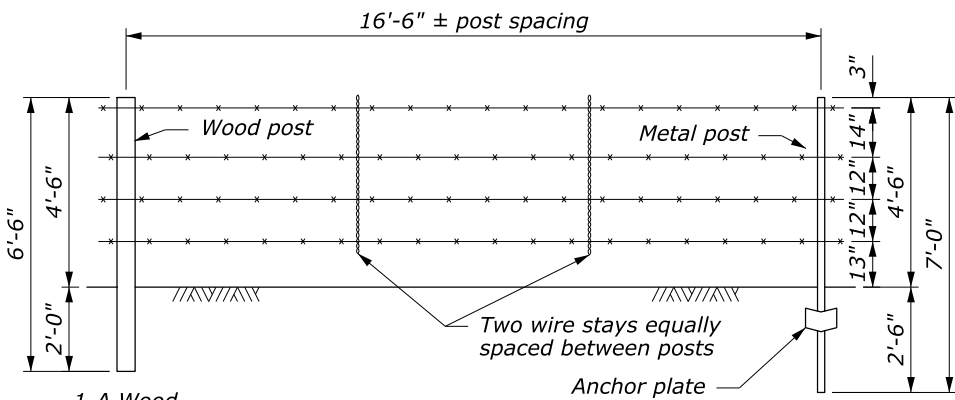
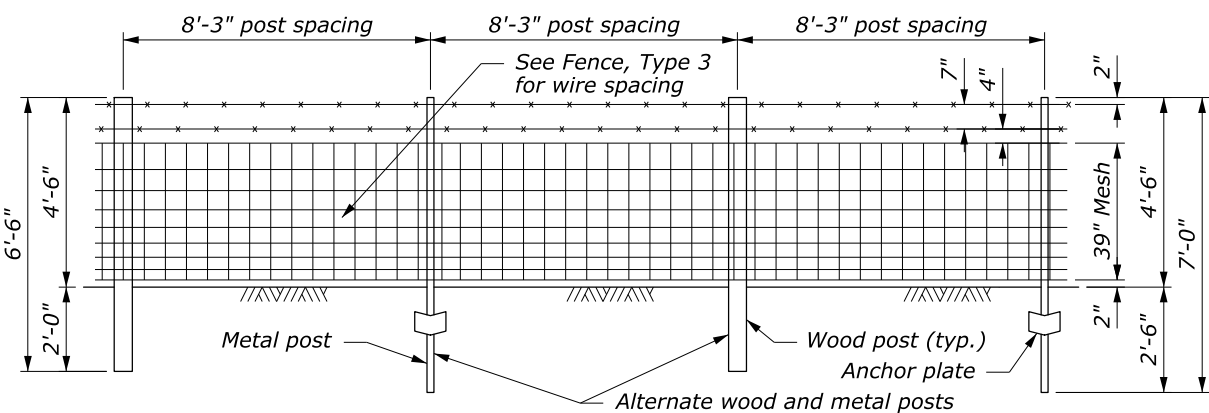


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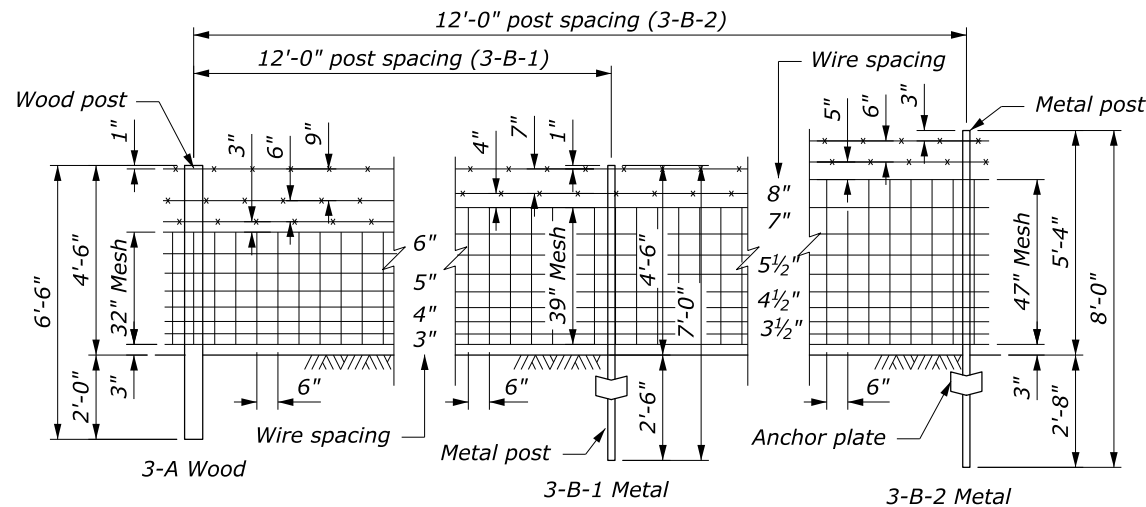
STATE	PROJECT	SHEET NUMBER



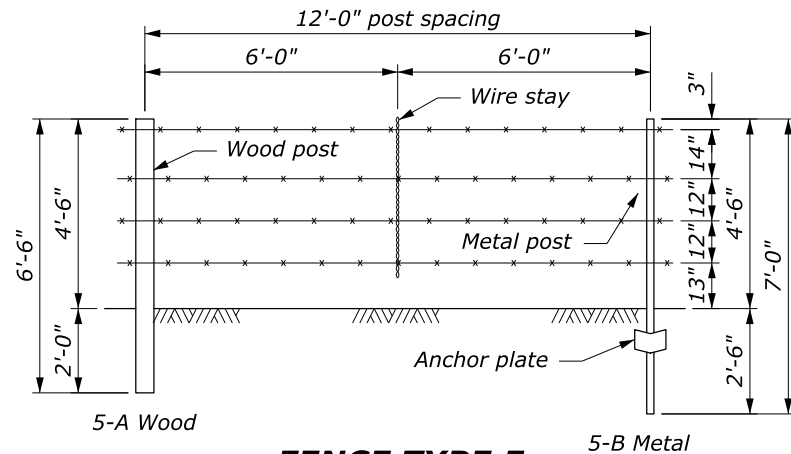
**FENCE TYPE 1**



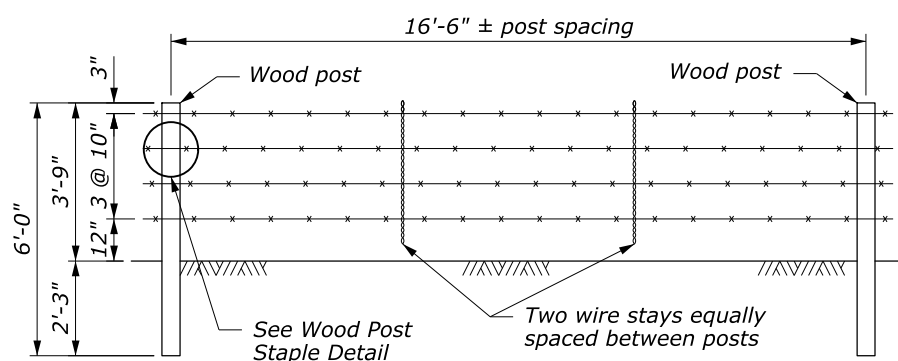
**FENCE TYPE 2**



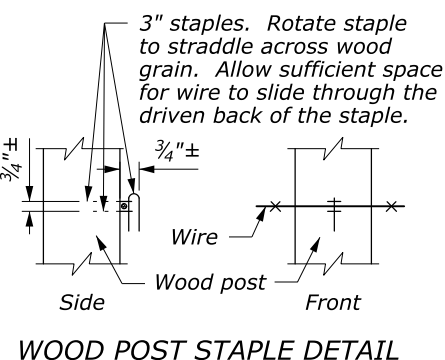
**FENCE TYPE 3**



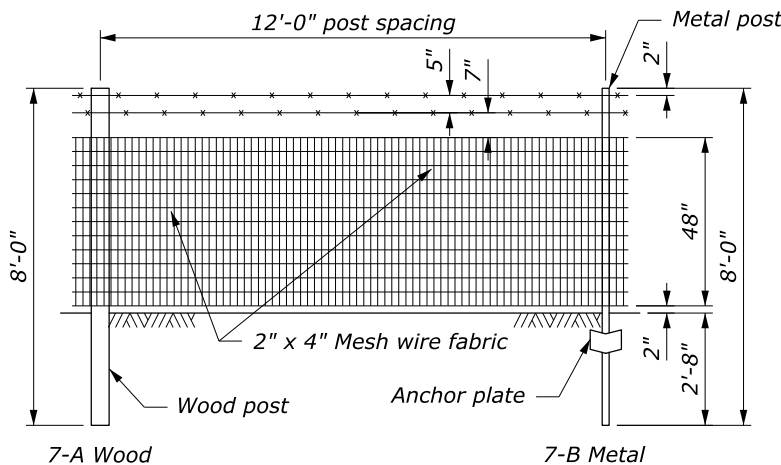
**FENCE TYPE 5**



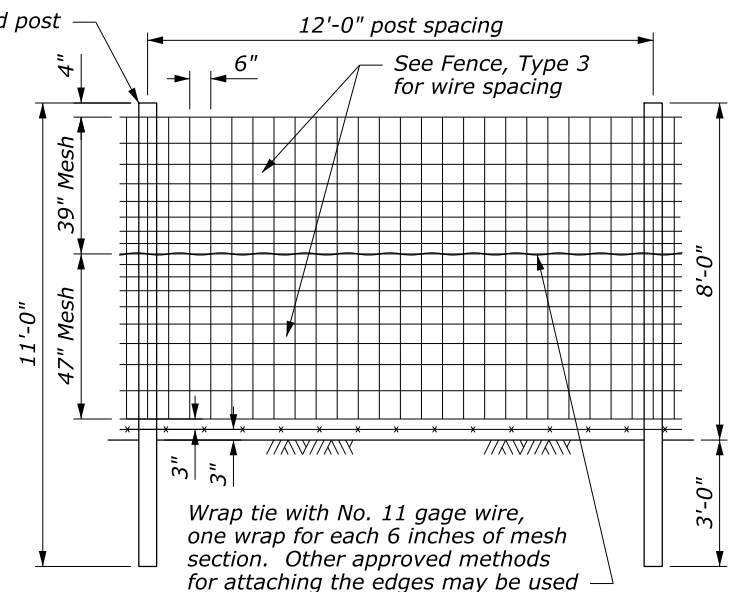
**DROP FENCE TYPE 6**



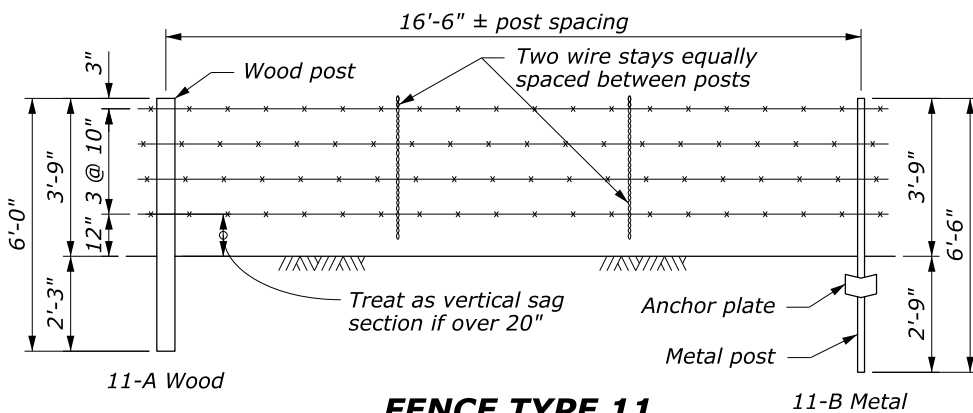
**WOOD POST STAPLE DETAIL**



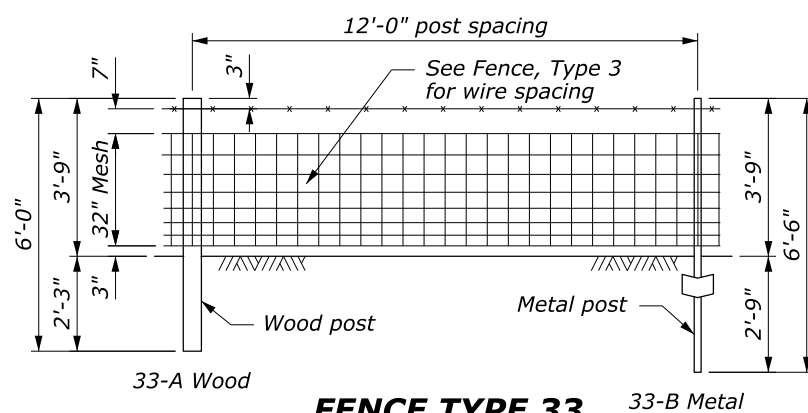
**FENCE TYPE 7**



**DEER-PROOF FENCE TYPE 8**



**FENCE TYPE 11**



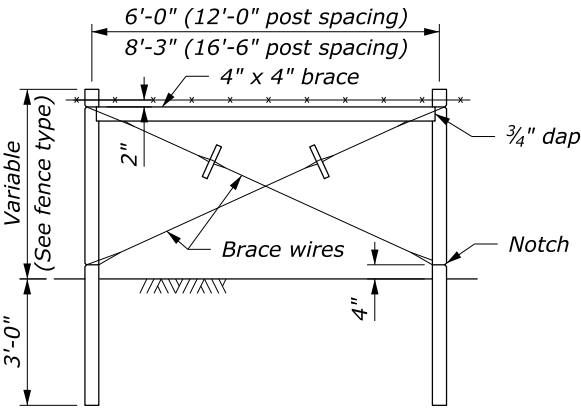
**FENCE TYPE 33**

NO SCALE

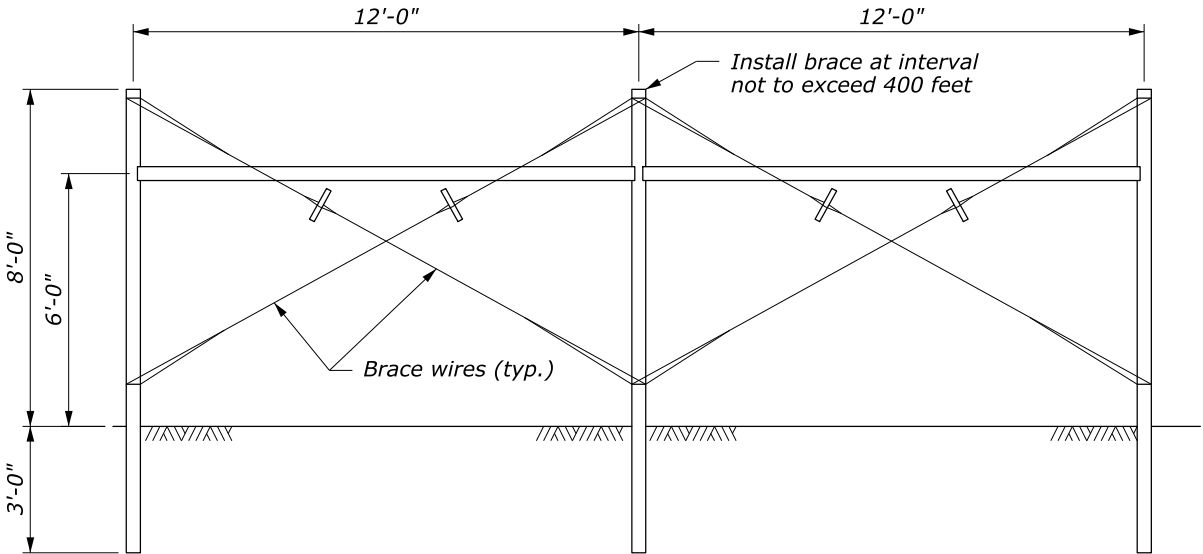
**NOTE:**

1. Furnish pressure treated wood posts consisting of either Douglas Fir, Western Larch, Cedar, or Pine of any species. Provide line posts having a minimum 10-inch post circumference and a 3-inch minimum distance between opposite faces or between any face and an opposite corner. Provide minimum 17.5-inch circumference posts for corner, terminal, or braces; and a 4-inch minimum distance between opposite faces or between any face and an opposite corner.
2. Provide woven wire conforming to ASTM A116, except wire size and strength options are limited to the following subsections of Table 1: No. 12½ Grade 60, No. 12½ Grade 125, or 14½ Grade 125.
3. Furnish 9 gage staples with a minimum length of 1.5-inch, except that 1-inch staples may be used in locust posts. Provide 9 gage stay wires and brace wires, and 12.5 gage tie wire and wire clamps. Provide galvanized stay wire, brace wire, tie wire and wire clamps conforming to ASTM A 116.

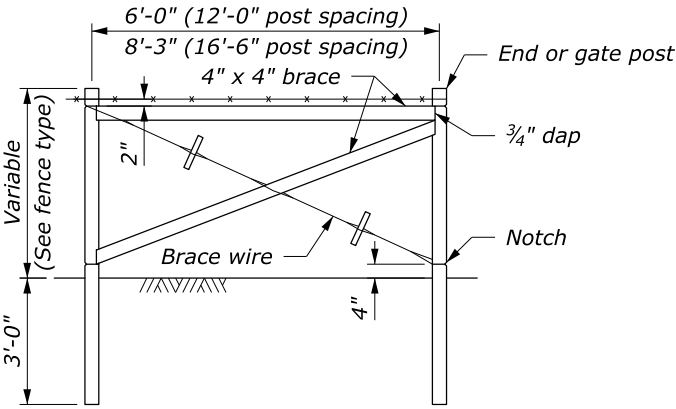
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION WESTERN FEDERAL LANDS HIGHWAY DIVISION	
U.S. CUSTOMARY DETAIL	
<b>IDAHO FENCE</b> Sheet 1 of 3	
DETAIL APPROVED FOR USE 9/2010 REVISED:	DETAIL W619-50



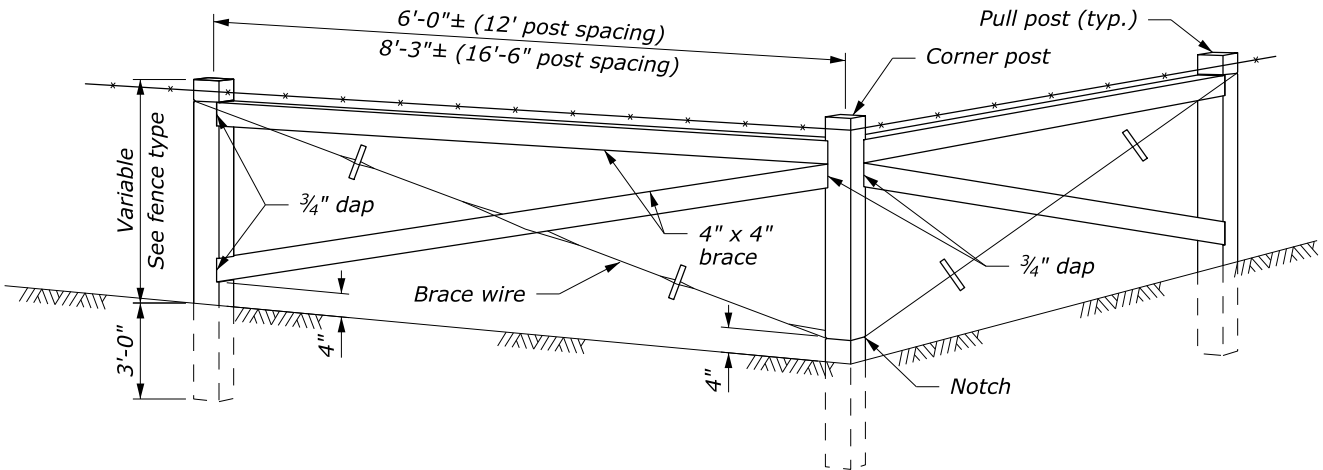
**WOOD LINE BRACE**



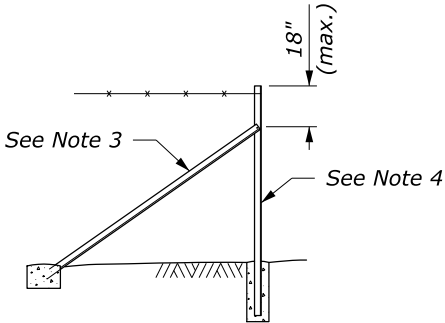
**WOOD LINE BRACE FOR TYPE 8 FENCE**



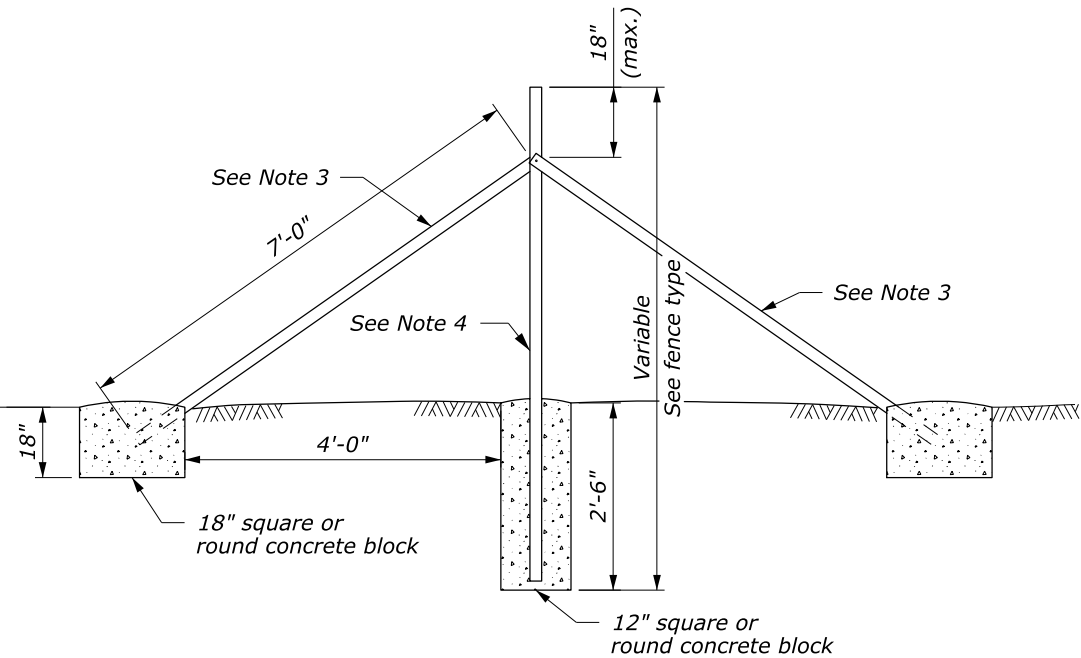
**WOOD TERMINAL BRACE**



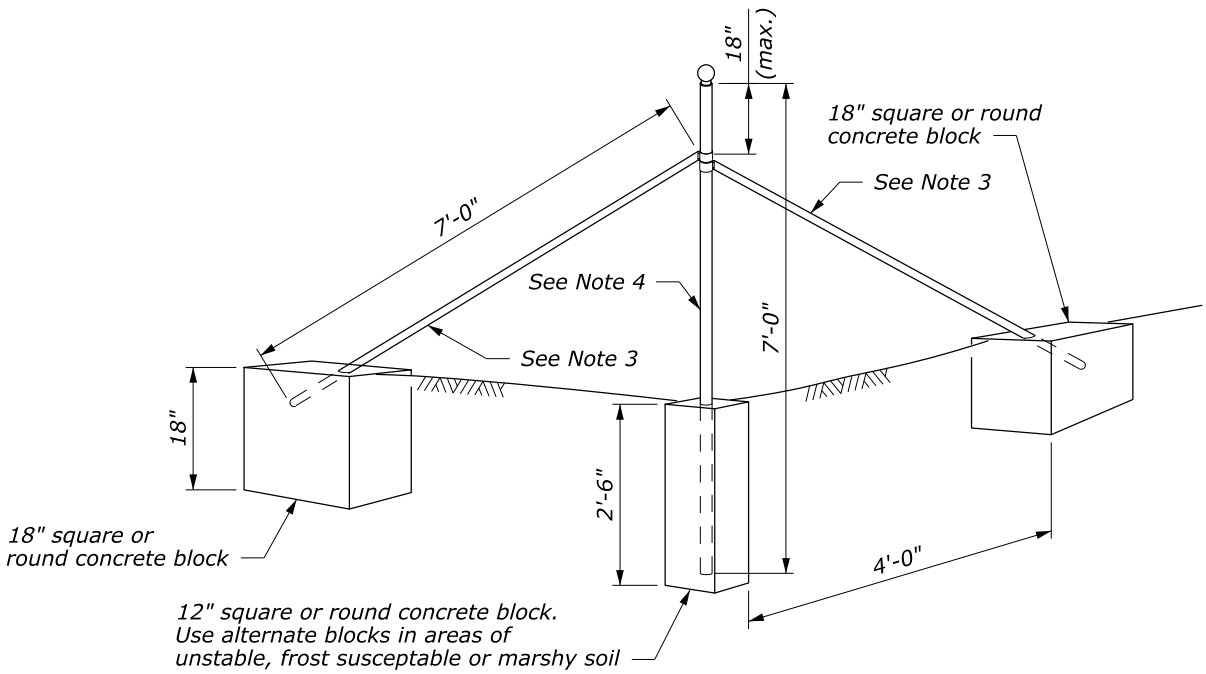
**WOOD CORNER BRACE**



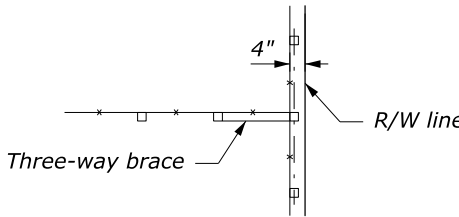
**METAL END AND GATE BRACE**



**METAL LINE BRACE**



**METAL CORNER BRACE**

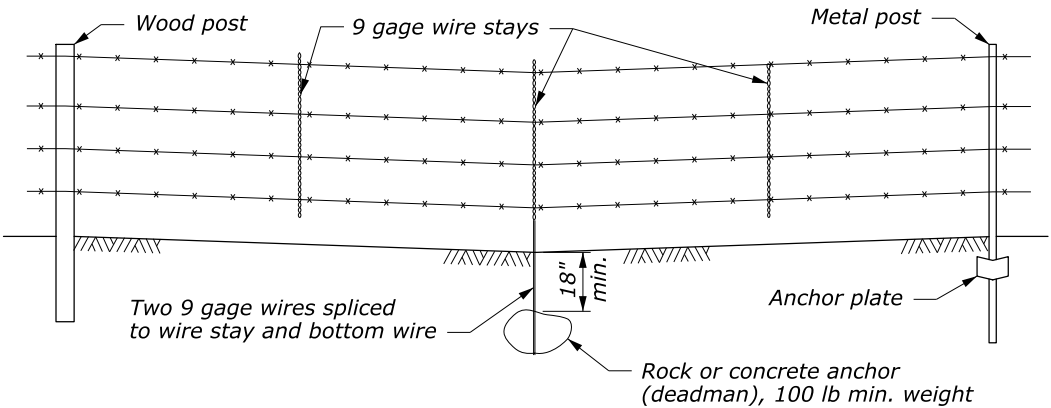


**FENCE TERMINAL**

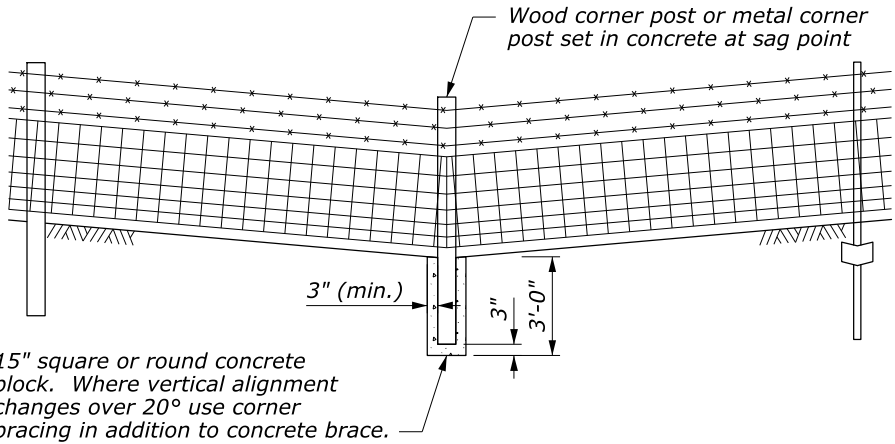
NO SCALE

**NOTE:**

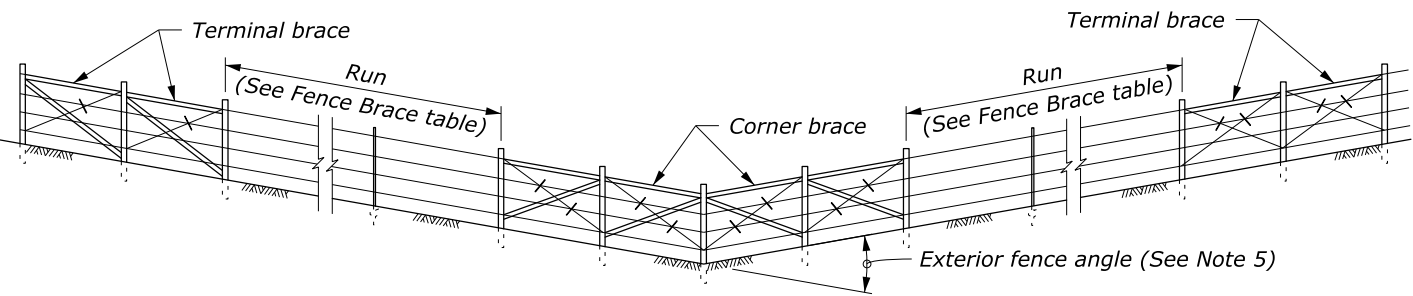
1. Furnish either painted or galvanized angles or galvanized steel round pipe posts for corner or line braces. Furnish round pipe posts with snug-fitting galvanized metal caps. Fabricate steel pipe fence posts and braces according to ASTM F 1083.
2. Connect braces to post with three 16d nails or a  $\frac{3}{8}$ " x 4" steel dowel.
3. 2" x 2" x  $\frac{1}{4}$ " angle or  $\frac{1}{4}$ " standard steel pipe brace.
4.  $2\frac{1}{2}$ " x  $2\frac{1}{2}$ " x  $\frac{1}{4}$ " or  $2\frac{1}{2}$ " inch standard steel pipe post.



TYPICAL SAG SECTION - BARBED WIRE FENCES



TYPICAL SAG SECTION FOR WOVEN WIRE, MESH OR COMBINATION FENCES

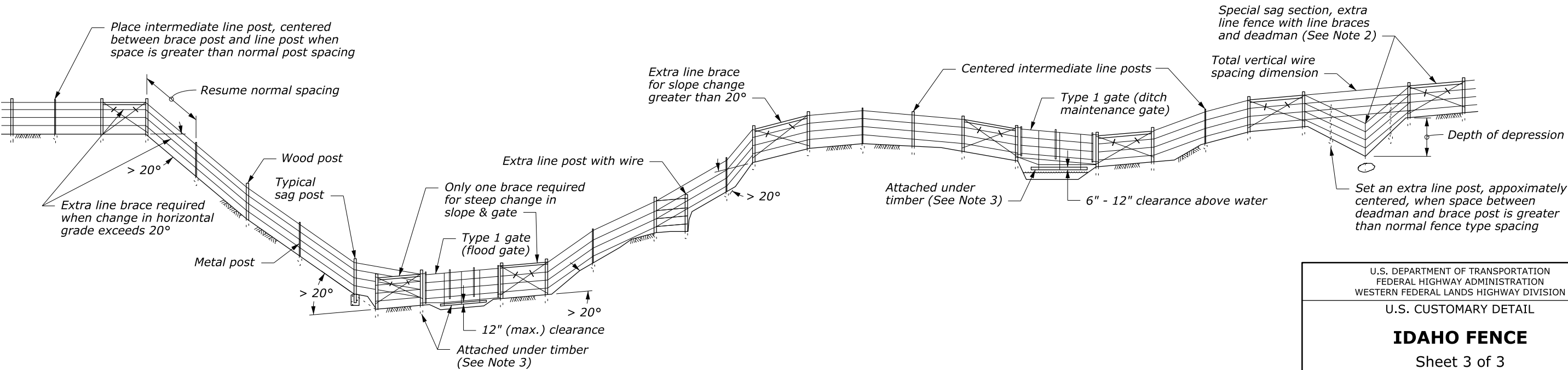


DOUBLE BRACE PANELS

FENCE BRACE TABLE			
FENCE TYPE	RUN	WOOD PANELS REQUIRED	METAL BRACES
1, 5, 6 & 11	< 66'	NONE	NONE
	66' - 660'	SINGLE	SINGLE
	660' - 990'	DOUBLE	NOT ALLOWED
8	≤ 400'	DOUBLE	NOT ALLOWED
2, 3, 7 & 33	< 33'	NONE	NONE
	33' - 330'	SINGLE	SINGLE
	330' - 660'	DOUBLE	NOT ALLOWED

NOTE:

- When a fence line approaches a ditch, gully, or depression, place the last post on level ground close enough to the edge of the drop-off that the wire may be strung to a post in the depression without touching the ground.
- When the depth of a depression on a Type 1, 5, or 11 fence exceeds the total vertical wire spacing over a maximum horizontal run of 2 spaces, construct an extra fence through the depression. Include extra line braces and a deadman in this application as shown.
- When a Type 1 gate is used in a special application as shown, include extra line braces and the attached under timber, wire, and wire stays. Wrap the horizontal wires on the under timber around the brace post (not stapled), then twice around the wire itself.
- When approved by the CO, the special applications for barbed wire fences may also be used for Types 2, 3, 7, and 33 woven wire fence. Use a Type 2 gate with these fences. Barbed wire may be used through the special areas, however the wires must match the woven wire spacing as nearly as possible. Do not attach the under timber directly to a Type 2 gate.
- When wood braces are used and the fence corner angle exceeds 30° in the exterior angle of the fence, use double panels on the corner brace. Install double panels for line and terminal braces according to the fence brace table.
- Where a fence ties into a bridge parapet or railing, do not allow the top of fence to project above the top of the parapet or railing.



SPECIAL APPLICATIONS FOR BARBED WIRE FENCES

FOR TYPE 1, 5, & 11 (See Note 4)

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
WESTERN FEDERAL LANDS HIGHWAY DIVISION

U.S. CUSTOMARY DETAIL

IDAHO FENCE

Sheet 3 of 3

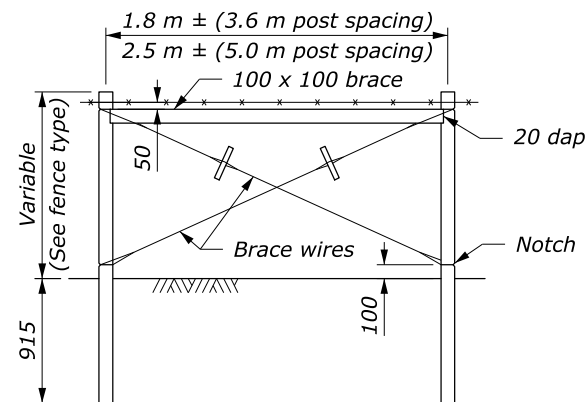
DETAIL APPROVED FOR USE 9/2010

REVISED:

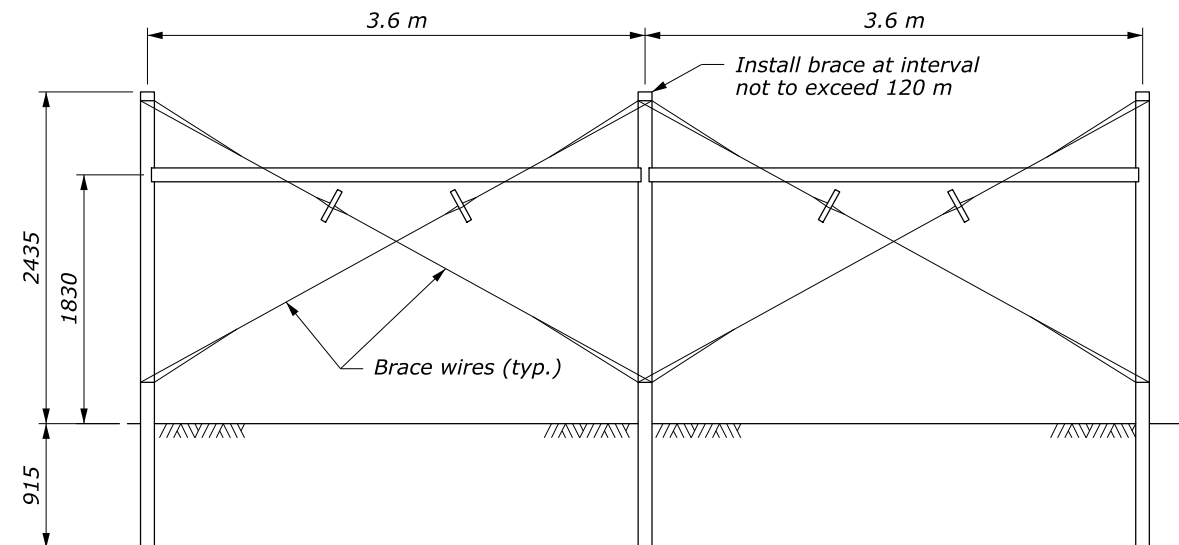
DETAIL

W619-50





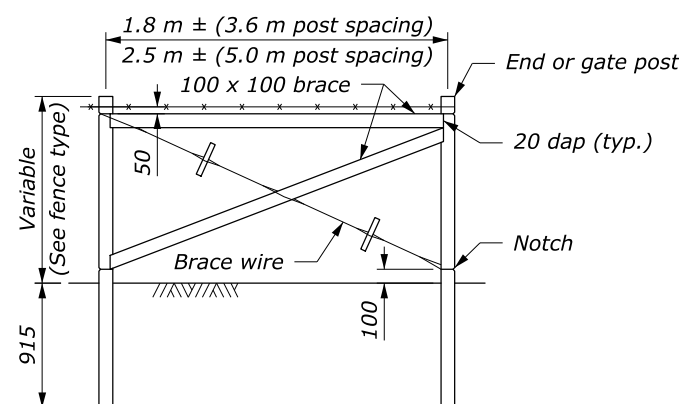
**WOOD LINE BRACE**



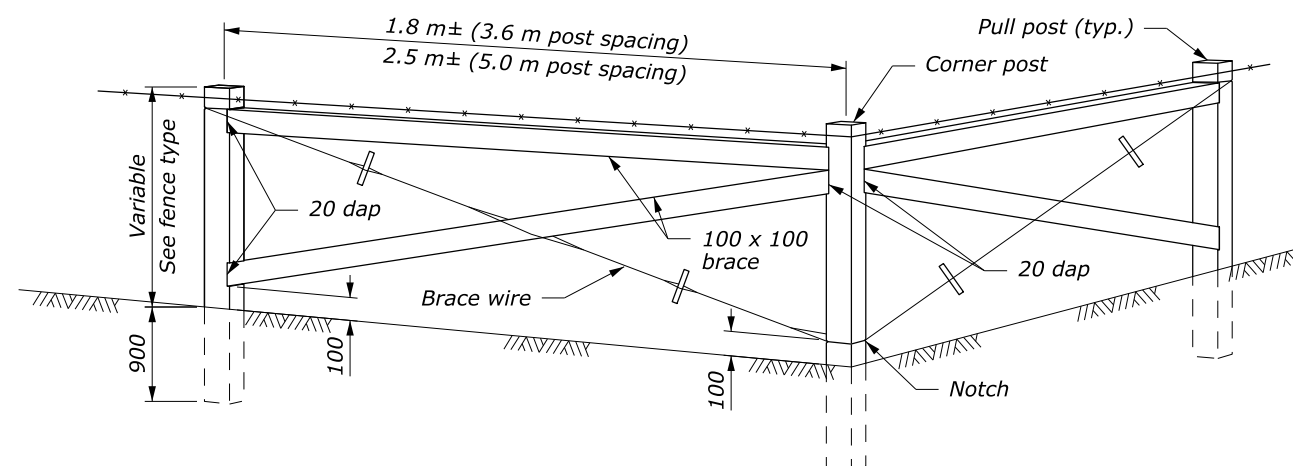
**WOOD LINE BRACE FOR TYPE 8 FENCE**

**NOTE:**

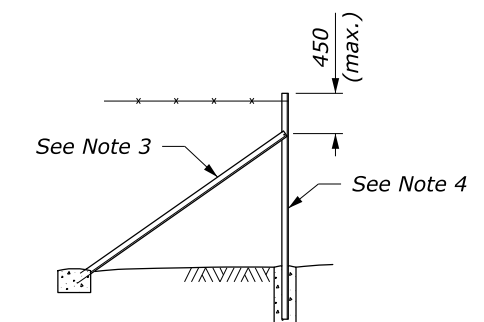
1. Furnish either painted or galvanized angles or galvanized steel round pipe posts for corner or line braces. Furnish round pipe posts with snug-fitting galvanized metal caps. Fabricate steel pipe fence posts and braces according to ASTM F 1083.
2. Connect braces to post with three 16d nails or a 9.53 x 100 mm steel dowel.
3. Provide 51 x 51 x 6.4 mm angle or 31.75 mm standard steel pipe brace.
4. Provide 64 x 64 x 6.4 mm angle or 64 mm standard steel pipe post.
5. Dimensions without units are millimeters.



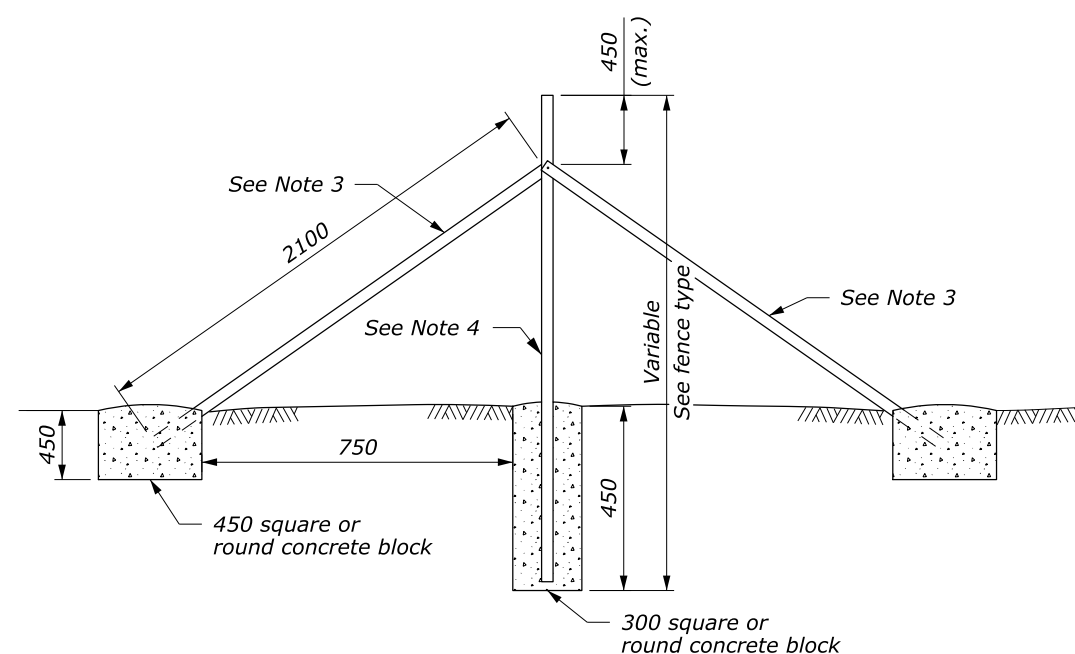
**WOOD TERMINAL BRACE**



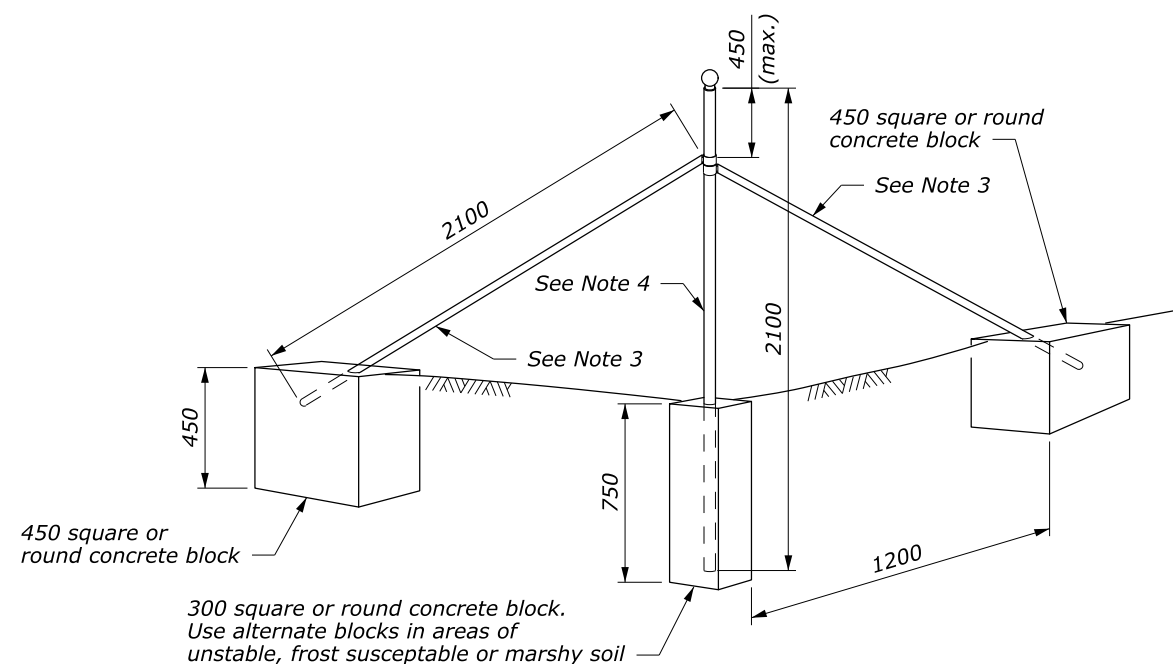
**WOOD CORNER BRACE**



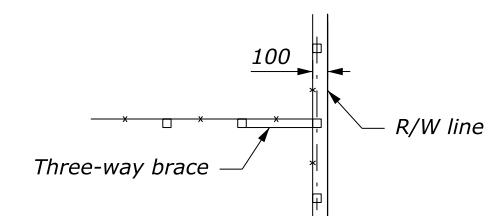
**METAL END AND GATE BRACE**



**METAL LINE BRACE**

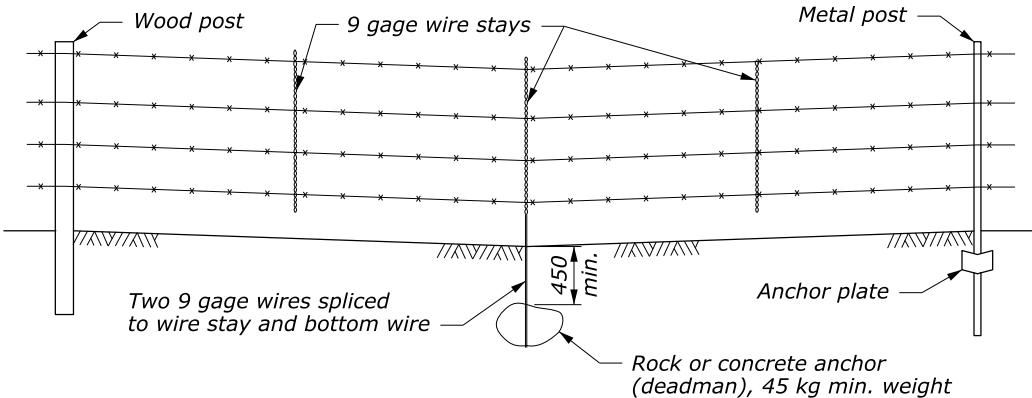


**METAL CORNER BRACE**

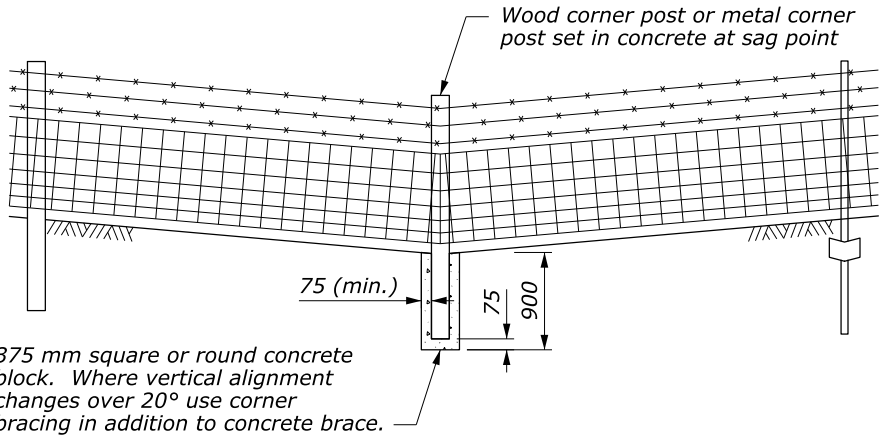


**FENCE TERMINAL**

NO SCALE



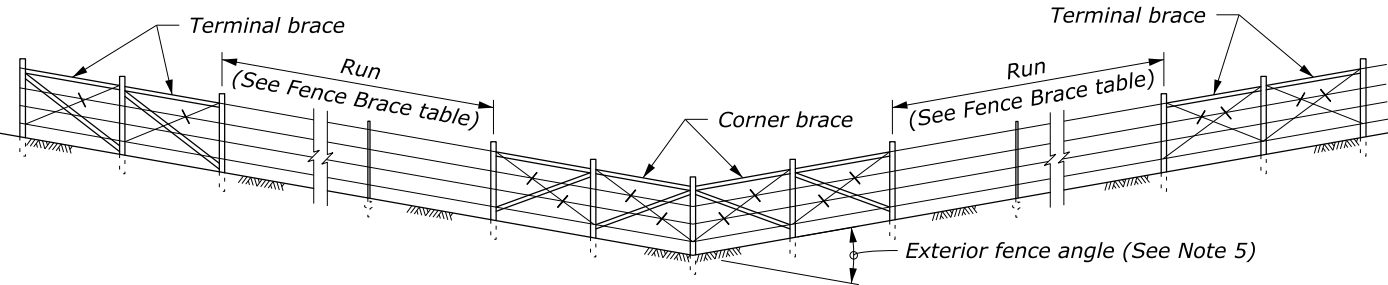
TYPICAL SAG SECTION - BARBED WIRE FENCES



TYPICAL SAG SECTION FOR WOVEN WIRE, MESH OR COMBINATION FENCES

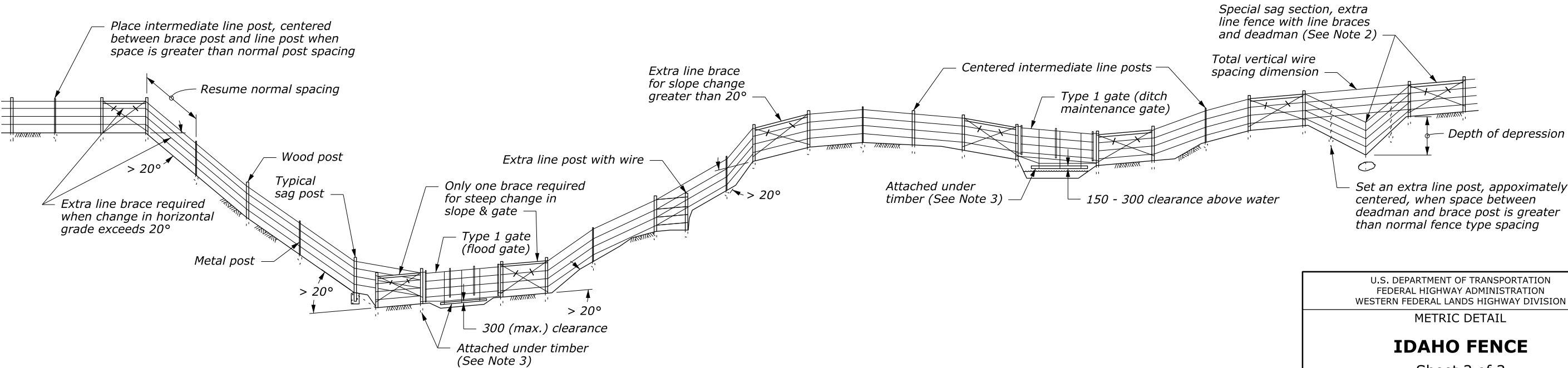
NOTE:

- When a fence line approaches a ditch, gully, or depression, place the last post on level ground close enough to the edge of the drop-off that the wire may be strung to a post in the depression without touching the ground.
- When the depth of a depression on a Type 1, 5, or 11 fence exceeds the total vertical wire spacing over a maximum horizontal run of 2 spaces, construct an extra fence through the depression. Include extra line braces and a deadman in this application as shown.
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- Where a fence ties into a bridge parapet or railing, do not allow the top of fence to project above the top of the parapet or railing.
- Dimensions without units are millimeters.



DOUBLE BRACE PANELS

FENCE BRACE TABLE			
FENCE TYPE	RUN	WOOD PANELS REQUIRED	METAL BRACES
1, 5, 6 & 11	< 20 m	NONE	NONE
	20 - 200 m	SINGLE	SINGLE
	200 - 300 m	DOUBLE	NOT ALLOWED
8	≤ 120 m	DOUBLE	NOT ALLOWED
	< 10 m	NONE	NONE
2, 3, 7 & 33	10 - 100 m	SINGLE	SINGLE
	100 - 200 m	DOUBLE	NOT ALLOWED



SPECIAL APPLICATIONS FOR BARBED WIRE FENCES  
FOR TYPE 1, 5, & 11 (See Note 4)

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
WESTERN FEDERAL LANDS HIGHWAY DIVISION

METRIC DETAIL

IDAHO FENCE

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DETAIL APPROVED FOR USE 9/2010

REVISED:

DETAIL

WM619-50