

Grand Oak Ordinance Standards

1. The developer shall preserve all trees identified as a grand oak unless authorized for removal by the Administrator. This provision shall not apply for a grand oak located in road site distances, recovery and maintenance areas as shown in the Transportation Technical Manual unless the County Engineer, otherwise, renders a determination that a grand oak may be preserved in these areas.

2. The developer shall be required to replace 50 percent of the total DBH of any tree having a DBH of 24 inches or greater or any clump of trees, as defined in this Code, that is to be removed from the site. Irreparably unhealthy or damaged trees, as determined by the Administrator, shall not require replacement. If the tree removed is a species which either has undesirable growth habits or is susceptible to freeze damage, as determined by the Administrator, replacement shall not be required. A grand oak, however, shall be replaced as indicated below if authorized for removal by the Administrator.

<u>Grand oak trunk measurement</u>	<u>Replacement Ratio (in DBH)</u>
34" ---- < 48" DBH	1:1
48" ---- < 60" DBH	1.5:1
60" DBH and greater	2:1

This replacement requirement, however, shall not apply when the Administrator has determined that Section 4.01.14.A.4.b of this Code is applicable. Replacement of a grand oak for these situations shall not exceed 20% of the DBH trunk diameter unless a lesser amount is appropriate as determined by the Administrator.

3. Pruning of a grand oak, with the exception of minor pruning, is prohibited unless conducted in accordance with the ANSI A 300 Pruning Standards. It is recommended to be performed by an Arborist certified by the International Society of Arboriculture (ISA) or a Registered Consulting Arborist with the American Society of Consulting Arborists (ASCA).

An ISA Certified Arborist or an ASCA Registered Consulting Arborist contracted by a property owner to prune a grand oak shall assume full responsibility for all pruning activities determined in noncompliance with standards specified within the Land Development Code.

DEFINITIONS

Grand Oak: A Grand Oak is a tree of the genus Quercus with a trunk measuring 34" DBH and greater, a condition rating of good or better in accordance to the Tree Condition Evaluation Form referenced as Exhibit 4.1.6.1.a of the Development Review Manual, and whose trunk circumference, height and crown measurements are of the size and character to total a minimum 175 points in accordance to the Tree Point System methodology defined by this Code.

Tree Point System: The tree point system classifies the significance of a tree species through three measurements of a tree's anatomy and asserts a point value for each measurement. One (1) point per inch is allotted for the tree trunk circumference to the nearest inch measured at 4.5 feet above grade, one (1) point per foot is allotted for the tree's overall height to the nearest foot measured vertically from a point level with the base of the highest twig and one (1) point per four (4) feet is allotted for the crown spread to the nearest foot averaging a measurement of the longest and shortest diameters of the tree canopy.

Minor Pruning: The pruning of a tree by removing branches measured no greater than 3 inches in diameter at the point of connection to a supporting branch and in accordance to the American National Standards Institute (ANSI) A 300 Pruning Standards.



Hillsborough County Florida Grand Oak Point System and Condition Evaluation Form

POINT SYSTEM

Grand Oak: A Grand Oak is a tree of a genus *Quercus* with a trunk measuring 34" DBH (tree trunk diameter measurement at 4.5 feet above grade) and greater with a tree condition rating of good or better and with trunk circumference, height and crown measurements totaling a minimum of 175 points in accordance to the Tree Point System methodology.

Tree Point System: The Tree Point System classifies the significance of a tree through three measurements of the tree's anatomy and asserts a point value for each measurement. One (1) point per inch is allotted for the tree trunk circumference to the nearest inch measured at 4.5 feet above grade, one (1) point per foot is allotted for the tree's overall height and one (1) point per four (4) feet is allotted for the crown spread to the nearest foot averaging a measurement of the longest and shortest dimension of the tree's canopy.

Circumference: Using a standard measure, tape measure the distance around the tree trunk and this will provide the circumference. If the tree has co-dominant trunks, measure each trunk at 4.5 feet above the ground surface and add them together unless the piths of each trunk merge at a point above the root collar. In this circumstance, measure the narrowest point of the supporting trunk below the point of pith mergence to obtain the tree trunk circumference. This inch measurement is the total circumference point score for the tree. If it is equal to or over 175 inches, the Tree Point Score for the definition of a Grand Oak is met and no other measurements are required. (Measuring the tree trunk diameter will require multiplying this measurement by 3.14 to obtain the tree trunk circumference).

	Feet	Inches	Circumference Points
Circumference _____			
(14'7" will equal 175 points)			

Height: Equipment that could be used is a 100' plus reel tape, ground spike and a clinometer. First place the ground spike at the base of the tree and attach the tape. Measure 100' away from the tree. Using a clinometer view the top of the tree. Read the right side scale on the rotating wheel. This is your measurement in feet. If you are on level ground, no other measurement is needed. If the ground is not level, view the base of the trunk after determining the height. Notice if the scale reads positive or negative. If the number is negative, add that to your height measurement. If it's positive subtract it from your height score. Where obstacles obstruct measurements or for very tall trees measure out from the tree 50 or 200 feet.

		Adjustment	Height Points
100'	Top in feet _____		
	Base in feet _____		
50' (divide measurement by 2)	Top in feet _____		
	Base in feet _____		
200' (multiply measurement by 2)	Top in feet _____		
	Base in feet _____		

Crown Spread: Observe the tree's canopy and locate its widest and narrowest points. Measure, in feet, both from dripline to dripline. Average the two figures and divide by 4 to get the spread score.

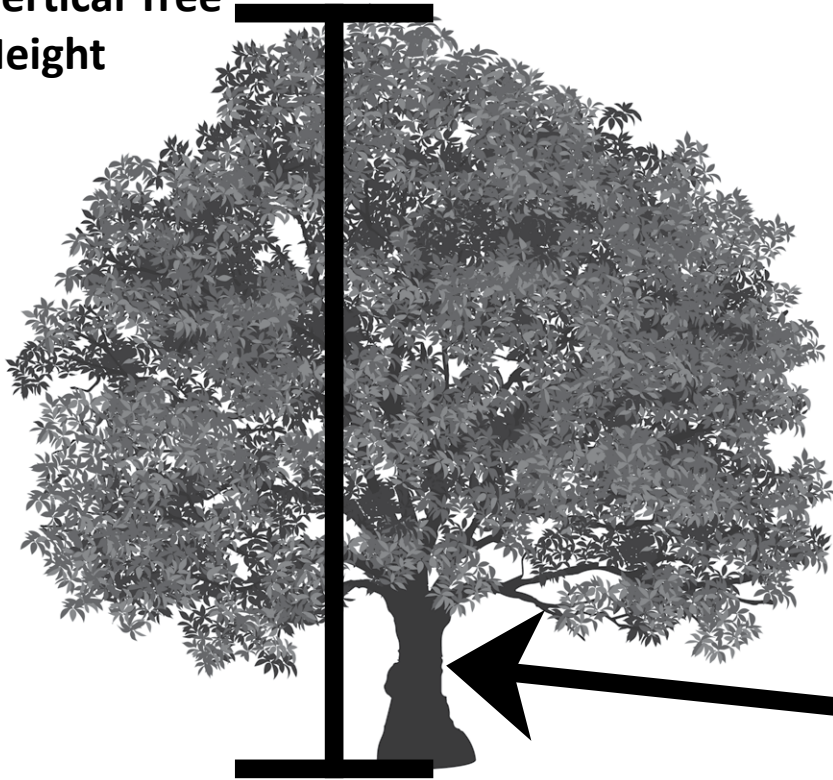
Widest	Narrowest	Average	Spread Points

Grand Total Points _____



Tree Measurement Visual Guide

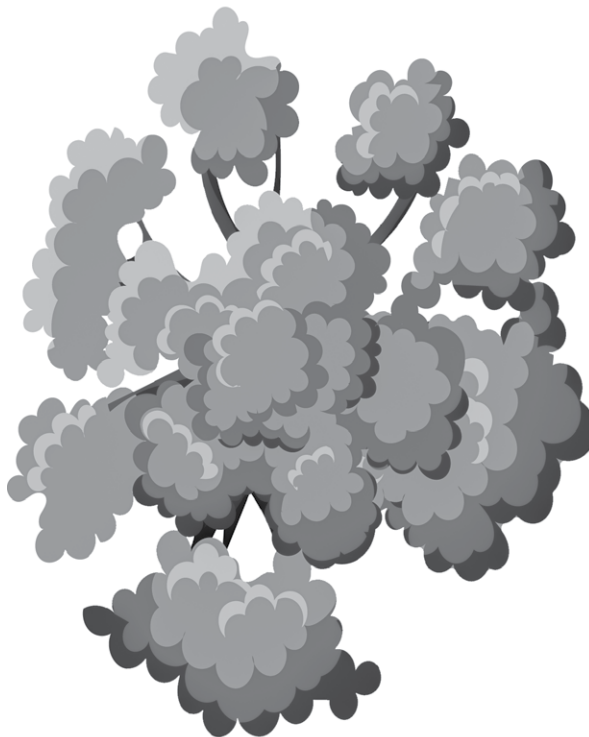
Vertical Tree
Height



Tree Circumference
To be measured approximately
4.5 feet above the ground

Tree Canopy
Cross Section

Narrowest
Width





Tree Condition Evaluation

For Certified Arborist Use Only

A tree's condition is determined from the sum of the condition points established from the rating of a tree's roots, trunk, limb/branch structure, twigs and foliage. The condition point system is structured as follows: **no apparent problems (4 points), minor problems (3 points), major problems (2 points) and extreme problems (1 point).**

ROOTS

- Root anchorage
- Restricted root system relative to canopy
- Mechanical injury
- Girdling roots
- Compaction or water-logged roots
- Presence of insects or diseases

Condition points _____

TRUNK

- Sound bark and wood, no cavities
- Upright trunk (well tapered)
- Included bark between co-dominant stems
- Mechanical or fire injury
- Cracks
- Swollen or sunken area
- Presence of insects and diseases

Condition points _____

LIMB AND BRANCH STRUCTURE

- Strong attachments, no included bark
- Free of decay and cavities
- Well proportioned, good form
- Wound closure
- Dead limbs/epicormic sprouting
- Presence of decay, insects and diseases

Condition points _____

TWIGS

- Shoot vigor compared to past 3-year growth
- Presence of weak or dead twigs
- Presence of insects and diseases

Condition points _____

FOLIAGE

- Normal appearance (size, color, density)
- Nutrient deficiencies
- Herbicidal, chemical injury symptoms
- Wilted or dead leaves
- Presence of insect or disease

Condition points _____

Total Condition Points _____

TREE CONDITION RANKING: The ranking does not incorporate a wood density evaluation of the root collar and includes an evaluation of the tree's canopy from the ground surface only.

Total Points	Condition
18-20	Excellent
15-17	Good
12-14	Fair
11 or less	Poor

Evaluated by: _____

Date: _____

File Number: _____

Tree Species: _____

Application Number: _____