

# ***THE TECHNIQUE MATTERS***

Many urban landscapes are in poor condition and a responsible fertilization program is an important component in promoting plant health care. Soils are often heavily compacted and low in organic matter, which limits the trees ability to absorb water and nutrients. In addition to **water** and **nutrients**, tree roots and those of other woody plants require **oxygen** for respiration and will die without a constant supply. Compaction and poor drainage limit oxygen movement into the soil and, as a result, tree roots can form near the surface and succumb to heat, cold and drought without the protection of leaf litter or mulch. The resultant stress can cause a tree to further decline and become more susceptible to other problems such as insects and diseases. Without proper management, the urban soil is a hostile environment and can shorten the effective life of a woody plant by a factor of 10.

**Pressurized, liquid soil injection is the most effective method of distributing nutrients throughout the root zone of woody plants.** A soil injection probe with lateral ports results in a distribution pattern that radiates from the probe much like the spokes of a wheel as the probe is pushed into the soil. The ideal injection depth is from 4 to 12 inches, which distributes the nutrients below the majority of turfgrass roots that compete with tree roots for the growth factors in the soil. This depth is also below the harsh surface conditions that can kill the roots of woody plants. In addition to nutrient distribution, pressurized water creates horizontal capillaries that allow oxygen to diffuse lower in the soil, supporting a deeper, healthier root system. Therefore, this process can be sold as **fertilization** and **aeration!**

The use of **Arbor Green® PRO** as the fertilizer in this process will provide you with a slow release, non burning, non leaching product that possesses the proper ratio of macro nutrients for both soil microorganisms and woody plants. Arbor Green *PRO* was developed to mimic the nutrient availability of the natural forest environment.

Arbor Green *PRO* is a suspendable (not soluble) product. Tiny granules are carried into the root zone by water under high pressure (sub-surface granular application). Sufficient agitation with advanced by-pass jet agitation or paddle agitation is necessary.

When paddle agitation is not present, the use of a high pressure, brass or poly **Venturi nozzle agitators** are necessary. Venturi action triples the amount of liquid produced by the agitator and will maintain adequate suspension.

***The technique, equipment, and fertilizer do make a difference!***