

06-17-2022 LETTING ITEM 128

CONTRACT NO. 95916

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED STP OFF-SYSTEM BRIDGE FUNDING

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 571B	19-07132-00-BR	FAYETTE	10	1
CONTRACT NO. 95916			GCL JOB NO. 20-617	

INDEX OF SHEETS

- COVER SHEET
- SUMMARY OF QUANTITIES, GENERAL NOTES, AND TYPICAL SECTIONS
- PLAN AND PROFILE OF ROADWAY
- GENERAL PLAN AND ELEVATION
- 5.-6. PRECAST PRESTRESS CONCRETE DECK BEAM DETAILS
- STEEL RAILING, TYPE S1 DETAILS
- ABUTMENT DETAILS
- HP PILE DETAILS
- CROSS SECTIONS OF ROADWAY

HIGHWAY STANDARDS (SEE SPECIFICATIONS)

- 000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 515001-04 NAME PLATE FOR BRIDGES
- 701901-08 TRAFFIC CONTROL DEVICES
- 725001-01 OBJECT AND TERMINAL MARKERS
- BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

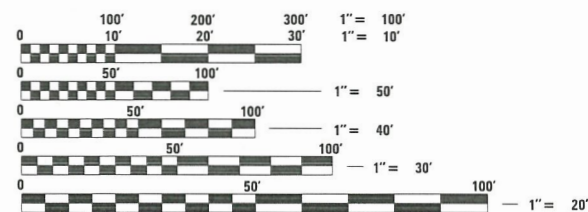
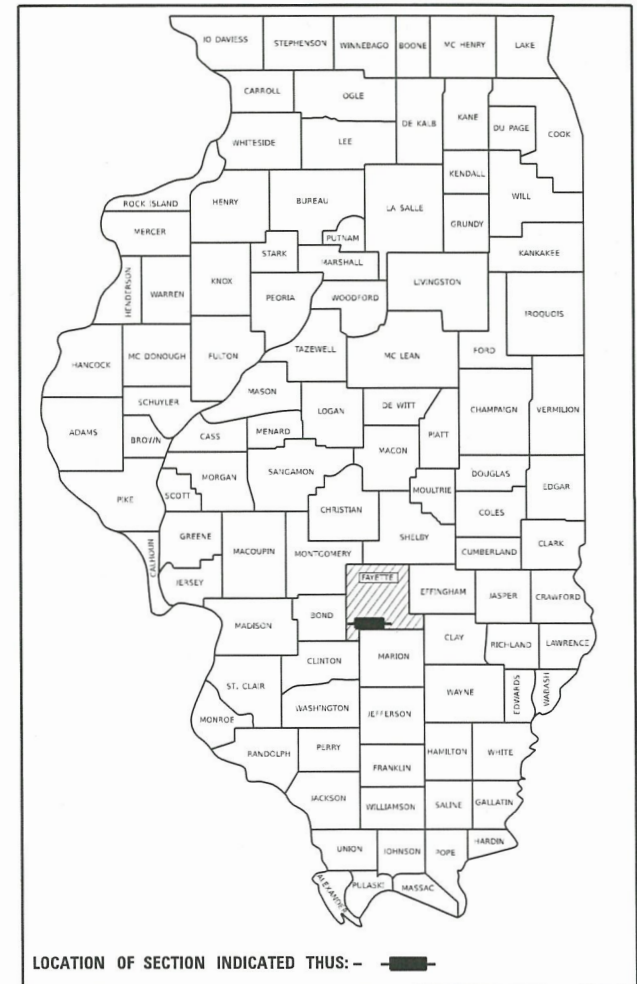
SOIL BORINGS (SEE SPECIFICATIONS)

DESIGN CLASSIFICATION: RURAL LOCAL ROAD

AD_{DESIGN} 100

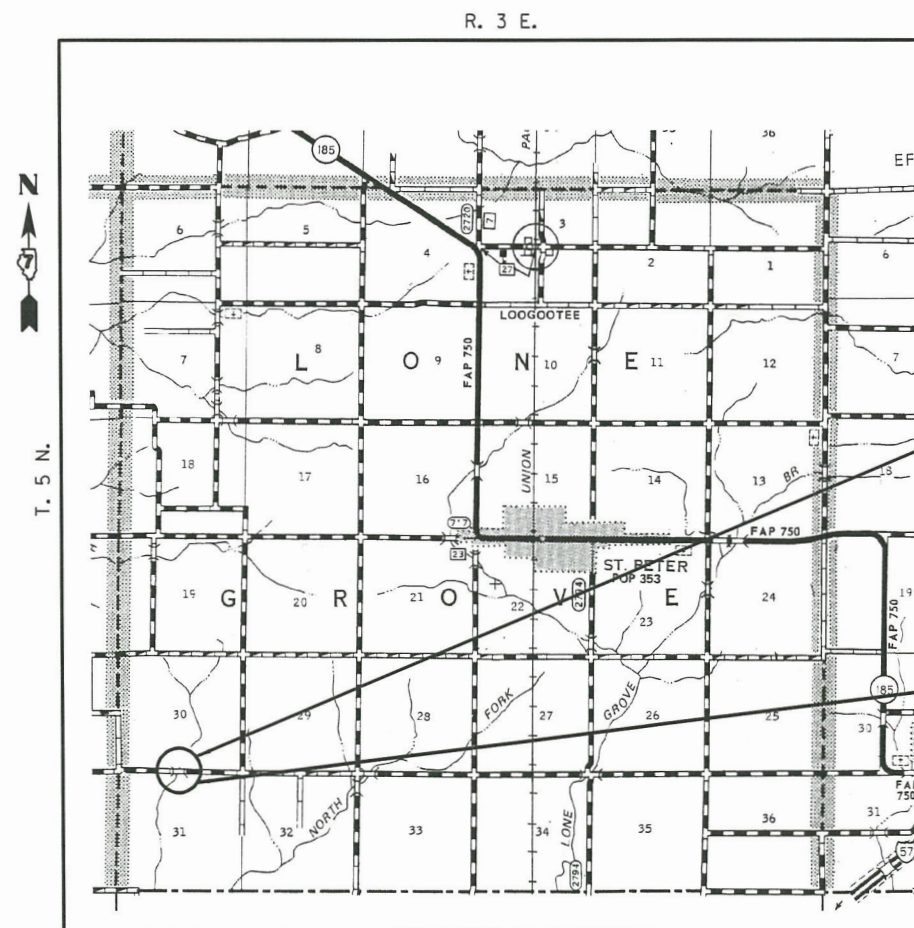
DESIGN SPEED: 30 MPH

TR 571B (700 AVE.)
BRIDGE OVER TRIBUTARY TO NORTH FORK
SECTION 19-07132-00-BR
PROJECT NO. 8GM5(575)
LONE GROVE ROAD DISTRICT
FAYETTE COUNTY
JOB NO. C-97-045-22



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS
1-800-892-0123 or 811 Website: <http://www.illinois1call.com>



LOCATION: NEAR THE SE CORNER OF THE SW 1/4, SECTION 30, T5N, R3E, 3rd P.M.
NET LENGTH OF PROJECT: 260.00 FT. = 0.049 MI.

SECTION BEGINS
STA. 8+70.00

SECTION 19-07132-00-BR INCLUDES THE CONSTRUCTION OF A SINGLE SPAN PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE CARRYING TR 571B OVER A TRIBUTARY TO NORTH FORK, 52'-2 1/2" BK. TO BK. ABUTMENTS X 24' WIDE, 25° AH. LT. SKEW. EXISTING STRUCTURE NO. 026-3254 PROPOSED STRUCTURE NO. 026-3476

SECTION ENDS
STA. 11+30.00

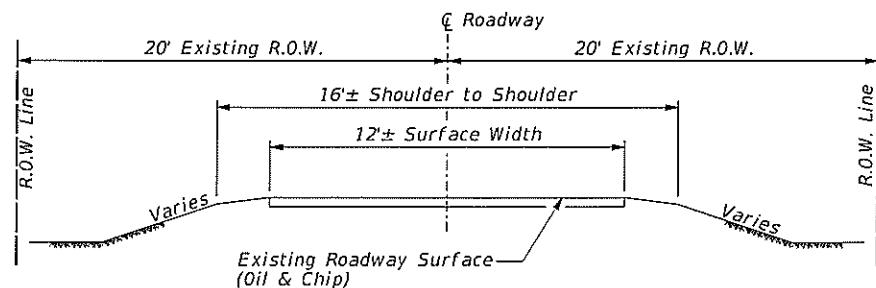
FAYETTE COUNTY HIGHWAY DEPARTMENT		
APPROVED	3-23	2022
<i>[Signature]</i> FAYETTE COUNTY, COUNTY ENGINEER		
PASSED	04/12/22	
<i>[Signature]</i> DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS		
RELEASING FOR BID BASED ON LIMITED REVIEW	04/12/22	
<i>[Signature]</i> REGION FOUR ENGINEER		

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OF THE STATE OF ILLINOIS

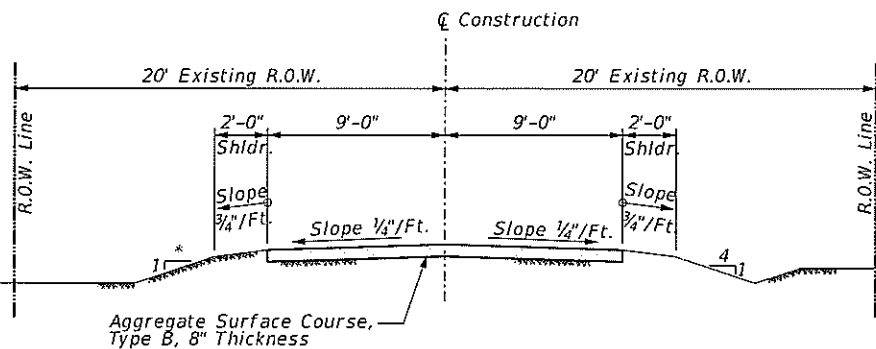


[Signature] 03/23/2022
BRENT L. TAYLOR
SALEM, ILLINOIS
ILLINOIS LICENSED PROFESSIONAL
ENGINEER NO. 062-066114
EXPIRES NOV. 30, 2023
GONZALEZ COMPANIES, LLC
7 CARPENTER DRIVE
SALEM, IL 62881
PHONE (618) 222-2221
www.gonzalez.com
ILLINOIS PROFESSIONAL DESIGN FIRM 184.004564





TYPICAL SECTION
EXISTING APPROACH ROADWAY



TYPICAL SECTION
PROPOSED APPROACH ROADWAY

* 4:1 within 6' of
Roadway Surface.
Varies outside 6'
dimension - see
cross sections

UTILITIES

J.U.L.I.E. Dig No. X2880969-00X

WATER:
Fayette Water Company
Dennis Vaughn
618-427-3000
FWC_DRV@FRONTIER.COM

TELEPHONE:
Frontier Communications
Kalin Hinshaw
815-895-1515
KALIN.HINSHAW@FTR.COM

PIPELINE:
Countrymark Refining & Logistics
Jamie Posner
812-833-259 812-270-2107 xCell
JAMIE.POSNER@COUNTRYMARK.COM

Marathon - Vernon
Caleb Comstock
618-432-7839
CCOMSTOCK@MARATHONPETROLEUM.COM

ELECTRIC:
Southwestern Electric Coop.
Natalie Goestenors
800-637-8667 x5933
618-664-1025
Natalie.Goestenors@sweci.com

GENERAL NOTES

- This section shall be constructed according to the plans, the Special Provisions, and the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2022.
- Roadway Centerline profiles refer to the finished surface.
- Existing utilities shown are located from surface observations or information provided by the respective utilities and must be considered approximate and are only included for the convenience of the bidder. There may be others, the exact location of which are unknown and not shown. The Contractor will be responsible for notifying the respective utilities before work is begun. Field marking of underground utilities may be obtained by providing a minimum of 48 hours advance notice through the J.U.L.I.E. system by calling 1-800-892-0123, 811, or by direct contact with non-members of J.U.L.I.E.
- Factors used for quantity calculations are as follows:

Porous Granular Embankment	2.1 tons/cu. yd.
Stone Dumped Riprap	130 pounds/cu. ft.
Aggregate Surface Course	2.1 tons/cu. yd.
- Commitments:
 No tree clearing will be allowed or performed from April 1 through September 30, to prevent any adverse effects to the federally threatened Northern Long-eared bat or federally endangered Indiana bat.

 Existing fence replacement within the limits of construction will be done by others and will be coordinated by the Township.

 The County Engineer will notify public service providers prior to the start of construction.

SUMMARY OF QUANTITIES

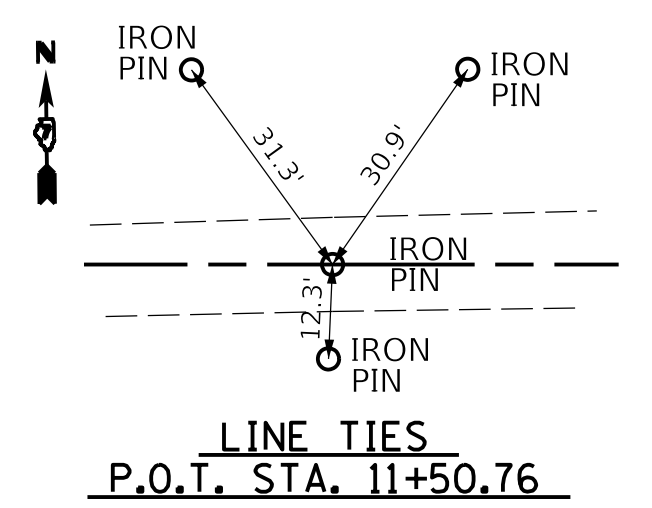
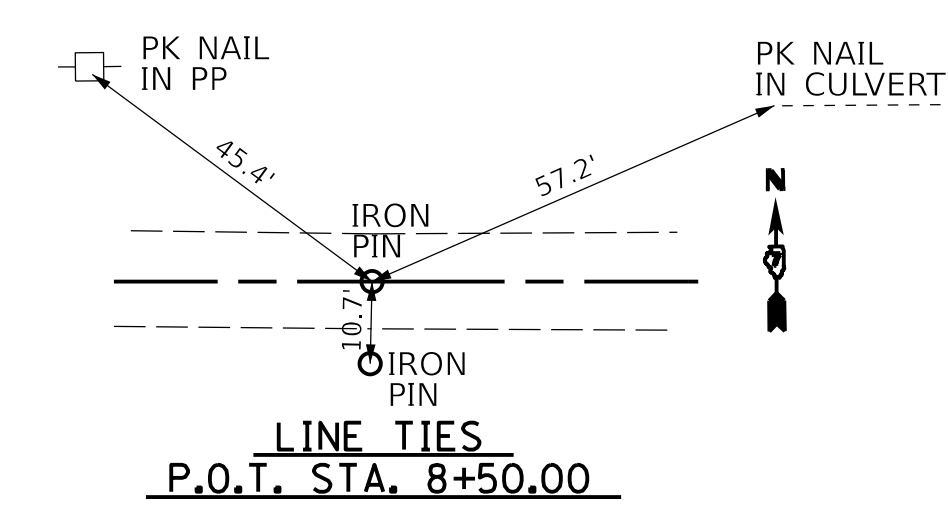
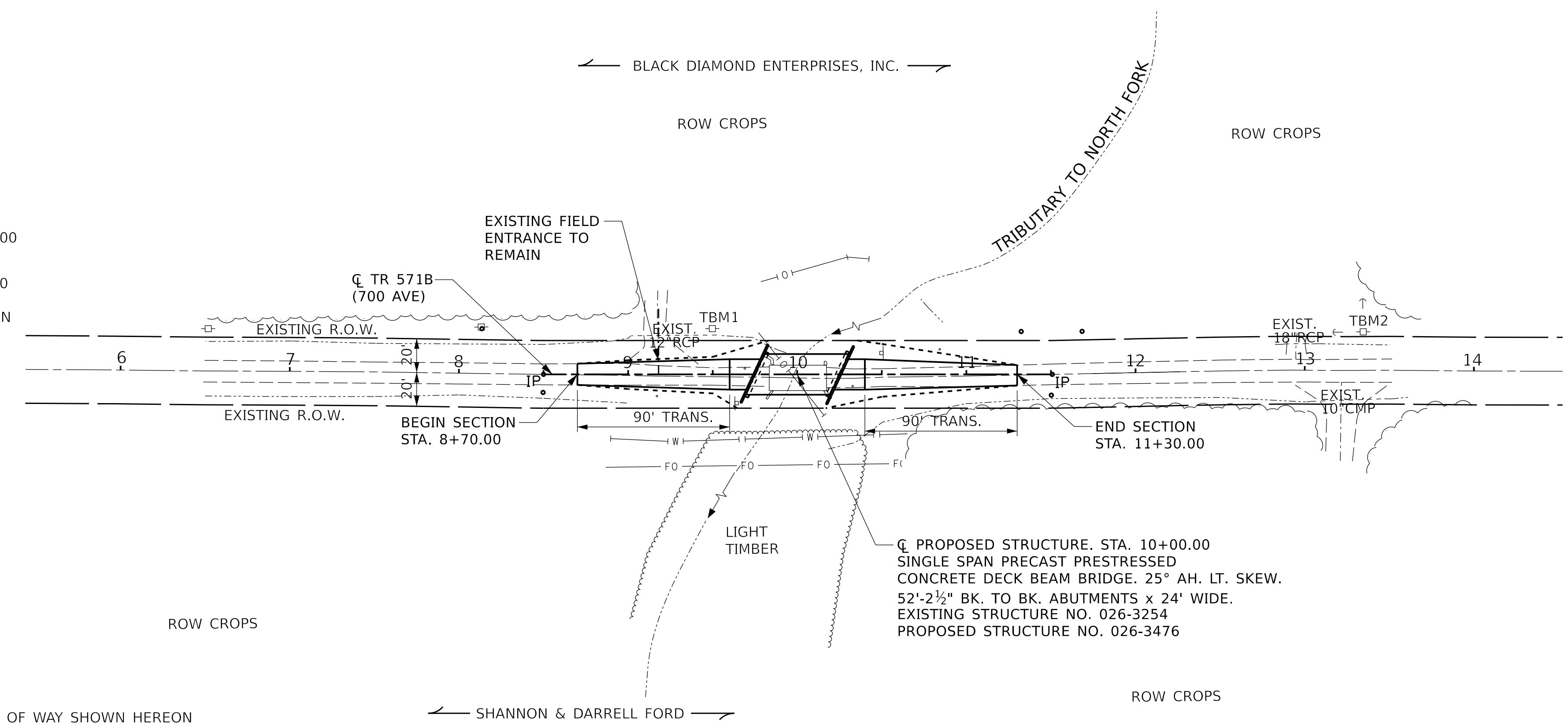
Code No.	Item	Unit	Quantity
20200100	Earth Excavation	Cu Yd	70
20300100	Channel Excavation	Cu Yd	150
20700110	Porous Granular Embankment	Ton	92
28100807	Stone Dumped Riprap, Class A4	Ton	168
40200800	Aggregate Surface Course, Type B	Ton	166
50100100	Removal of Existing Structures	Each	1
50300225	Concrete Structures	Cu Yd	32.0
50300280	Concrete Encasement	Cu Yd	2.8
50400405	Precast Prestressed Concrete Deck Beams (21" Depth)	Sq Ft	1200
50800105	Reinforcement Bars	Pound	4180
Δ 50900205	Steel Railing, Type S1	Foot	105
51201600	Furnishing Steel Piles HP12x53	Foot	439
51202305	Driving Piles	Foot	439
51203600	Test Pile Steel HP12x53	Each	1
51500100	Name Plates	Each	1
67100100	Mobilization	L Sum	1
Δ 72501000	Terminal Marker - Direct Applied	Each	4
X2501000	Seeding, Class 2 (Special)	Acre	0.1
X7010216	Traffic Control and Protection, (Special)	L Sum	1

Δ Specialty Items

EXISTING STRUCTURE: STRUCTURE NO.: 026-3254. SINGLE SPAN BRIDGE WITH PRECAST CONCRETE CHANNEL BEAMS ON CLOSED CONCRETE ABUTMENTS AND WINGWALLS. NO SKEW. 34'±L. x 15'±W. TO BE REMOVED.



SCALES:
 HORZ.- 0 50 100
 VERT.- 0 5 10
 - - - - - LIMITS OF CONSTRUCTION



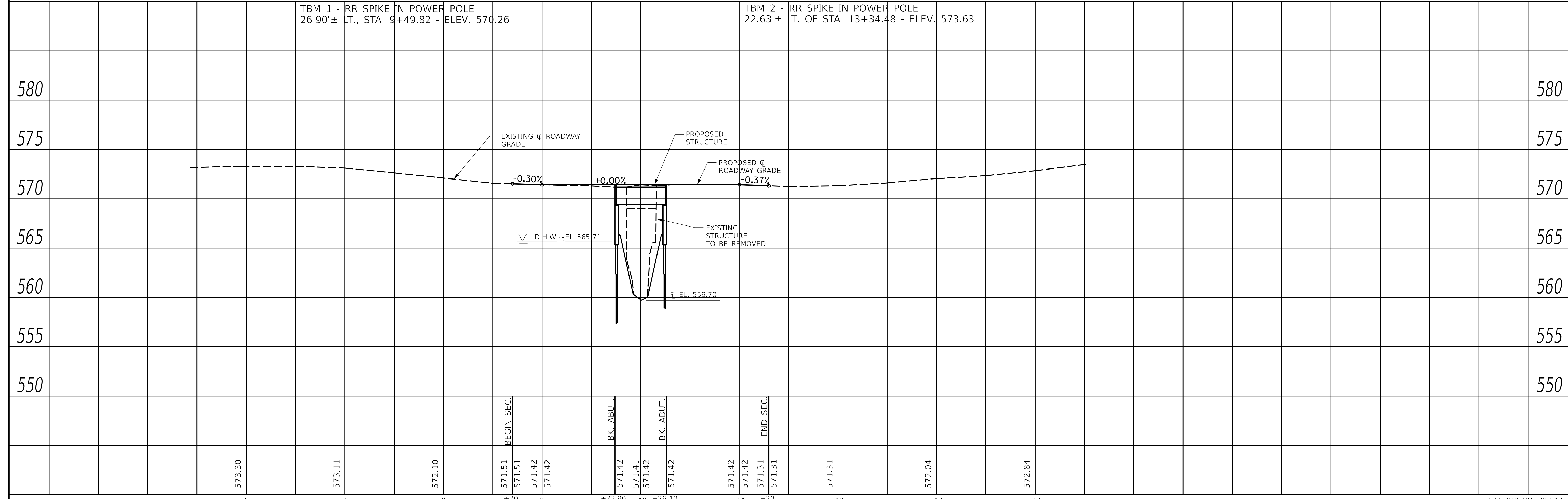
EARTHWORK SCHEDULE				
LOCATION	EARTH EXCAVATION CU. YD.	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE* CU. YD.	EMBANKMENT CU. YD.	EARTHWORK BALANCE** WASTE (+) OR SHORTAGE (-) CU. YD.
STA. 8+70.00 TO STA. 9+73.90	34	26	4	+22
STA. 10+26.10 TO STA. 11+30.00	36	27	9	+18
TOTAL	70	53	13	+40

*25% SHRINKAGE **FURNISHED EXCAVATION

THE EXISTING RIGHT OF WAY SHOWN HEREON HAS BEEN PROTRACTED FROM EXISTING RECORDS AND IS TO BE USED FOR REFERENCE PURPOSES ONLY. FURTHERMORE, NO COMPLETE SURVEY OF SAID R.O.W. IS IMPLIED BY THIS DRAWING.

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	GRADE CHECKED	
	STRUCTURE NOTARIS CHRD	
	NOTE BOOK NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTARIS CHRD	
	NOTE BOOK NO.	



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DESIGNED - BLT	REVISED -
DRAWN - JN, KMA	REVISED -
CHECKED - GLH	REVISED -
DATE - 03/23/2022	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

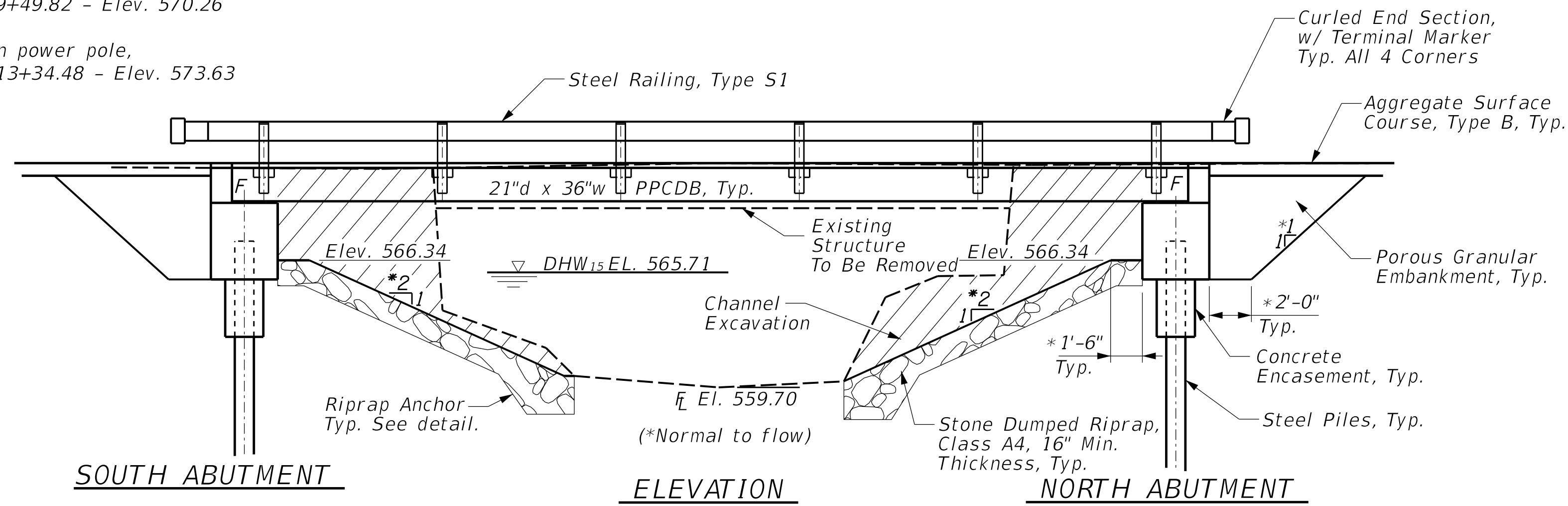
PLAN AND PROFILE OF ROADWAY

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 571B	19-07132-00-BR	FAYETTE	10	3
CONTRACT NO. 95916			GCL JOB NO. 20-617	

STA. 6+00.00 TO STA. 14+00.00

TBM 1 - RR spike in power pole,
26.90'± Lt. of Sta. 9+49.82 - Elev. 570.26

TBM 2 - RR spike in power pole,
22.63'± Lt. of Sta. 13+34.48 - Elev. 573.63



Note:
An Additional 30 Ton of Stone Dumped Riprap, Class A4, 16" Min. Thickness is Included for Placement at Creek Embankment Slopes at NE & NW Quadrants of Bridge, if Req'd and as Directed by Engineer.

LOADING HL-93
50#/sq. ft. included in dead load for future wearing surface.

DESIGN SPECIFICATIONS
AASHTO LRFD Bridge Design Specifications, 2020 (9th Edition)

DESIGN STRESSES

FIELD UNITS

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Soil Site Classification = C
 $S_{D1} = 0.173$ $S_{D5} = 0.445$

Existing Structure: Structure No.: 026-3254. Single span bridge with precast concrete channel beams on closed concrete abutments and wingwalls. No skew. 34'± L. x 15'± W. To be removed.

BILL OF MATERIALS (BRIDGE ONLY)

ITEM	UNIT	TOTAL
Channel Excavation	Cu Yd	150
Porous Granular Embankment	Ton	92
Stone Dumped Riprap, Class A4	Ton	168
Removal of Existing Structures	Each	1
Concrete Structures	Cu Yd	32.0
Concrete Encasement	Cu Yd	2.8
PPCDB (21" Depth)	Sq Ft	1200
Reinforcement Bars	Pound	4180
Steel Railing, Type S1	Foot	105
Furnishing Steel Piles HP12x53	Foot	439
Driving Piles	Foot	439
Test Pile Steel HP12x53	Each	1
Name Plates	Each	1
Terminal Marker - Direct Applied	Each	4

GENERAL NOTES

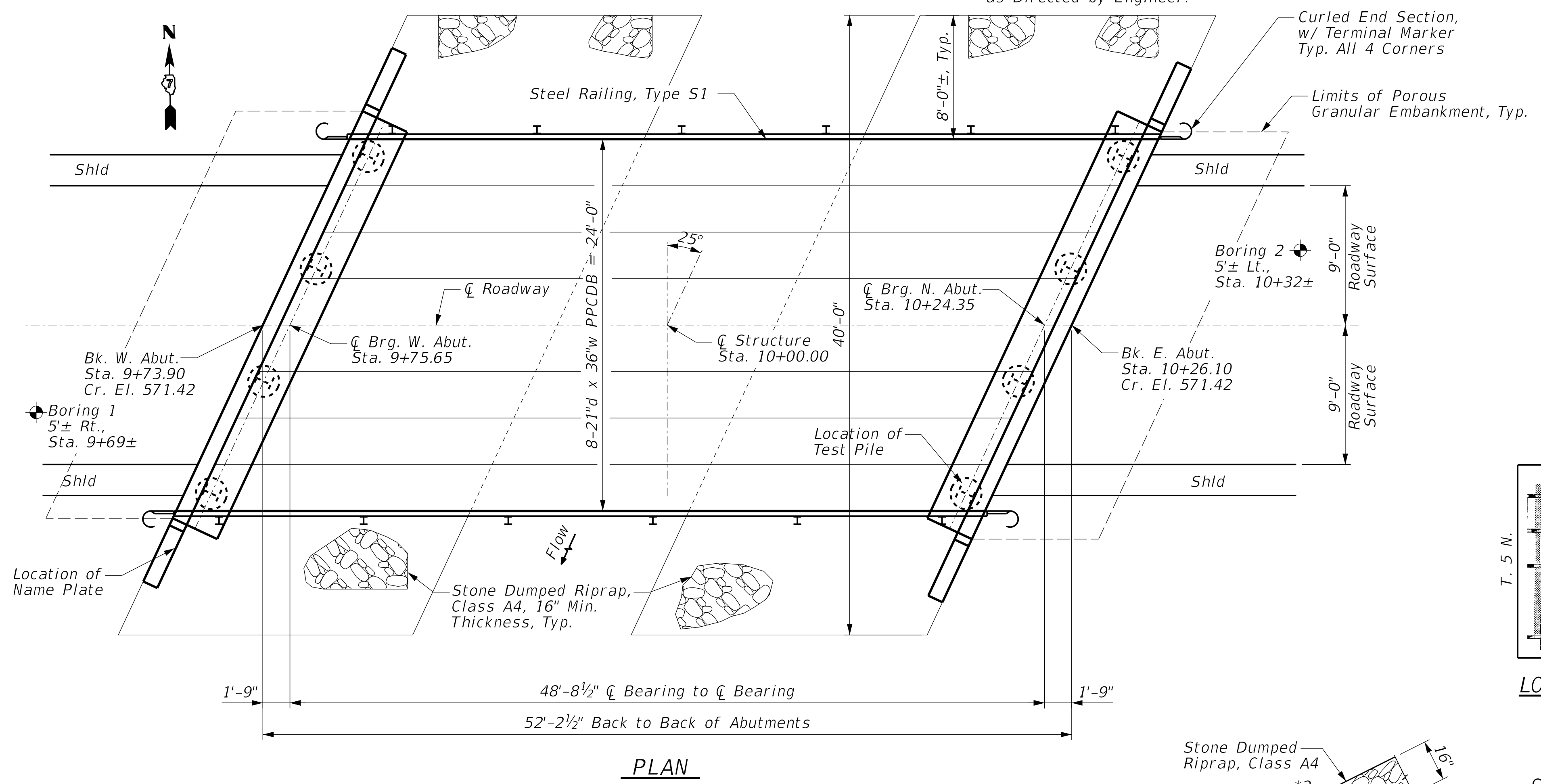
Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
See Section 502 of the Standard Specifications for Structural Excavation.

Channel excavation shall be excavated as shown within the limits of the proposed bridge, then tapered to the existing channel at the ROW line. If the Engineer deems the material satisfactory, it may be used to construct the roadway embankment.

See Specifications for Soil Borings.

Do not scale these drawings.

The abutment bearing seat surfaces for the precast prestressed concrete deck beams shall be adjusted by shimming to assure firm and even bearing. As required, $1/8$ " fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing. The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.

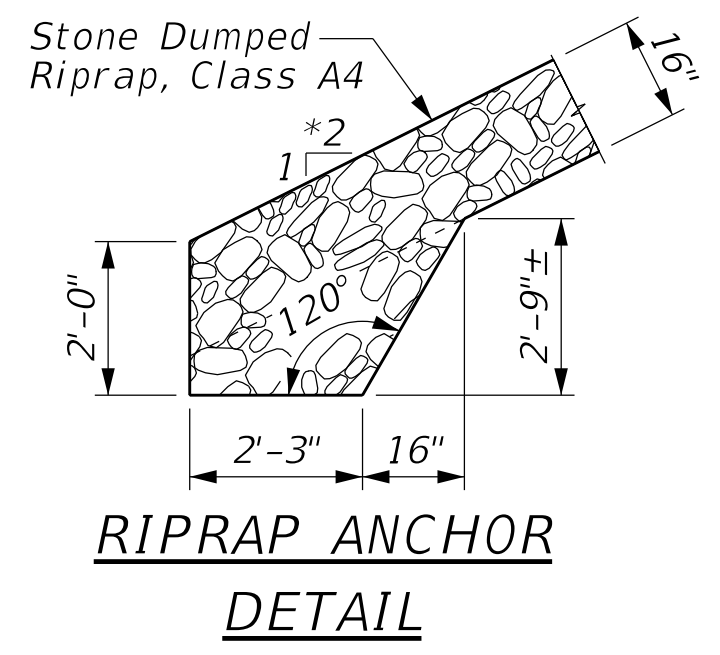


PLAN

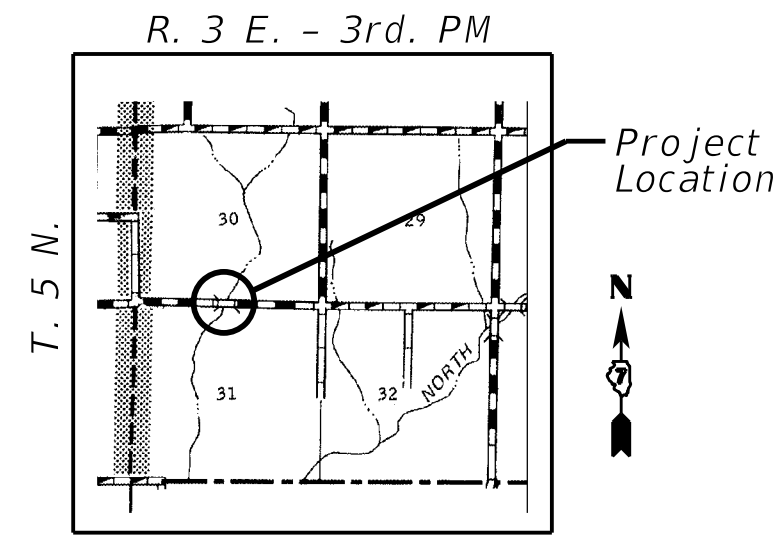
WATERWAY INFORMATION

Drainage Area = 1.22 sq. mi. Exist. Low Grade Elev. 571.24 @ Sta. 11+50
Prop. Low Grade Elev. 571.24 @ Sta. 11+50

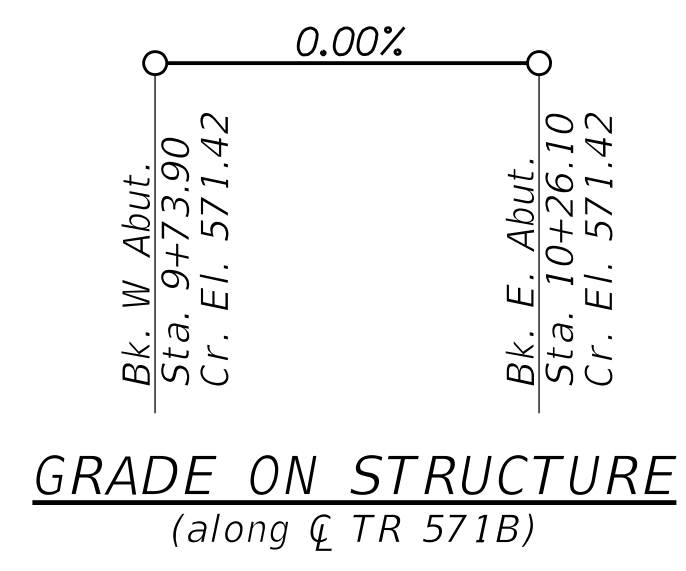
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	15	525	115	150	565.71	0.45	0.08	566.16	565.79	
Base	100	851	141	187	566.61	0.95	0.16	567.56	566.77	
Max. Calc.	500	1160	160	215	567.23	1.63	0.27	568.86	567.50	



RIPRAP ANCHOR DETAIL



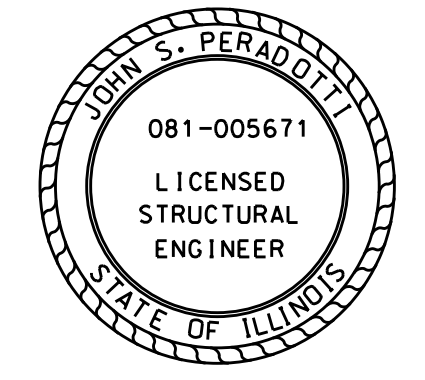
LOCATION SKETCH



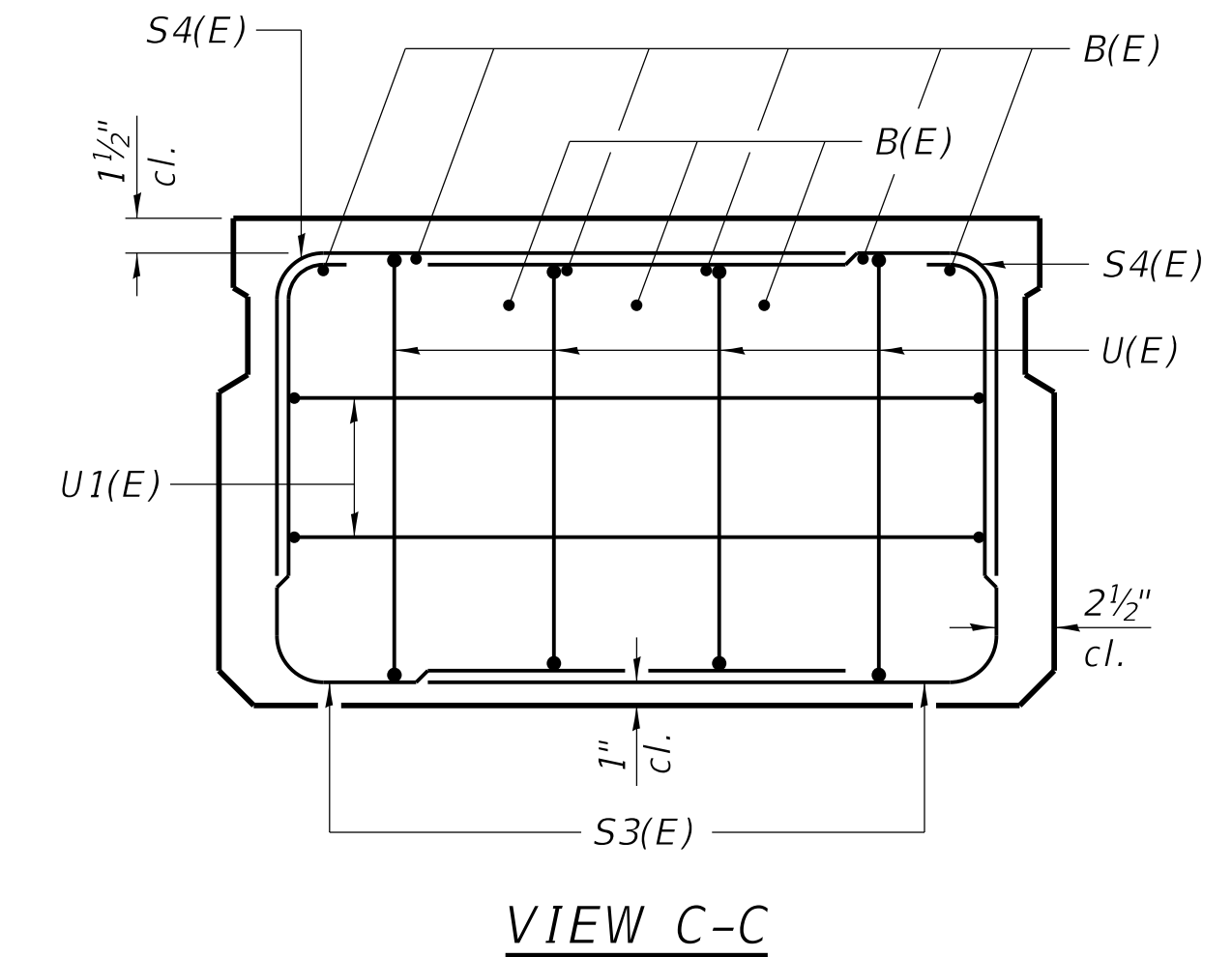
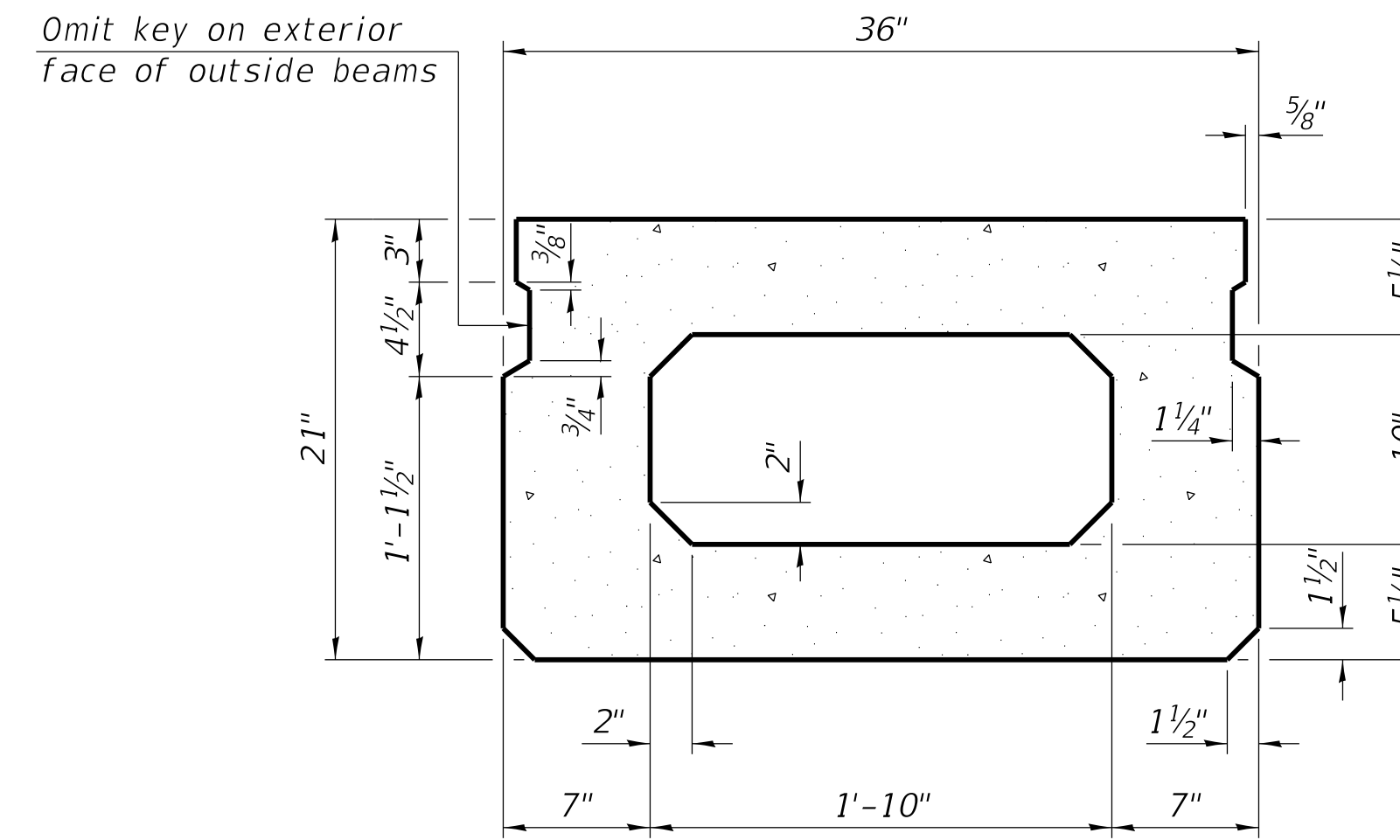
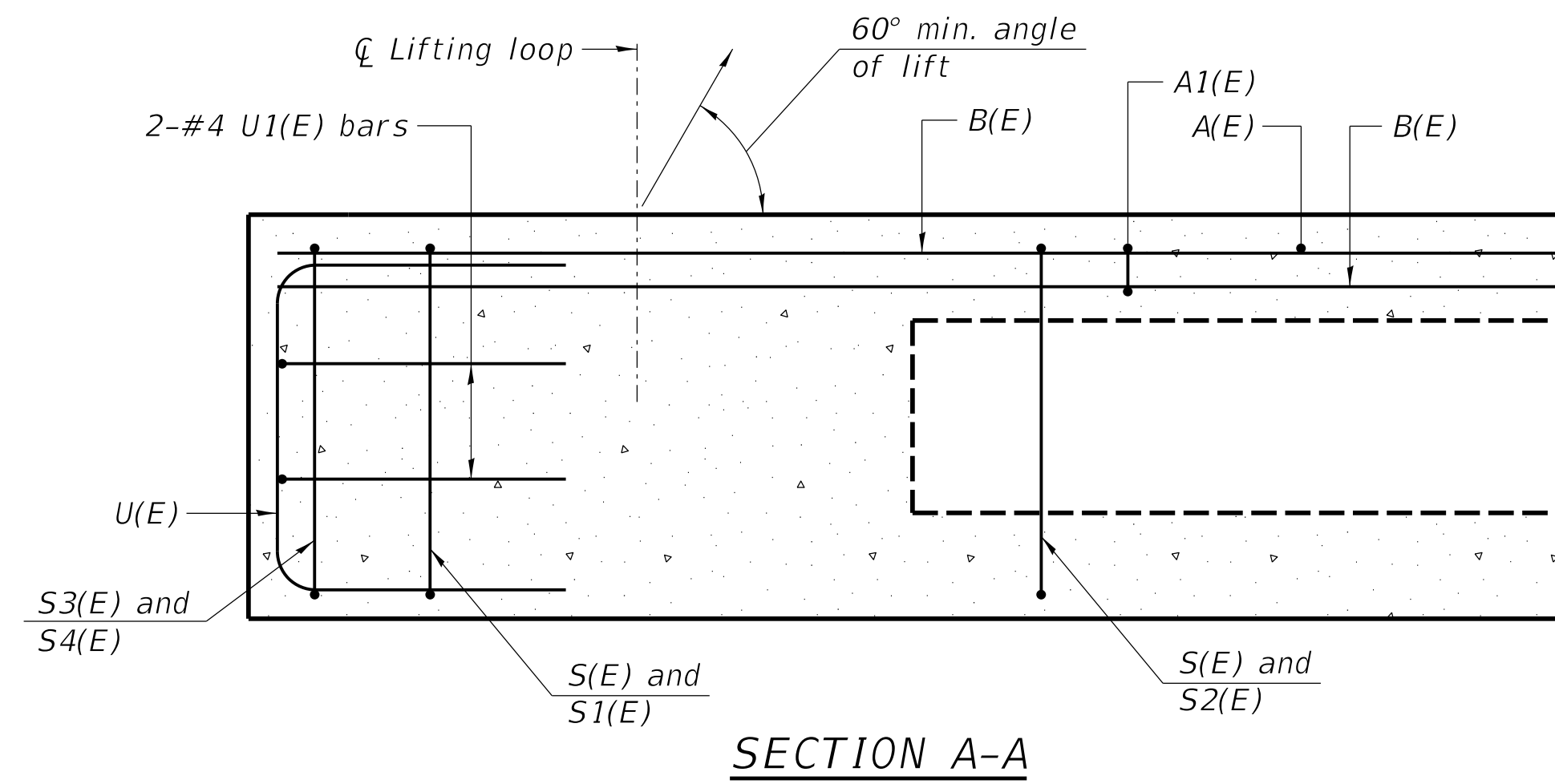
TRIBUTARY TO NORTH FORK
BUILT 20__ BY
FAYETTE COUNTY
SEC. 19-07132-00-BR
TR 571B STA. 10+00.00
LOADING HL-93
STRUCTURE NO. 026-3476

NAME PLATE
See Std. 515001

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 Standard Specifications for Highway Bridges.

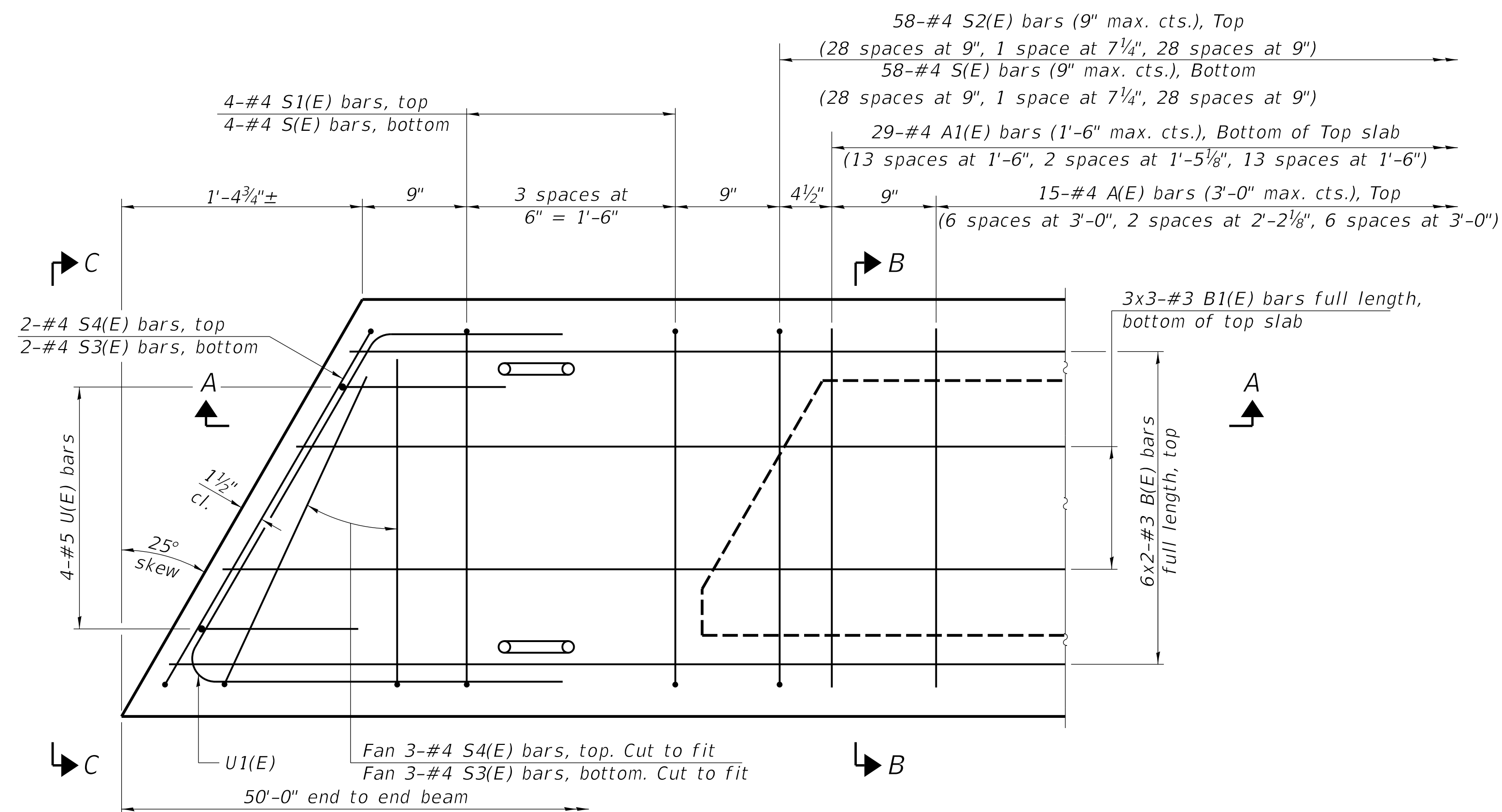


John S. Peradotti 03/23/2022
John S. Peradotti
Salem, Illinois
Illinois Licensed Structural Engineer No. 081-005671
Expires Nov. 30, 2022



SECTION B-B
(Showing dimensions)

VIEW C-C

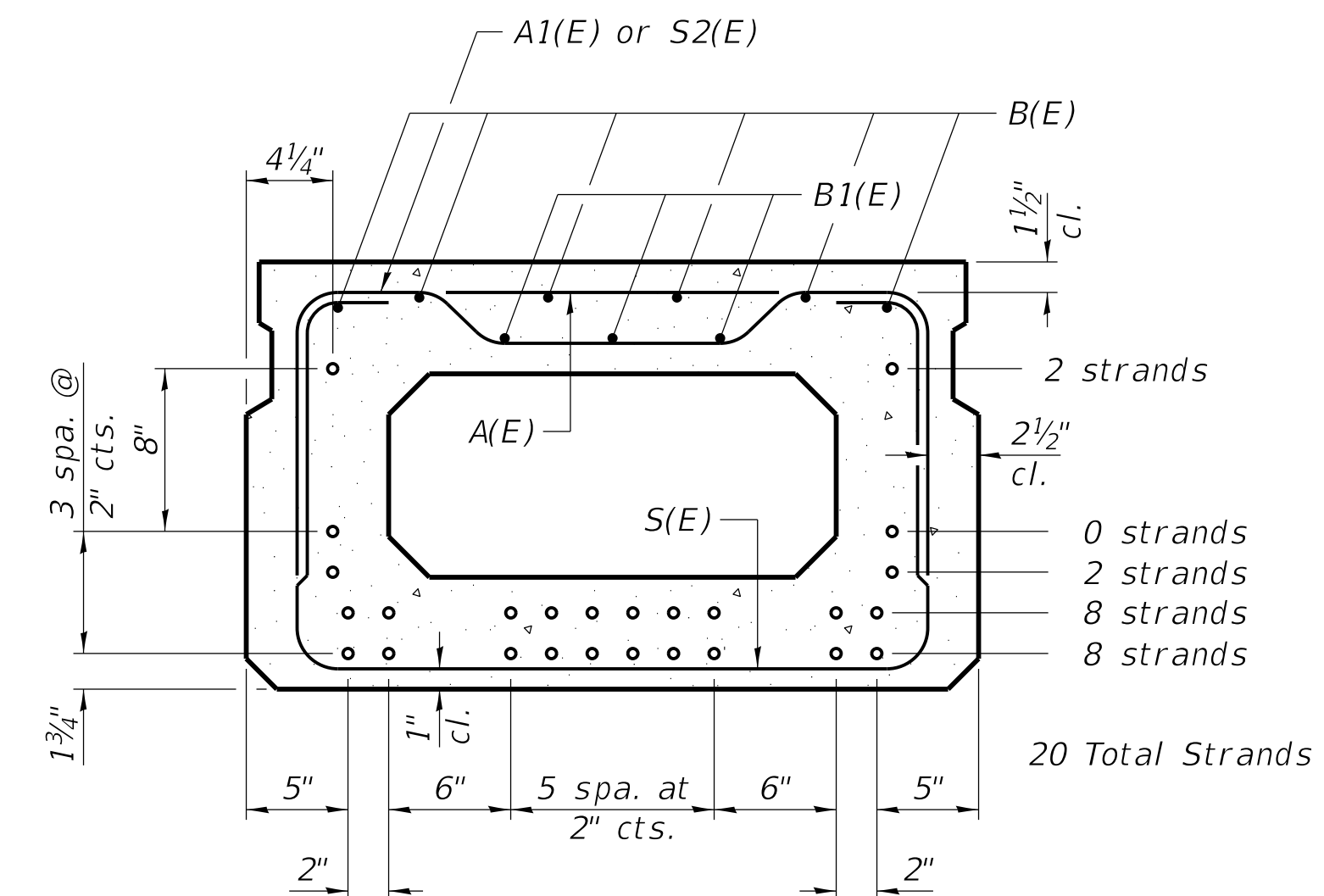


PLAN VIEW

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: 4x3-#3, etc. indicates 4 lines of bars with 3 lengths per line.

Similar about \bar{C}



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	2'-7"	—
A1(E)	29	#4	2'-10"	—
B(E)	12	#3	25'-8"	—
B1(E)	9	#3	17'-7"	—
S(E)	66	#4	6'-5"	⌋
S1(E)	8	#4	4'-11"	⌋
S2(E)	58	#4	5'-2"	⌋
S3(E)	10	#4	4'-3"	⌋
S4(E)	10	#4	3'-6"	⌋
U(E)	8	#5	4'-0"	⌋
U1(E)	4	#4	6'-5"	⌋

Note: See sheet 6 for additional details and Bill of Material.

MINIMUM BAR LAP
#3 bar = 1'-6"



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DESIGNED - BLT
DRAWN - JN, KMA
CHECKED - GLH
DATE - 03/23/2022

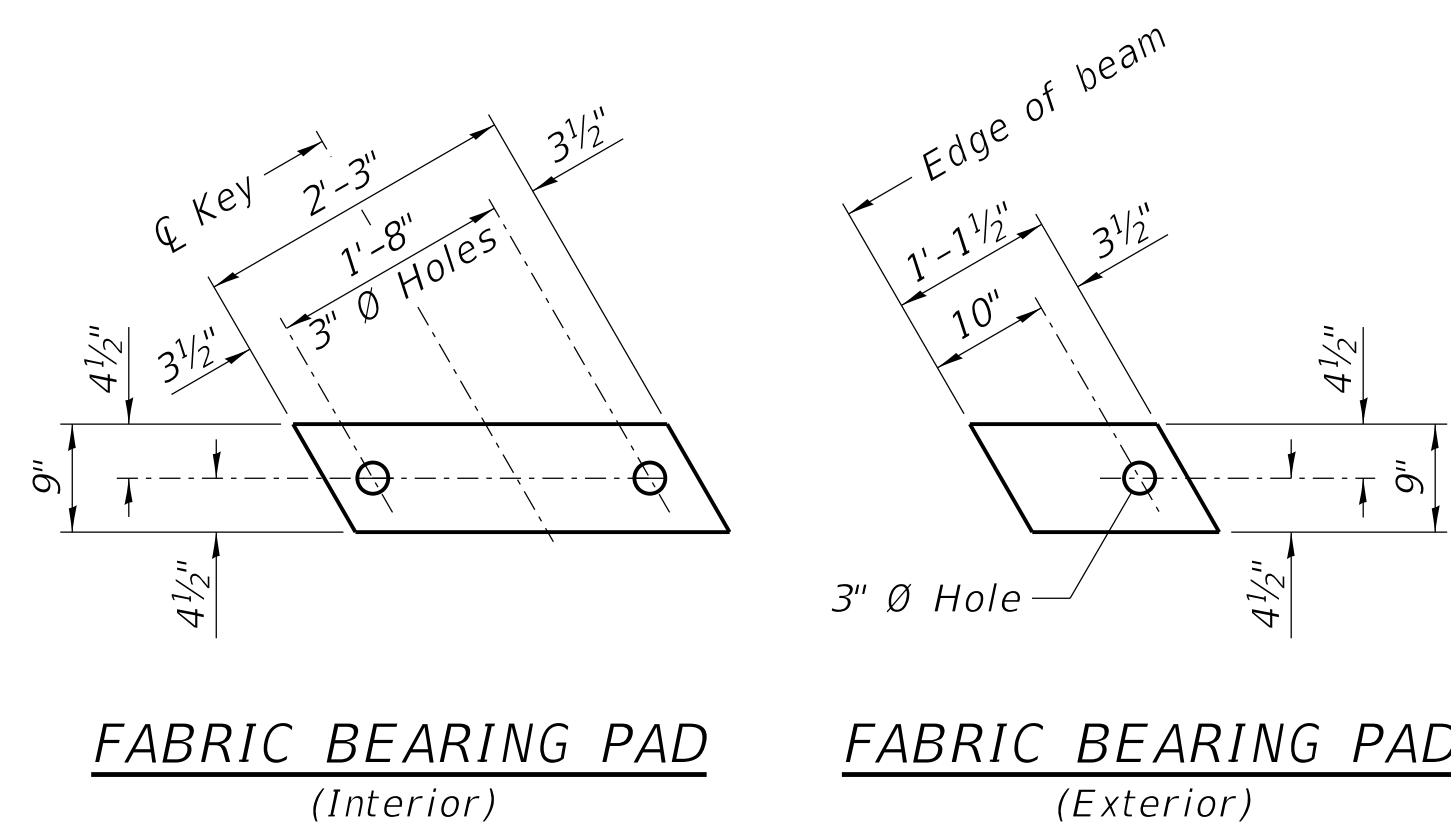
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST PRESTRESS CONCRETE DECK BEAM DETAILS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 571B	19-07132-00-BR	FAYETTE	10	5
CONTRACT NO. 95916				

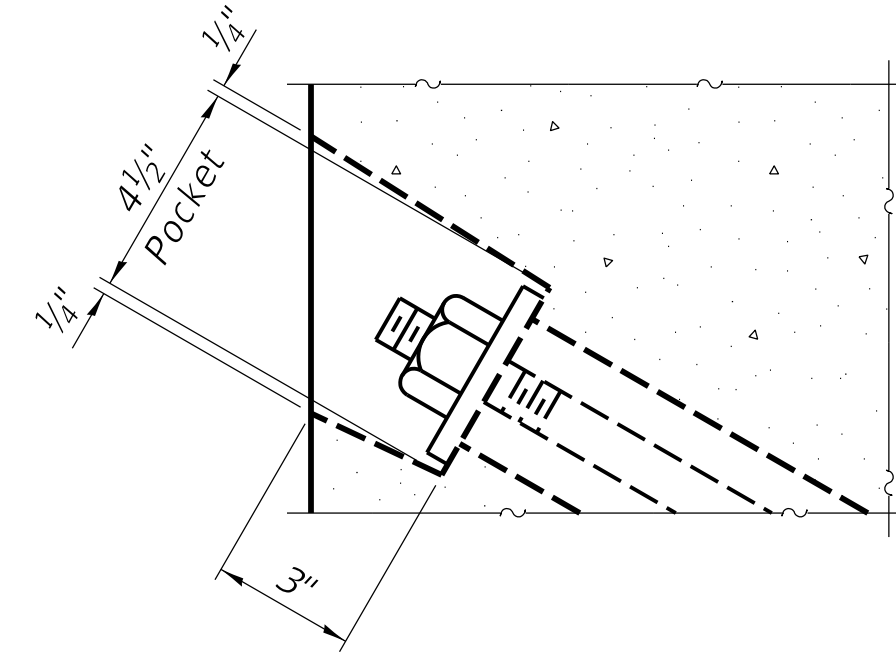
GCL JOB NO. 20-617



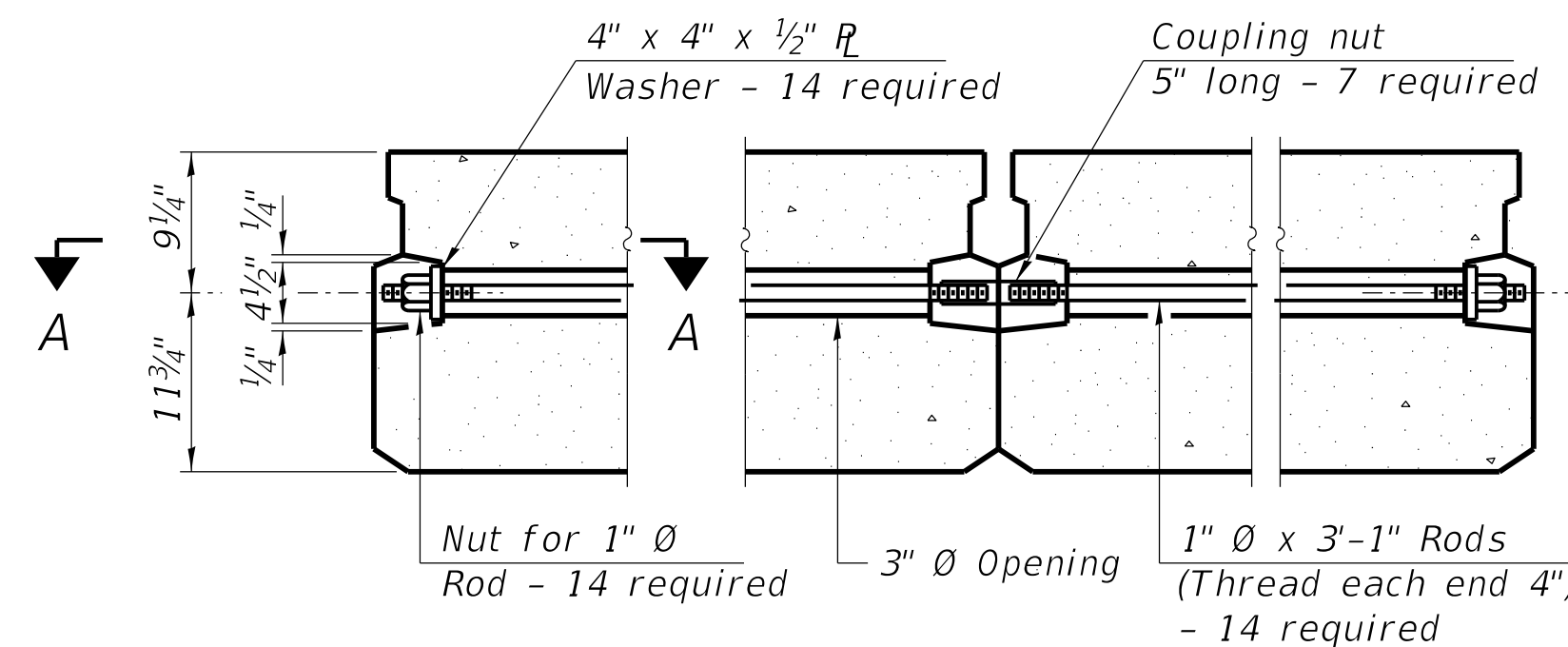
FABRIC BEARING PAD
(Interior) **FABRIC BEARING PAD**
(Exterior)

FIXED

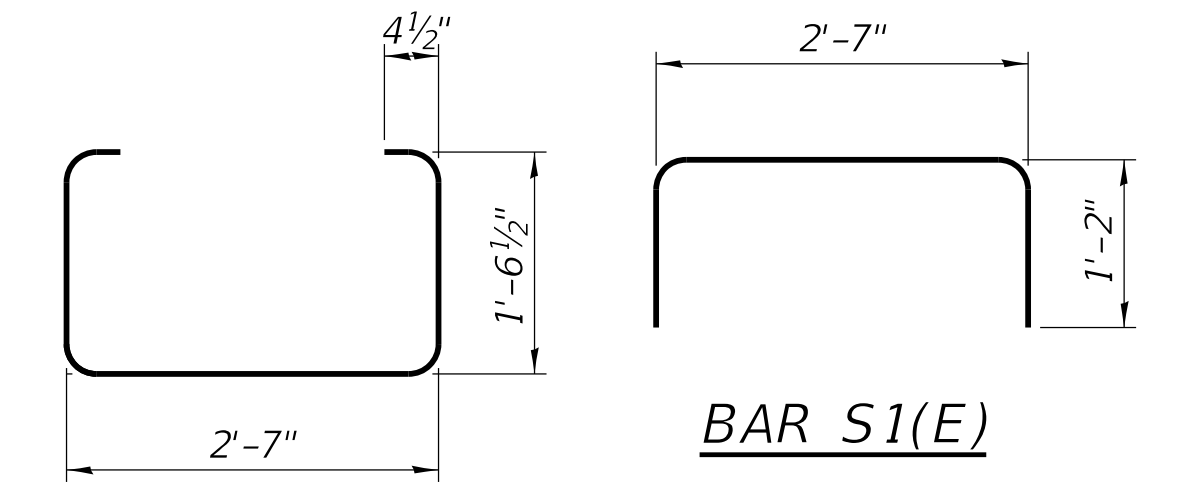
Notes: All bearing pads shall be 1" thick.



SECTION A-A

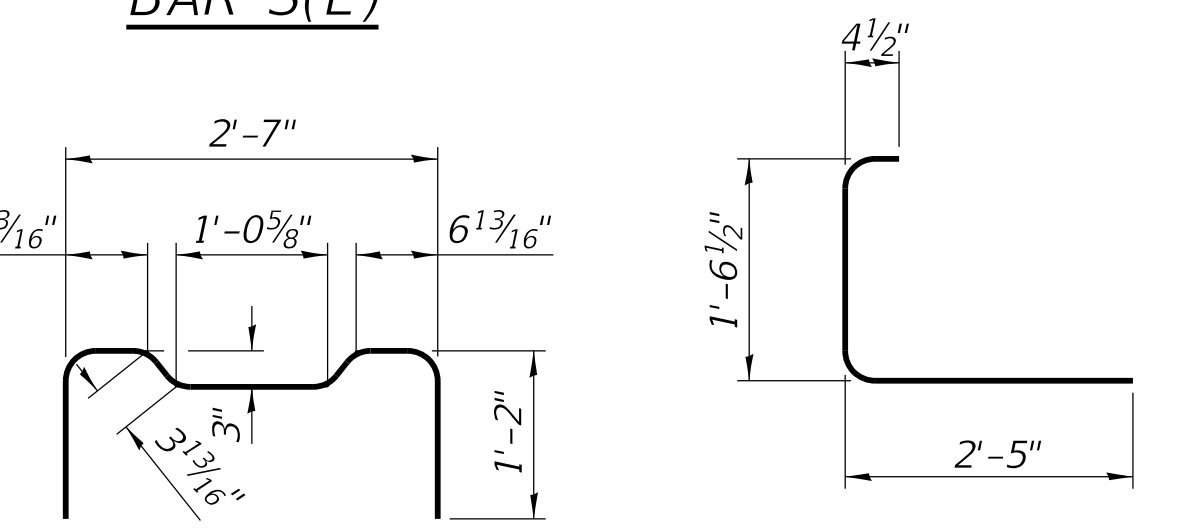


TYPICAL TRANSVERSE TIE ASSEMBLY



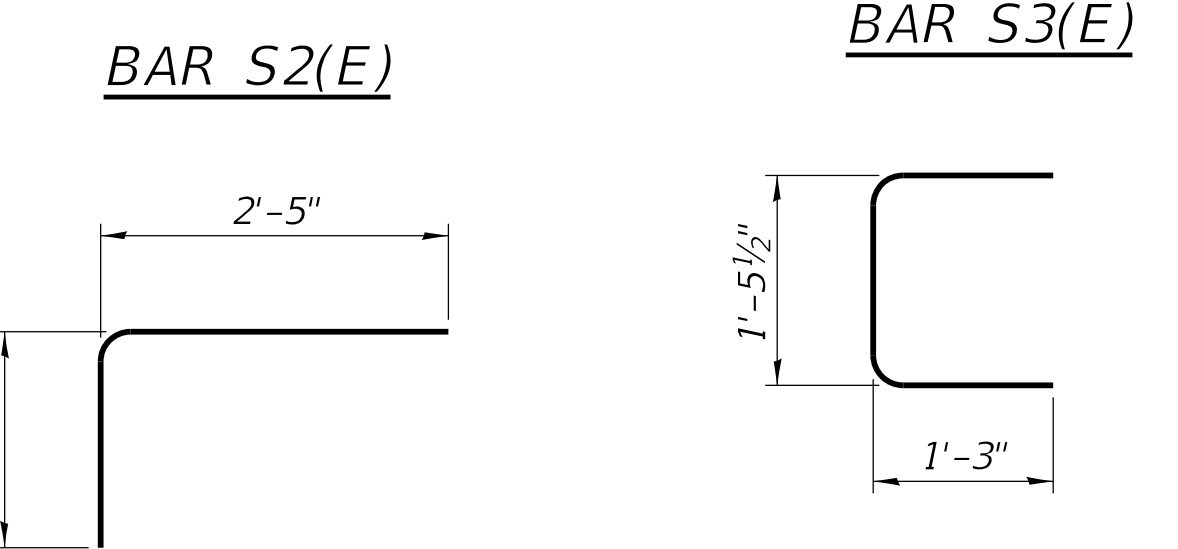
BAR S(E)

BAR S1(E)



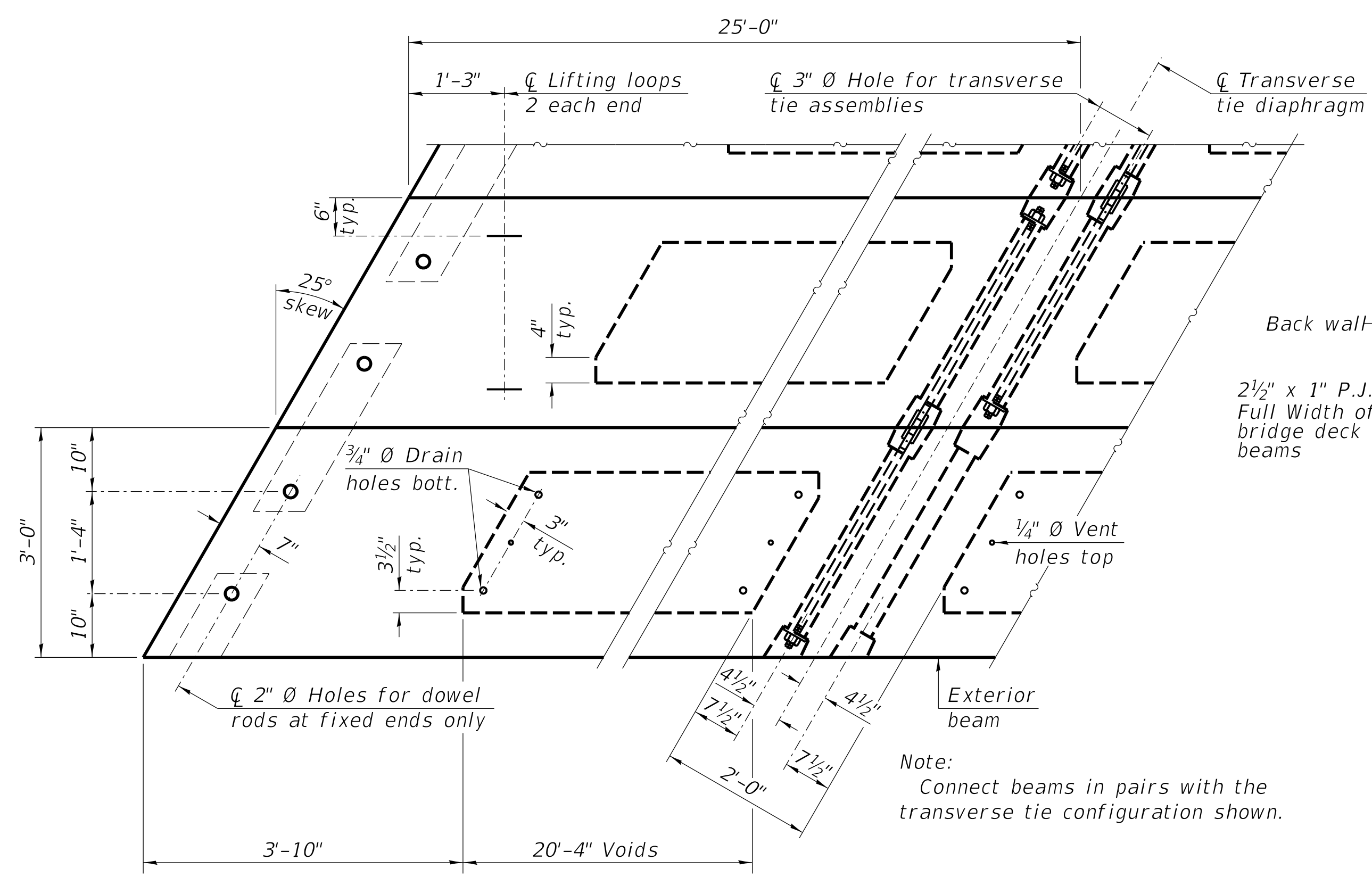
BAR S2(E)

BAR S3(E)

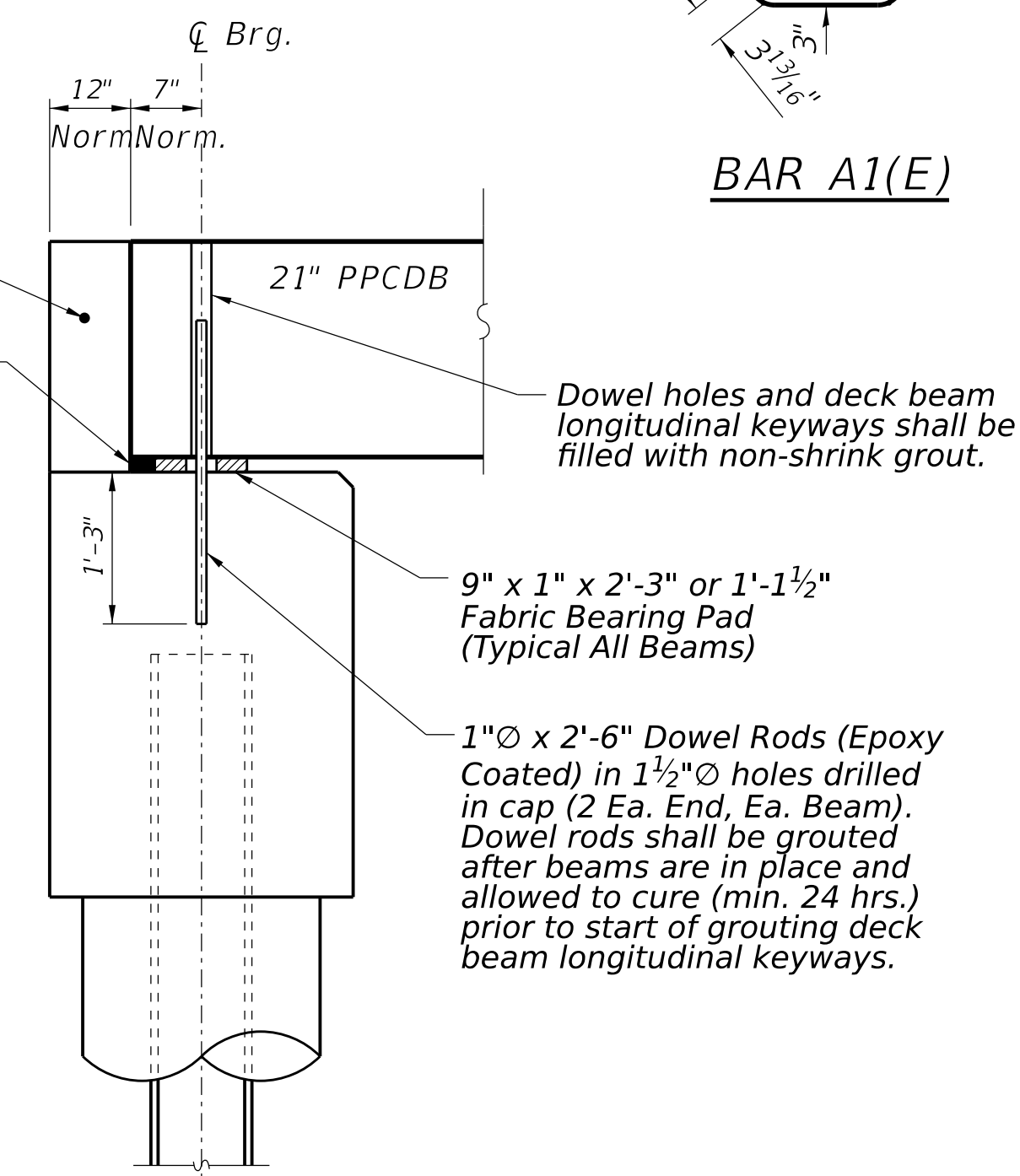


BAR U1(E)

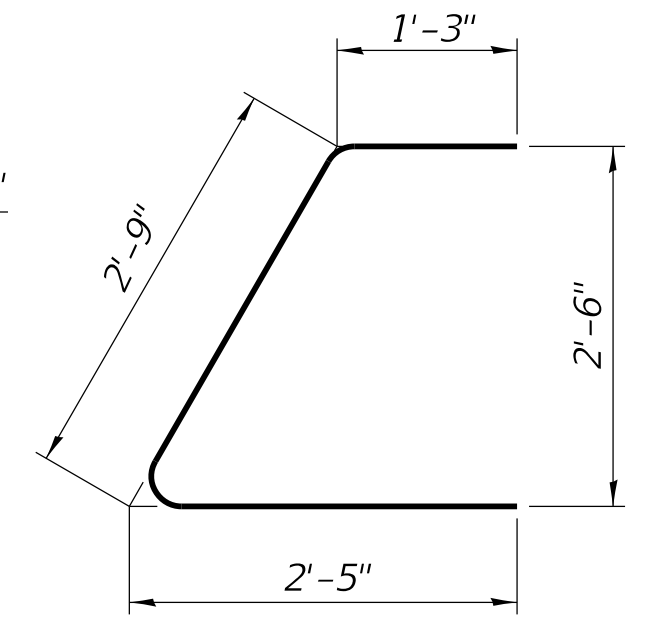
BAR U(E)



PLAN VIEW

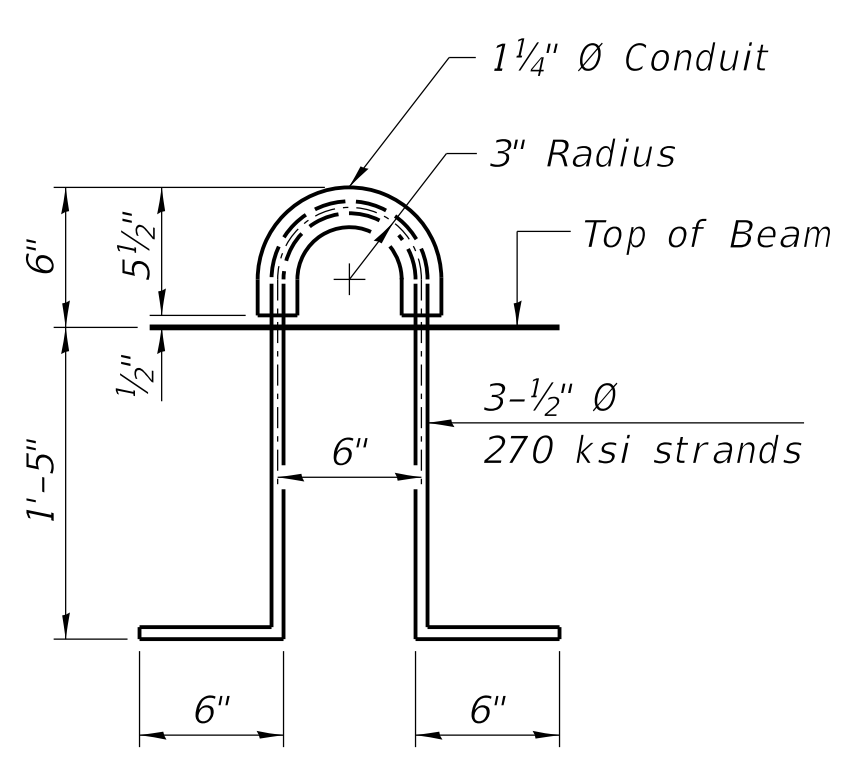


FIXED BEARING ABUTMENT
(Normal to ζ)



BAR A1(E)

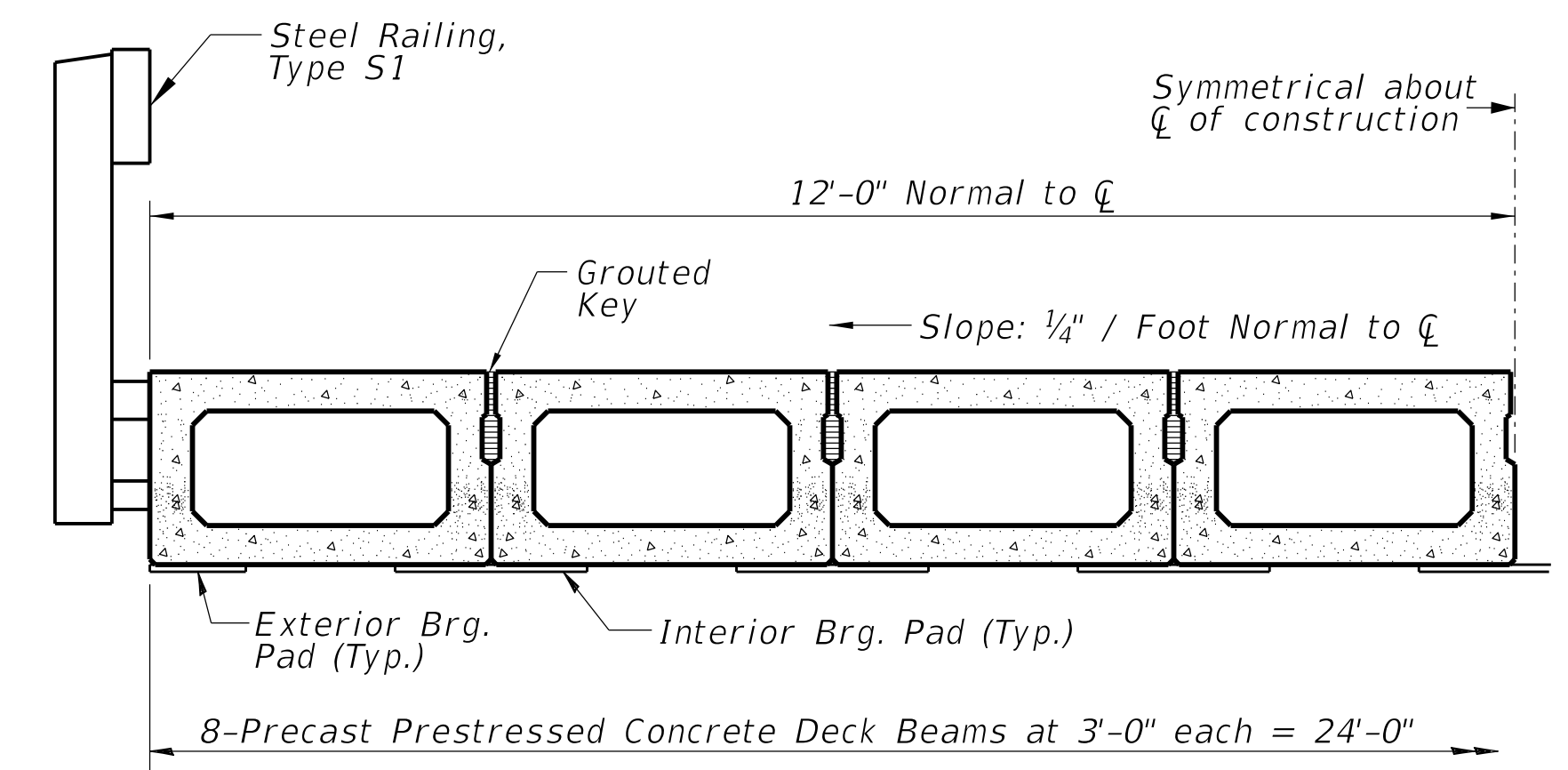
BAR U1(E)



LIFTING LOOP DETAIL

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" \varnothing 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 the requirements of ASTM A706, Grade 60 (IL Modified). 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" \varnothing lifting pin shall be used to engage the lifting loops during handling. Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 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'_{ci} , shall be 5000 psi.



HALF CROSS SECTION

See Sheet 7 for the details showing the spacing and mounting of posts and rails to the PPCDB.

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (21" depth)	Sq. Ft.	1200
---	---------	------



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DESIGNED - BLT
DRAWN - JN, KMA
CHECKED - GLH
DATE - 03/23/2022

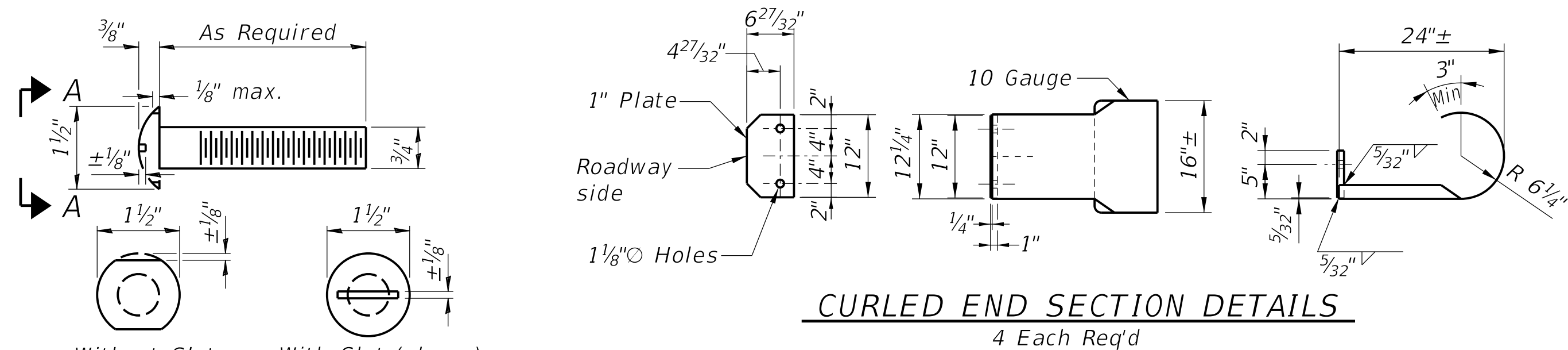
REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

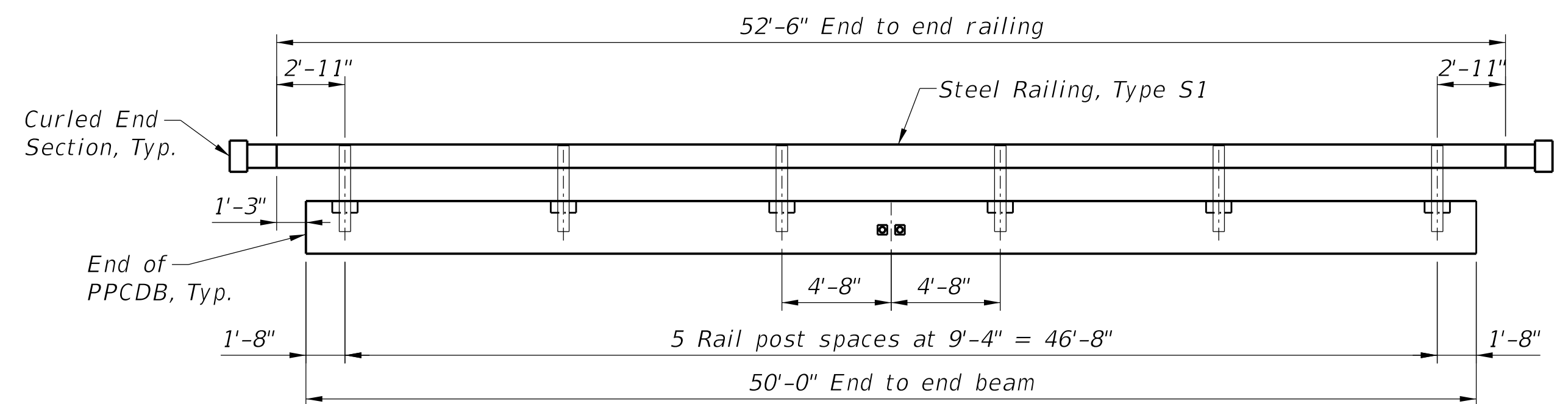
PRECAST PRESTRESS CONCRETE DECK BEAM DETAILS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 571B	19-07132-00-BR	FAYETTE	10	6
CONTRACT NO. 95916				

GCL JOB NO. 20-617

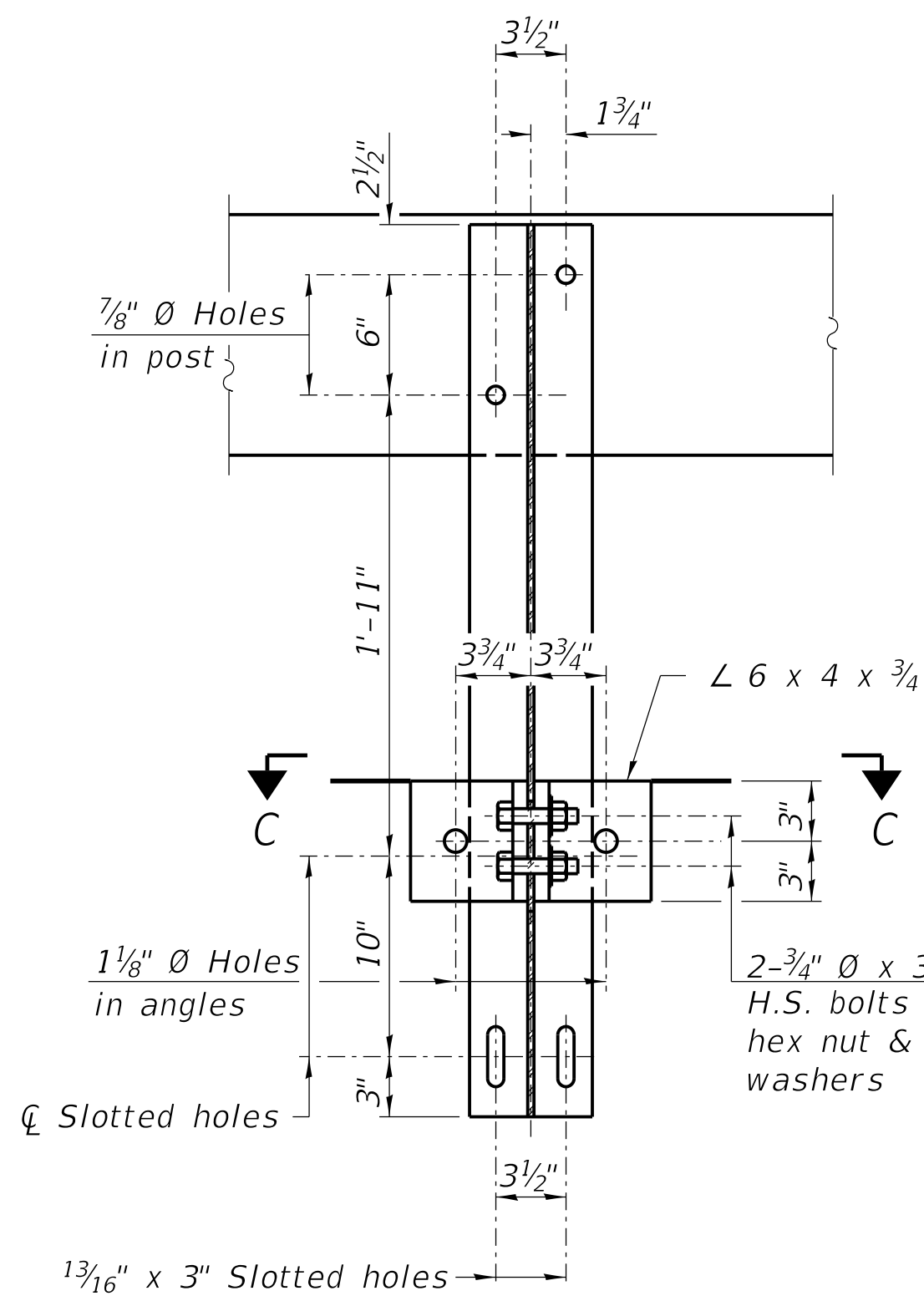


CURLLED END SECTION DETAILS
4 Each Req'd



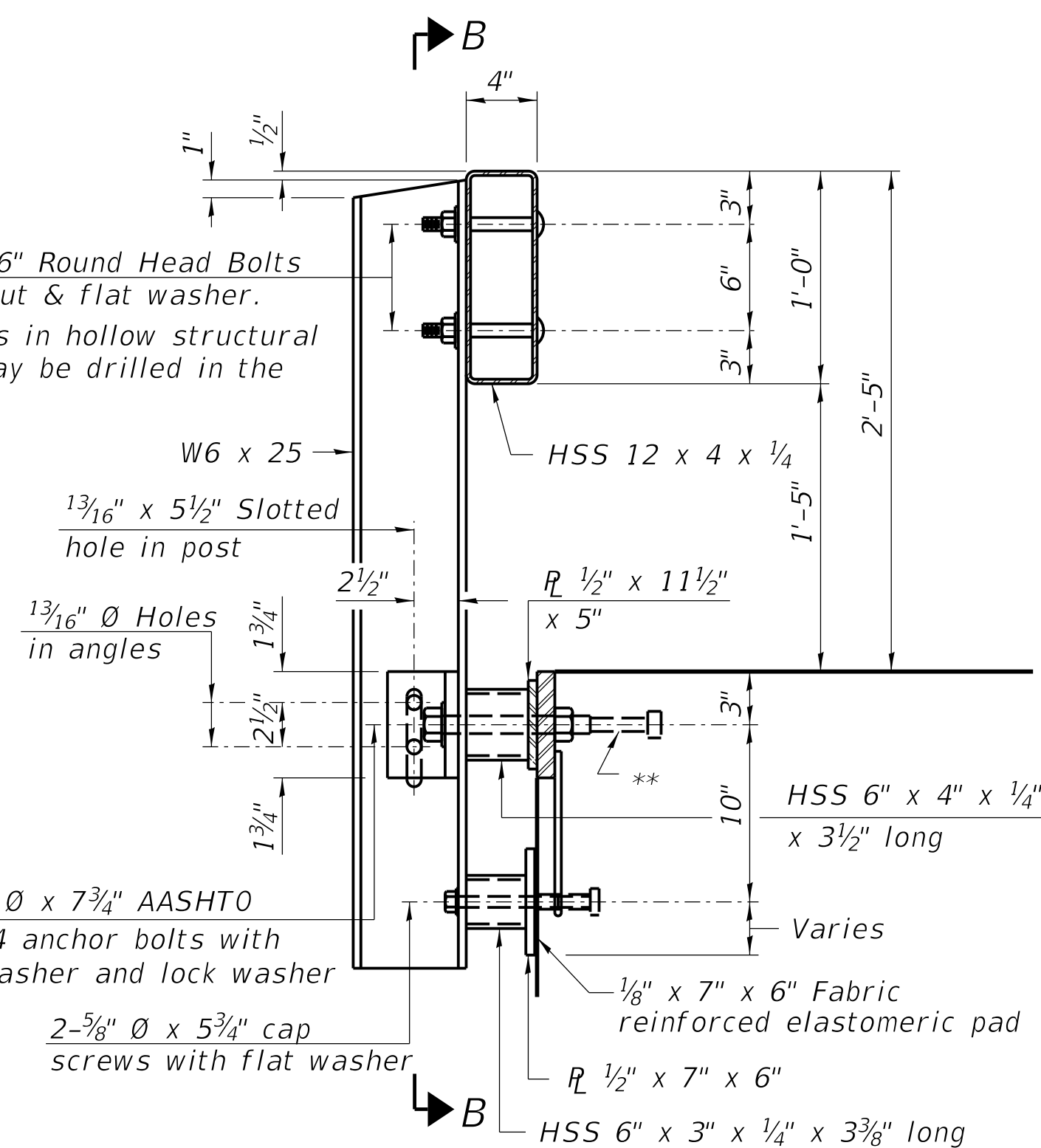
ELEVATION

Note: The cost of the Curled End Sections shall be included in the contract unit price per foot for "STEEL RAILING, TYPE S1", and no additional compensation will be allowed.

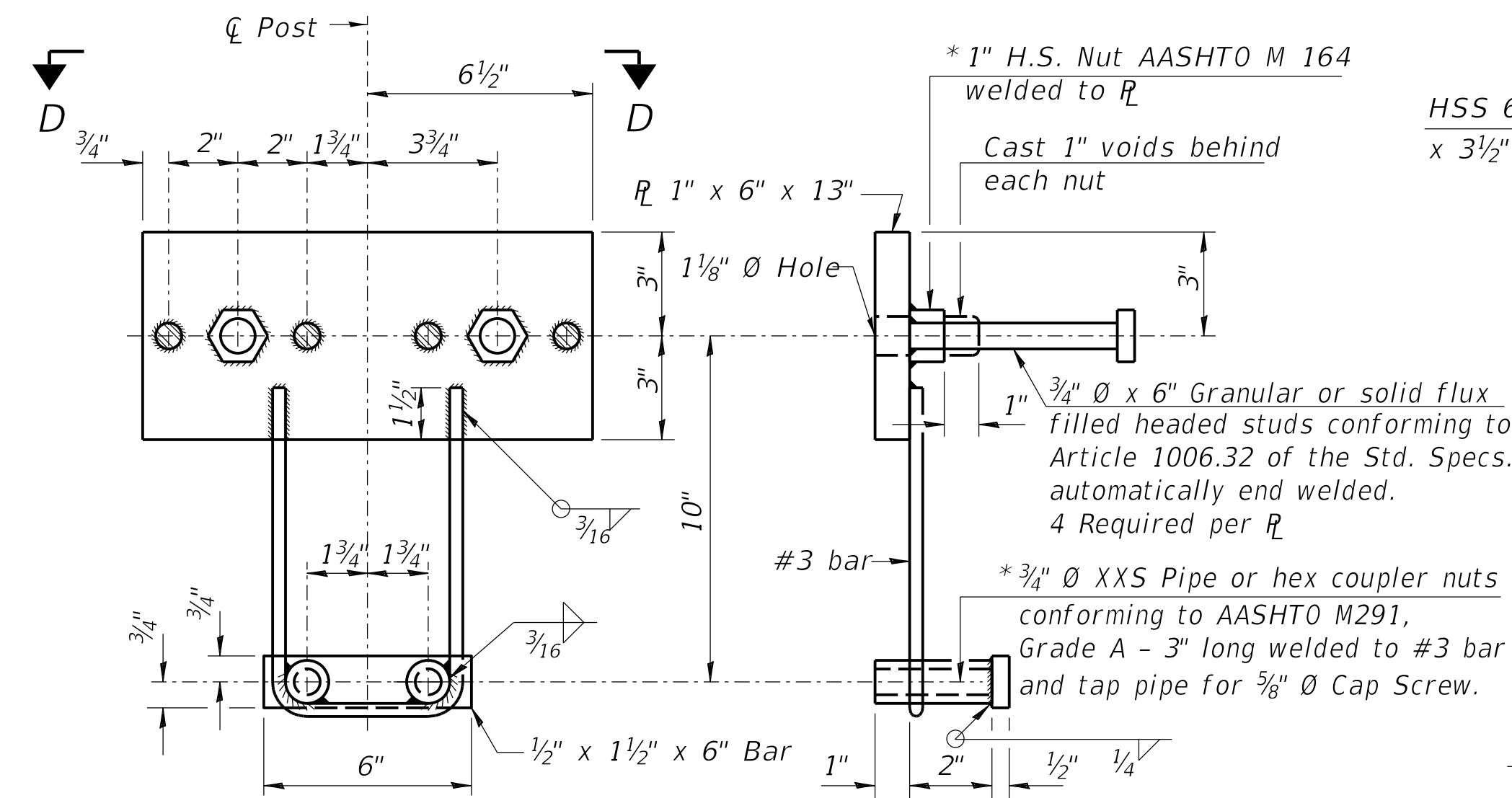


SECTION B-B

2-3/4" Ø x 6" Round Head Bolts with locknut & flat washer. 7/8" Ø holes in hollow structural section may be drilled in the field.

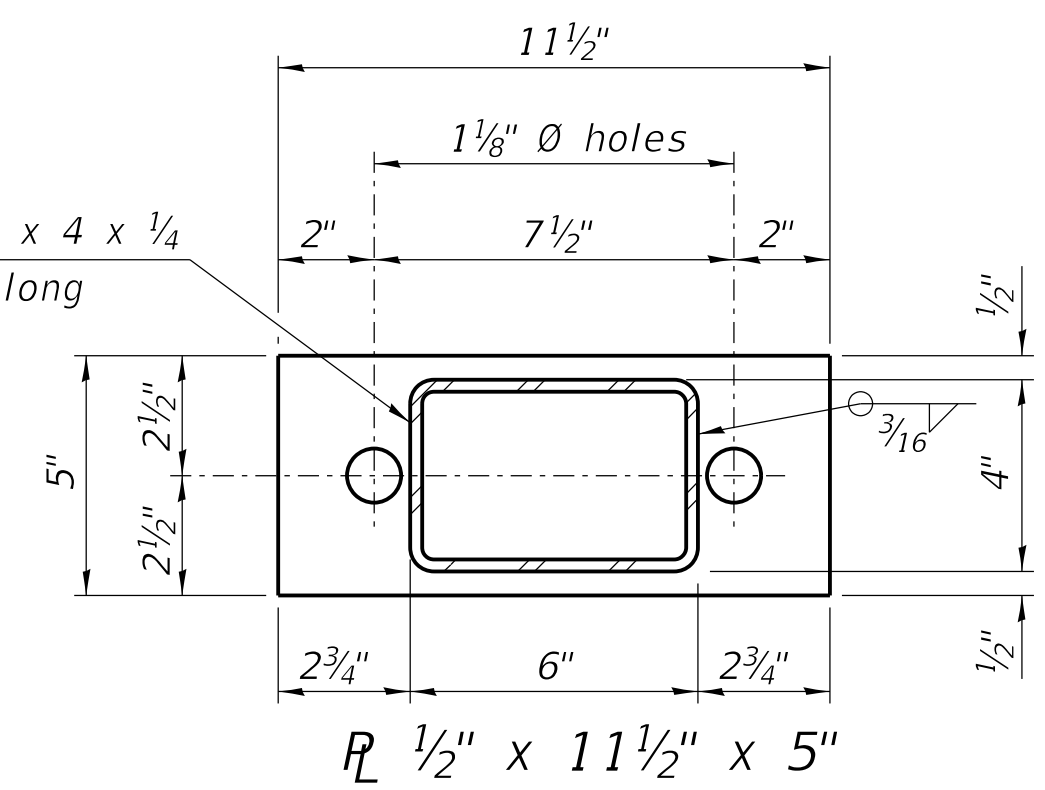


SECTION AT RAILING POST

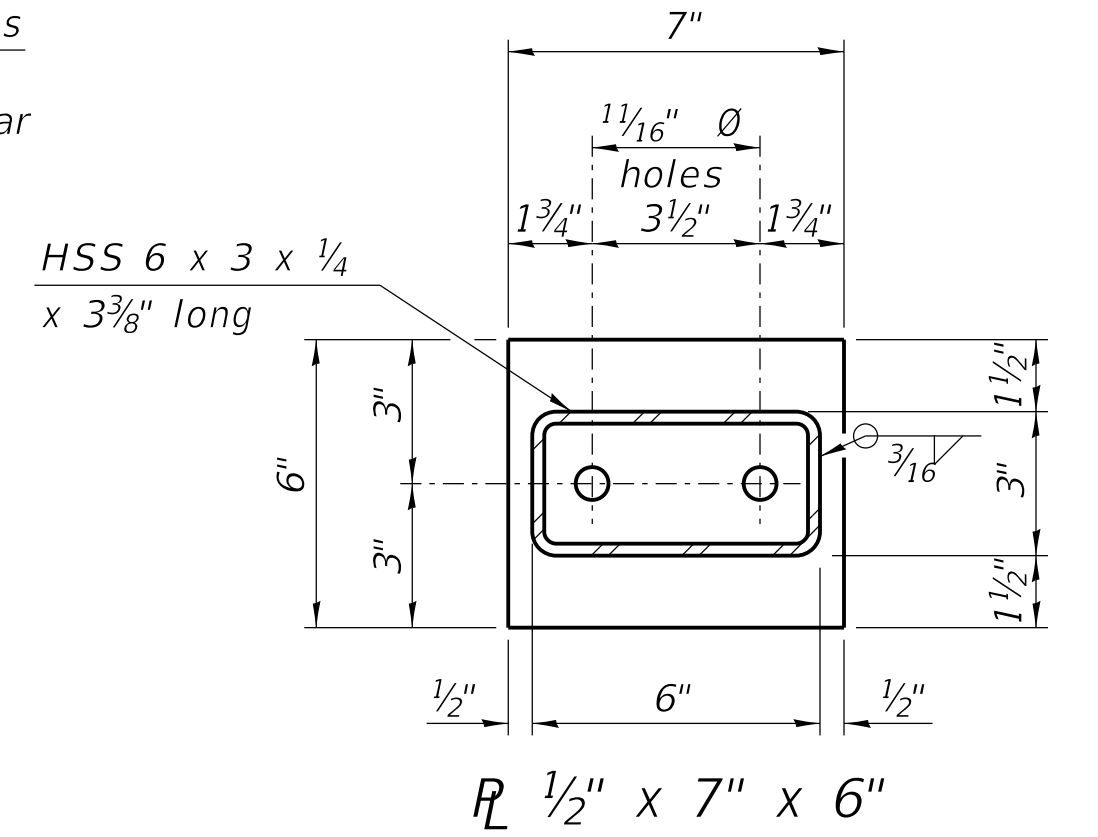


ANCHOR DEVICE

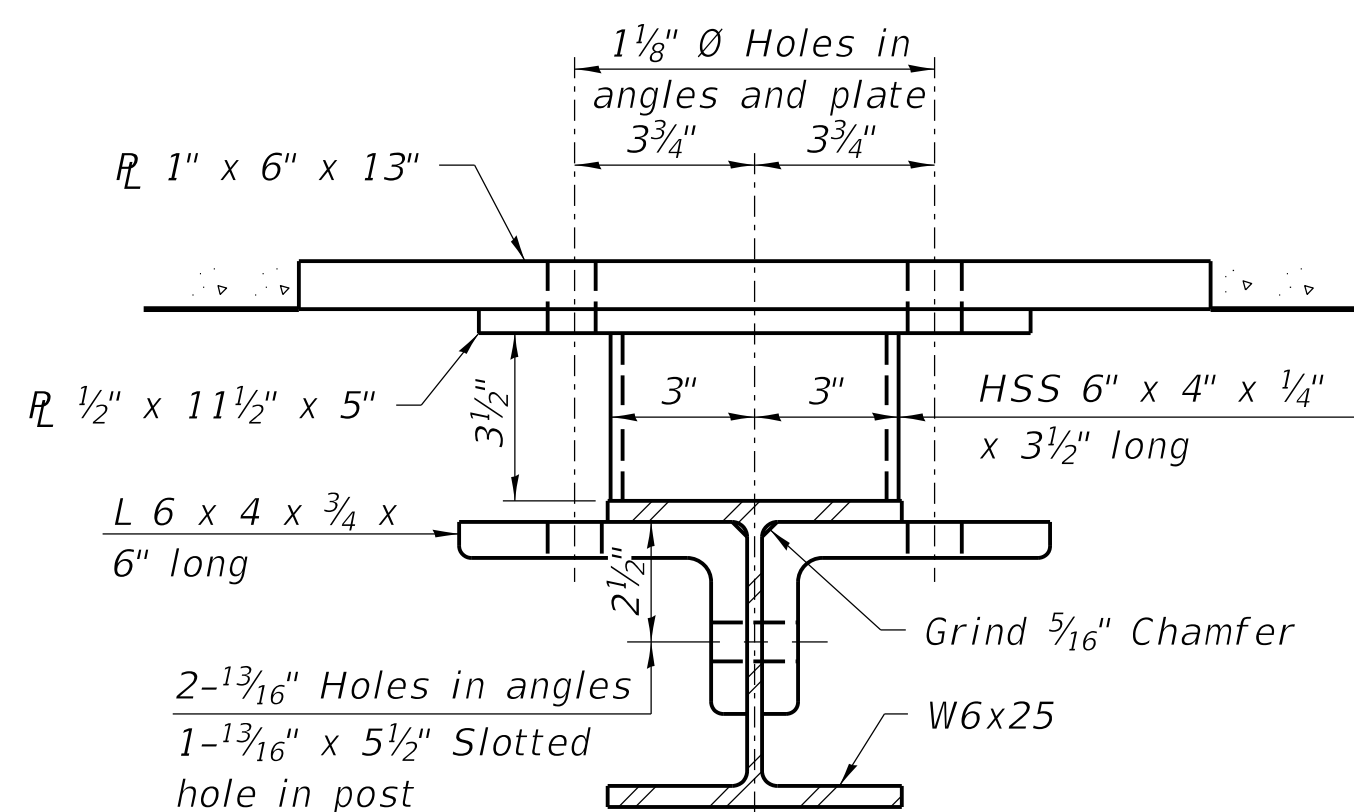
* Threaded areas shall be plugged or blocked off during casting of beam.



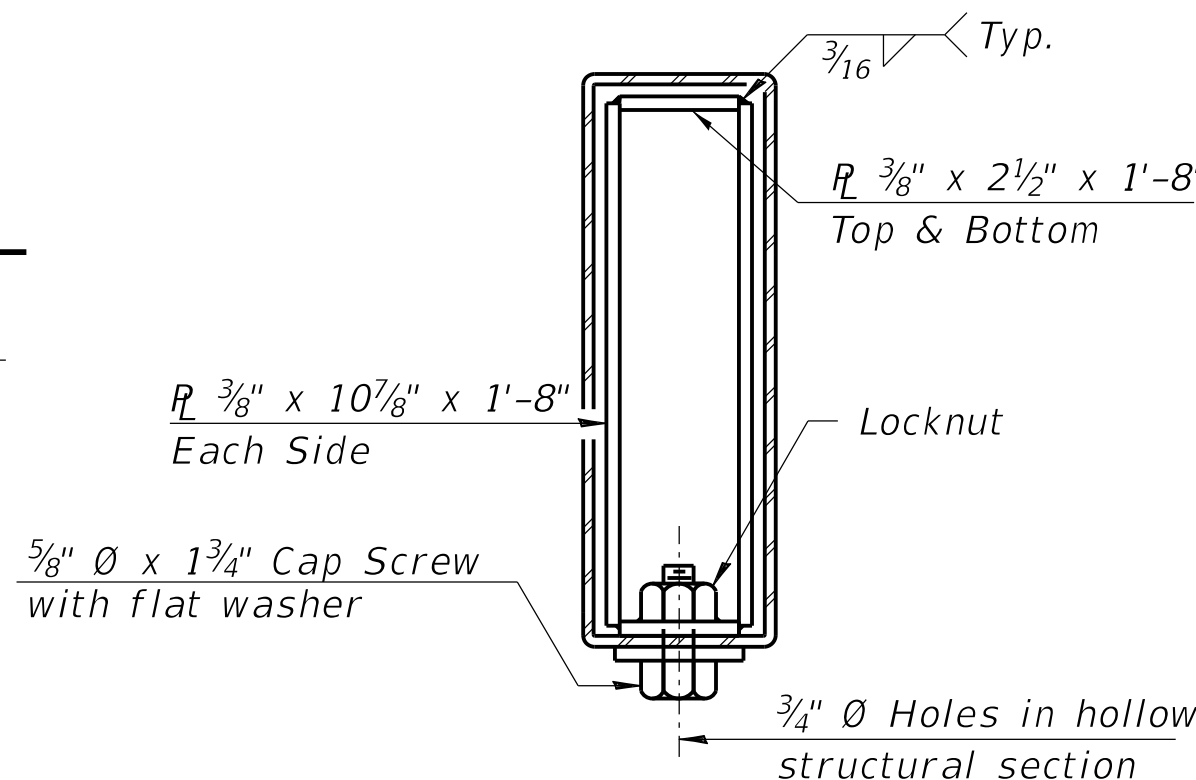
R 1/2" x 11 1/2" x 5"



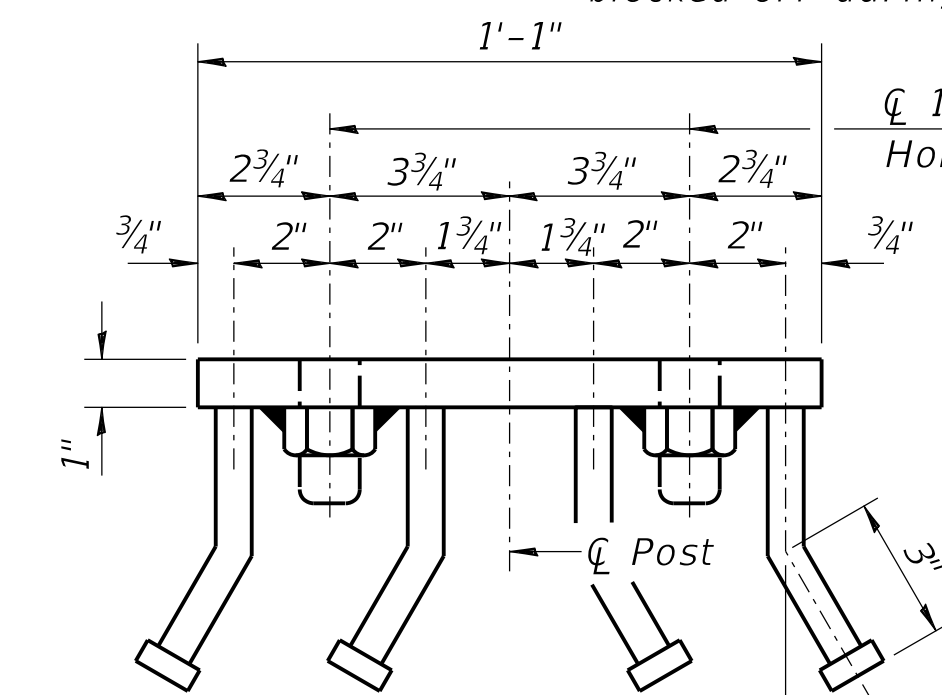
R 1/2" x 7" x 6"



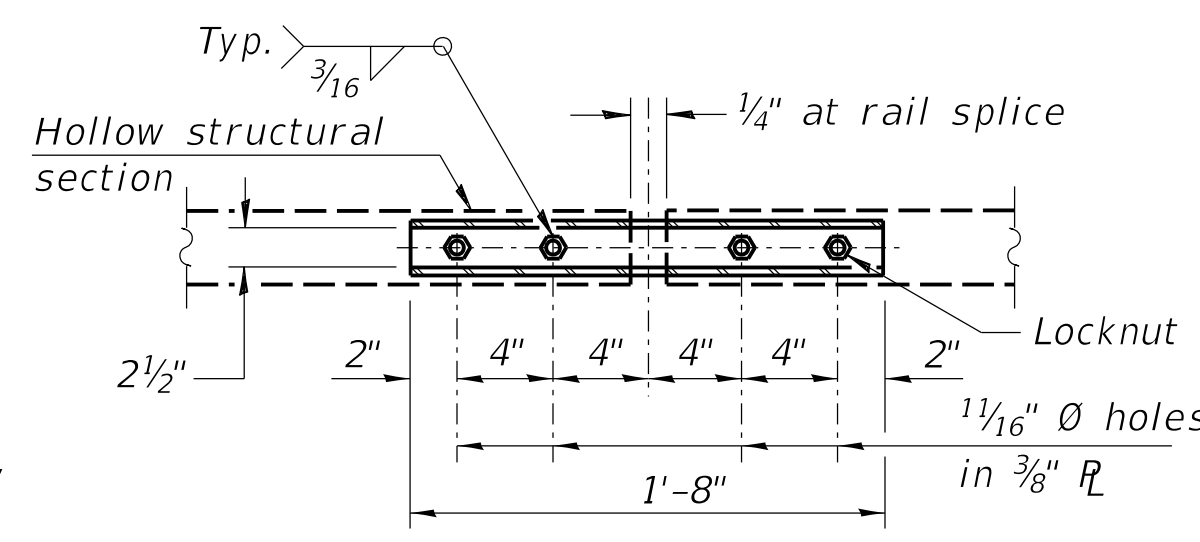
SECTION C-C



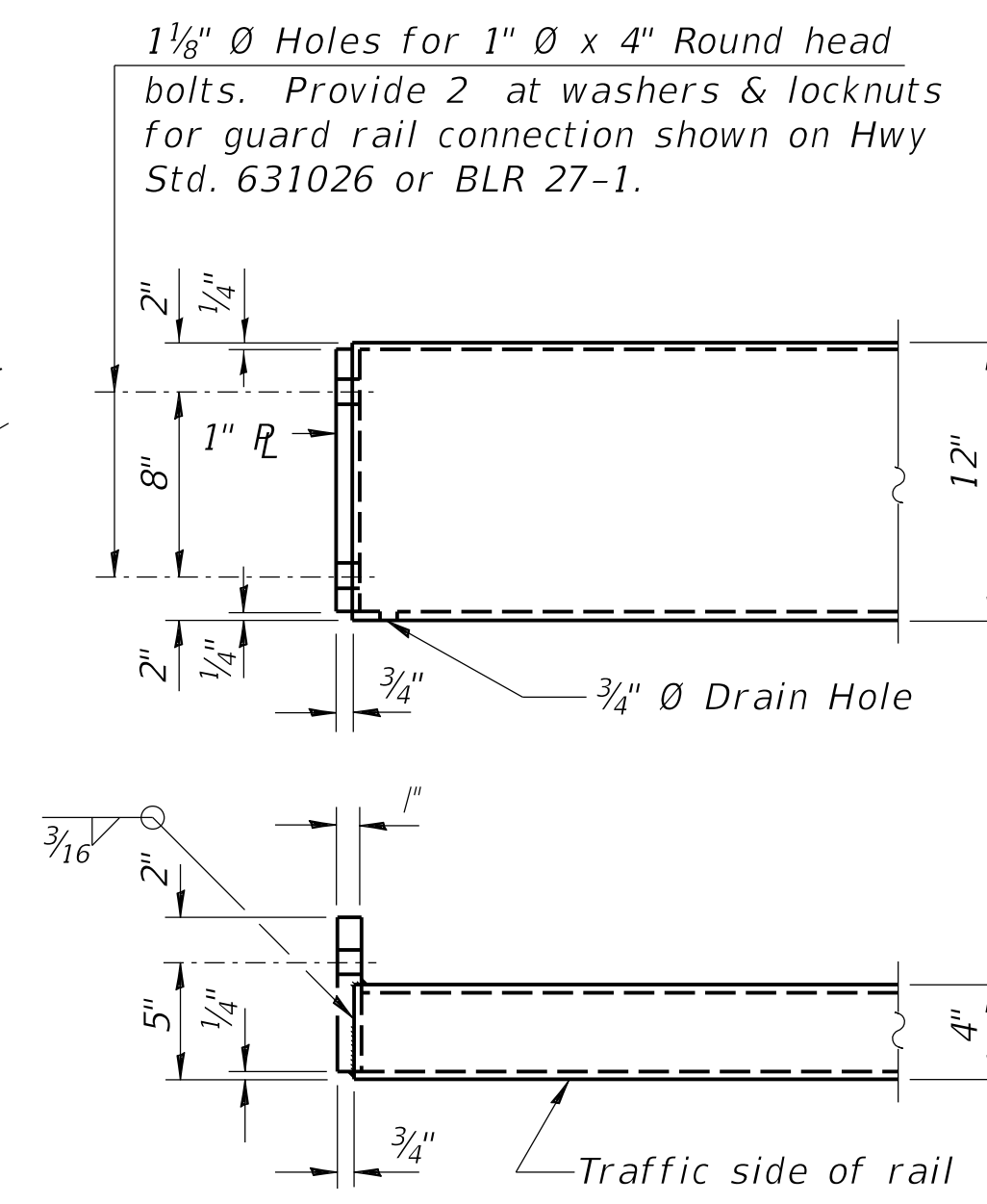
SECTIONS AT RAIL SPLICE



VIEW D-D



PLAN-BOTT. SPLICE R TYPICAL



END OF RAIL DETAILS

Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
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. The anchorage studs may be bent down 1/2 inch to accommodate the top reinforcement bar placement.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S1	Foot	105



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ILLINOIS PROFESSIONAL DESIGN FIRM 184,004564

DESIGNED - BLT
DRAWN - JN, KMA
CHECKED - GLH
DATE - 03/23/2022

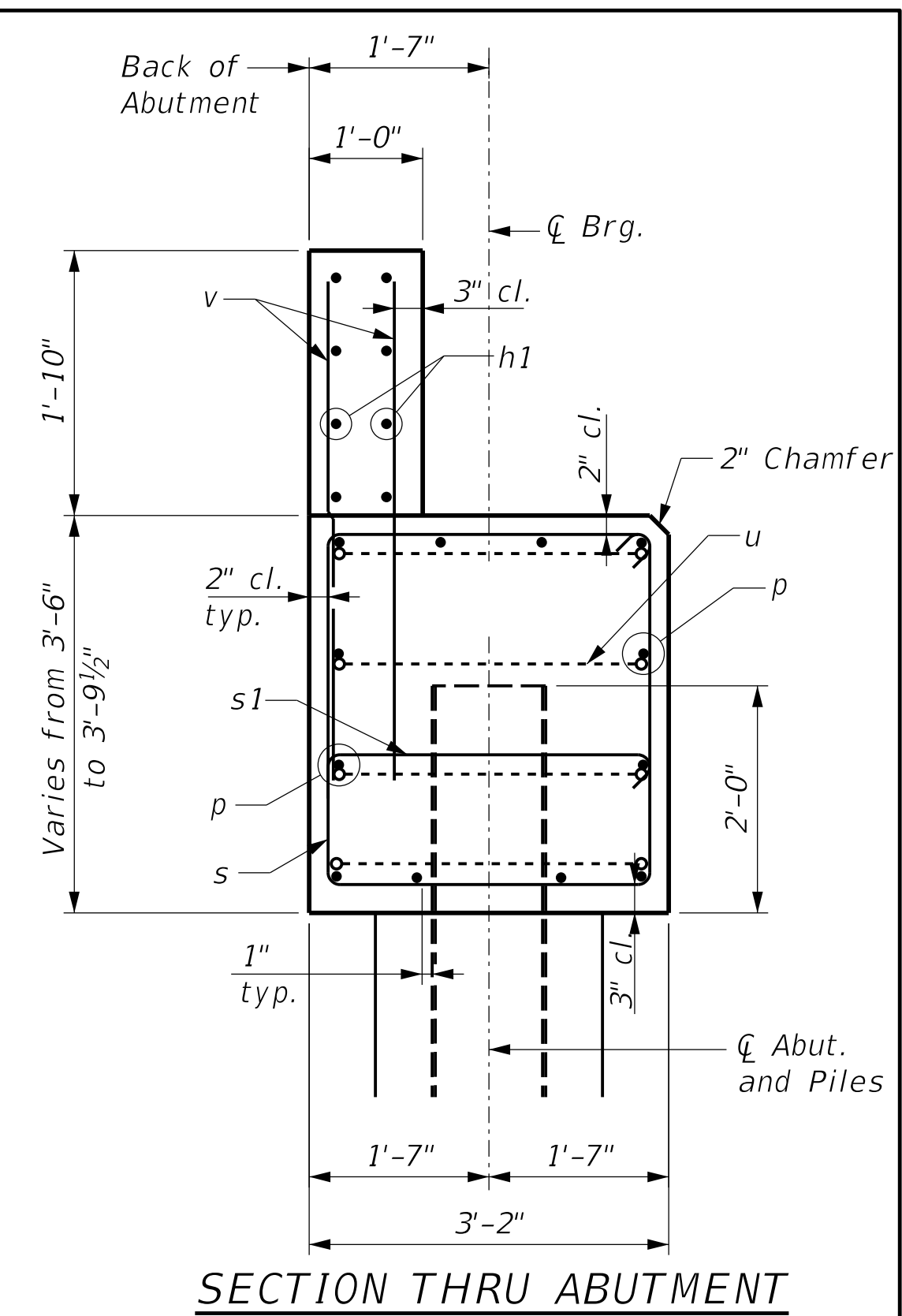
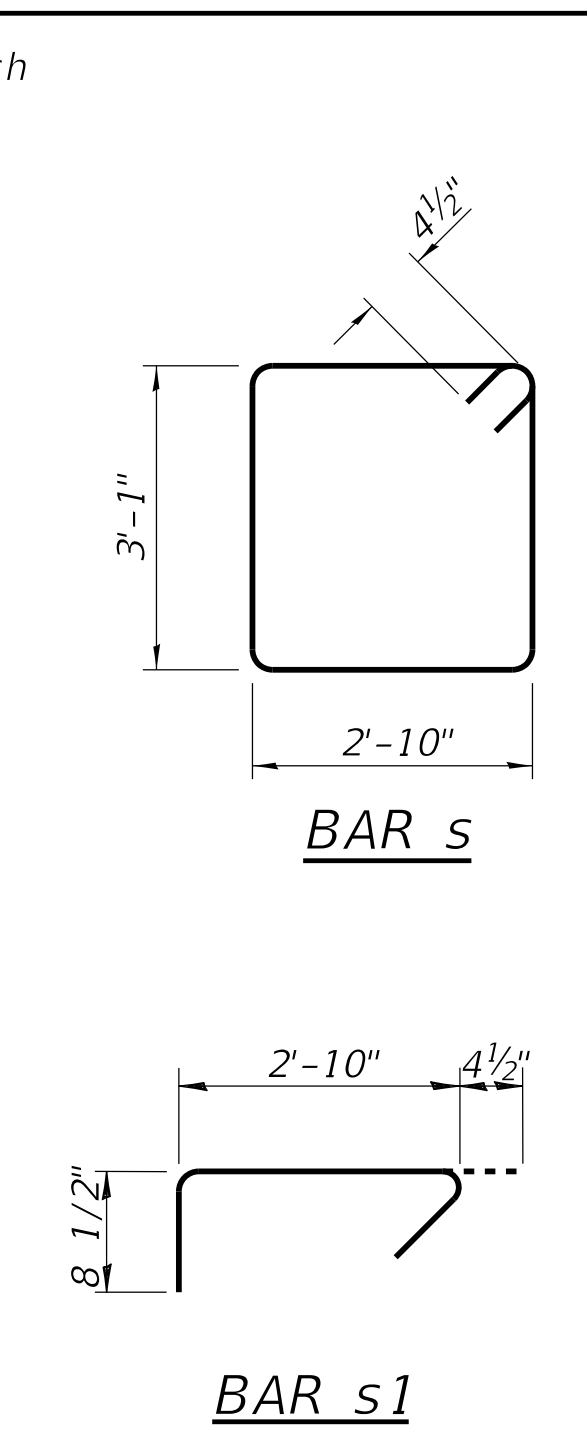
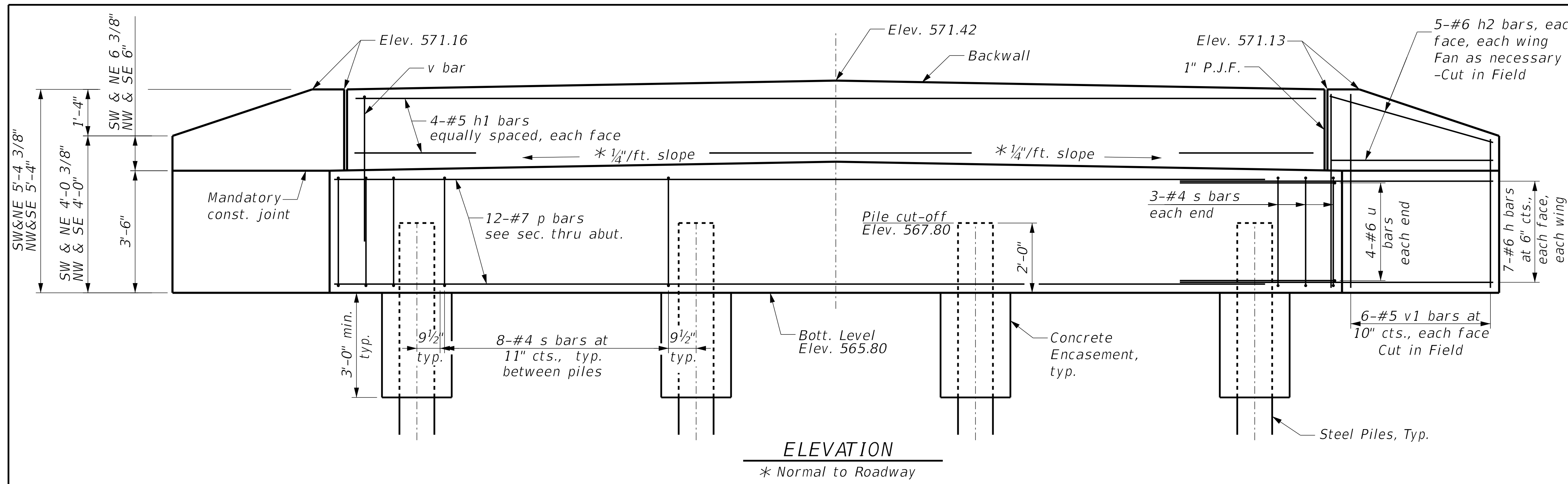
REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE S1 DETAILS

GCL JOB NO. 20-617

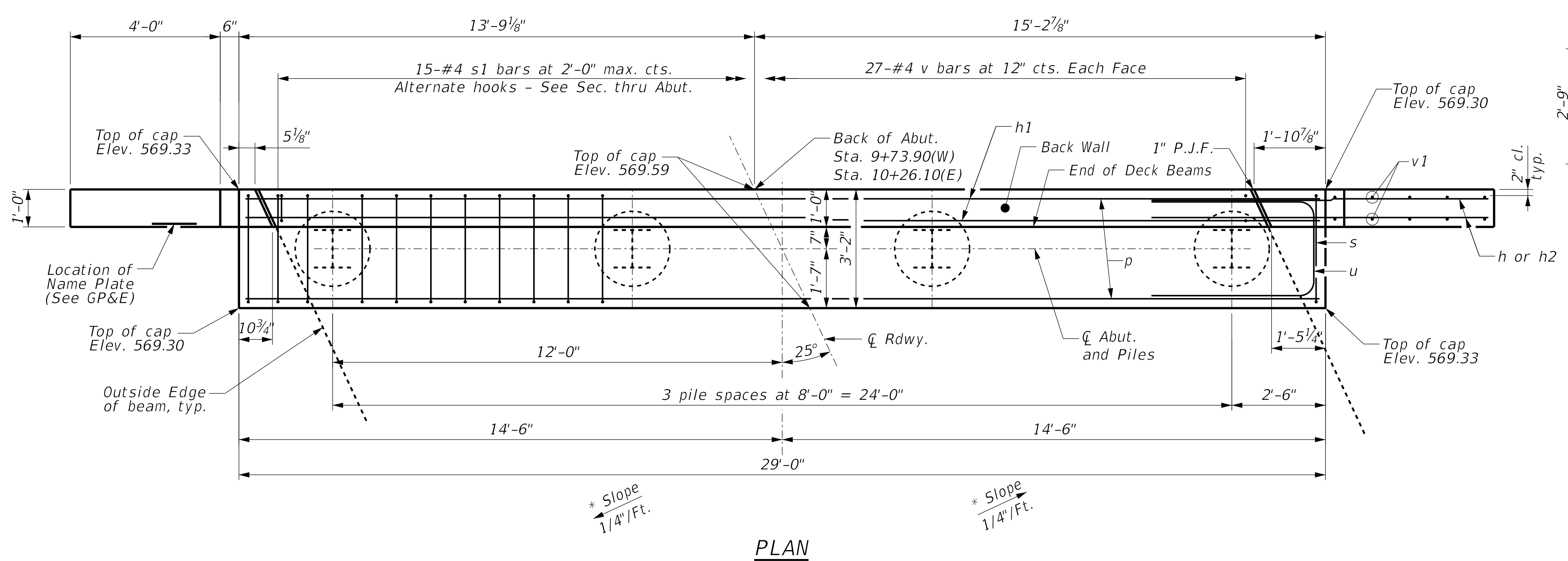
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 571B	19-07132-00-BR	FAYETTE	10	7
			CONTRACT NO. 95916	



BILL OF MATERIAL FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h	28	#6	7'-10"	—
h1	8	#5	26'-1"	—
h2	20	#6	6'-0"	Cut in Field
p	12	#7	28'-8"	—
s	30	#4	12'-7"	□
s1	15	#4	3'-11"	┌
u	8	#6	9'-5"	—
v	54	#4	3'-8"	—
v1	24	#5	5'-0"	Cut in Field
Concrete Structures		Cu Yd		16.0
Concrete Encasement		Cu Yd		1.4
Reinforcement Bars		Pound		2090
Furnishing Steel Piles HP12x53		Foot	W. Abut. 220 E. Abut. 219	
Driving Piles		Foot	W. Abut. 220 E. Abut. 219	
Test Pile Steel HP12x53		Each	W. Abut. 0 E. Abut. 1	

Notes:
For details of piles and Concrete Encasement, see sheet 9.



GENERAL NOTES

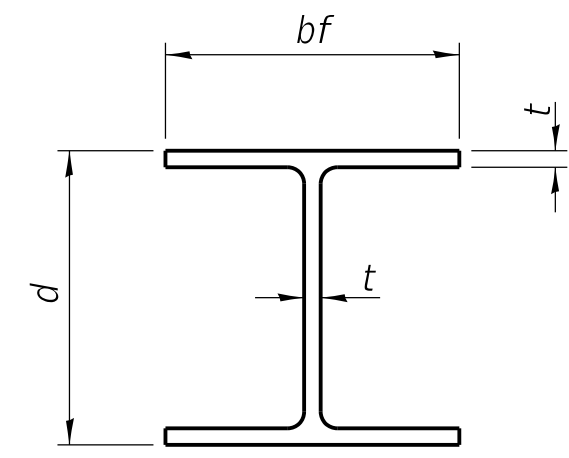
- Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (IL Modified).
- All exposed edges shall have standard 3/4" chamfer, unless otherwise noted or as directed by the Engineer.
- All clearances between rebar and form surface shall be 2", unless otherwise noted.
- Space reinforcement in cap to miss PPCDB dowel rods.
- The Steel H-piles shall be according to AASHTO M270 Grade 50.
- The Contractor shall drive one (1) Test Pile of the size indicated in a permanent location as shown on the plans or as directed by the Engineer before ordering the remainder of the piles.
- The Test Pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.
- The back wall and portion of the wingwalls above the construction joint shall be cast against the in-place deck beams.
- The position of the 90° & 135° hooked ends of the s1 bar shall be alternated between adjacent bars.

PILE DATA WEST ABUTMENT

Type: Steel HP12x53
Nominal Required Bearing: 372 kips
Factored Resistance Available: 205 kips
Est. Length: 55'/pile
No. Production Piles: 4
No. Test Piles: 0

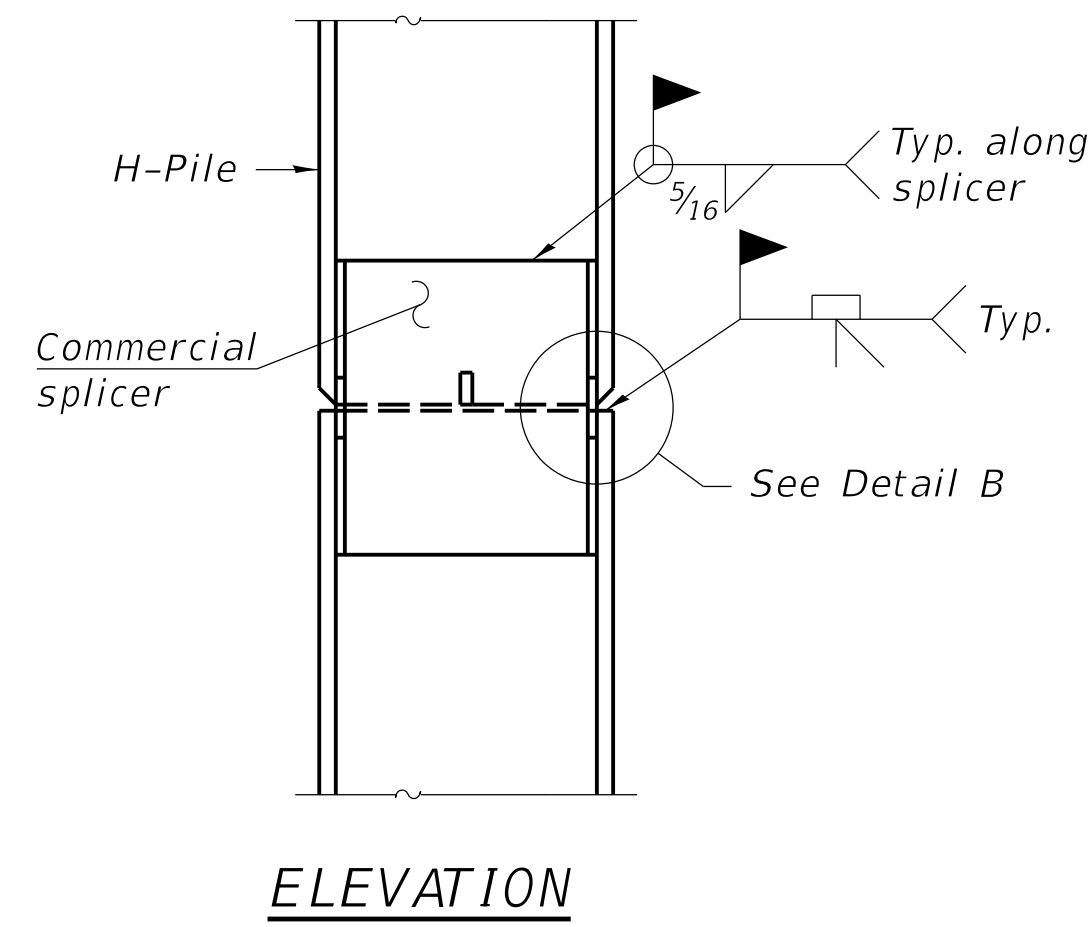
PILE DATA EAST ABUTMENT

Type: Steel HP12x53
Nominal Required Bearing: 372 kips
Factored Resistance Available: 205 kips
Est. Length: 73'/pile
No. Production Piles: 3
No. Test Piles: 1

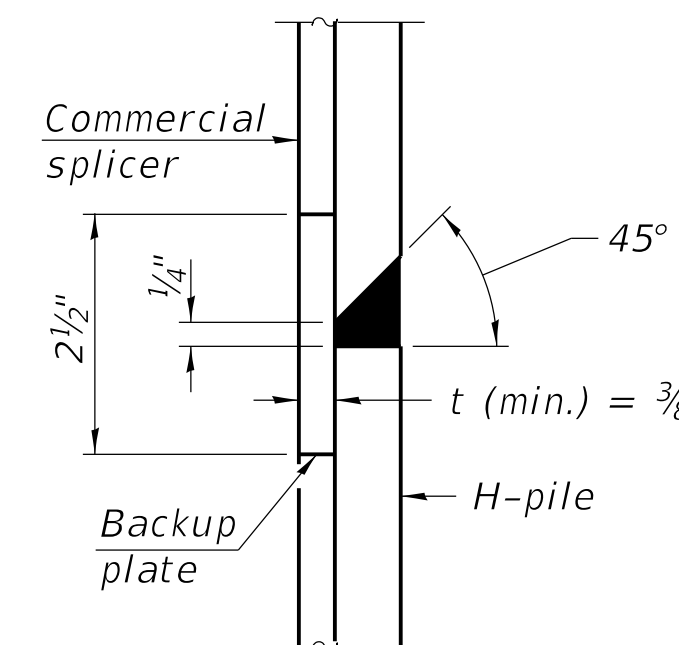


STEEL PILE TABLE

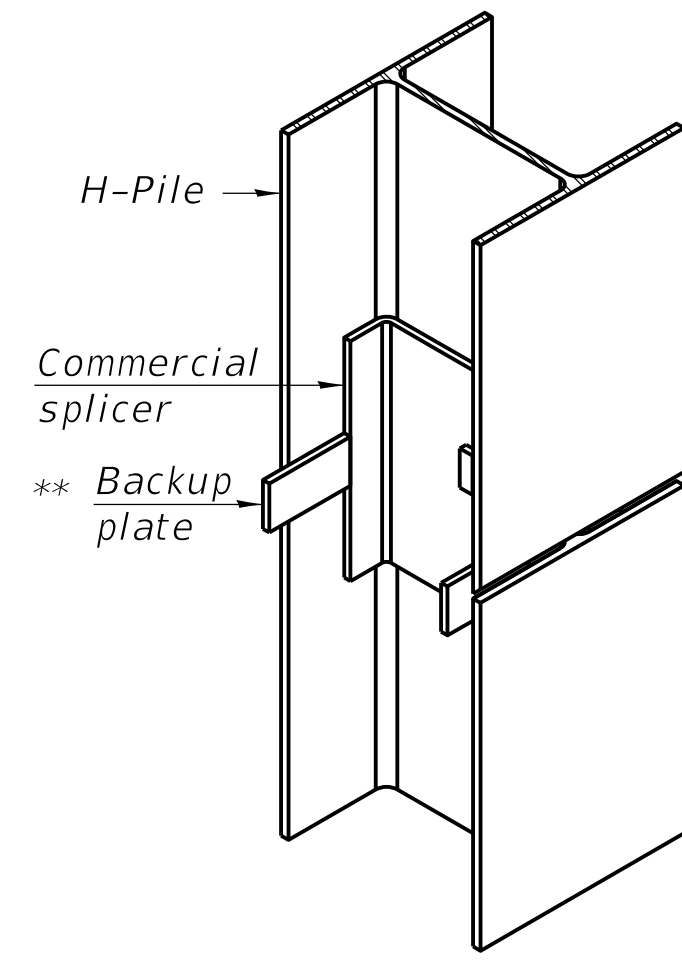
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"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

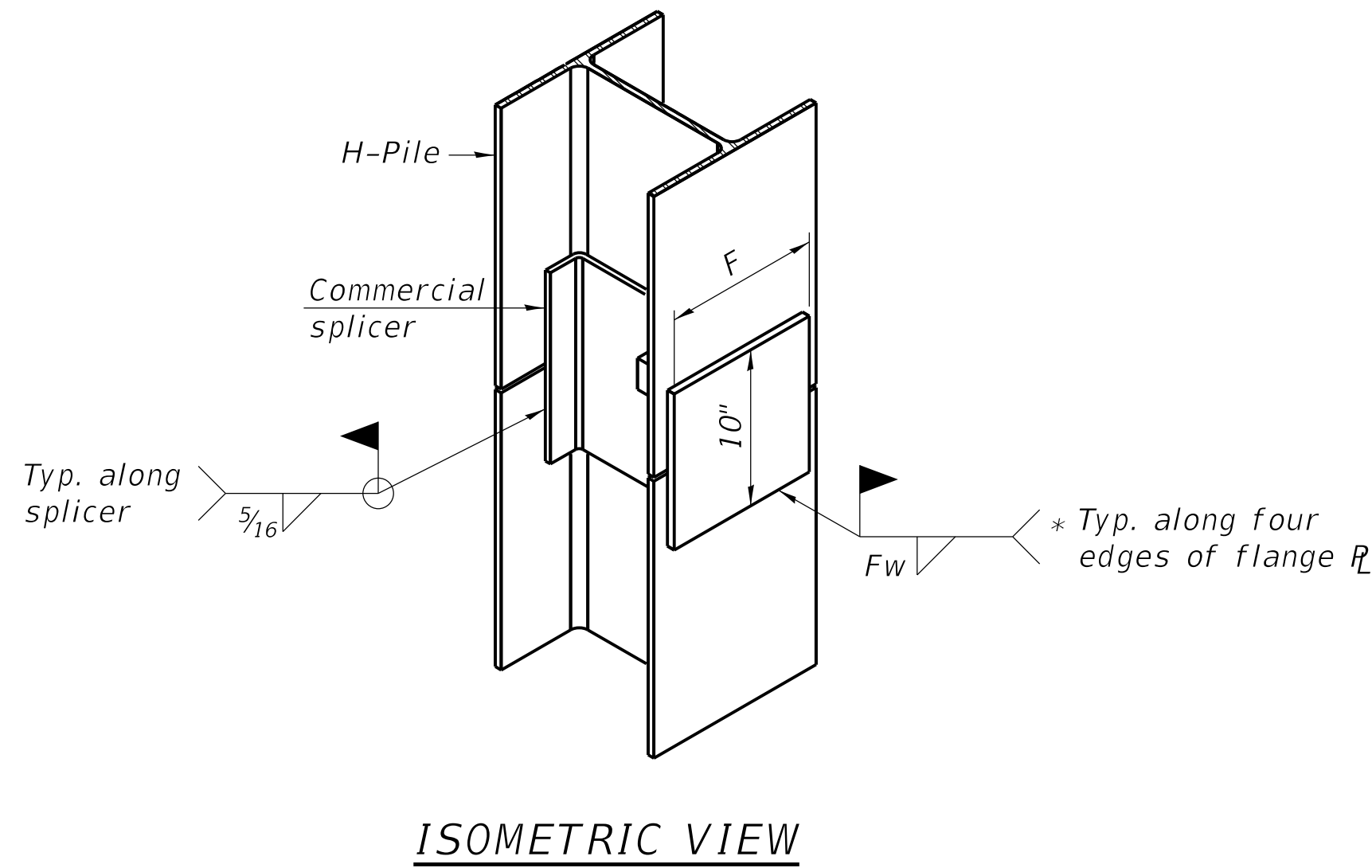


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE

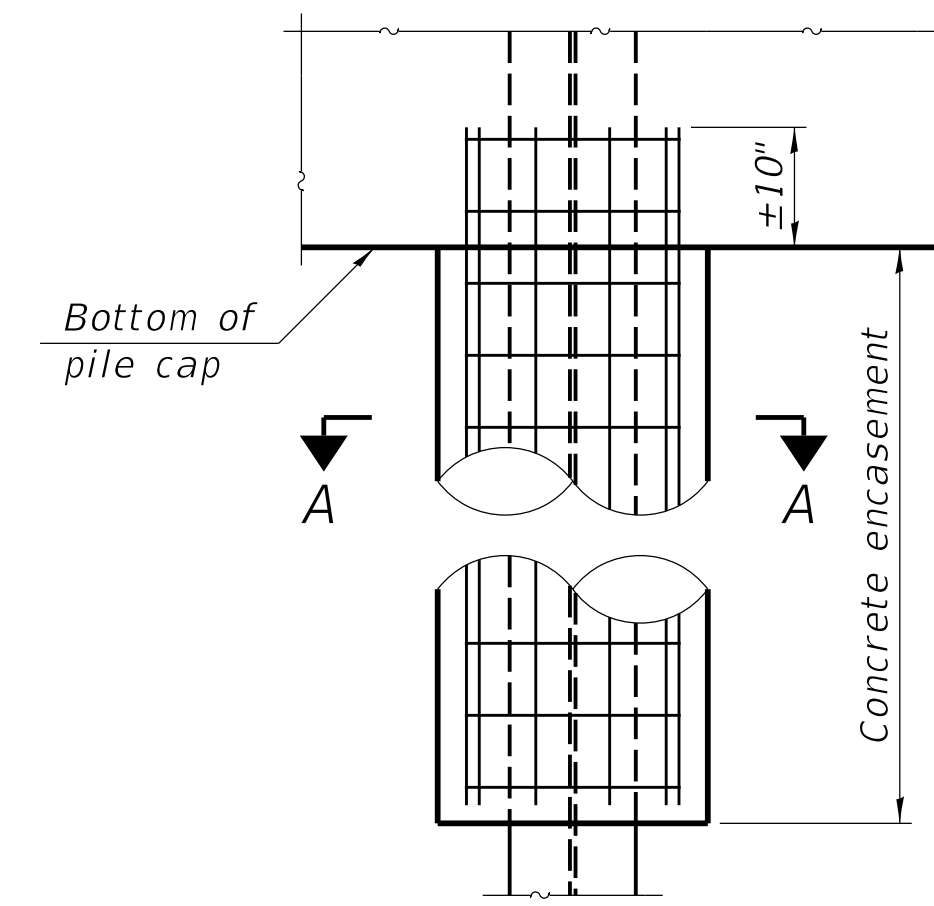


WELDED COMMERCIAL SPLICE ALTERNATE

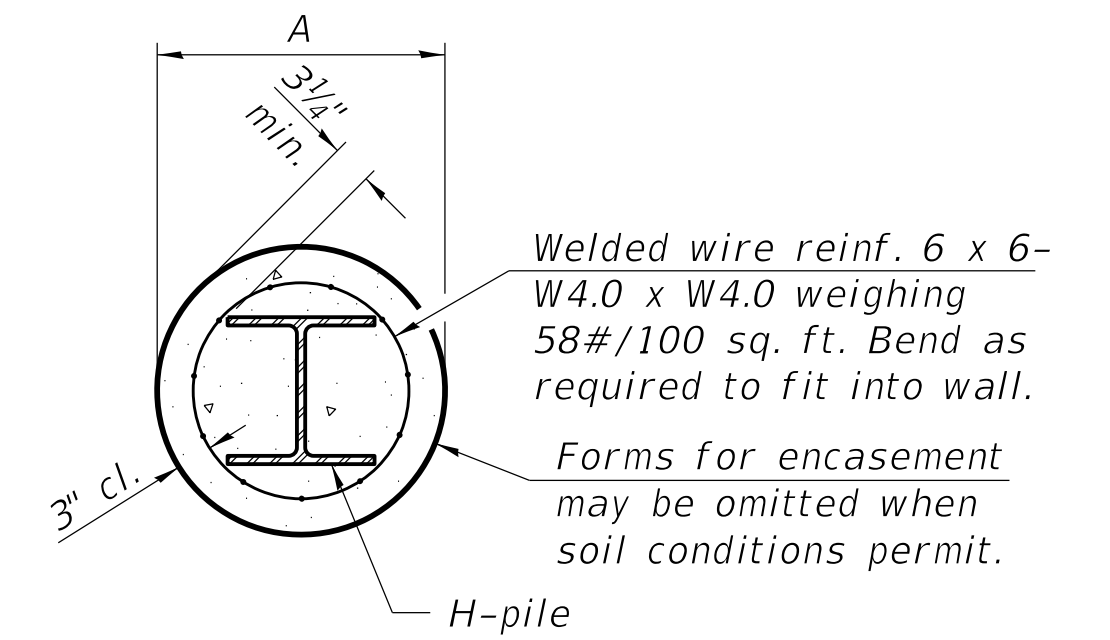
* Interrupt welds 1/4" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).

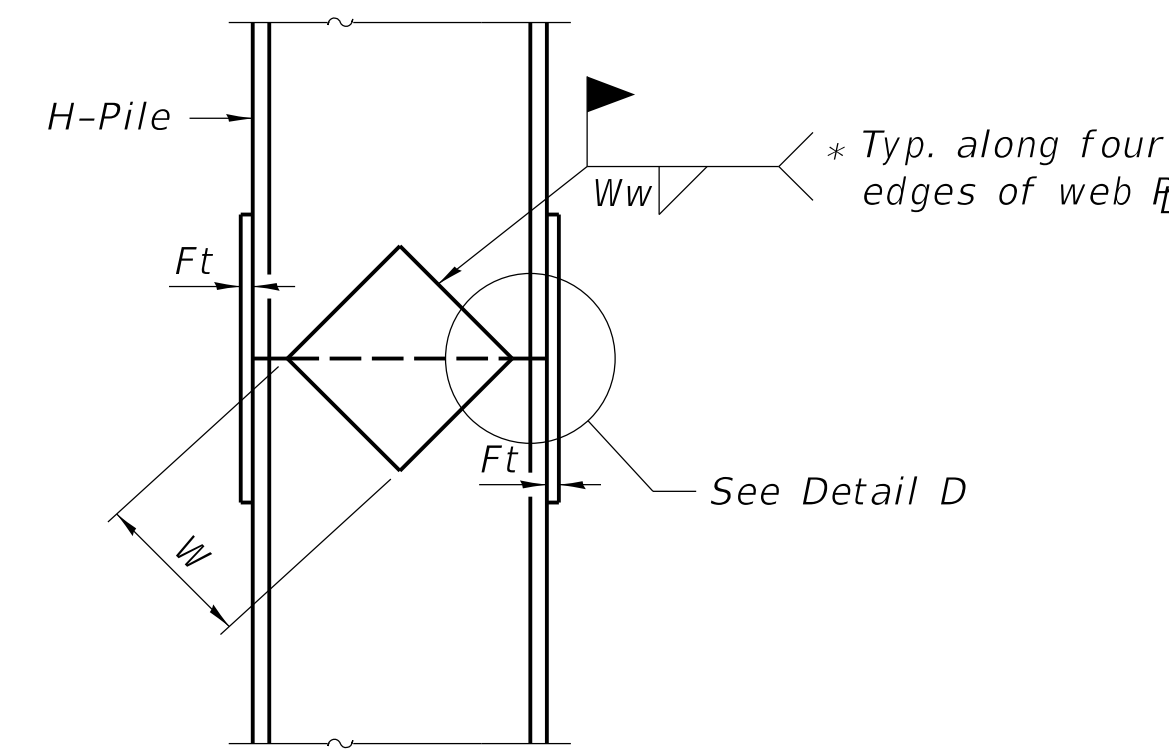


ELEVATION

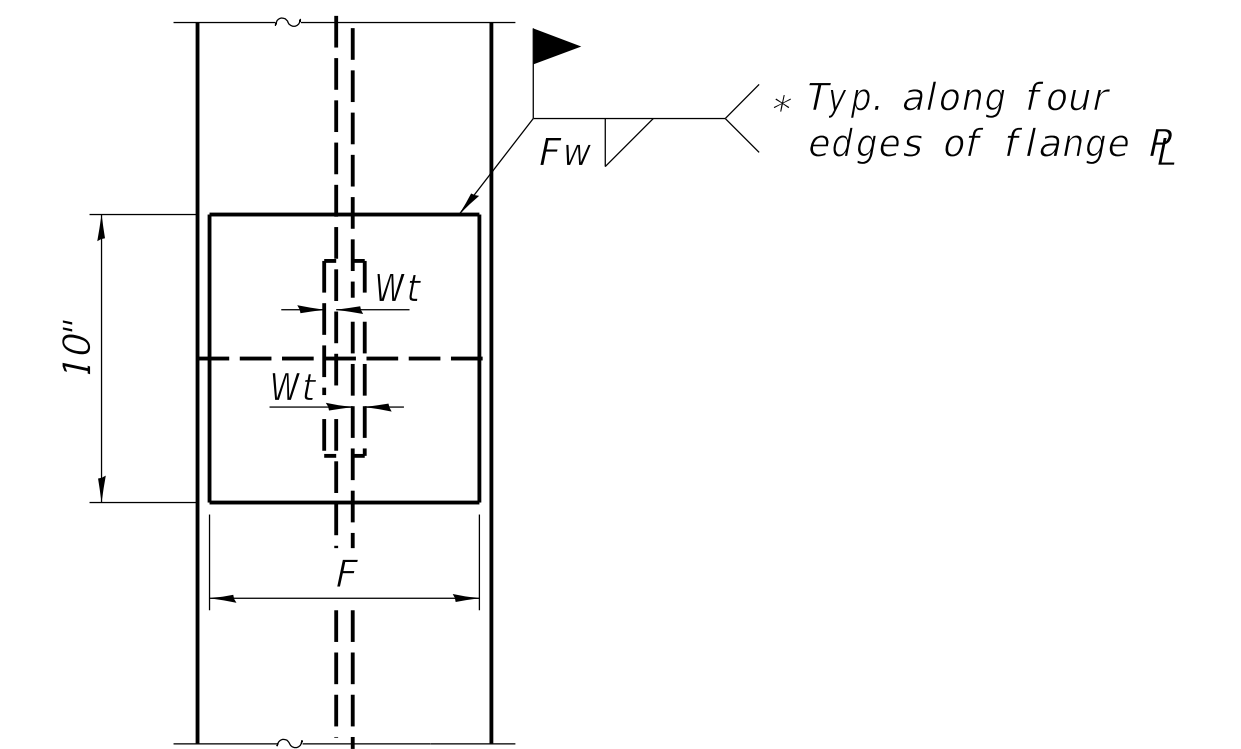


SECTION A-A

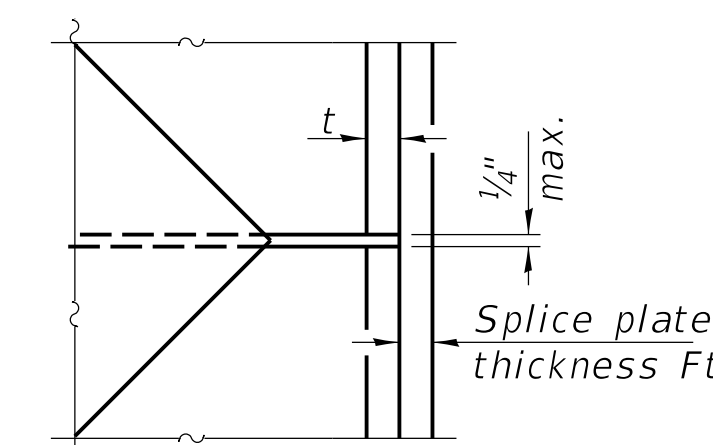
INDIVIDUAL PILE CONCRETE ENCASUREMENT (when specified)



ELEVATION



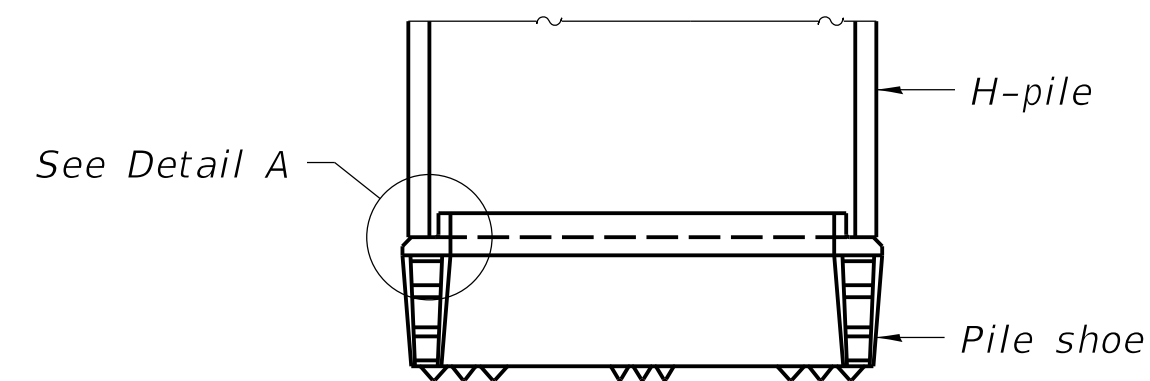
END VIEW



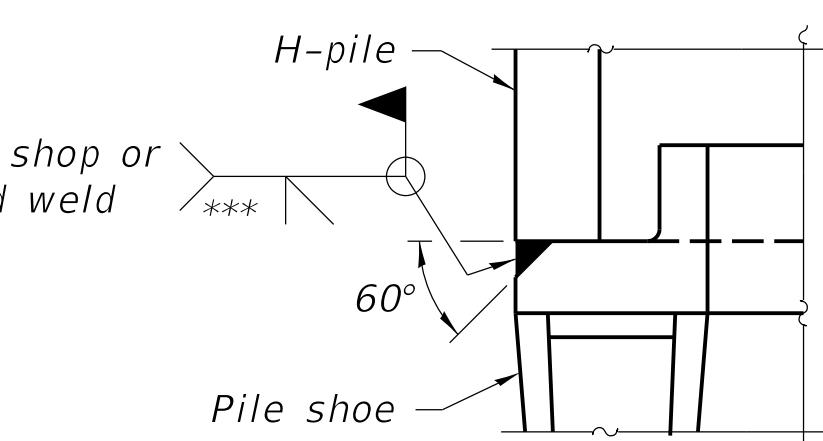
DETAIL D

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"	1 1/16"	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"	1 1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1 1/16"	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



DETAIL A

SHOE ATTACHMENT

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



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DESIGNED - BLT
DRAWN - JN, KMA
CHECKED - GLH
DATE - 03/23/2022

REVISED -
REVISED -
REVISED -
REVISED -

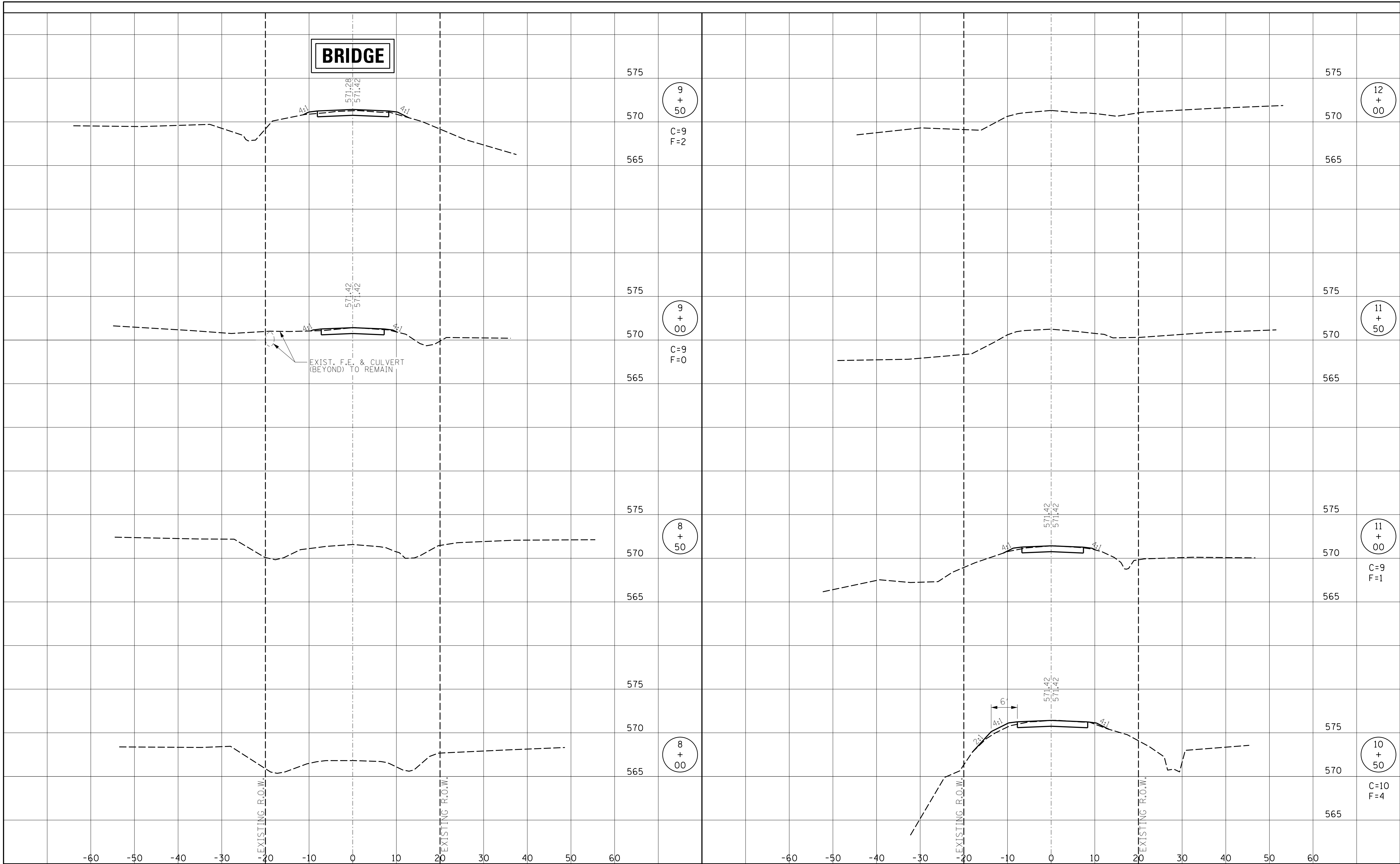
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS

GCL JOB NO. 20-617
ROUTE TR 571B SECTION 19-07132-00-BR COUNTY FAYETTE TOTAL SHEETS 10 SHEET NO. 9 CONTRACT NO. 95916

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		
	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	TEMPLATE		
	AREAS CHECKED		
	AREAS CHECKED		



	GONZALEZ COMPANIES, LLC 7 CARPENTER DRIVE SALEM, IL 62381 PHONE (618) 222-2221 www.gonzalezcos.com ILLINOIS PROFESSIONAL DESIGN FIRM 184.004564	DESIGNED - BLT DRAWN - JN, KMA CHECKED - GLH DATE - 03/23/2022	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS OF ROADWAY	ROUTE TR 571B SECTION 19-07132-00-BR COUNTY FAYETTE CONTRACT NO. 95916	GCL JOB NO. 20-617 TOTAL SHEETS 10 SHEET NO. 10 STA. 8+00 TO STA. 12+00
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