## Tree Measurement Guide

The following is a reference guide for how to measure the Diameter of a tree at breast height (DBH) and determine which Tree Classification to associate it with. These are strictly guidelines and do not cover all situations found in the field; instead, it is the intent of these diagrams to provide a general understanding of how a tree can be measured and how best to assess a given situations to attain the most accurate measurement possible.

Diagram 1 - Std. measurement height of $4.5^{\prime}$ above grade determines both the full critical root zone (CRZ) and the $1 / 2$ CRZ


Diagram 2 - Measuring locational guide for Multi-trunk trees, Leaning trees, Irregular Swelling, and trees on Slopes; multiple instances can apply to a single tree in which both measuring locations are to be used to determine the DBH


* Diameter at Breast Height (DBH), is measured at four and a half feet above grade.
** Reference measurement locations for each instance above when incountered in the field.
*** When an irregular swelling occurs at the DBH height, measurements are to be taken just below the swell.
**** DBH measurement is to be taken from the uphill side of the tree when the tree is on a slope.


Irregular Swelling trunk


Diagram 3 - Ornamental Multi-trunk Formula (OMTF); the below guide is meant to increase profieciency and reduce time spent to measure multi-trunk ornamental trees only. It is still recommended that all trunks are measured to provide the most accurate DBH possible however if the below measurement is used, this is to be identified on the plans and tree survey schedule as OMTF. The rules of Diagram 2 shall apply to ornamental trees if applicable.


- Use Formula to determine total DBH of Multi-trunk Ornamental Tree where, $X=$ Largest trunk, \& $n=$ No. of samller trunks
$\mathrm{X}+\left(0.5^{*} \mathrm{X}\right)(\mathrm{n})=\mathrm{DBH}$
E.g.
$6+(0.5 * 6)(6)=24$-inches


## Notes:

*For all non-ornamental multi-trunk trees, list the total diameter at breast height (DBH) for the tree as well as each individual trunk size. To calculate the DBH for multi-trunk trees, take the diameter of the largest trunk and add half the diameter of all remaining trunks.
**Any fraction of a tree equals a full tree.

