



# TREES VS. MONSOONS

Heavy rains and strong winds associated with severe weather pose a significant test for trees that are less than two years old. Frequently, these trees have never before shown signs of weakness or root problems. Although most trees remain unscathed during storms, a small percentage of trees lean or fall during as a result of wind and rain. This is usually a result of un-established or defective root systems.

Immediately following a storm event, DLC maintenance crews visit each damaged tree to determine the best course of action. In the process of evaluating a tree, the base of the tree and its root system is tested for strength and stability. This is done by moving the trunk slightly from side to side to determine if the roots exhibit some degree of establishment with the adjacent soil. Trees that show any degree of root stability are straightened and re-staked. Trees that show no stability, which means they are either broken at the base or root bound (essentially swiveling in the soil), are removed.



Root bound trees may live if re-staked and may continue to show above ground growth. However, experience tells us that these trees will eventually fail since root bound trees never establish good root growth. If root bound trees are re-staked instead of removed, there is significant risk that they will outgrow the stakes and fail again, this time as a larger tree. This can cause significant damage to whatever is in their path.

In locations where trees are removed, replacement trees are selected to include the best quality given the availability and variety. Depending on these factors, some replacement trees will be 15 gallon, 24" or 36" box size. It is important to note that where smaller trees are chosen, they will grow stronger in time because they have more growth time in their new location.



Root bound trees can usually be identified by observing the soil when gently shaking the tree. If the ground around the base of the tree moves, chances are the tree is root bound.





- 1 Poorly established root system allows a storm to knock over this tree
- 2 Girdled roots or a poorly established root system can cause trees to fail at the point of connection
- 3 Roots wound tightly around the trunk are called girdled roots. This will eventually kill the tree
- 4 Nursery containers can cause roots grow in a continuous circle
- 5 Ideal root growth - roots grow out in every direction almost evenly

