

Drainage Easement Width Calculations:

Culvert Easement Width Calculation:

Culverts will require an easement dependent upon the following equation:

$W_c = (O.D. + (2.5' \times 2)) + ((\text{Depth of Trench} \times 2) + (12' + 5'))$ Rounded up to the next 5' increment.

Where: O.D. = Outside Diameter of the pipe
(2.5' x 2) = 30" either side of the pipe
(Depth of Trench x 2) = 1:1 Slope of trench on either side of the pipe
12' = Access for equipment
5' = Access opposite side of equipment access

Ditch Easement Width Calculations:

Ditches (greater than 3' of depth) will require an easement dependent upon the following equation:

$W_d = B + ((\text{Depth of Trench} \times 2) + (12' + 5'))$ Rounded up to the next 5' increment.

Where: B = Bottom width of the ditch
(Depth of Trench x 4) = 2:1 Slope of the trench on each side
12' = Access for equipment
5' = Access opposite side of equipment access

Swale Easement Width Calculations:

Swales (3' of depth or less) will require an easement dependent upon the following equation:

$W_s = (\text{Depth of Swale} \times 6) + 10'$ Rounded up or down to a 5' increment.

Where: (Depth of Swale x 6) = 3:1 Slope of the swale on each side
10' = 5' access on each side