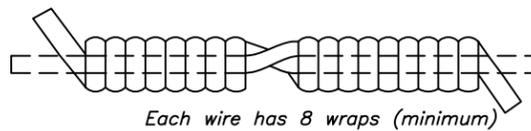


Revised groundline (minimum excavation, 12 ft. bottom width and 3:1 side slopes) to obtain 4 foot depth of water as shown.



FULL "WESTERN UNION" SPLICE

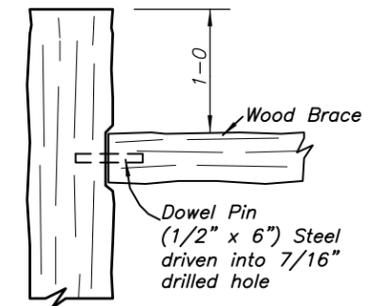
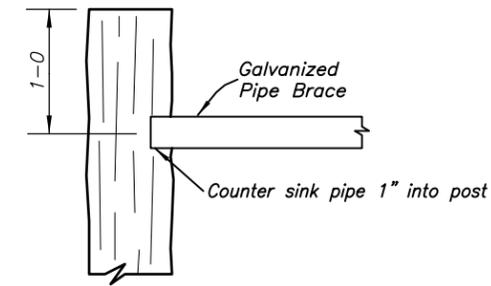
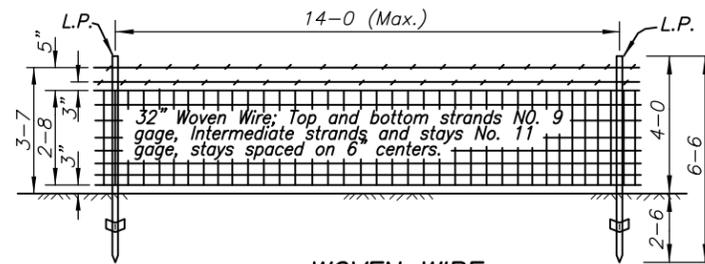
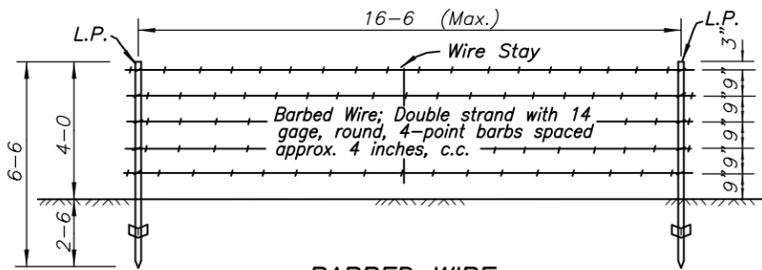
NOTES:

- Cattle panels shall be tied loosely to each post with 2 loops of 10 gage insulated copper wire near top, center and bottom of cattle panel. Insulation can be type THHN or THWN.
- Trim to fit panel extending into water to obtain proper fit.
- Cattle panels shall be 1/4" diameter galvanized steel rods welded together to form a wire mesh panel 52 inches high by 16 feet long. Maximum spacing of rods shall be 6 inches vertical and 8 inches horizontal.
- End Detail Post shall be of sufficient length to extend 5 feet above revised groundline.

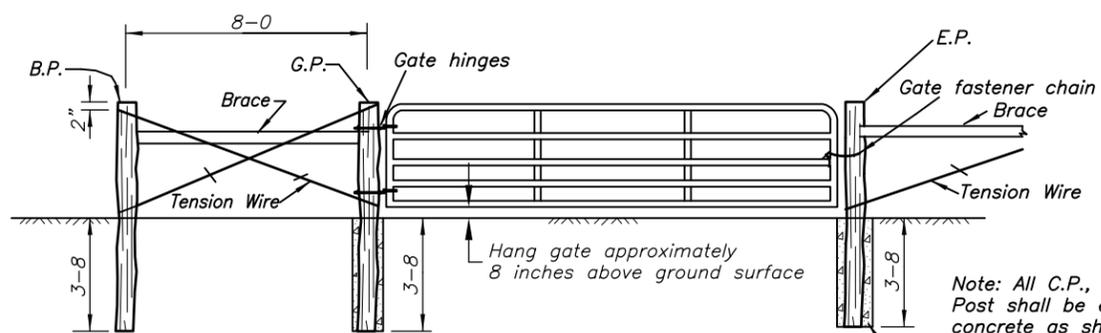
NOTES:

- Special Anchors**
Line post subject to upward pull shall be anchored by 4" of high slump concrete placed around the post to a depth of 2'-6", bolting a pressure treated 2" x 4" x 2'-0" cross piece near bottom of post with a 3/8" x 8" bolt or approved screw anchor.
- Steel Line Post**
Steel line post shall be T-Section with nominal weight of 1.33 lb/ft and shall be painted.
- Gates**
When specified, tubular steel gates shall be used. Tubular steel gates shall be minimum 48 inches high with minimum of 5 horizontal bars. Spacing of vertical braces shall not exceed 8 feet. Tubular steel gates shall be welded at all joints and constructed of 2 inch diameter 16 gage steel tubing.
- All metal parts shall be galvanized, cadmium coated or have two coats of Zinc Dust-Zinc Oxide Primer except Tubular steel gates which shall be painted as recommended by the manufacturer.
- The fencing wire shall be fastened to each end post, corner post, gate post and pull post by a continuous wrap completely around post and tied back to itself with three (3) tightly wound wraps.
- Tension wires shall be 4 strands of No. 9 Galvanized or cadmium coated smooth wire. Wire shall be secured at both post by stapling with a minimum of three staples. Wires shall be twisted with a 1 1/4" galvanized pipe tightener at least 18" long until assembly is rigid. The pipe shall be left in position and fastened to brace.
- Gate fastener chain shall be of sufficient length to encircle end posts. Chain shall be of size recommended by gate manufacturer.
- All galvanized pipe shall be galvanized steel standard weight conforming to ASTM A53 or equivalent.
Pipe Brace and Tightener Pipe - 1 1/4" NPS
End Detail Post - 2" NPS
- If wood brace is used, it shall be nominal 4" square or 5" diameter.

BILL OF MATERIALS		
Item	Size	Length
End Post (E.P.), Gate Post (G.P.)	6" (Min. Diam)	8-0 (Min.)
Corner Post (C.P.)		
Brace Post (B.P.)		
Line Post (L.P.)	Steel	See Note 2
Brace	Wood	See Note 9
	Galv. Pipe	See Note 8
Dowel Pins-Steel	1/2" Diam.	0-6
Woven Wire-Galvanized	832-6-11	
Barbed Wire-Galvanized	12 1/2 Gage	
Staples	9 Gage	
Tension Wire-Galvanized	9 Gage	
Wire Stays-Galvanized	9 1/2 Gage	3-6 (Min.)
End Detail-Galvanized	See Note 8	10-0 (Min.)
Cattle Panels	See Notes a, b & c	16-0
End Detail Post	See Note 8	See Note d



FENCE ELEVATION

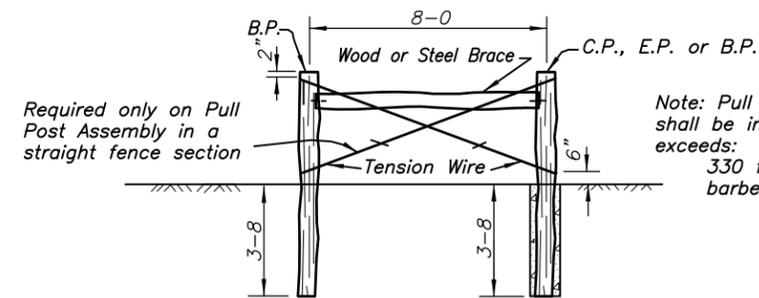


Note: All C.P., G.P. and E.P. and End Detail Post shall be embedded in high slump concrete as shown. Furnishing and installation of concrete is subsidiary to the item "Fence".

Min. 3" Concrete

Note:

At contractor's option Brace Post may be set in concrete as shown for C.P., E.P. or B.P.



Required only on Pull Post Assembly in a straight fence section

Note: Pull Post Assembly (minus the concrete) shall be installed when a straight fence section exceeds:
330 feet for woven wire and 660 feet for barbed wire.

DETAIL - HEAVY DUTY FENCE

Date

Designed _____
Drawn _____
Checked _____
Approved _____

United States Department of Agriculture
Natural Resources Conservation Service



File Name

Drawing Name
29-N-501

Sheet of

DRAFT
NOT FOR
CONSTRUCTION