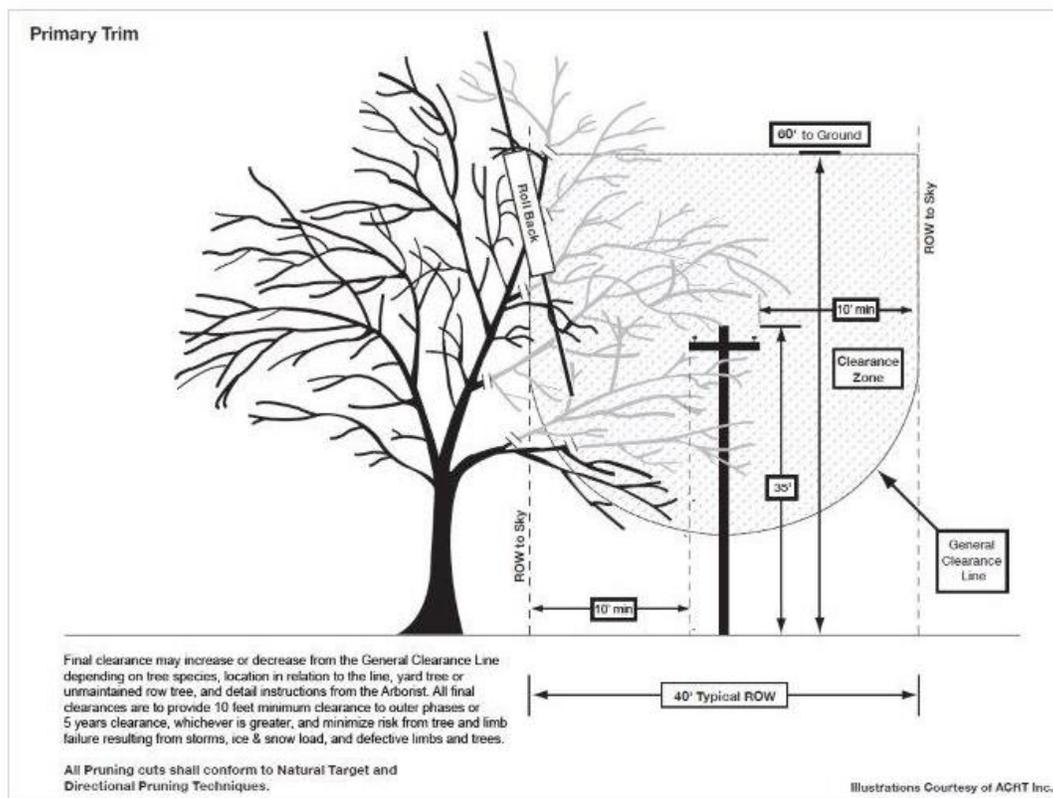


## ROW Clearing Specifications for Medina Electric Cooperative, Inc.

### Line Clearance Specifications

- Minimum clearance on primary overhead conductors is 10' or 5 years of clearance, whichever is greater. Remove all limbs overhanging primary conductors.
- Minimum clearance on neutral lines is 10' or 5 years of clearance, whichever is greater.
- Minimum clearance on overhead guy wires, secondary triplex lines is 5ft.
- Minimum clearance on open wire or bare wire secondary lines is 5ft.
- Any branches abrading, putting pressure on, or growing around down guy wires are to be removed. Vegetation should only be removed or pruned for down guy wires if it threatens the structure.
- All wild growing trees in the ROW less than 6.6" DBH are to be cut to the ground or as close as terrain or obstructions, such as fences, allows. Do not remove landscape quality vegetation without landowner consent.
- Brush shall be cleared a minimum of 10ft. (20ft. total width) on either side of the center line of the right of way on 1-phase systems.
- Brush shall be cleared a minimum of 15ft. (30ft. total width) on either side of the center line of the right of way on 2-phase and 3-phase systems.
- Remove any dead, diseased, or weak limbs that threaten primary overhead conductors or electrical equipment.
- Do not remove trees over 6.6"DBH without MEC approval. Only when mechanically clearing a right of way are trees larger than 6.6"DBH allowed to be cleared without an authorization form.
- Brush stumps should be cut flush with the terrain if possible. Brush stumps should be no more than 3" high and should not be left with final cuts made at acute angles to the ground.
- Tree stumps should be cut flush with the terrain if possible. Tree stumps should be no more than 3" high and should have an even level surface if a stump must be left.
- Vines on poles or guy wires are to be cut at ground level and a 10' section cut out. The contractor is not to pull vines from poles, overhead structures, or guy wires.

### Maintenance Zone Diagram



## **ROW Clearing Specifications for Medina Electric Cooperative, Inc.**

### **Clearance Exceptions**

Live oaks in the ROW *and* part of a consumer's landscaping may qualify for a reduced clearance: minimum clearance is 7ft. Live oaks in unmaintained areas shall be trimmed for 10' or 5 years of clearance, whichever is greater. Slow growing tree species or low growing ornamentals qualify for a reduced clearance if they are in the ROW *and* part of a consumers landscaping. Example types of trees that would qualify for this exemption include, but are not limited to, Rock Mountain juniper (cedars), dogwood, and fringe tree. All clearance exceptions are subject to the needs of MEC and the judgment of the system arborist.

### **Tree Removals & Make Safe Trims**

Priority trees in or adjacent to the right of way that threaten Medina's lines must be removed. In certain cases a priority tree may be trimmed to make it safe. The Cooperative may partner with a landowner to make a tree safe for private removal by trimming it away from electric lines. Trees that require significant or repeated pruning may also be removed. Removing trees is costly and therefore may not always be an option.

### **Natural Pruning Technique & Work Quality (as described by Dr. Alex Shigo in Pruning Trees Near Utility Lines: A Field Pocket Guide for Qualified Line Clearance Tree Workers)**

Natural pruning technique shall be used. Regrowth is to be cut back to origin or the existing stub is to be removed back to next best lateral branch/trunk. Lateral branches should be at least 1/3 the size of the branch or limb being removed. Some discretion should be used on trees with poor pruning history. If cutting a stub back to a lateral would remove a large limb or section of a high value tree, it is probably better to cut the regrowth back to the point of origin as long as the minimum clearance is achieved. Note that the best laterals may exist outside the minimum clearance zone, which is OK. If possible choose lateral branches growing parallel to or away from conductors.

Quality tree work goes hand in hand with natural pruning, and most of the following is detailed in Dr. Shigo's booklet listed above. The contractor is not to leave stubs in trees. This occurs when a branch or limb is not properly cut back to a lateral branch or branch collar. Rips and tears shall be avoided. Weight reduction cuts shall be made when removing large limbs to avoid rips and tears. Utilization of the 3 cut method, as outlined by Dr. Shigo, shall also be used when necessary to prevent rips and tears. Branch collars shall be preserved and flush cuts are not allowed. Bark scarring and partial cuts into remaining limbs shall be avoided. Reasonable care and effort shall be taken to avoid damaging any part of the tree that is to be left after line clearance work is complete. Hangers shall not be left in trees. This includes partially attached branches broken during pruning and fully cut branches that are lodged or hung in the remaining portion of the tree. If a branch is broken or severely damaged during the pruning process, then it shall be cut back to the next best lateral. Tree topping, tipping, or "rounding over a tree" is not allowed. Climbing spikes (also known as gaffs or hooks) are only permitted when no other safe alternative exists and/or the tree is going to be cut to the ground. MEC permission is required for use of spikes on non-removals.

### **Oak Wilt and Tree Disease**

Medina Electric requires contractors to paint wounds on all oak trees and properly dispose of debris generated from this work. Contractors are also responsible for following tool sterilization procedures.

### **Mechanical Brush Removal**

The Cooperative frequently uses mechanical means to clear right of ways such as hydroaxes or mulchers and dozers. These machines are more efficient than hand cutting brush and help the utility keep costs down. When these machines are not appropriate, brush will be cut by hand.

## **ROW Clearing Specifications for Medina Electric Cooperative, Inc.**

### **Herbicide Application**

Cut stump application of herbicide shall be applied to brush and tree stumps from hand cutting. Care shall also be taken to prevent drift to non-target species. Herbicide shall not be used in the vicinity of creeks, streams, rivers, or wetlands. Basal application of herbicide may be used to tree brush or regrowth up to 6 ft. high. Broadcast or foliar application of herbicide shall not be done without MEC approval. The contractor is responsible for maintaining any certification(s) and/or license(s) needed to use herbicide and must comply with all local, state, and federal laws including the product labels.

### **Work Schedule**

The normal work week is 7am to 6pm Monday through Friday. Contractors shall work within these hours unless approved by MEC. The contractor is responsible for reporting their work location daily to the appropriate MEC contact.

### **Contractor and Public Safety**

The contractor shall comply with OSHA 1910-269 standards and ANSI z133 safety standards for arboriculture operations. The contractor shall prioritize safety and provide all necessary personal protective equipment (PPE) to its employees. The contractor must provide training on proper use of PPE and ensure that it is worn when hazards are present. Adequate work zones must be established to protect the public. This includes any necessary traffic control devices and personnel. If these work zones cannot be maintained, then work shall not be done, and the system arborist should be contacted. The contractor shall maintain the appropriate minimum approach distance from conductors at all times. If the work cannot be done while maintaining these safe approach distances, then work shall not be done, and MEC shall be contacted. Should the contractor damage or knock down any MEC electrical conductors or equipment, they must immediately notify MEC. As part of each job safety briefing, the crew must identify the nearest hospital or medical facility. At least one member of each crew must be able to speak and read English.