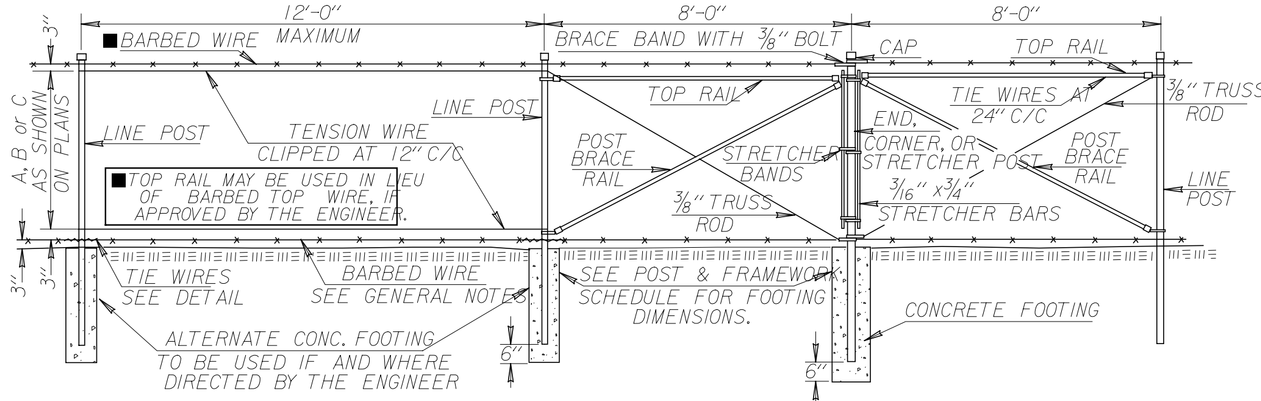
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	472-84071	2005	R5.3	

DATE	BY

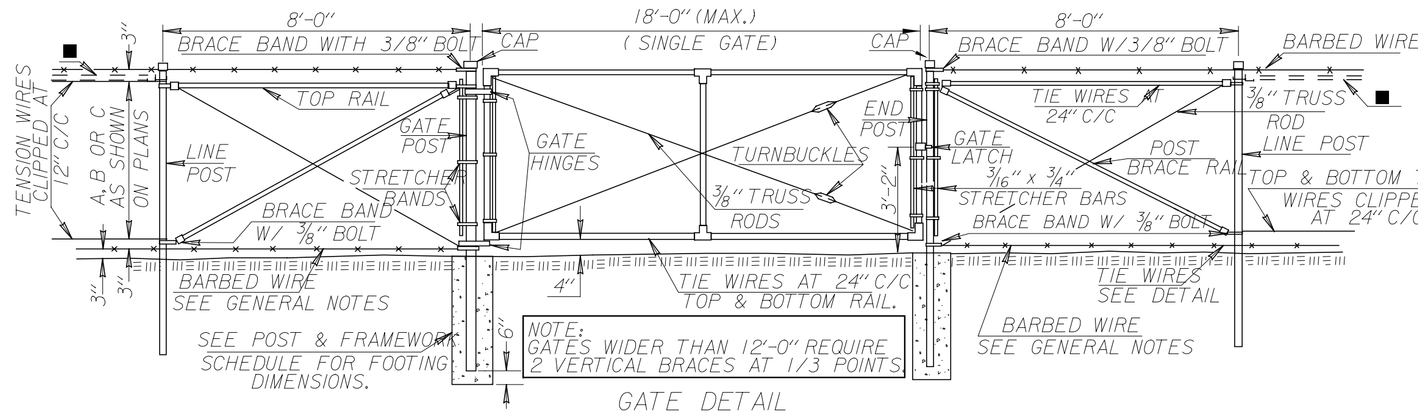


TYPICAL LINE POST DETAIL

NOTE: LINE POSTS MAY BE DRIVEN OR EARTH EMBEDDED - SEE SPECIFICATIONS

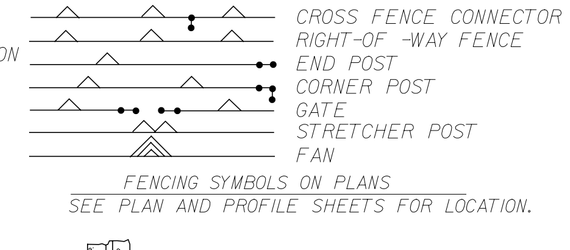
END, CORNER, & STRETCHER DETAILS

USE STRETCHER DETAILS AT ALL CORNERS, BENDS IN R/W, ON HILLTOPS IN VALLEYS OR DEEP DEPRESSIONS AND AT 500 FEET MAXIMUM SPACING - (REQUIRES CONCRETE FOOTING)

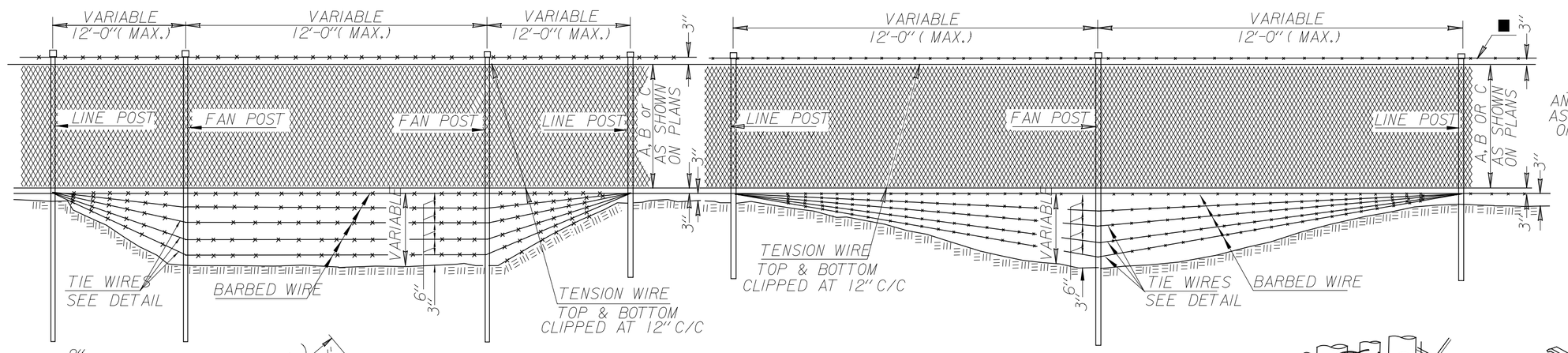


GATE DETAIL

SEE PLANS FOR SIZE AND LOCATION OF GATES. WHERE WIDTH GREATER THAN 18'-0" IS REQUIRED, USE DOUBLE SWING GATES WITH MIDDLE LATCH.

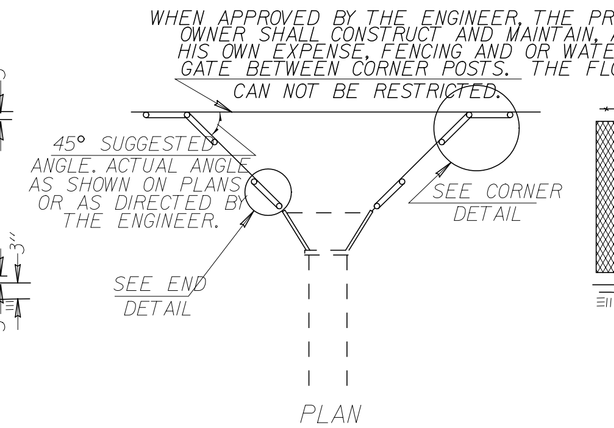


FENCING SYMBOL THIS SHEET

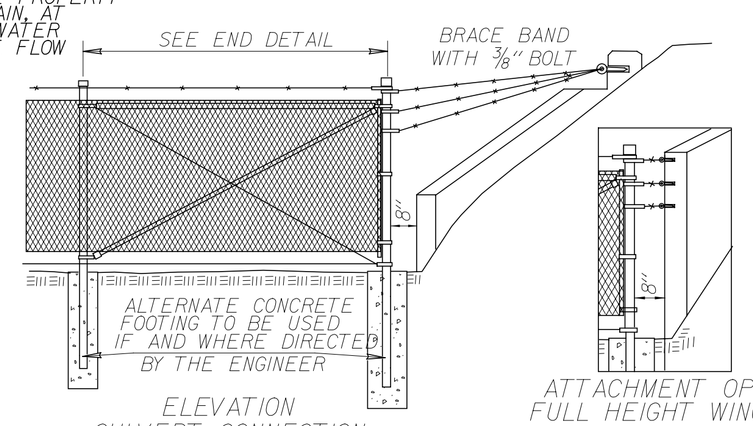


FAN DETAILS

SEE PLANS FOR APPROX. LOCATION OF FANS.



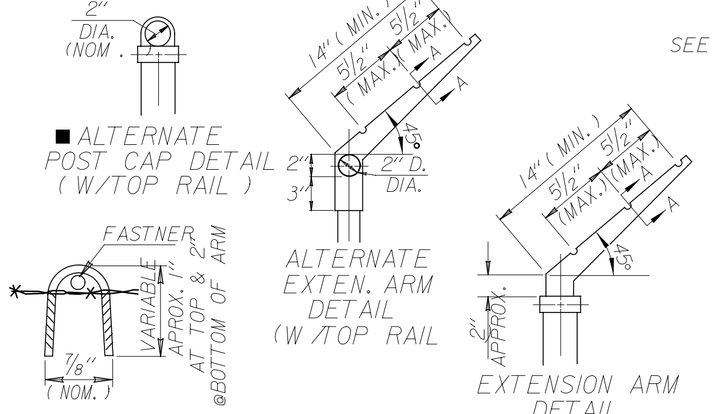
PLAN

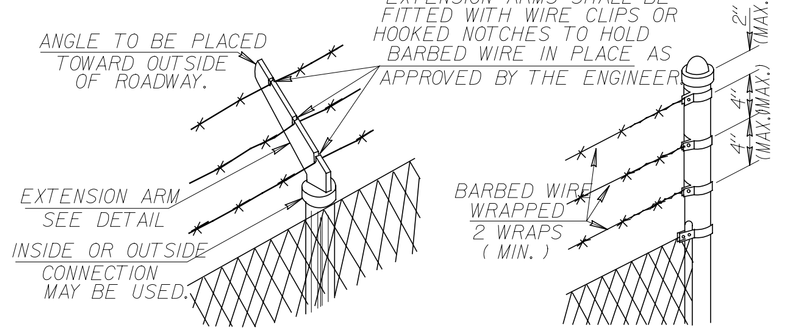


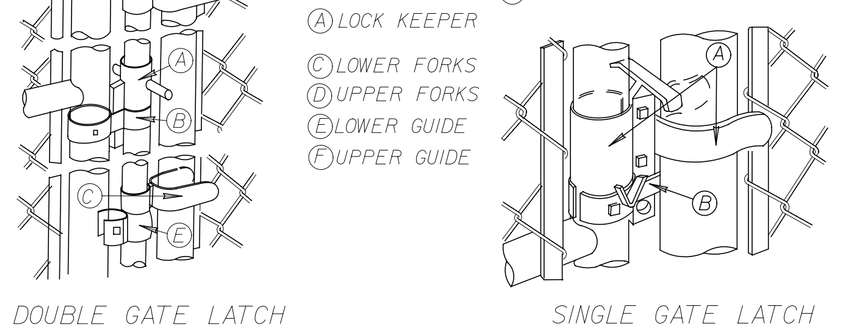
ELEVATION
CULVERT CONNECTION

ATTACHMENT OPTION
FULL HEIGHT WING/WALL

WHEN WING OR WALL HEIGHT EQUALS FENCE HEIGHT







TYPICAL GATE LATCH DETAIL

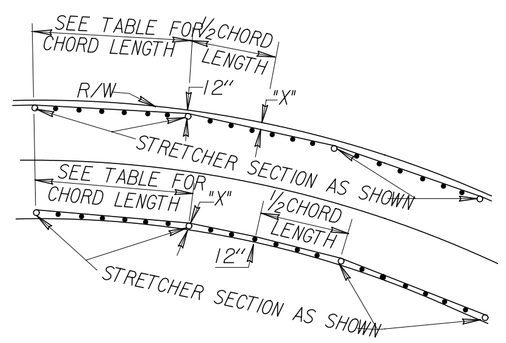
ALTERNATE TYPE LATCH MAY BE USED IF APPROVED BY THE ENGINEER.

GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE KDOT 1999 ENGLISH STANDARD SPECIFICATIONS.
2. COST OF BARBED WIRE AND EXTRA LENGTH POSTS FOR FAN TO BE INCLUDED IN PRICE BID FOR CHAIN LINK FENCE.
3. THE BOTTOM BARBED WIRE MAY BE OMITTED AND FABRIC INSTALLED 1" CLEAR FROM GROUND LINE IN LOCATIONS APPROVED BY THE ENGINEER.
4. ALL MISCELLANEOUS HARDWARE SHALL BE FURNISHED GALVANIZED OR ALUMINUM ALLOY.
5. CLIMB BARRIER SHOWN INTENDED ONLY TO SHOW AN ACCEPTABLE TYPE. ALTERNATE CLIMB BARRIERS APPROVED BY THE ENGINEER PRIOR TO INSTALLATION MAY BE USED. FENCE POST EXTENSION ARM SHALL BE MADE OF PRESSED STEEL OR MALLEABLE IRON AND SHALL BE GALVANIZED AFTER FABRICATION.
6. CHAIN LINK FABRIC MAY BE ACCEPTED KNUCKLED BOTH SELVAGES IN ALL WIDTHS. NO FABRIC WITH TWISTS AND BARBS ON BOTH SELVAGES WILL BE ACCEPTED.
7. STRETCHER POSTS TO BE USED IN GENERAL AT HILL TOPS AND AT BOTTOM OF VALLEYS AND AT A MAXIMUM OF 6" APART.
8. ALL POSTS WITH THE EXCEPTION OF LINE POSTS, FAN POSTS AND HEADWALL CONNECTION STRETCHER POSTS SHALL BE EMBEDDED IN CONCRETE WHEN FENCE IS BEING ERECTED ON EARTHEN FOUNDATIONS. OTHER POSTS MAY BE EMBEDDED IN CONCRETE IF AND AS DIRECTED BY THE ENGINEER TO SATISFY SPECIFIC FOOTING REQUIREMENTS.

POST & FRAMEWORK SCHEDULE

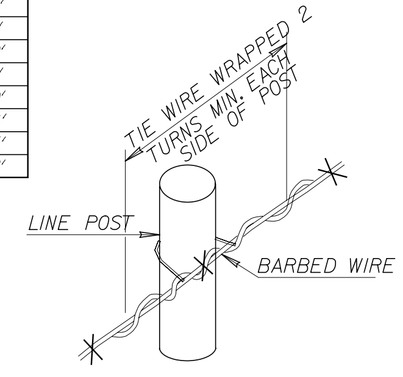
	LINE POST				END, CORNER, OR STRETCHER POSTS		GATE POSTS●			TOP RAIL OR POST BRACE RAIL		GATE FRAMES		
							6' WIDE OR LESS	OVER 6' TO 12' WIDE	OVER 12' TO 18' WIDE			GATES UP TO 6' WIDE	GATES OVER 6' TO 12'	GATES OVER 12' TO 18'
SHAPE	○	C	C	I	○	◺▲	○	○	○	○	▯		○	○
NOMENCLATURE	1.9" PIPE	ROLL FORMED HEAVY "C"	ROLL FORMED STAND. "C"	"H" RAIL	2" PIPE	ROLL FORMED	2.5" PIPE	3.5" PIPE	5.0" PIPE	1¼" PIPE	ROLL FORMED	1¼" PIPE	1½" PIPE	1½" PIPE
DIMENSIONS	1.9" O.D. 1.6" I.D. 0.145" THK	2.25" x 1.7" 0.121" THK	1.875" x 1.625" 0.105" THK	2.25" x 1.7" 0.125" THK	2.38" O.D. 2.07" I.D. 0.154" THK	3.5" x 3.5" 0.128" THK	2.88" O.D. 2.47" I.D. 0.203" THK	4.0" O.D. 3.55" I.D. 0.226" THK	5.563" O.D. 5.047" I.D. 0.258" THK	1.66" O.D. 1.44" I.D. 0.11" THK	1.625" x 1.25" 0.075" THK	1.66" O.D. 1.44" I.D. 0.11" THK	1.9" O.D. 1.67" I.D. 0.114" THK	1.9" O.D. 1.61" I.D. 0.145" THK
CRITICAL AXIS SEC. MODULUS	.326 IN.³	.506 IN.³	.368 IN.³	.661 IN.³	.561 IN.³	1.00 IN.³	1.06 IN.³	2.39 IN.³	5.45 IN.³ ▼	◐ 0.195 IN.³	0.165 IN.³	◐ 0.195 IN.³	◐ 0.270 IN.³	▼ 0.326 IN.³
WEIGHT	2.72 LBS./LIN. FT.	2.64 LBS./LIN. FT.	1.85 LBS./LIN. FT.	3.26 LBS./LIN. FT.	3.65 LBS./LIN. FT.	4.85 LBS./LIN. FT.	5.79 LBS./LIN. FT.	9.11 LBS./LIN. FT.	14.62 LBS./LIN. FT.	1.81 LBS./LIN. FT.	1.35 LBS./LIN. FT.	1.81 LBS./LIN. FT.	2.17 LBS./LIN. FT.	2.72 LBS./LIN. FT.
LENGTH FOR GIVEN FENCE FAB.	4	6'-10" W/CONC. FOOTING; 7'- 4" WHEN DRIVEN.			7'-4" W/CONC. FOOTING				7'-10"					
	5	8'- 1" W/CONC. FOOTING; 8'- 7" WHEN DRIVEN.			8'-7" W/CONC. FOOTING				9'- 1"					
	6	9'- 4" W/CONC. FOOTING; 9'-10" WHEN DRIVEN.			9'-10" W/CONC. FOOTING				10'- 4"					
EMBEDMENT FOR GIVEN FENCE FAB.	4	24" IN CONC. FOOTING; 30" WHEN DRIVEN.			30" IN CONC. FOOTING				36"					
	5	27" IN CONC. FOOTING; 33" WHEN DRIVEN.			33" IN CONC. FOOTING				39"					
	6	30" IN CONC. FOOTING; 36" WHEN DRIVEN.			36" IN CONC. FOOTING				42"					
FOOTING DIM. IN EARTH	9" DIA.				9" DIA.	14" DIA.	12" DIA.	16" DIA.	18" DIA.					
	36" DEEP													
FOOTING DIM. IN ROCK	4" DIA.				4" DIA.	6" DIA.	5" DIA.	6" DIA.	8" DIA.					
	9" DEEP				9" DIA.	16" DIA.	12" DIA.	16" DIA.	24" DIA.					



TYPICAL PLACEMENT FOR CURVES

SPACING FROM R/W FENCE	
DEGREE	"X"
1°00'	1.20'
2°00'	1.40'
3°00'	1.60'
4°00'	1.31'
5°00'	1.39'
6°00'	1.47'
7°00'	1.20'
8°00'	1.23'
9°00'	1.25'
10°00'	1.28'

SPACING FOR STRETCHER SECTION	
UP TO 1°00' CURVE	STD. FENCE
1°00' TO 3°00'	96' CHORDS
3°00' TO 6°00'	60' CHORDS
OVER 6°00'	36' CHORDS



TIE WIRE DETAIL

- MAXIMUM WIDTH OF SINGLE SWING GATE TO BE 18'-0" (MAX.) OPENING MAY BE UP TO 36'-0" WIDE.
- DIAMETERS AS SHOWN ARE MINIMUM VALUES. DEPTHS FOR ROCK ARE MINIMUMS. DEPTHS SHOWN FOR CONCRETE FOOTINGS IN EARTH ARE MINIMUM FOR 6'-0" HIGH FENCE AND MAY BE REDUCED 3" FOR EACH FOOT OF FENCE HEIGHT LESS THAN 6'-0" HIGH.
- ▲ WIRE FABRIC TO BE WOVEN INTO LOCK LOOPS FOR THE ENTIRE WIDTH OF THE FABRIC.
- ▼ SECTION MODULUS AS SHOWN IS BASED UPON ASTM A53 AND AASHTO M 181. SEE SPECIFICATIONS FOR SUBSTITUTION FORMULA ON CLASS 2 COLD FORMED STEEL PIPE.
- ◐ SECTION MODULUS AS SHOWN IS BASED UPON ASTM A 501 AND AASHTO M 181. SEE SPECIFICATIONS FOR SUBSTITUTION FORMULA ON CLASS 2 COLD FORMED STEEL PIPE.

BASIS OF PAYMENT

ITEM NO.	ITEM	UNIT
624.06(D)	FENCE-STYLE CLF (◨ in HIGH-CLASS ⬓	L.F.
624.06(E)	GATES-STYLE CLF (◨ in HIGH-CLASS ⬓	EA.
932.16	TOP RAIL	L.F.

■ WHEN TOP RAIL IS USED IN LIEU OF BARBED TOP WIRE THE COST OF TOP RAIL SHALL BE INCLUDED IN THE PRICE BID FOR FENCE. WHEN TOP RAIL ONLY ( ) IS ADDED AS A RETROFIT ITEM, THE COST OF TOP RAIL, INCLUDING ALL HARDWARE FOR INSTALLATION, SHALL BE PAID FOR AS TOP RAIL, BY THE LINEAR FOOT, AS INSTALLED.

◨ HEIGHT OF FENCE OR GATE SHALL BE SPECIFIED.

⬓ CLASS A DESIGNATES FENCE OR GATE WITHOUT CLIMB BARRIER
CLASS B DESIGNATES FENCE OR GATE WITH CLIMB BARRIER

This sheet designed by:

HNTB
ARCHITECTS ENGINEERS PLANNERS

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

CITY OF WICHITA

WICHITA CENTRAL CORRIDOR

SECURITY FENCE DETAIL

SHEET NO. OF	SCALE	APP'D	
DESIGNED	DETAILED	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK.

Plotted on: Tuesday, January 04, 2005 8:12:36 AM
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