The Davey Tree Expert Company Harmony Community Development District Landscape Maintenance - Monthly Summary

August 2016

4.1 Turf

- 4.1.1 Mowing Mowing was completed throughout common and park locations on a weekly basis.
- 4.1.2 Edging (same as above, see 4.1.1)
- 4.1.3 Trimming (same as above, see 4.1.1)
- 4.1.4 Disease/ Weed Control
 - a. Gray Leaf Spot Fungus was found in multiple areas in the St. Augustine turf. These areas were spot sprayed in early July and all St. Augustine was sprayed approximately two weeks later in the standard seasonal application.
 - b. The seasonal application in July was performed by an outside service under the direction of Davey Tree and coordinated with Gerhard.

4.1.5 Fertilization

a. Late summer application was applied in late July including fertilizer, insecticide, fungicide and a light herbicide.

4.1.6 Pest Control

- a. Active Chinch bugs noted in the July report were treated and no additional Chinch bugs have been discovered.
- b. Ant treatments on-going. With a weekly and bi-weekly schedule in place. The outside fertilization company recommended to both Davey and Gerhard we switch to a product called Advion which works for up to five (5) to six (6) month period of time. This will be discussed with Gerhard and implemented if deemed appropriate.
- 4.1.7 pH Adjustment
- 4.1.8 Other

4.2 **Sports Turf**

4.2.1 Mowing

a. Mowing is being completed with a rotary style mower, mulching deck, at a 1" cutting height, on a weekly basis.

4.2.2 Insecticides

a. No active pests at this time.

4.2.3 Herbicides

a. Turf weed applications concurrent with St. Augustine application schedule.

4.2.4 Fungicide

a. No disease concerns at this time.

4.2.5 Fertilization

a. Complete.

4.2.6 pH Adjustment

4.3 Shrub/Ground Cover Care

4.3.1 Annuals

a. Next rotation scheduled for October.

4.3.2 Pruning

a. General trimming and pruning throughout the community.

4.3.3 Weeding

- a. Weed control cycling through property covering hardscape and open bedding areas throughout community and 192. On-going basis. However, due to the declining mulch in beds and the weather conditions which are prime for excessive growth of weeds, three (3) additional crew members were added the last ten (10) days in July and will continue for a couple more weeks as necessary.
- b. Hand weeding to maintain aesthetics within ornamentals and ground covers being supplemented with selective herbicides.

4.3.4 Fertilization

a. Next application scheduled for August.

4.3.5 Pest and Disease Control

a. No major pest or disease concerns at this time other than reported in previous reports.

4.3.6 Mulching: Completed for the Year

4.3.7 pH Adjustment

4.4 Tree Care

4.4.1 Pruning

- a. General 10ft. clearance though out property is in progress.
- b. General sucker removal throughout

4.4.2 Fertilizer

b. Swim Club palm fertilizer completed as outlined in last month's report.

4.4.3 Pest Control

- a. Harmony Square two oaks in sudden and rapid decline. Tissue sampling sent to the University of Florida for diagnosis. Early diagnosis is a canker. Results are expected within two weeks of submittal, 4/11/14 (Fed-Ex) for discussion at Board meeting. Dr. A.D. Ali, Regional Advisor site visit and review on 4/16/14 → re-scheduled to 4/28/14.
- b. Update (May): A third tree in the square has exhibited same signs of decline. Tissue sampling was conducted on 05/13 and submitted to a second source for diagnosis, Dr. Aaron Palmateer, Univ. of Florida homestead Diagnostic Center
 - a. 4/11/14 Samples submitted to Dr. Jason Smith, Univ. of Florida School of Forestry. Dr. Smith leading research into Sudden Wilt disease among Laurel Oaks in the State of Florida.
 - b. 4/28/14 Site visit by Davey Tech Advisor, Dr. A.D. Ali; no physical signs of borers...rule out wilt disease.
 - c. 5/01/14 Phone conversation with Dr. Jason Smith. Evidence of canker on tissue samples submitted. Leaning towards condition known as armilleria. Test results expected in 1-2 weeks. Dr. Ali does not concur with armilleria condition.
 - d. 5/13/14 Removal to grade of two original trees. Third tree exhibiting similar conditions. New tissue samples submitted to Dr. Aaron Palmateer. Seeking additional assistance through Osceola and Orange County Extension (Celeste White) offices, Dr. Aaron Palmateer, and Stephanie Bledsoe, DPM PHC Consultants, Inc.

c. Update (June):

- a. 5/27/14 received news from Stephanie Bledsoe that a culture had developed on one of the samples from the third tree. This information was passed along at the May Board meeting. Identification of the pathogen is pending development of the culture in the sporification stage which will allow her to conduct further testing.
- b. 6/9/14 received e-mail from Adam Black, Manager of the Forest Health Laboratory at the School of Forest Resources and Conservation, University of Florida indicating their determination is a result of Diplodia corticola (Oak bot canker) and is the first known case discovered to affect Laurel Oaks in Florida. A copy of the report is provided below.

- c. 6/10/14 A trunk sample from the third tree is being submitted to the University of Florida for testing as well.
- d. 6/10/14 A treatment regimen is being developed with input from multiple sources within Davey as well as outside consultants for a preventative program and best methods and products to use given what little is known at this date. Recommendations are pending.
- d. Update (July)
 - a. 7/22/14 Results from 6/10 submission of trunk sample still pending.
 - b. 7/22/14 Treatment regimen suggestions: Twice per year application of Agri-Fos combined with Pentra Bark. This is not a curative regimen and no guarantee to prevent canker type pathogens. This is a regimen to assist the tree in boosting its immune system and strengthening the ability to withstand environmental stresses. Application is a basal drench from the base of the tree up the trunk 3-4'.
- e. Update (August)
 - a. Results from additional testing still pending.
 - b. No additional occurrences noted
- f. Update June 14, 2016 Laurel Oaks in Harmony Square (6) showing signs of stress and possible Diplodia corticola (Oak bot canker). The diameter of each tree ring was enlarged and vertical mulching was completed to help alleviate soil compaction. Trees also were treated with Agri-fos and Pentra Bark as a basal drench. This is a regimen to assist the tree in boosting its immune system and strengthening the ability to withstand environmental stresses. Application is a basal drench from the base of the tree up the trunk 3-4'. The trees also were deep root fertilized with Abor Green Pro, as proposed in a letter to Kerul Kassel. Soil and Tissue sample test results pending.
- g. Update 7/15/16: No results have been received determining the underlying cause of the Laurel Oaks condition.
- h. Update 8/12/16 No evidence of Botryosphaeria Canker or Oak Wilt has been observed in the culture. The cultures will be held one more week and then a final report will be generated. The evidence of the dry conditions of the samples still indicates the adverse environmental conditions and/or poor site conditions suspected. Additional deep root aeration to at least the drip line of tree may be necessary.
- 4.4.4 Mulch
 - a. Note section 4.3.6
- 4.4.5 pH Adjustment

4.5 <u>Irrigation</u>

- 4.5.1 General Requirements
- 4.5.2 Monitoring

- a. Turf monitoring and notification of breaks, damage, concerns to Project Manager and Staff
- 4.5.3 Valve/ Valve Boxes

4.6 <u>Litter Removal</u>

- 4.6.1 Landscaped Area
 - a. Mowing, detail, weed crew and Supervisor responsibility on a daily basis.
- 4.6.2 Sidewalks
 - a. Mowing, detail, weed crew, and Supervisor responsibility on a daily basis.
- 4.6.3 Trash Receptacles
 - a. Cleaning and pest control scheduled bi-weekly.
- 4.6.4 Streets
 - a. Mowing, detail, weed crew, and Supervisor responsibility on a daily basis

4.7 <u>District/ District Manager Awareness</u>

5.0 <u>Unscheduled Maintenance and Repairs</u>

- 5.1.1 General
 - a. None noted at this time.
- 5.2.1 Damaged Facilities
- 5.2.2 Damaged Irrigation System Repairs
 - a. Reference section 4.5.1 above
- 5.3.1 Emergency Repairs
- 5.4.1 Unscheduled Maintenance

Proposals/ Enhancement Work and General Notes

- 1. Warranty replacements will be completed once cooler temperatures begin around the end of September.
- 2. As discussed last Board Meeting, if Billy Newell the Site Manager was not able to show effective management to maintain the property at a level deemed appropriate by Davey and Harmony, a change would be made. The change was necessary and I personally have been overseeing the operations while a replacement is hired or promoted from within Davey. To help our on-site crew an additional three people have been added to the crew to make sure all areas are improved during this transition period.