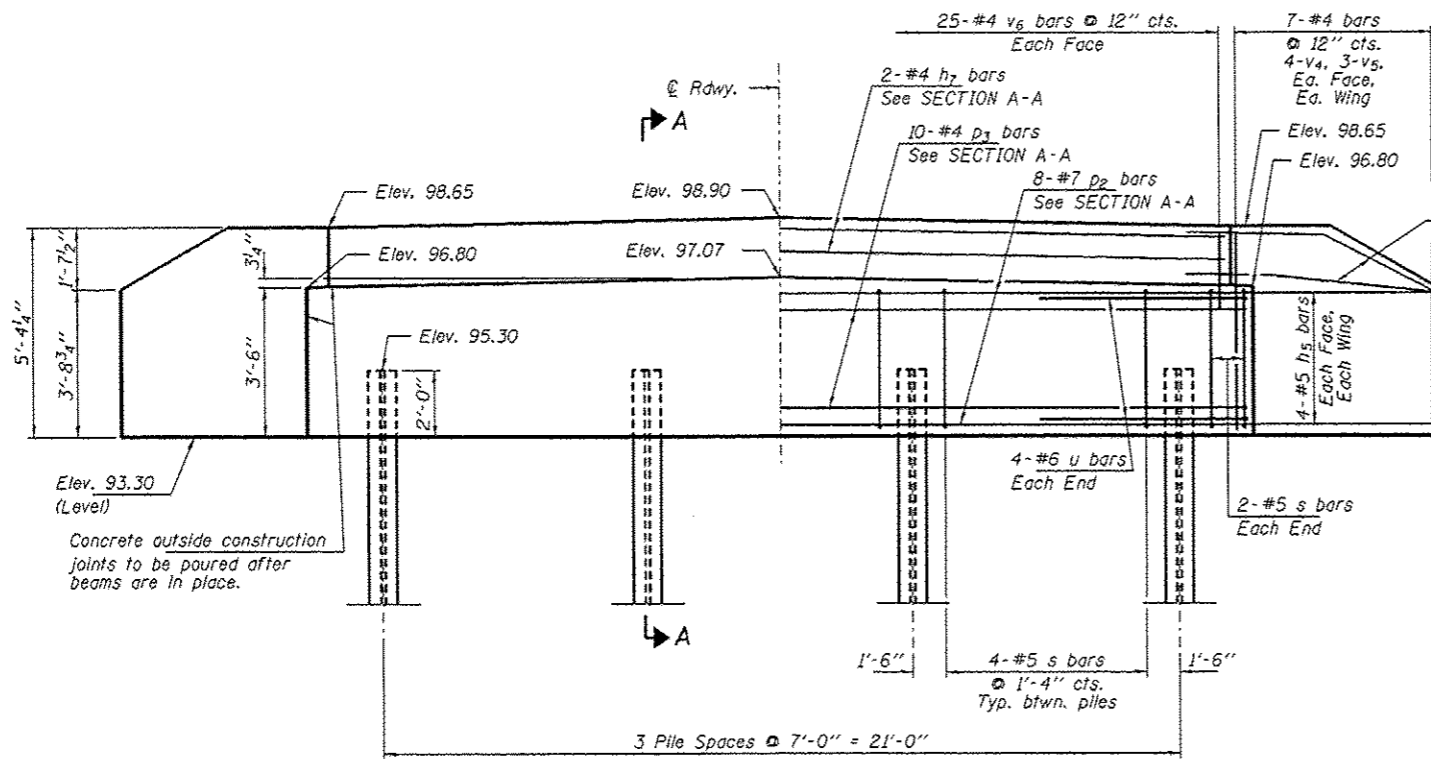
Hatched area to be poured after beams are in place.



BAR s



BAR u



ELEVATION

Note: Extend h5 bars into abutment oop.

Fan 2-#5 h5 bars (B.F.)
Fan 2-#5 h5 bars (F.F.)
Each Wing Band in field.

Elev. 93.30 (Level)
Concrete outside construction joints to be poured after beams are in place.

PILE DATA

Type ----- Steel HP12x53
No. Req'd. (N. Abut.) ----- 4
Factored Resistance Available (RF) ----- 230 Kips/Pile
Nominal Required Bearing (Rn) ----- 418 Kips/Pile
Est. Length ----- 55 Ft/Pile

Notes: * Includes one test pile to be driven in a permanent location at the North Abutment.

The test piles shall be driven to 110 percent of the Nominal Required Bearing Indicated in the pile data information.

BILL OF MATERIAL - N. ABUT.

BAR	NO.	SIZE	LENGTH	SHAPE
h5	20	#5	8'-6"	—
h6	4	#5	7'-0"	—
h7	2	#4	25'-2"	—
p2	8	#7	25'-2"	—
p3	10	#4	25'-2"	—
s	16	#5	11'-7"	□
u	8	#6	12'-1"	—
v4	16	#4	5'-0"	—
v5	12	#4	3'-5"	—
v6	50	#4	2'-8"	—
Concrete Structures			Cu. Yd.	11.8
Reinforcement Bars			Pound	1,330
Steel Piles HP12x53			Foot	165
Test Pile Steel HP12x53			Each	1
Name Plates			Each	1

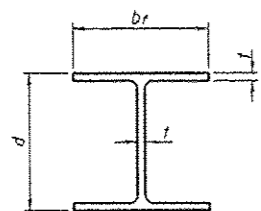
FILE NAME * 120207-ah-bridge.dgn	USER NAME *	DESIGNED - D.W.T.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC.		CHECKED - S.W.M.	REVISED -
2045 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62775	PLOT SCALE :	DRAWN - D.A.B.	REVISED -
ILLINOIS PROFESSIONAL DESIGN #3484 L.S. #2 / S.E. COMP. #84-000055	PLOT DATE * 3/1/2013	CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
HARDIN COUNTY HIGHWAY DEPARTMENT

NORTH ABUTMENT
STRUCTURE NO. 035-3052

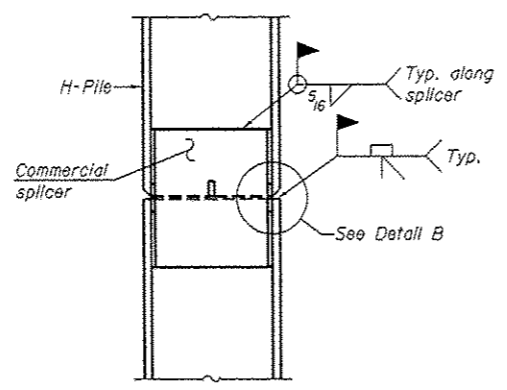
SHEET NO. 8 OF 11 SHEETS

T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
97	07-01161-00-0R	HARDIN	15	12
COUNTY UNIT ROAD DISTRICT			CONTRACT NO. 99491	
ILLINOIS FED. AID PROJECT				

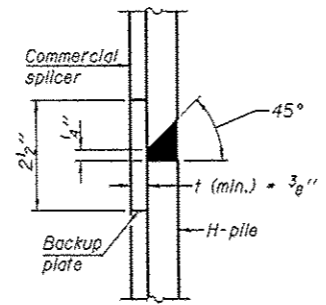


STEEL PILE TABLE

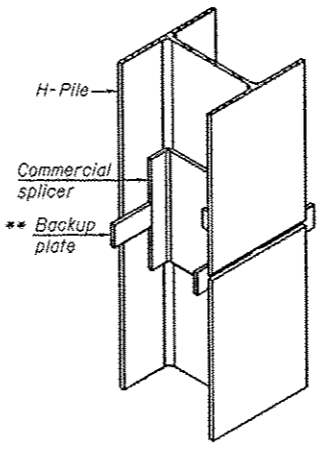
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



ELEVATION

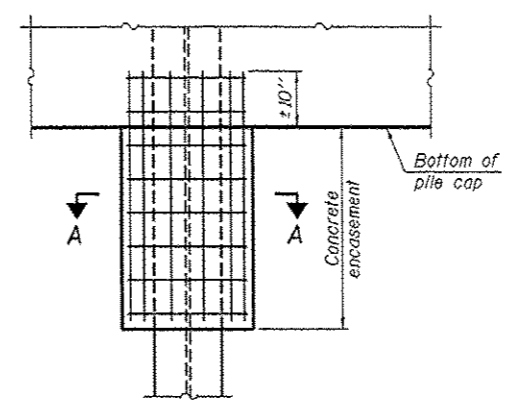


DETAIL "B"



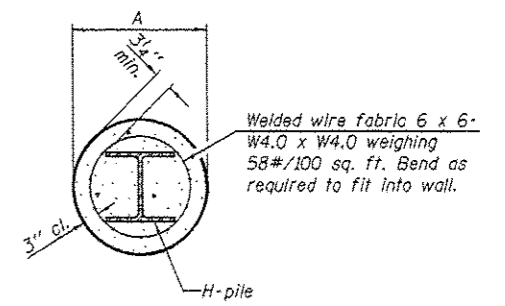
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE

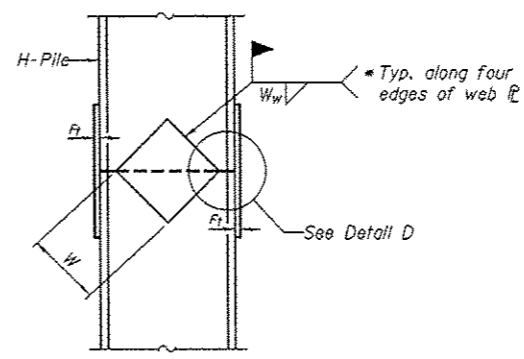


ELEVATION

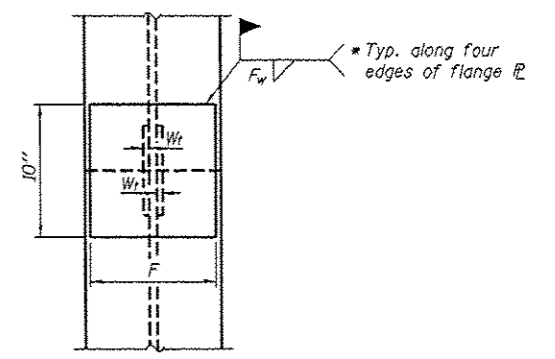
PILE ENCASEMENT



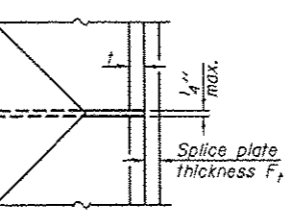
SECTION A-A



ELEVATION



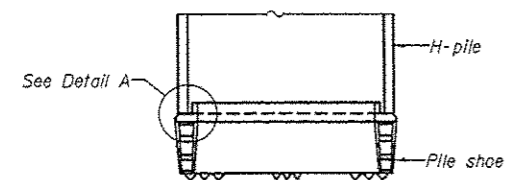
END VIEW



DETAIL D

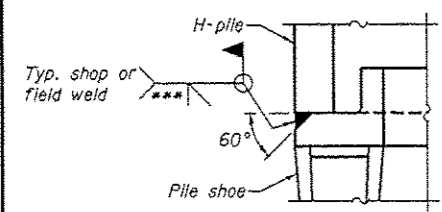
WELDED PLATE FIELD SPLICE

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

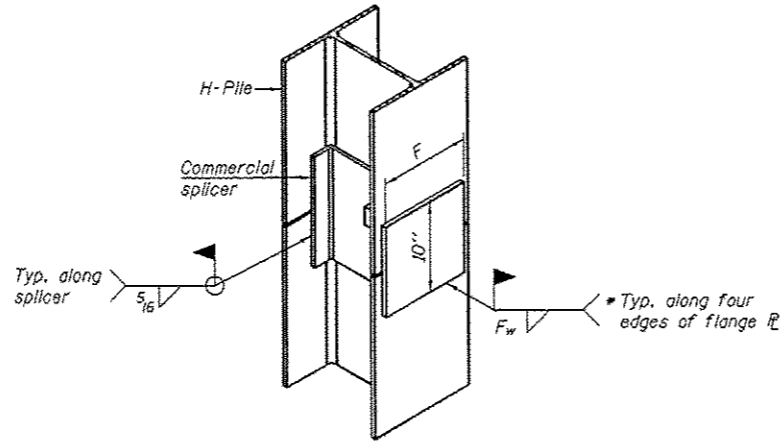


ELEVATION

H-PILE SHOE ATTACHMENT



DETAIL A



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

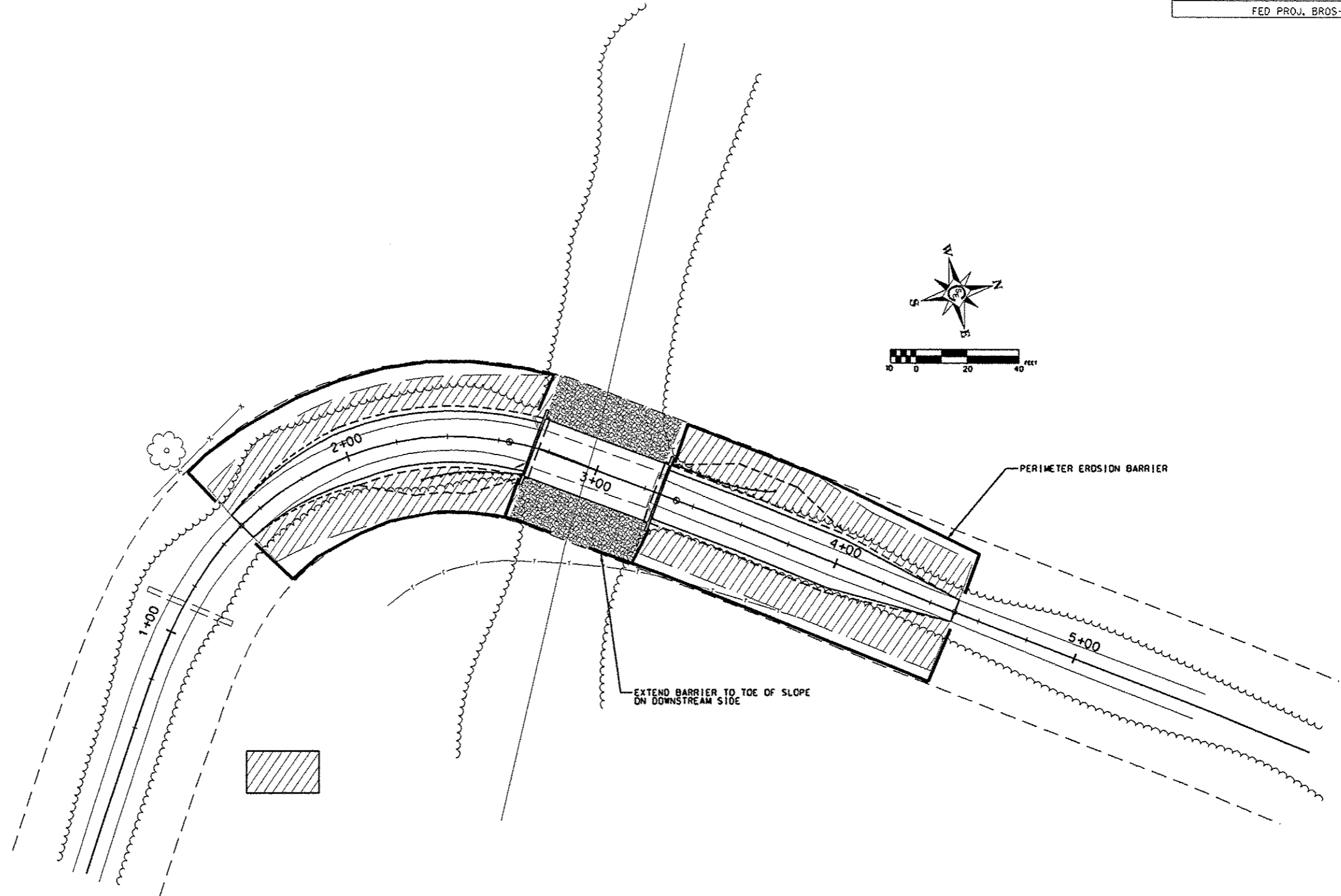
- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

F-HP 1-27-12

FILE NAME * 120057-ahb-bridge.dgn	USER NAME *	DESIGNED - D.W.T.	REVISIONS -	STATE OF ILLINOIS HARDIN COUNTY HIGHWAY DEPARTMENT	HP PILE DETAILS STRUCTURE NO. 035-3052	T.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
HAMPTON, LENZINI AND RENWICK, INC. 3000 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62761	PLOT SCALE *	CHECKED - S.W.M.	REVISIONS -			97	07-01161-00-BR	HARDIN	15	13
ALUNGA PROFESSIONAL DESIGN PLLC 137 W. 1st St. Springfield, IL 62761	PLOT DATE * 3/1/2013	DRAWN - D.A.B.	REVISIONS -			COUNTY UNIT ROAD DISTRICT CONTRACT NO. 99491				
		CHECKED - S.W.M.	REVISIONS -			ILLINOIS FED. AID PROJECT				

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 97	07-01161-00-BR	JACKSON	15	15A
FED PROJ. BROS-069(10)				



SWPPP
HANEY CREEK BRIDGE- SECTION 07-01161-00-BR