

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**PROPOSED  
HIGHWAY PLANS**

D4 OPERATIONS BRIDGE YARD  
SECTION D4 FENCING REMV & RPL 2025  
TAZEWELL COUNTY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D4 OPS BRIDGE YARD	D4 FENCING REMV & RPL 2025	TAZEWELL	7	1
		ILLINOIS	CONTRACT NO. 68J29	

D-94-053-24



**PROJECT DESCRIPTION:**  
CHAIN LINK FENCE REMOVE AND REPLACE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED May 14 2024  
Kensil A. Darmelima  
REGIONAL ENGINEER

June 28, 2024 [Signature]  
ENGINEER OF DESIGN AND ENVIRONMENT

June 28, 2024 [Signature]  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

**INDEX OF SHEETS**

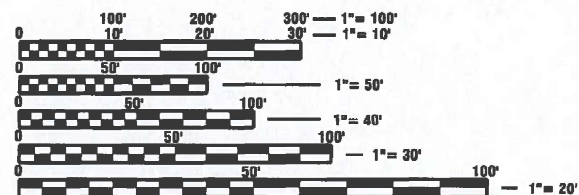
- 1 COVER SHEET
- 2 GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 PROPOSED PLANS
- 5-7 CHAIN LINK FENCE DETAILS

**HIGHWAY STANDARDS**

701106-02  
701901-09

C-94-081-24

**PROJECT  
LOCATION**



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 LOCATION INFORMATION FOR EXCAVATORS  
1-800-892-0123  
OR 811

**PROJECT ENGINEER: BEN TELLEFSON (309) 671-3333**  
**PROJECT MANAGER: MARK ECKHOFF (309) 671-3333**  
**CATALOG NO. 036534-00D**  
**CONTRACT NO. 68J29**

**COMMITMENTS**

Commitments are not to be altered without the written approval of all parties to which the commitment was made.

**NO COMMITMENTS HAVE BEEN MADE FOR THIS PROJECT**

**UTILITIES – LOCATIONS /INFORMATION ON PLANS**

The locations of existing water mains, gas mains, sewers, electric power lines, telephone lines and other utilities as shown on the plans are based on careful field investigation and the best information available, but they are not guaranteed. Unless elevations are shown — all utility locations shown on the cross sections are based on the approximate depth supplied by the utility company. It shall be the Contractor's responsibility to ascertain their exact location from the utility companies and by field inspection.

**PLAN ELEVATIONS – U. S. G. S. MEAN SEA LEVEL DATUM**

All elevations shown on the plans are established from U. S. G. S. mean sea level datum.

**ENVIRONMENTAL REVIEWS**

Prior to the use of any proposed borrow areas, use areas (temporary access roads, detours, run-arounds, etc.) and/or waste areas, the Contractor shall file the required environmental resource request surveys according to Section 107.22 of the Standard Specifications. These surveys are required in order for the Department to conduct cultural and biological resource surveys for the proposed site.

Prior to any waste materials being removed from the construction site the required environmental resource surveys will need to be obtained and filed by the Contractor. Excess waste products removed from the construction site shall be disposed of as required in Section 202.03 of the Standard Specifications.

Any protruding metal bars shall be removed prior to the disposal of broken concrete at approved disposal sites.

The required environmental resource documentation shall include the following:

- \* BDE Form 2289 (Environmental Survey Request)
- \* A location map showing the size limits and location of the use area
- \* Signed property owner agreement form–D4 PI0100
- \* Color photographs depicting the use area
- \* Borrow Area Entry Agreement form–D4 PI0101

Please note that a minimum of two weeks shall be allowed for the District to obtain the required environmental clearances.

**NOTES:**

1. This project consists of removal of the existing chain link fence topped with barbed wire and replacement with new 6' chain link fencing with barbed wire, one 5' wide man gate and one 16' wide double swing access gate. The existing sliding gate at the parking lot entrance is to remain.
2. The new fence will be constructed with a barbed wire support arm and barbed wire similar to the existing fence.
3. The contractor shall tie down the location of all existing fence corners prior to removal for use in laying out the replacement fence.
4. The existing fence shall be fully removed from the site including all post foundations. Any holes that remain after the installation of the new fence due to the removal of post foundations shall be backfilled with pea gravel.
5. All construction methods and materials will be consistent with details in these plans, and Section 664 CHAIN LINK FENCE of the IDOT Standard Specifications for Road and Bridge Construction adopted January 1, 2022.
6. The fence is located outside the clear zone and shall have a TOP RAIL and BARBED WIRE TOP consistent with the plan details.

MOCP: D:\mcp\...  
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 PLOT DATE: 3/20/2023

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PLOT SCALE = 100.0000' / in.	CHECKED	REVISIONS
PLOT DATE = 3/20/2023	DATE	REVISIONS

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**COMMITMENTS, GENERAL NOTES,  
AND PROJECT SPECIFIC NOTES**

SCALE: NONE    SHEET 1 OF 1

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D4 FENCE REM & REPL 2025	TAZEWELL	7	2
D4 OPS BRIDGE YARD			CONTRACT NO. 68J29	
ILLINOIS				



# IDOT BRIDGE MAINTENANCE OFFICE & GARAGE

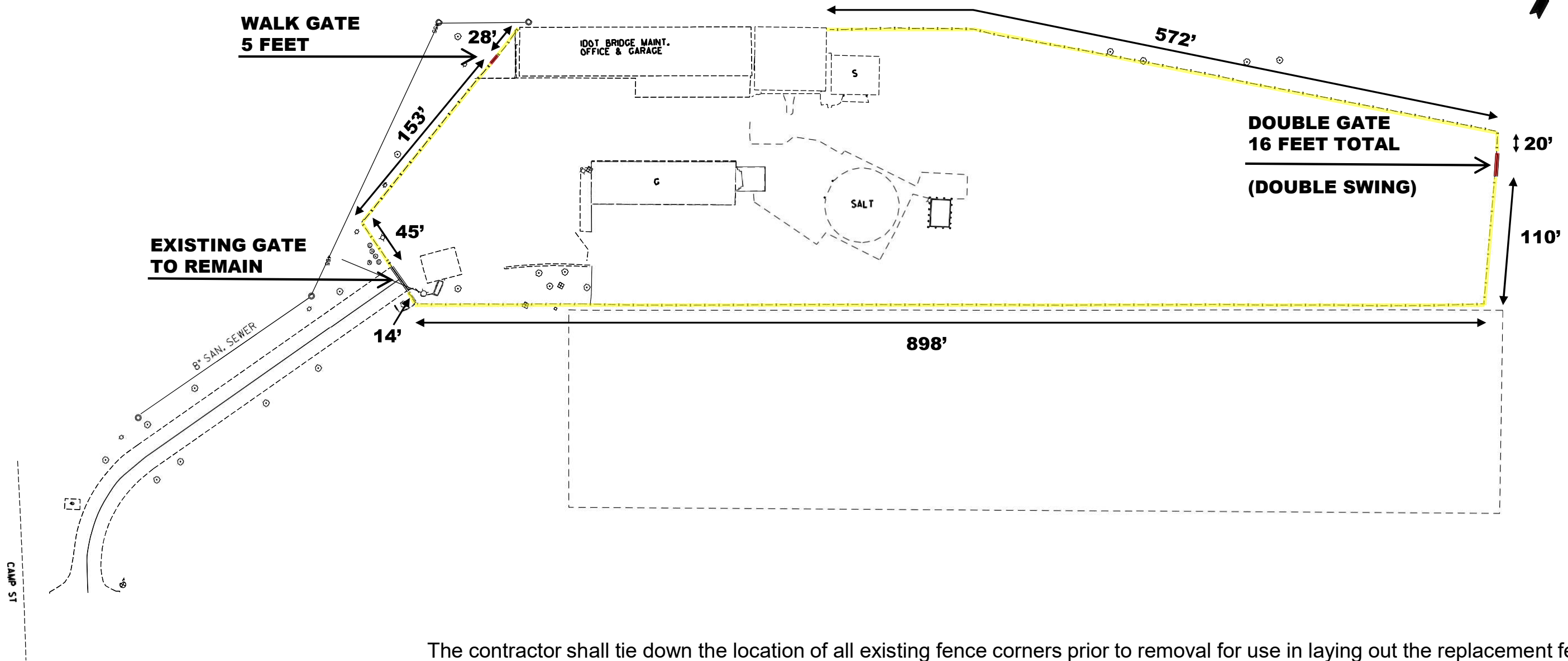
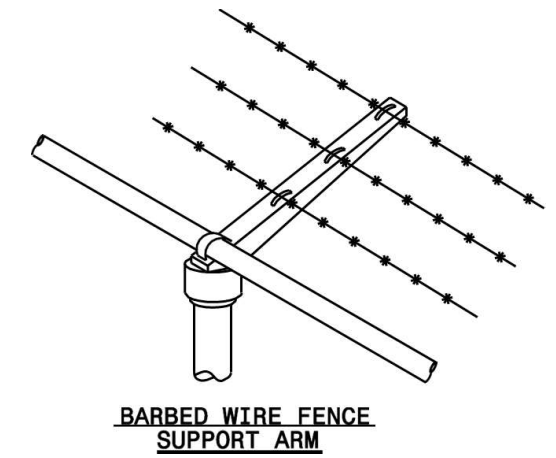
604 W CAMP STREET, EAST PEORIA, IL 61611

**CHAIN LINK FENCE 6' W/ BARBED WIRE - 1,840 FEET**

**CHAIN LINK FENCE 6' W/ BARBED WIRE - 5' GATE - 1 EACH**

**CHAIN LINK FENCE 6' W/ BARBED WIRE - 16' GATE - 1 EACH**

**FENCE REMOVAL - 1,861 FEET  
(INCLUDES GATES)**



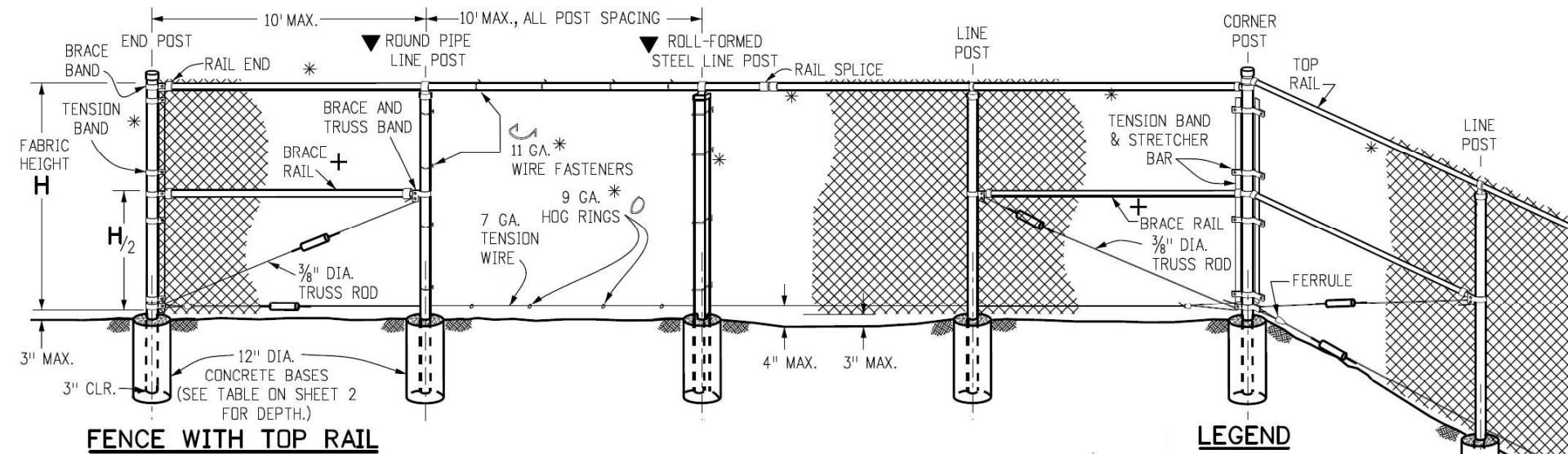
The contractor shall tie down the location of all existing fence corners prior to removal for use in laying out the replacement fence. The fence is located outside the clear zone and shall have a TOP RAIL and BARBED WIRE TOP consistent with the plan details.

MODEL - 8/20/2015  
FILE - 8/20/2015

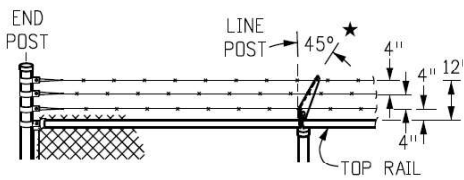
USER NAME = \$USERS PLOT SCALE = \$SCALE\$ PLOT DATE = \$DATE\$	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>IDOT DISTRICT 4 BRIDGE YARD CHAIN LINK FENCE REPLACEMENT</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>F.A. RTE.</th> <th>SECTION</th> <th>COUNTY</th> <th>TOTAL SHEETS</th> <th>SHEET NO.</th> </tr> <tr> <td></td> <td>D4 FENCE REM &amp; REPL 2025</td> <td>TAZEWELL</td> <td>7</td> <td>4</td> </tr> <tr> <td colspan="3"></td> <td colspan="2">CONTRACT NO. 68J29</td> </tr> </table>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		D4 FENCE REM & REPL 2025	TAZEWELL	7	4				CONTRACT NO. 68J29	
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.																
	D4 FENCE REM & REPL 2025	TAZEWELL	7	4																
			CONTRACT NO. 68J29																	

**GENERAL NOTES**

1. AT EACH LOCATION WHERE AN ELECTRIC TRANSMISSION, DISTRIBUTION, OR SECONDARY LINE CROSSES A FENCE, THE CONTRACTOR SHALL FURNISH AND INSTALL A GROUND CONFORMING TO ARTICLE 250 OF THE NATIONAL ELECTRIC CODE. A GROUND SHALL ALSO BE INSTALLED A MAXIMUM OF EVERY 500 FT. ALONG THE FENCE. THE GROUND ROD SHALL BE A MINIMUM DIAMETER OF 1/2 IN. AND 8 FT. IN LENGTH, AND DRIVEN AT LEAST 1/2 FT. INTO THE GROUND. THE ROD SHALL BE CONNECTED TO EACH WIRE WITH A MINIMUM AWG NO. 8 STRANDED COPPER WIRE. GROUNDING WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE FENCE.
2. H (HEIGHT OF FABRIC) SHALL BE AS SHOWN ON THE PLANS. FABRIC IS AVAILABLE IN THE FOLLOWING HEIGHTS: 36 IN., 42 IN., 48 IN., 60 IN., 72 IN., 84 IN., 96 IN., 108 IN., 120 IN., AND 144 IN.
3. CHAIN LINK FENCE SHALL CONFORM TO AASHTO M 181.
4. CHAIN LINK FABRIC SHALL BE 2 IN. MESH NO. 9 GAGE GALVANIZED OR ALUMINUM COATED WIRE SECURELY FASTENED TO TENSION WIRE, LINE POSTS, RAILS, BRACES AND STRETCHER BARS SPACED AS SHOWN HEREON. WIRE FASTENERS AND TIE CLIPS SHALL BE NO. 11 GAGE (W&M) GALVANIZED STEEL WIRE OR NO. 7 GAGE (B&S) ALUMINUM WIRE, AND HOG RINGS SHALL BE NO. 9 GAGE, ALL IN CONFORMANCE WITH ASTM F 626.
5. STEEL POSTS, RAILS AND GATE FRAMES SHALL CONFORM TO AASHTO M 181 TYPE 1, GRADE 1 OR GRADE 2.
6. AT THE CONTRACTOR'S OPTION, PIPE USED FOR FENCE CONSTRUCTION SHALL CONFORM TO THE DIMENSIONS AND WEIGHTS FOR EITHER "ORDINARY PIPE" OR "ALTERNATIVE PIPE" AS SHOWN ON SHEET 2. "ALTERNATIVE PIPE" SHALL BE HIGH STRENGTH STEEL PIPE CONFORMING TO FEDERAL SPECIFICATION RR-F-191/3C.
7. TENSION WIRE SHALL BE CONTINUOUS BETWEEN END OR CORNER POST AND LINE BRACE POST. A TURNBUCKLE OR OTHER APPROVED TIGHTENING DEVICE SHALL BE USED FOR EACH CONTINUOUS SPAN OF TENSION WIRE.
8. TENSION WIRE SHALL CONFORM TO AASHTO M 181.
9. CONCRETE FOOTINGS SHALL HAVE TOPS CROWNED AT GROUND LEVEL AND SHALL BE AN IDOT APPROVED CONCRETE MIX
10. TERMINATION OF FENCE AT BRIDGES OR OTHER STRUCTURES SHALL BE AS SHOWN ON THE PLANS.
11. CHAIN LINK FABRIC UP TO 5 FT. HIGH SHALL BE KNUCKLED AT THE TOP AND BOTTOM SELVAGES. FABRIC OVER 5 FT. HIGH SHALL BE TWISTED AND BARBED ON THE TOP SELVAGE AND KNUCKLED ON THE BOTTOM SELVAGE.
12. FENCE MAY BE CONSTRUCTED WITH EITHER ROUND PIPE OR ROLL-FORMED STEEL COMPONENTS. THE CONTRACTOR SHALL STATE AT THE PRECONSTRUCTION CONFERENCE, THE TYPE OF CONSTRUCTION AND TYPE OF LINE POST TO BE USED THROUGHOUT THE PROJECT.



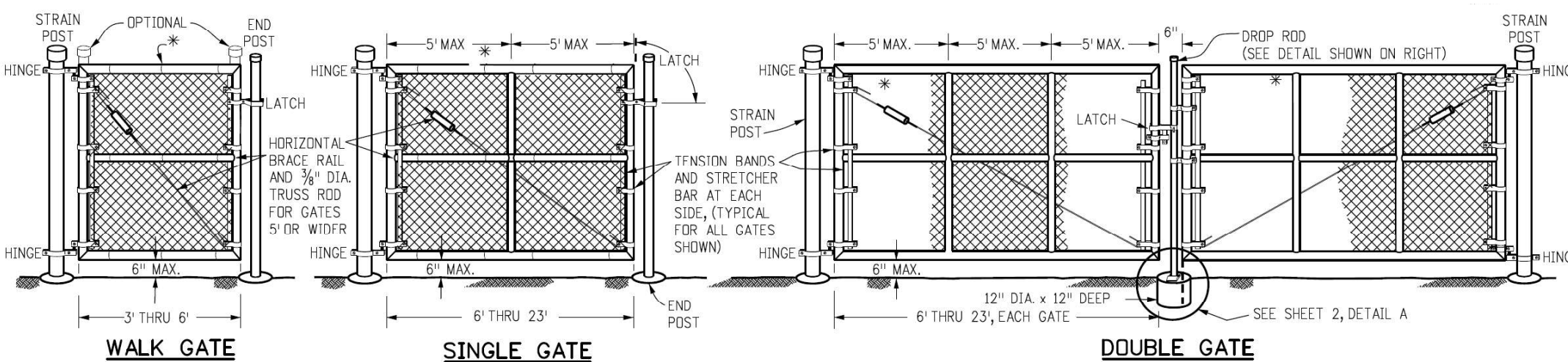
**FENCE WITH TOP RAIL**



**BARBED WIRE TOP**

**LEGEND**

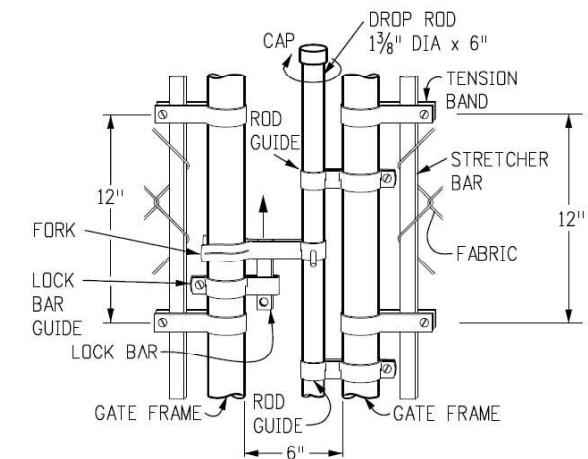
- \* ATTACH FABRIC TO ALL FENCE & GATE STRUCTURES AT 12 IN. INTERVALS VERTICALLY AND AT 20 IN. HORIZONTALLY.
- ★ CASE 1. TO KEEP INSIDERS IN, SLOPE TOP IN 45°
- ★ CASE 2. TO KEEP OUTSIDERS OUT, SLOPE TOP OUT 45° BARBED WIRE OVER GATES SHALL NOT BE SLOPED
- ⚡ TIGHTENER OR TURNBUCKLE SYMBOL, (SEE DETAILS ON SHEETS 2 AND 3).
- ▼ TYPE OF LINE POST (ROUND PIPE OR ROLL-FORMED STEEL) SHALL BE AT THE OPTION OF THE CONTRACTOR UNLESS OTHERWISE SHOWN ON THE PLANS.
- + BRACE RAIL IS NOT REQUIRED FOR 36 IN., 42 IN., OR 48 IN. FABRIC HEIGHTS. BRACE RAIL FOR FENCE WITH ROLL-FORMED STEEL ELEMENTS IS 12 IN. BELOW THE TOP RAIL, (SEE SHEET 3).



**WALK GATE**

**SINGLE GATE**

**DOUBLE GATE**



**TYPICAL DROP ROD ASSEMBLY**

MODEL - SMOGELMARTS  
FILE - 68J29 - 001

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PLOT SCALE = \$SCALE\$	DRAWN -	REVISED -
PLOT DATE = \$DATE\$	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CHAIN LINK FENCE DETAILS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D4 FENCE REM & REPL 2025		TAZEWELL	7	5
D4 OPS BRIDGE YARD				CONTRACT NO. 68J29
		ILLINOIS		

**FENCE MATERIAL**

FABRIC HEIGHT	END, CORNER AND LINE BRACE POSTS		LINE POSTS		TOP & BRACE RAILS	
	ROUND PIPE I.D.	ROLL-FORMED STEEL	ROUND PIPE I.D.	ROLL-FORMED STEEL	ROUND PIPE I.D.	ROLL-FORMED STEEL
FEET	INCHES		INCHES		INCHES	
3 THRU 6	2.5	3.5 x 3.5	1.5	1.875 x 1.625	1.25	1.25 x 1.625
> 6 THRU 8	2.5	3.5 x 3.5	2.0	1.875 x 1.625	1.25	1.25 x 1.625
> 8 THRU 12	2.5	3.5 x 3.5	2.0	2.250 x 1.625	1.25	1.25 x 1.625

FABRIC HEIGHT	△ CONCRETE BASE			
	DEPTH		DIA.	
FEET	INCHES		INCHES	
3 THRU 4	34	12	28	12
> 4 THRU 12	40	12	40	12

△ ALL POSTS 3 IN CLEAR FROM BOTTOM OF CONCRETE BASE

**ORDINARY PIPE**

NOMINAL I.D.	O.D.	WALL THICK.	WEIGHT
INCHES			LB/FT
1.25	1.660	0.140	2.27
1.50	1.900	0.145	2.72
2.00	2.375	0.154	3.65
2.50	2.875	0.203	5.79
3.00	3.500	0.216	7.58
3.50	4.000	0.226	9.11
4.00	4.500	0.237	10.79
5.00	5.563	0.258	14.62
6.00	6.625	0.280	18.97
8.00	8.625	0.322	28.55

**ALTERNATIVE PIPE**

NOMINAL I.D.	O.D.	WALL THICK.	WEIGHT
INCHES			LB/FT
1.25	1.660	0.111	1.836
1.50	1.900	0.120	2.281
2.00	2.375	0.130	3.117
2.50	2.875	0.160	4.640

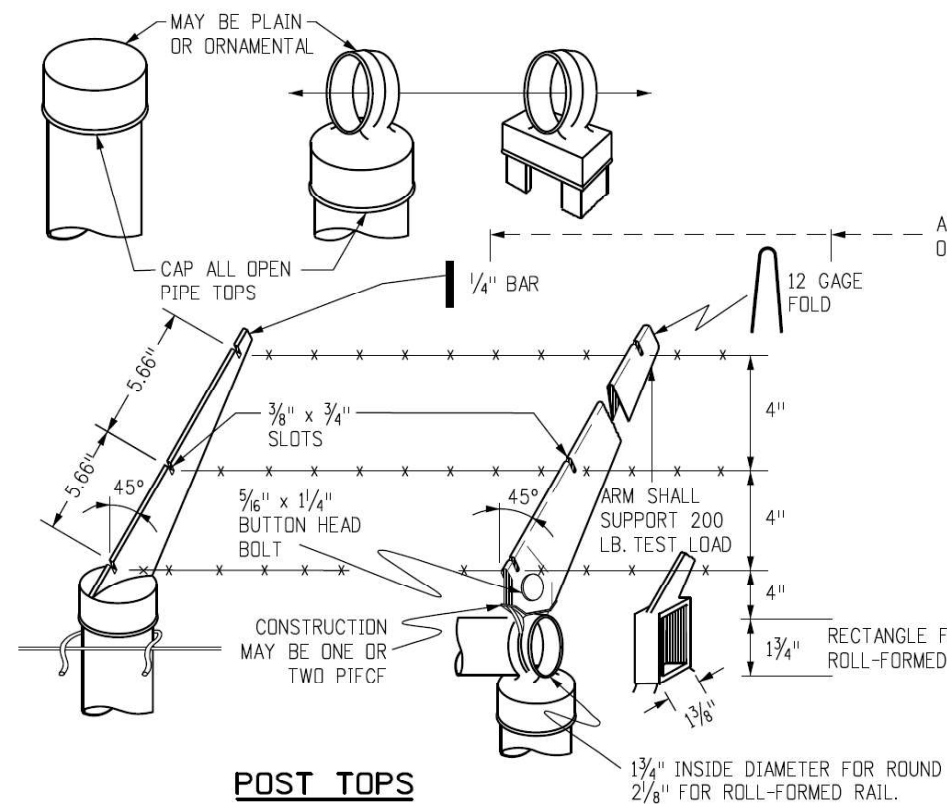
**GATE MATERIAL**

GATE FRAME WIDTH	STRAIN POST		△ CONCRETE BASE	
	ROUND I.D.	ROLL-FORMED	DEPTH	DIA.
FEET	INCHES		INCHES	
3 THRU 6	2.5	3.5 x 3.5	36	12
> 6 THRU 13	3.5	—	42	12
> 13 THRU 18	6.0	—	48	18
> 18 THRU 23	8.0	—	48	24

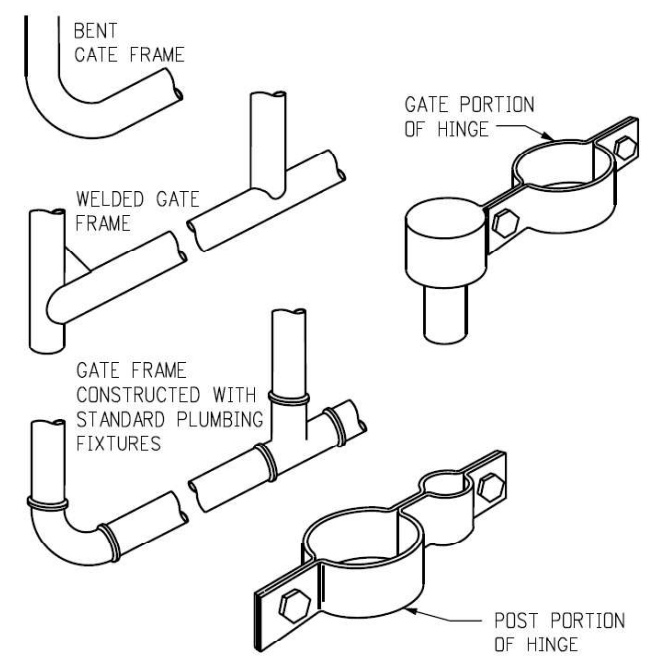
GATE FRAME		FRAME PIPE	BRACING PIPE
WIDTH	HEIGHT	I.D.	I.D.
FEET		INCHES	
3 THRU 8	3 THRU 6	1.25	1.25
> 8 THRU 23	6	1.50	1.25
> 8 THRU 23	> 6 THRU 12	1.50	1.50

**ROLL-FORMED STEEL**

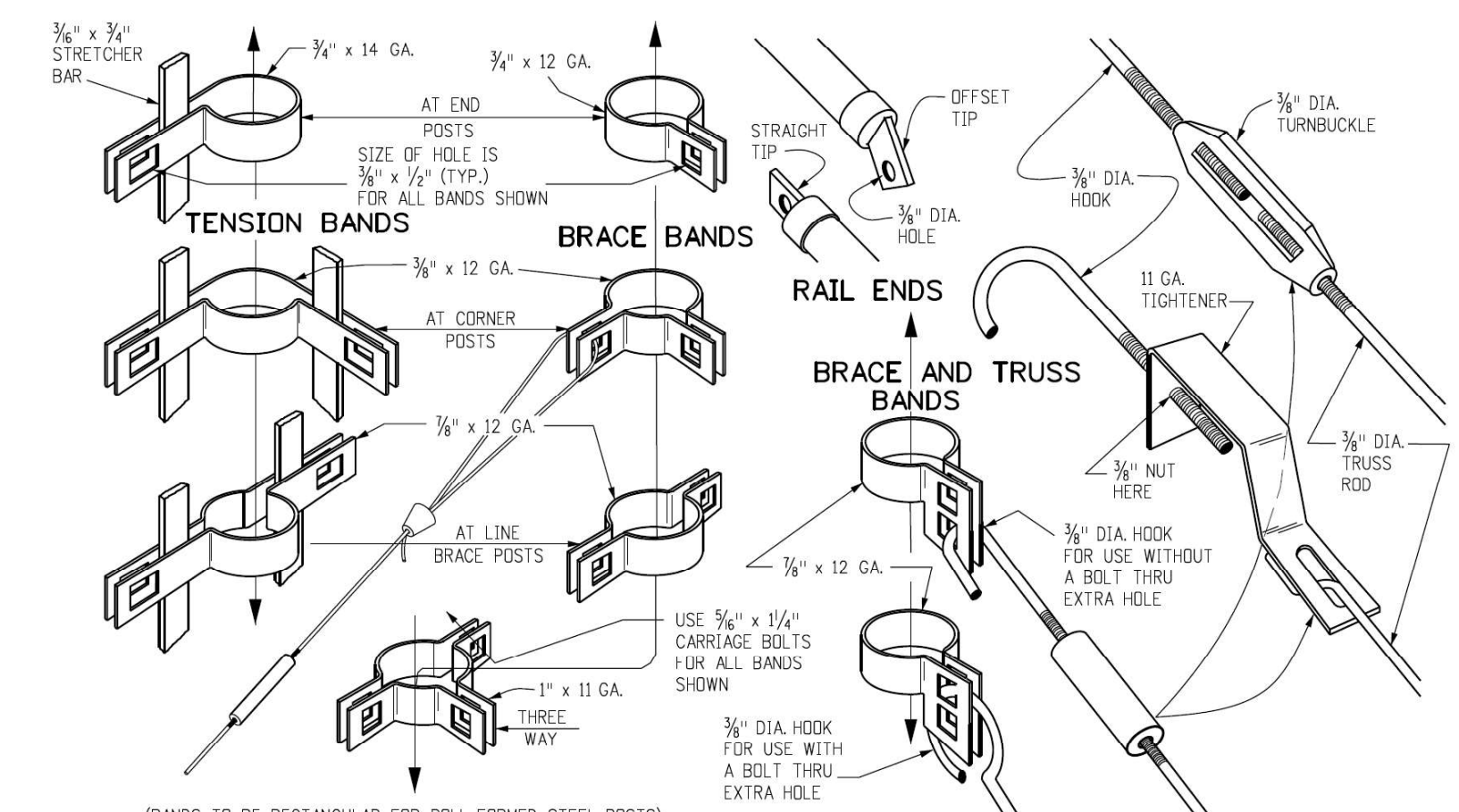
PART	SIZE	THICK.	WEIGHT
	INCHES	GAGE	LB/FT
TOP & BRACE RAILS	1.250 x 1.625	14	2.08
LINE POST (H: 3FT - 6FT)	1.875 x 1.625	12	2.75
LINE POST (H: > 6FT - 8FT)	1.875 x 1.625	11	3.36
LINE POST (H: > 8FT - 12FT)	2.250 x 1.625	11	4.02
END, CORNER & LINE BRACE POSTS	3.50 x 3.50	10	7.59



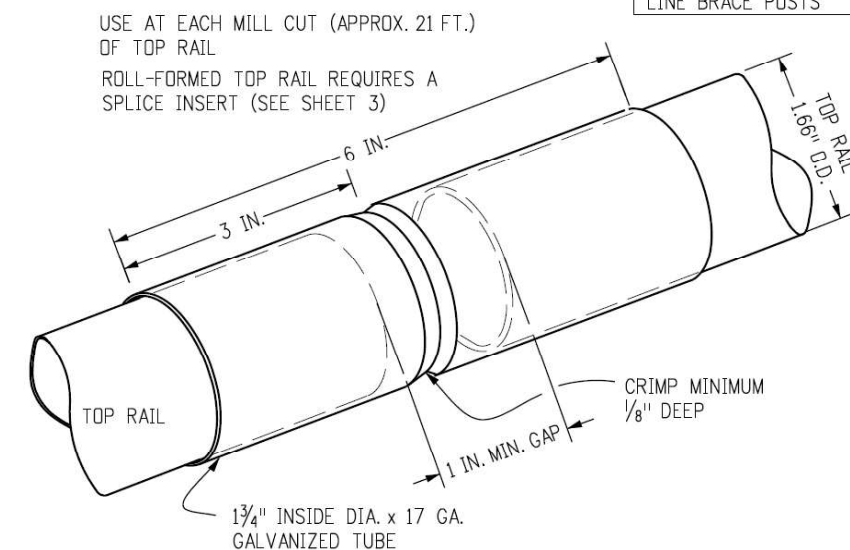
**POST TOPS**



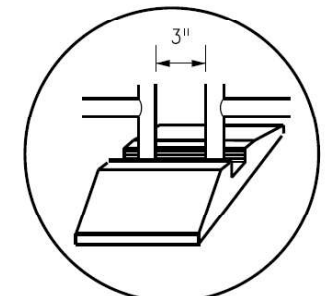
**GATE FRAMES & HINGE**



**BANDS, RAIL ENDS & TIGHTENERS** (DIMENSIONS SHOWN ARE MINIMUMS)



**RAIL SPLICE**



**DETAIL A TYPICAL CENTER REST**

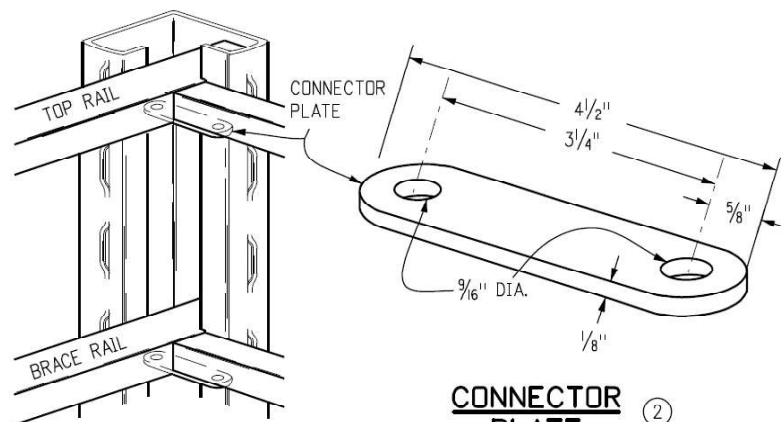
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FILE - 68J29 - 0101

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

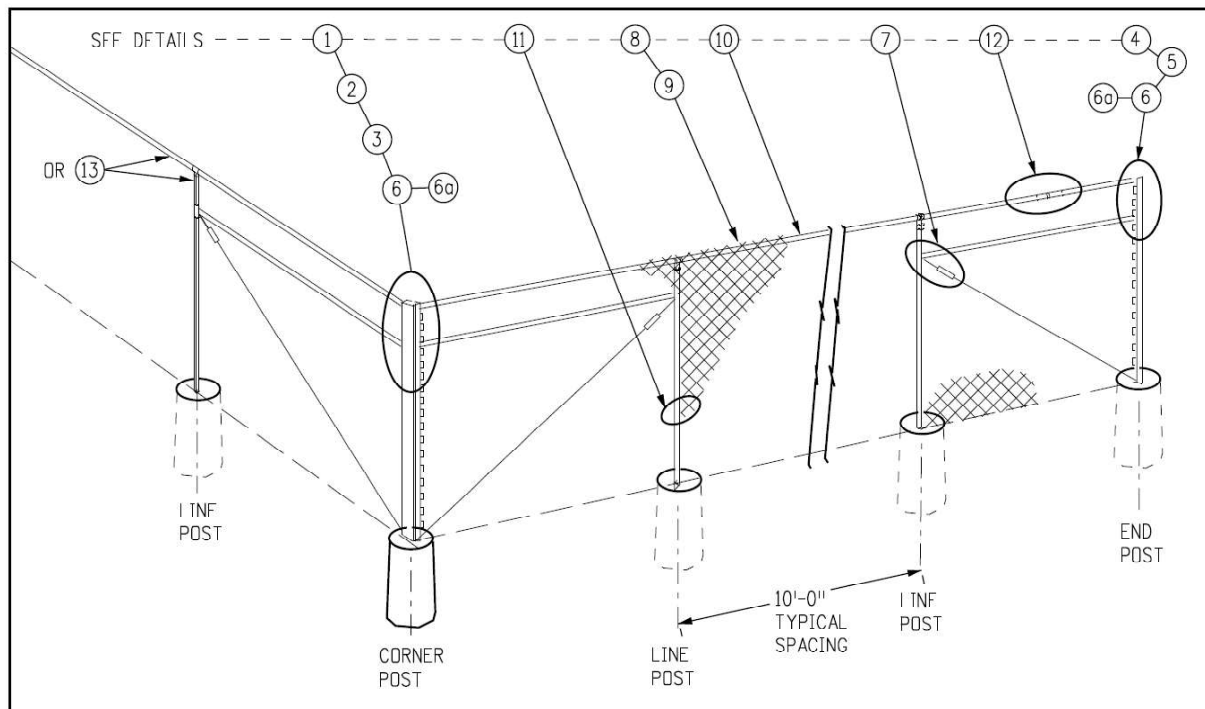
CHAIN LINK FENCE DETAILS  
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
D4 FENCE REM & REPL 2025		TAZEWELL	7	6
D4 OPS BRIDGE YARD				CONTRACT NO. 68J29
		ILLINOIS		

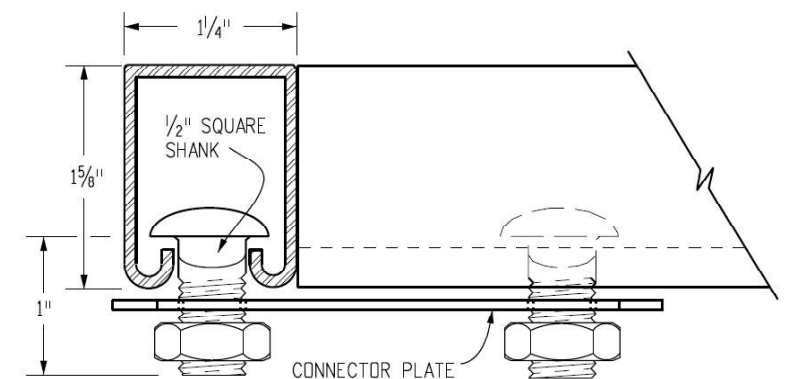


**CORNER POST TREATMENT** ①

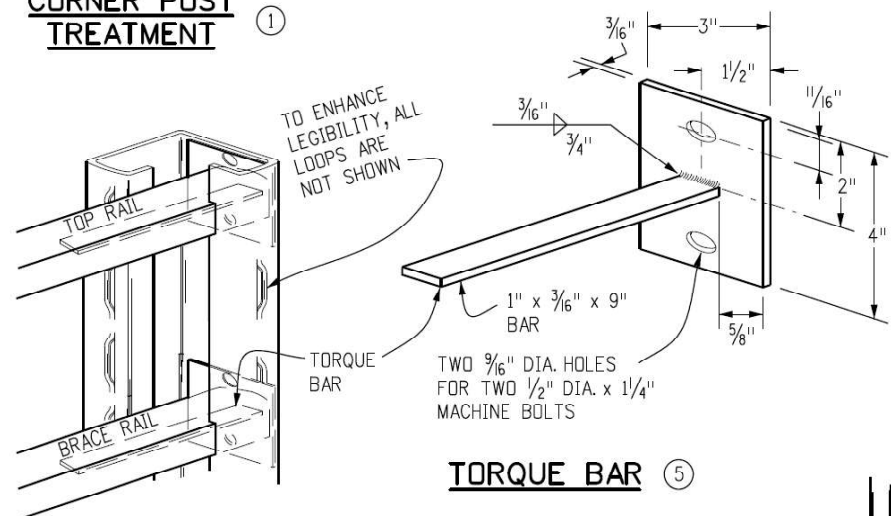
**CONNECTOR PLATE** ②



**KEY TO DETAILS**

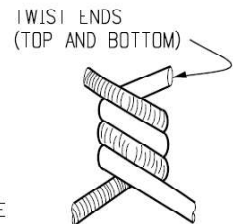


**RAIL (SHOWING CORNER ASSEMBLY)** ③  
14 GAGE ROLL-FORMED STEEL, 20 FT. LENGTHS, 1.40 LB. PER LIN. FT.

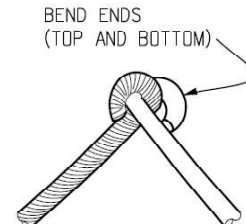


**TORQUE BAR** ⑤

**END POST TREATMENT** ④

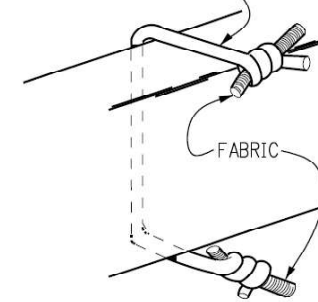


**BARBED SELVAGE** ⑧

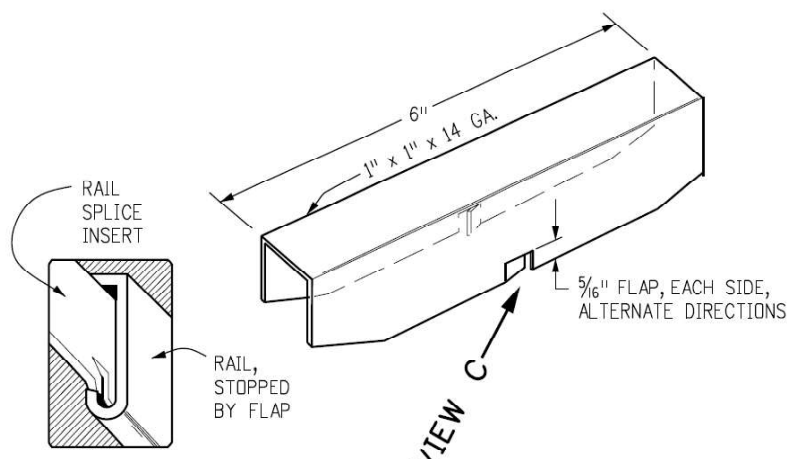


**KNUCKLED SELVAGE** ⑨  
ALTERNATIVE, USE ONLY WHEN CALLED FOR ON THE PLANS

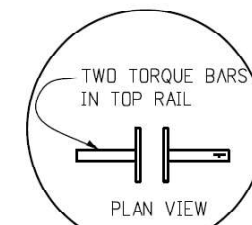
EVERY 20" HORIZONTALLY ON TOP RAIL FOR ENTIRE LENGTH OF INSTALLATION.



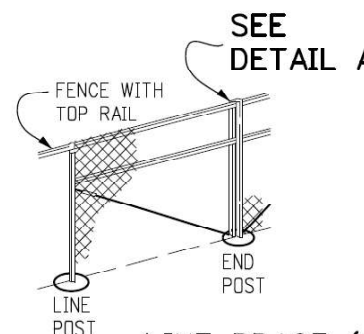
**WIRE FASTENER** ⑩



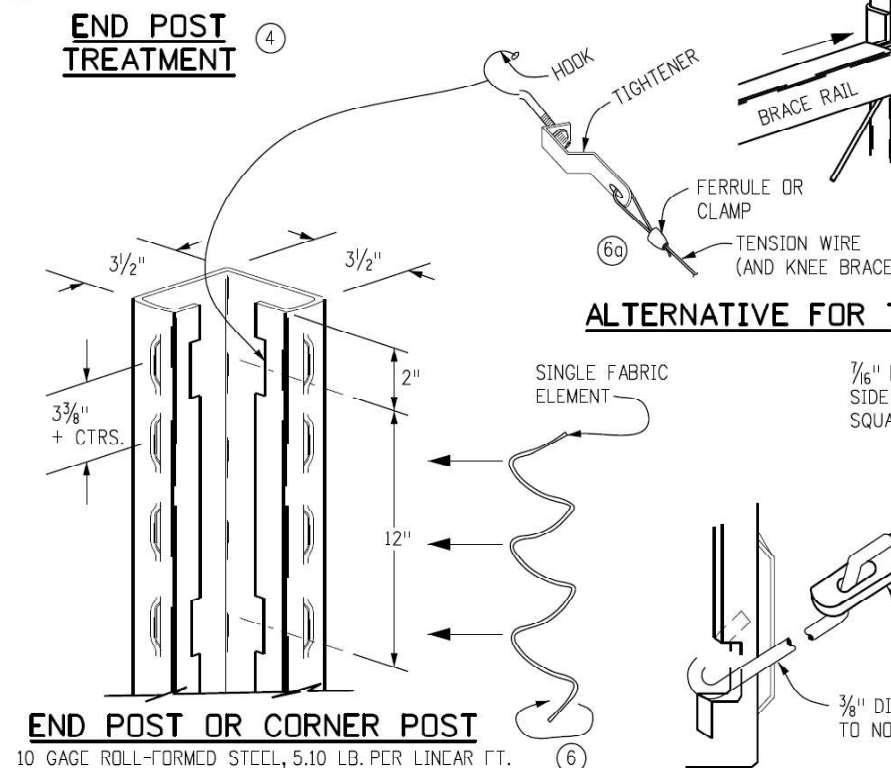
**RAIL SPLICE INSERT** ⑫



**DETAIL A**

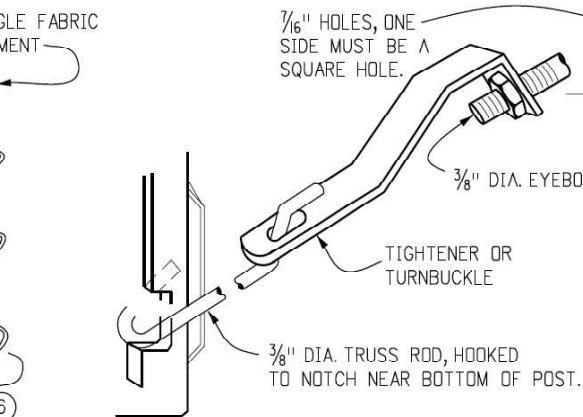


**LINE BRACE (ONE HALF SHOWN)** ⑬  
**400 FT. INTERVALS**

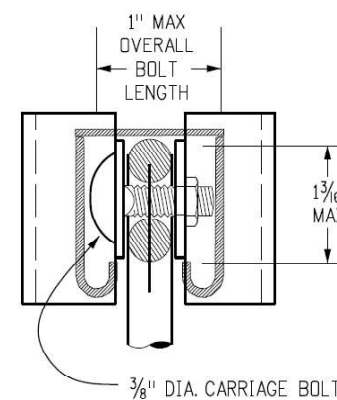


**END POST OR CORNER POST** ⑥  
10 GAGE ROLL-FORMED STEEL, 5.10 LB. PER LINEAR FT.

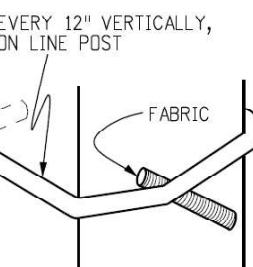
**ALTERNATIVE FOR TOP RAIL**



**TYPICAL BRACING** ⑦



**SECTION B-B**



**TIE CLIP** ⑪

MODEL - SMOGELMATES  
FILE - 68J29

USER NAME = \$USERS	DESIGNED -	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN -	REVISED -
PLOT DATE = \$DATE\$	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CHAIN LINK FENCE DETAILS

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	D4 FENCE REM & REPL 2025	TAZEWELL	7	7
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	ILLINOIS			