NATURAL RESOURCES CONSERVATION SERVICE
Idaho

CONSTRUCTION SPECIFICATIONS FOR WILDLIFE EXCLUSION

_____ _____ _____
(Owner/Operator)

_____ _____ _____
(Project Title)

GENERAL

Installation shall be in accordance with an approved plan. Details of construction shown on the drawings but not include herein are considered as part of these specifications. Construction activities shall be in accordance with applicable OSHA regulations.

Prior to construction the fence lines shall be cleared of any possible obstruction that would hinder the fence placement and operation.

The soil surface along the fence line shall be relatively smooth such that placement of the bottom fencing member does not exceed the maximum fence member to soil surface spacing specified.

The fence materials shall have an expected life of at least 10 years with routine maintenance. All wood materials except Orange Osage, Western Red Cedar, Juniper and Black Locust that have contact with the soil shall be treated with an EPA-registered wood preservative. Wood posts shall be treated from the butt end of the post to distance of at least 42 inches for line posts and 48 inches for all corner, gate and brace posts. Refer to Table 1 for the life expectancy of treated versus untreated wood posts.

MATERIALS

Wood Posts. Line posts shall have a minimum top diameter of 4 inches and shall be a minimum of 11.5 feet in length. Corner, gate and brace posts shall have a minimum top diameter of 6 inches and shall be a minimum of 12 feet in length. Brace rails shall have a minimum diameter of 4 inches and shall be a minimum of 16 feet in length when shared with a post corner. When adding a second brace panel, brace rails shall be a minimum of 12 feet in length.

Table 1. Life Expectancy of Untreated and Treated Fence Posts (Years)

Kind of Wood	Un-treated	Pressure Treated	Hot and Cold Bath	Cold Soak
Western Red Cedar	12-15	20-25	20-25	-
Lodge pole & Ponderosa Pine	2-4	20-25	15-20	10-20
Aspen or Cottonwood	1-3	15-20	10-15	5-10
Douglas Fir & Western Hemlock	3-6	20-35	15-25	10-20

Stays. Steel posts shall be the "T", "U" or "Y" type with a welded or riveted anchor plate near the bottom (minimum 18 inches square area) and have suitable corrugations, knobs, studs or grooves for fastening the wire. Posts shall weigh at least 1.33 pounds per linear foot of length and shall be a minimum of 12 feet long.

Steel Pipe Posts. Steel pipe corner, gate or brace posts shall be a minimum diameter of 3 inches, Schedule 40 (3.5-inch O.D.) and at least 11.5 feet long. Brace fittings and clamps shall be galvanized.

Woven Wire (Hog Wire). Woven wire materials shall conform to ASTM A 116. Mesh openings shall not be larger than 7 inches between horizontal lines and 6 inches between vertical stays. Wire shall be 12.5-gauge or heavier, have Class 3 Galvanizing and high tensile.

Smooth Wire. Smooth wire shall be a single steel wire of 9-gauge or heavier or two wrapped strands of 12.5-gauge or heavier wire. Wire shall have a minimum tensile strength of 45,000 psi. All brace wires shall be wrapped 3 times around post and double stapled.

Wire Panel Fasteners. Staples shall be 9-gauge or heavier and have a minimum length of 1.75 inches, except 1.0 inch staples are allowed on very hard woods. Fasteners for use with steel posts shall be 9-gauge or heavier zinc coated wire.

INSTALLATION

The fence shall be reasonably straight and shall not deviate more than 12 inches from a straight line between any corner and gate or line brace assembly.

Post Depth. Line steel pipe and wood posts shall be set a minimum depth of 3 feet, unless otherwise specified. Gate, corner and brace posts shall be set to a minimum depth of 3.5 feet, unless otherwise specified. Steel pipe posts shall be embedded in a 12-inch diameter, 3 feet deep hole or a square concrete pier, except when set in firm rock.

Post Spacing. The maximum post spacing interval shall be 12 feet on fences without fence stays and 20 feet with one stay between posts.

Bracing. Brace assemblies shall be located at all corners, gates and abrupt changes in vertical topography (generally considered as 15 degrees). On straight reaches of fencing line braces shall be installed at a spacing of no more than 600 feet.

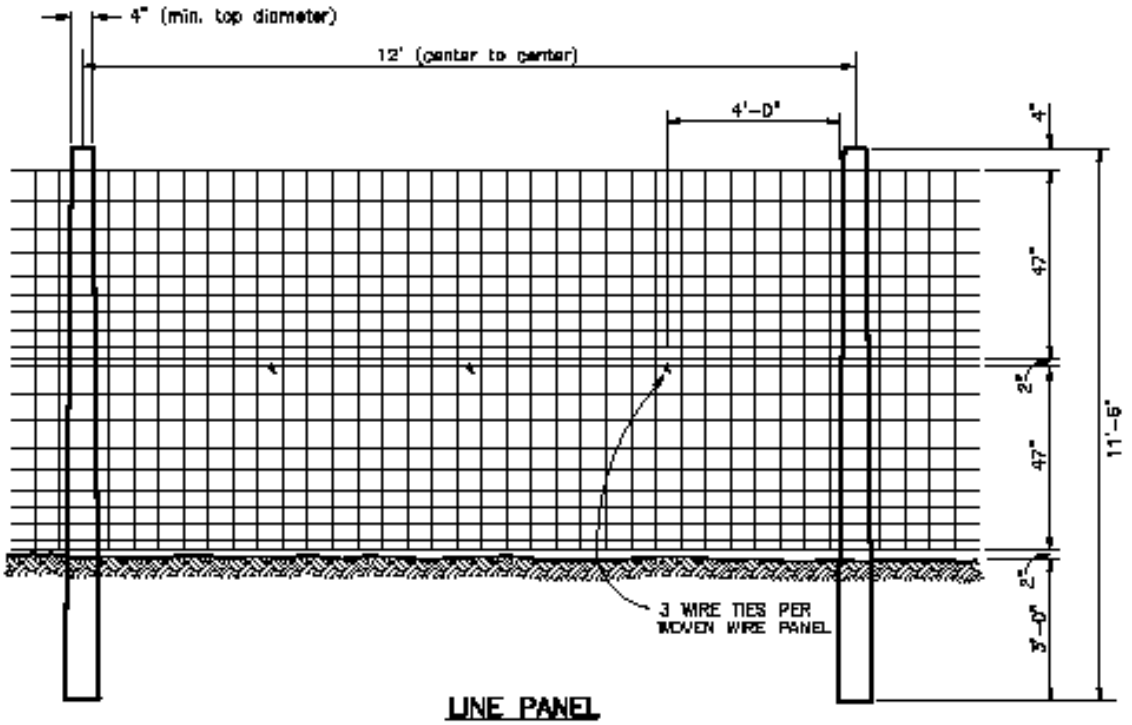
Woven Wire. Fabric shall be placed on the outside of area to be impounded. Where two four foot rolls are used the bottom course of woven wire shall have the small openings towards the top. The top course of woven wire shall have the small openings on the bottom. This presents a denser fence at mid-height. The fence must extend a minimum of 8’ feet above the ground. The bottom wire shall be no more than 6” from the ground.

Wire Fasteners. Staples shall be driven diagonally into the wood grain of the post. Space shall be left between the post and the staple to allow longitudinal movement of the wire. Fasteners on steel posts shall be snug enough to prevent vertical movement of the wire on the post.

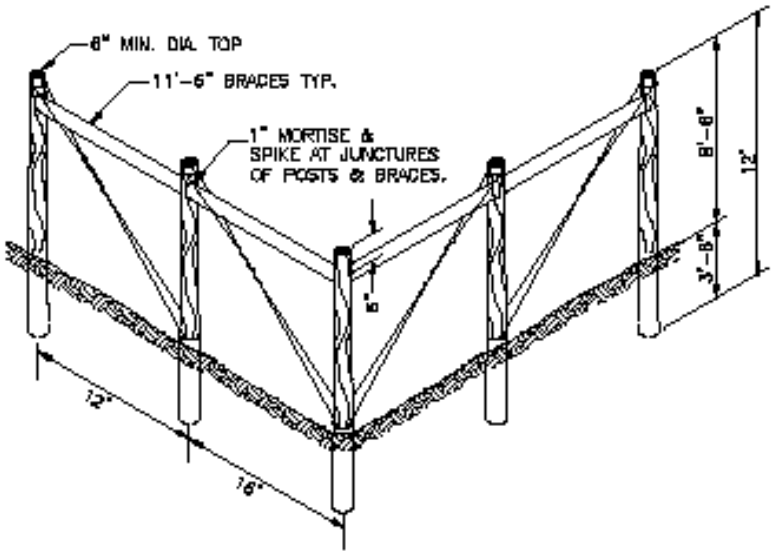
Stays. Stays shall be uniformly spaced between the posts as required for the specified post spacing.

Drainage ways. In crossing drainage ways or depressions a weight or deadman anchor shall be fastened to the fence to maintain the required spacing interval or additional wires shall be added to maintain the required minimum wire height from the ground line.

ADDITIONAL SPECIFICATIONS



LINE PANEL



CORNER PANELS

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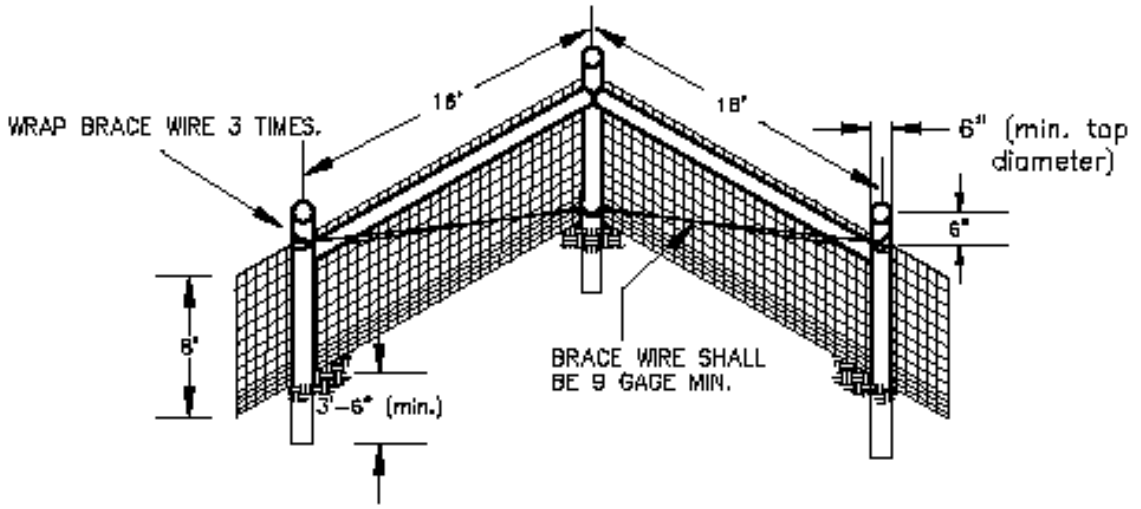
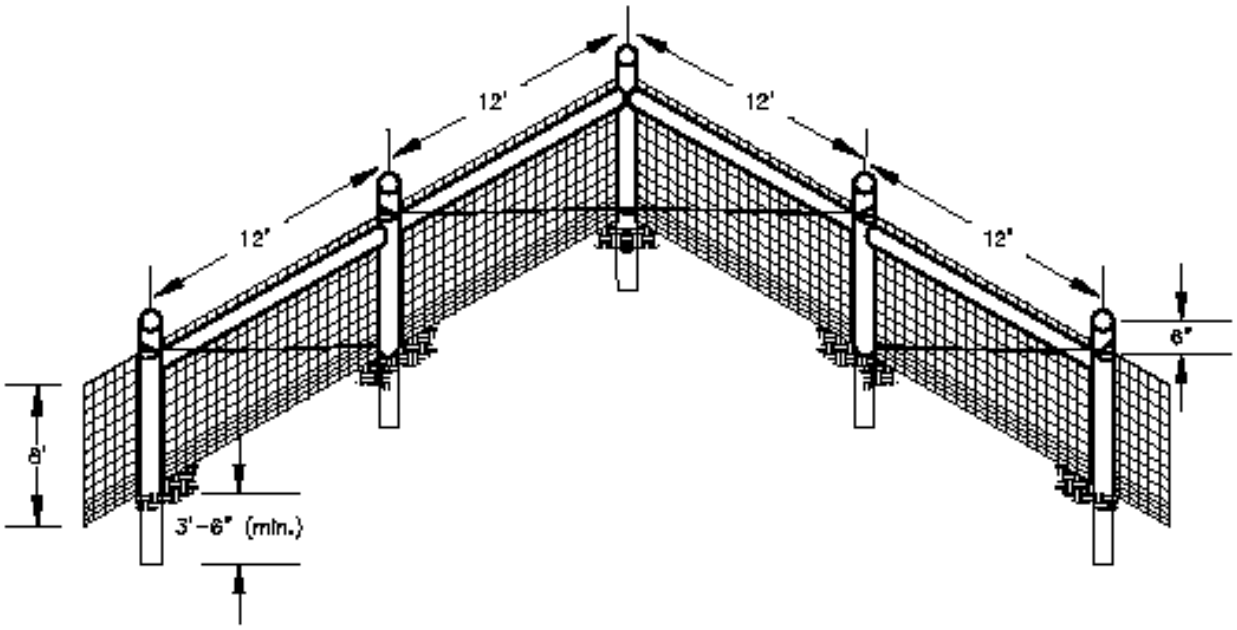


ADDING A SECOND BRACE PANEL WHEN THERE ARE POOR FOUNDATION CONDITIONS



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United States Department of Agriculture

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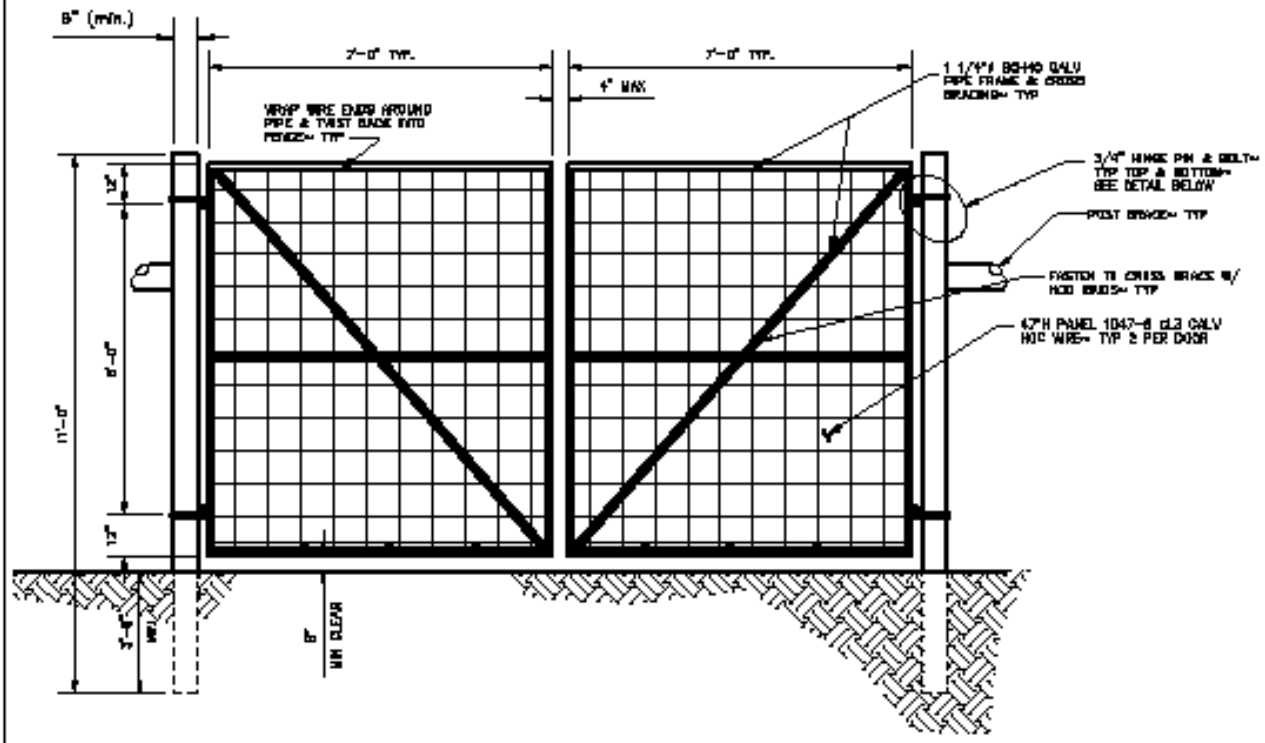
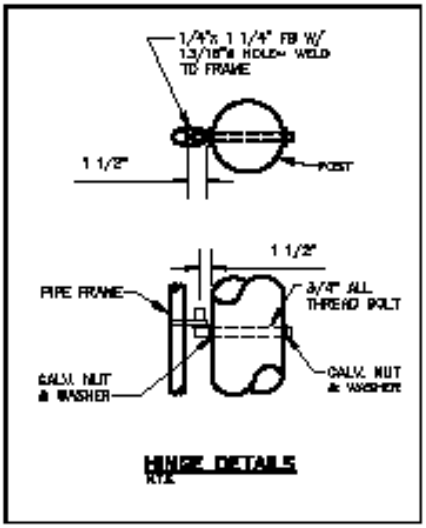


NOTES:

1. 14' WIDE GATES TO BE MADE IN 7' LONG PIECES
2. 12' WIDE GATES TO BE MADE IN ONE PIECE
3. 1 1/4" ø PIPE FRAME TO BE WELDED @ 4 CORNERS AND CROSS BRACE, 1 1/4"ø PIPE BRACE TO BE WELDED TO OPPOSING CORNERS AS SHOWN
4. WELDS SHALL BE PAINTED WITH GALV-A-WELD



HINGE DETAILS
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