Assessing storm damage and if repairing the damaged trees is going to require the help of a certified professional arborist. Certified arborists have been rigorously trained to evaluate tree health and then apply corrective measures to restore the tree.

When hiring a Certified Arborist for a large tree:

- Most are ISA certified (International Society of Arboriculture), but other certifying agencies include the Tree Care Industry Association or the American Society of Consulting Arborists. A list of ISA certified professionals can be found here [http://www.isa-arbor.com/findanarborist/arboristsearch.aspx](http://www.isa-arbor.com/findanarborist/arboristsearch.aspx)
- Always ask for multiple written bids for your work that describes exactly what will be done, by when and any responsibilities you have as the homeowner, especially with cleanup.
- Get references and go check out their work. Check with the Better Business Bureau and the online contractor rating services like Angie’s List.
- Don’t take the lowest bid. You are looking for a combination of price, work to be done, experience, skill and professionalism. Trees are an important component of the value of your home.
- Certified arborists will only use industry standards for pruning techniques. Refuse any bids that call for topping trees, removing more live wood than necessary or removing or disfiguring live trees without a reasonable explanation or using climbing spikes on healthy trees.

If you are going to make the repairs yourself, limit your work this year to ONLY repairing injuries resulting from the storms and removal of dead wood. Save other pruning on damaged trees until next year. There are two reasons for this:

1. Tree leaves will produce energy that injured trees need to “recover” from the trauma of split trunks, broken limbs, etc. Branch wood stores energy that leaves need to develop. By removing undamaged limbs and their leaves this year, you are increasing the trauma and removing the source of energy that wounded trees need this spring and summer.
2. Because portions of the tree have been removed, newly exposed parts of the trees are subject to sun injury this year. Especially smooth barked trees (maples, ash). Sun damage wounds are large and will become another stress on injured trees. Normally, tree leaves shade tree branches. By removing undamaged limbs this year, you are removing a source of shade to newly exposed area of trees.

Not pruning anything but dead and damaged wood will be difficult if it leaves asymmetrical or silly (but structurally sound) trees. However, in the interest of long-term tree health, we must leave trees with all the possible sources of energy.

**DO NOT PAINT OR SEAL WOUND SURFACES. THESE SUBSTANCES DO NOT AID WOUND CLOSURE OR PREVENT DISEASE ENTRY. IN SOME CASES WOUND HEALING IS DELAYED BY THEIR APPLICATION.**

**STERILIZE PRUNING TOOLS WHEN MOVING FROM ONE TREE TO ANOTHER. WIPE BLADES WITH 70% ISOPROPYL ALCOHOL (RUBBING ALCOHOL) TO PREVENT THE SPREAD OF DISEASES.**
Pruning and Removing Broken Branches: (Figure 1.)
Cut broken branches (or stubs that are left) back to what is called the branch collar. The branch collar is the swollen or bulging tissue that is present at the base of any branch where it attached to the main trunk. When a branch is correctly pruned, this collar will eventually grow over the exposed cut surface and prevent decay. Cut precisely to the outer edge of the branch collar. If you cut into the branch collar tissue, any decay will spread into the parent limb or trunk. If you leave any stub outside of the collar, the collar will not be able to close over the wound. If wounds fail to close, internal decay will result. Branch collars look different on different types of trees. Some are difficult to see. Look at several trees to get a general idea of the location.

If a Large Branch or the Main Trunk Has Broken: (Figure 2.)
In this situation it is necessary to make what is called a “drop-crotch cut.” This means you will cut a limb or the main trunk back to a side branch as shown. The smaller branch should be at least a third of the diameter of the larger one being cut off for this method to be effective. Make the cut just above the branch bark ridge and continue downward at about a 45° angle.

If a Branch has Split but Not Detached from Another Branch (or itself) OR if the Main Trunk is Split: (Figure 3.)
If the bark is intact, the two pieces may be rejoined and held tightly together, but DO NOT WRAP ANYTHING around the splits to hold them together. This will result in strangulation of that branch or tree. Consult a Certified Arborist with repairing this type of damage.
If there is not sound wood on either side of the split or if bark is no longer attached to one side of the split, remove the damaged section of the split at a slight angle down and away from the bottom of the split. Cut all splintered wood back to solid wood without enlarging the wound.

If a Branch has Torn Out of a Larger Branch or Trunk: (Figure 4.) If more than 1/3 of the cross section of wood is gone, consult a Certified Arborist to determine if the remaining portion is structurally sound. If less than 1/3 of the cross section of wood is gone, there is little need to do anything. Pare back the edges of the wood ONLY to remove loose, splintered or ragged edges. DO not enlarge the wound if the margins are relatively smooth.

When Removing a Trunk or Any Branch that is too heavy to be Supported by Hand, Make a 3-Step Cut to Prevent Tearing Bark: (Figure 5.)

Figure 1
Branch Collar Cut
The final cut represented by the dotted line begins outside the bark ridge at A and follows the outline of the branch collar (without cutting into it) to B. If the collar is not evident, B is the point of the angle formed by the branch and its parent stem.

Figure 2
Drop-Crotch Cut
The final cut represented by the dotted line begins just above the bark ridge and continues down at about a 45° angle. If the main stem is too heavy to be supported by hand, use the 3-step shown in Figure 5.

Figure 3

Figure 4

Figure 5
Natural Target Pruning
To avoid bark stripping when removing a large limb, make the first cut at A about 12 inches from the trunk. Make the second cut B on the outside of A. Make the final cut outside the branch collar (E to F).

A cut at C to D would leave too much of a stub, which may rot and a cut G to H is a flush cut which will allow decay to spread to the parent stem or trunk.