Managing Urban and Suburban Trees

Jeremy Hager

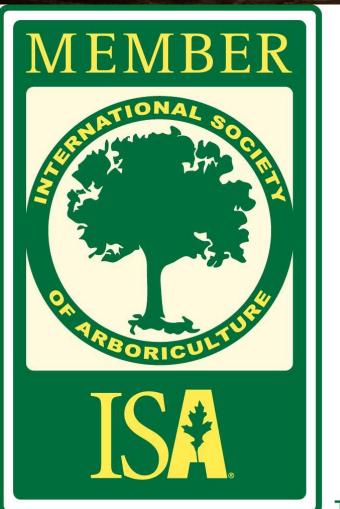
ISA Board Certified Master Arborist MA-4360B ISA Tree Risk Assessor DE/MD Certified Pesticide Applicator MD Licensed Tree Expert #2094



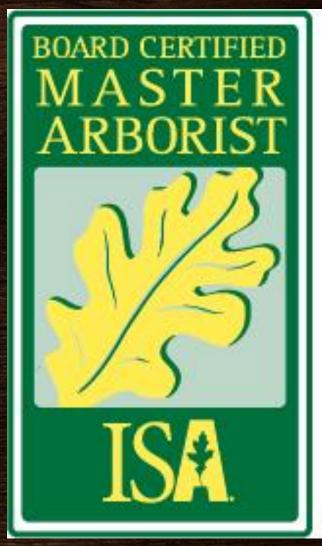




Credentials as Protection







Community Tree Management Master Plan Process

- > Review current plan. Understand management prior to start. Review existing landscape contract.
- ➤ **Define overall goals and timeline**. Goals include safety, visibility and sightline improvement (marketing window, asset visibility), infrastructure protection (sidewalks, lights, signage, structure), expenditure reduction over 3-7 years, tree health and longevity, and curb appeal. A typical master plan will include priority levels 1-3.
- > Compile maps and define property lines/working area.
- Field data collection. All notable trees are mapped, numbered, and prioritized. Color coding for priority and/or work type are applied. High risk items are communicated prior to data processing for immediate attention. Photos are taken at time of field data collection.
- ➤ **Draft Reporting.** Draft is prepared and brought to stakeholders for discussion prior to finalization. Rough budget numbers have been obtained. Site walk through with board or landscape committee recommended.
- Final Reporting. Final plan and budgeting submitted and will require meeting to discuss in detail.
- ➤ **Implementation.** Appropriate vendors for each work type are interviewed onsite. Economies of scale are leveraged, cost is negotiated, work timing is optimized (pruning/removal/root work performed in fall and winter and treatment and/or fertilization performed between 11pm-7am).
- ➤ Oversight. Board Certified Master Arborist (BCMA) onsite during all work activities to ensure safety and industry standards are met. BCMA to provide management with appropriate letters and information to be distributed to community residents to update them on planned work and expectation. BCMA will be available for direct community outreach and is common to hold town hall type events. Daily/weekly reporting available.
- Regular plan updates. Master plan updated annually prior to budgeting to reflect any changes that may have occurred during the growing season.



October 17, 2018

Bayside Community Master Association c/o Legum & Norman 7904 Coastal Highway Ocean City, MD 21842



To Whom It May Concern,

Followings meetings with the Bayside HOA Landscape Committee, property management, and the Master Board, I conducted a site evaluation of the tree canopy throughout the community and amenity areas. This site evaluation was conducted over the course of several weeks in the Fall of 2018. The purpose of this evaluation was to determine existing risk, tree pruning and removal needs, determine overall tree health and viability, quantify existing and potential pest and disease populations, and to evaluate soil related issues including nutrient deficiencies and potential for roots damaging sidewalks or other surface laid infrastructure. The findings were used to develop a prioritized management plan to address the tree canopy over the course of the next 1-3 years.

You will find several documents associated with this evaluation. A color-coded tree map was developed that corresponds to the list of recommendations. Trees that were mapped included

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all pertinent frees within the association's management and that are not under warranty or part of the new developments currently under way. A separate evaluation of these areas is available for general discussion and oversight. Numbered icons on the map correspond to the attached recommendations and are color coded by priority. Red icons refer to Priority 1, Yellow refer to Priority 2, and Green with Priority 3. Isastly, you will note areas delineated that pose a risk for root interference and infrastructure damage as requested by the board. Separate maps color coded my work type (i.e. pruning, removal, spraying, etc) can be developed should the board desire. Please note an overview of priorities and work specifications below.

Bayside HOA Work Priorities and Specification Overview

*Priority 1:

Trees needing attention within the next 12 months due to health and safety concerns. This includes trees that need to be removed due to high risk to residents or infrastructure, pruning that is overdue, or pest/disease treatments that pose a risk to cause irreparable harm to a tree or group of trees.

*Priority 2:

Trees needing attention in the next 12-24 months due to safety concerns or issues concerning asset protection (i.e. building, signage, lighting, amenities, etc). This includes but not limited to trees with significant decline due to pest or disease infestations, trees with poor structure, undesirable species, or trees that are deemed higher risk but located in low traffic areas. Fertilization of trees stressed from pest, disease, drought, etc. will fall under Priority 2. Ongoing therapeutic or preventative pest and disease treatments may be warranted.

*Priority 3:

Trees needing attention in the next 24-36 months. This includes trees recommended for removal to improve design and/or visibility, pruning to improve the aesthetic and marketability of the property, and pruning to reduce risk and improve health. Ongoing therapeutic or preventative pest and disease treatments may be warranted.

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*Structural Pruning (for all trees listed under 'Tree Pruning' unless otherwise noted):

Crown clean to remove dead branches 1" and larger throughout the canopy. Thin trees 5-25% as appropriate to reduce risk of branch failure and increase the light and air penetration throughout the tree. Prune to remove selected lower branches to improve clearance over buildings, parking/cars, and reduce any conflicts with existing lighting and signage. Reduce or subordinate selected limbs as appropriate to provide additional clearance to buildings, lighting, or other structures. Prune to remove or subordinate co-dominant leaders to improve structure and reduce risk over the lifespan of the tree. All trees will be pruned as appropriate for their size, species, and location. Remove all associated wood and debris.

Removal (for all trees listed under 'Tree Removals' unless otherwise noted):

Safely dismantle trees and cut stumps as close to grade as possible. Remove all resulting wood and debris. Stump grinding included in tree removal price and will be performed as follows:

High visibility areas: Grind stumps to 6"-12" below grade, remove resulting grindings to grade.

Wooded/Playground/Low Visibility areas: Grind stumps to 2" below grade and rake mulch to grade.

*Plant Health Care (Pest and Disease Treatments and Fertilization):

Specific treatments will be outlined in the recommendations with corresponding estimated dates of completion.

*Root Collar Excavation

In cases where trees have buried root flares, these trees will be excavated using an Air Spade and offending/girdling roots will be removed to the extent possible. Resulting debris will be re-mulched as needed.

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Tree ID#	Map#	Species	Total Trees	Diameter	Condition Rating	Removal	Priority 1Pruning	Priority 2Pruning	Priority 3 Pruning	Anthracnose	Scale	Fertilization	RCX	Root Pruning
1	1	River Birch	1	14	85		x					х		
2	1	River Birch	1	12	85		x					х		
3	1	River Birch	1	14	85		x					x		
4	1	River Birch	1	16	85		x					x		
5	1	River Birch	1	18	85		x					x		
6	1	River Birch	1	18	80		х					х		
7	1	River Birch	1	17	80		x					x		
8	1	Maple	1	6	40	x								
9	1	Maple	1	5	55		x				х	х		
10	1	Maple	1	10	70		x				х	x		
11	1	Maple	1	8	70		x				х	х		
12	1	Maple	1	12	75		x				х	х		
13	1	Maple	1	6	45	x								
14	1	River Birch	1	20	75		x							
15	1	River Birch	1	22	70		x							
16	1	River Birch	1	23	70		x							
17	2	(3) Sweetgum	3	24	20	x								
18	2	Maple	1	36	65		x							
19	2	(14) Hornbeam	14	4	85			Х			х	х		
20	2	Sweetgum	1	16	35	x								
21	2	(16) Trees	16	n/a	70			Х				х		
22	2	Elm	1	4	90				x				х	х
23	2	Elm	1	5	90				х				х	х
24	2	(3) River Birch	3	n/a	80		x					х		
25	2	(3) Magnolia	3	n/a	95				x					
26	2	Chinese Elm	1	10	90		x						х	
27	2	Chinese Elm	1	10	90		x						х	
28	2	(3) Crape Myrtle	3	n/a	85				х					
29	2	(7) Hollies	7	n/a	85						х			
30	2	Crape Myrtle	1	n/a	85				х					
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Lisa Arni 35548 Coastal Highway Fenwick Island, DE 19944 September 21, 2018

JOB LOCATION – 35548 Coastal Hwy, Fenwick Island, DE 19944 CONTACT: ma2010@verizon.net; 302-537-6238

officer. mideotog-vericominet, 502 557 0250

DISEASE AND INVASIVE SPECIES MANAGEMENT

Invasive Species Management: Treat rear and right property line to reduce Phragmites population.

Inspections with treatment will occur on or around: 10/12/2018, 10/01/2019, 10/01/2020
 Cost for program @\$330/treatment\$990.00

Disease Management: Treat all the Sycamores, Hydrangea and other diseased plants at the property to suppress Anthracnose and Powdery Mildew disease.

TREE REMOVAL

Remove the (2) Bayberry at the front right

Remove trees and all resulting wood and debris. Cut stumps as close to grade as possible

Cost for removal.....\$345.00

TREE PRUNING

Prune the following trees according to the specifications below:

- -Crape Myrtle at the rear left house corner
- -Crape Myrtle at the rear right house corner

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- -Sycamore at the front right house corner
- -Sycamore at the front left property corner
- -Pear at the front near the driveway
- -(2) Persimmon at the front right near wall/Pear
- Prune to remove all dead, diseased, and broken branches equal to or greater than 1" diameter.
- Prune to retain privacy to the extent possible.
- · Prune to clear house by 8-10' as appropriate.
- Prune to thin canopies by 10-25% as appropriate for each species and location
- Additional specific limbs or instructions for each tree:
 - o Crape Myrtle at rear left: Prune to remove low right limb growing towards house/deck
 - o Crape Myrtle at rear right: Pune to remove low limb extending towards the Bay
 - Sycamore at front right: Prune to clear over Magnolia beneath low front limb
 - o (2) Persimmon: Remove lower limbs as directed by client
 - Sycamore at front left property corner: Prune to clear nearby plants. Retain foliage near electric
 pole to the extent possible.
 - o Pear at front: Remove 2 lowest limbs over fence and 2 lowest limbs over driveway

Cost for pruning		\$2,270.00
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STANDARD OF PRACTICE & AUTHORIZATION

Coastal Plant Care is committed to serving you safely and professionally. The work described above will be carried out in accordance with ANSI, OSHA, EPA, & LEED EB performance and safety standards applicable to Arboricultural Operations.

To give your go-ahead please review the Terms and Conditions listed below, which are part of this agreement, indicate the services that you would like us to perform, sign one copy of this proposal and return it to our office. To expedite scheduling you may return it electronically, but please mail original as well.

Approved	Date		
C. D.			
***	09/21/2018		
Jeremy Haser, ISA Board Certified Master Arborist MA-4360B	Date		

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Delaware Tree-Friendly Community Program

Tree-Friendly Community Awards recognize Delaware communities that have an active community forestry program.

To qualify as a Tree-Friendly Community, you must have fulfilled (3) of the following:

- Performed an annual ceremony to promote your community's and our state's urban forest resources. This may be an Arbor Day, Earth Day, or another community ceremony that educates the public and promotes the importance of trees within your community.
- Conducted a tree project within your community that enhances existing urban forest resources. This can include planting trees within a community-owned open space, trimming of community-owned street trees, or a similar project that demonstrates a commitment to maintaining your community's existing urban forest resources.
- Developed a community forestry management plan in cooperation with the Delaware Forest Service U&CF Program. Management plans should guide the management of urban forestry resources for at least a five year period.
- Developed a community tree ordinance that protects trees.
- Formulated a tree commission or tree board that serves as the guiding body for tree related decisions throughout the community.
- Had a tree budget of \$1 per household for residential communities.

Communities will receive a complimentary sign to let the public know they are committed to maintaining their forest resources and our state's environment. This certification is good for two years, after which it can be renewed. To see if your community qualifies as a Delaware Tree-Friendly Community, please complete the attached application.

If you have any additional questions, please contact Michael Martini, Urban & Community

Forester: Phone: (302) 659-6704 Email: michael.martini@state.de.us.

The Delaware Forest Service Urban & **Community Forestry Program**

Delaware Community Forestry Council



Common Tree Issues BASICS OF TREE CARE





Buried Root Collars



Nutrient Deficiencies and Moisture Stress



Infrastructure Damage







Human Impact











Structural Defects, Risk Mgmt, Pruning





Reducing annual costs through renovation



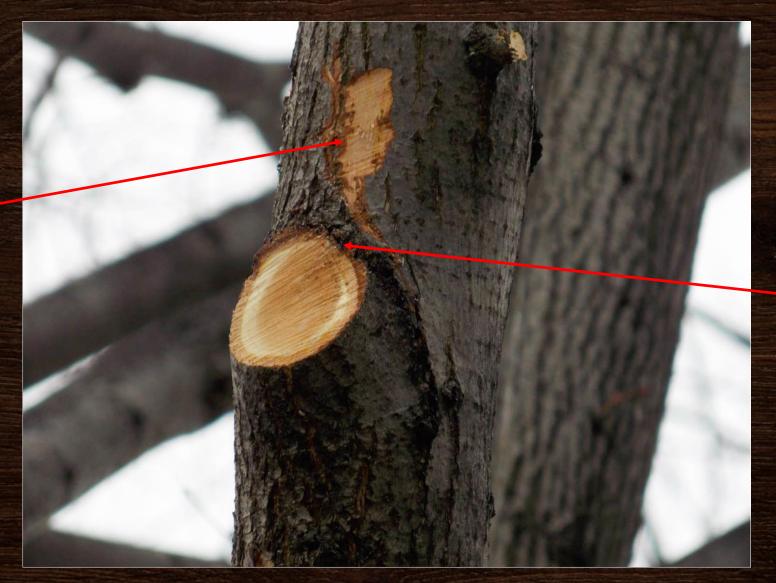


Proper Pruning Cuts BASICS OF TREE CARE



Improper Pruning Cut

Cut made with chainsaw when small limb should have been removed with handsaw. Careless operator damaged limb and bark. Wounds will not heal.



Cut made too flush to the branch. Contractor cut into the vascular system of the tree and will cause decay. May increase pest and disease problems.

Improper Pruning Cut



Proper location and angle. The cut should have been made here using a handsaw

Careless tree climber allowed weight of the limb to rip vascular tissue and bark prior to finishing his/her cut. Wound will not heal

Small diameter limb cut with an unsharpened chainsaw. Cut should be made with handsaw and resulting cut should be smooth and not jagged. Improper location of cut, branch stub left too long. Decay probable.

Improper Pruning Cut

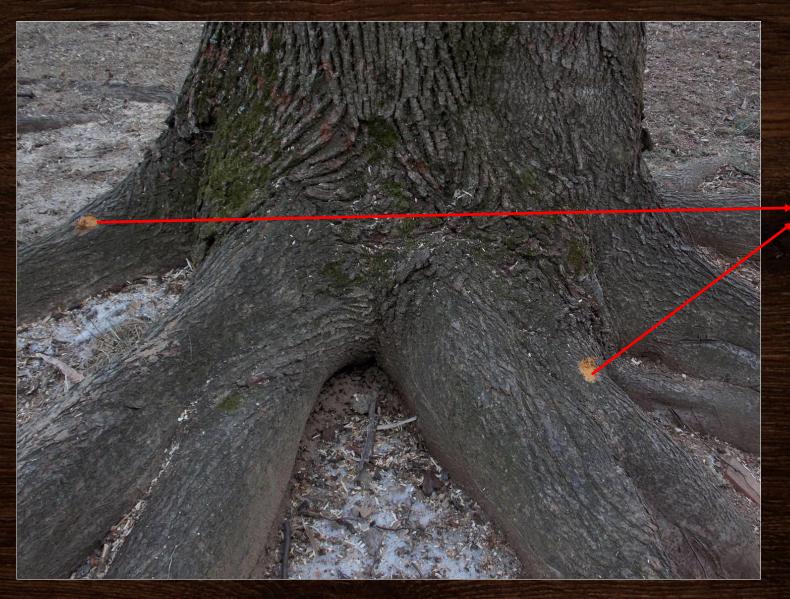
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Collateral Damage

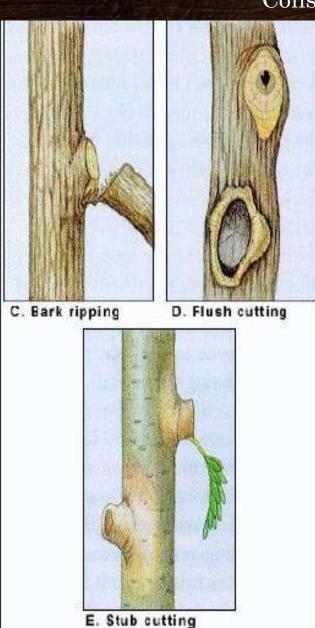


Careless tree climber allowed limbs to fall and damage root flare of the tree. Limbs should be lowered to the ground or dropped in a manner so as to not damage tree, surrounding landscape, or our property.

Consequences



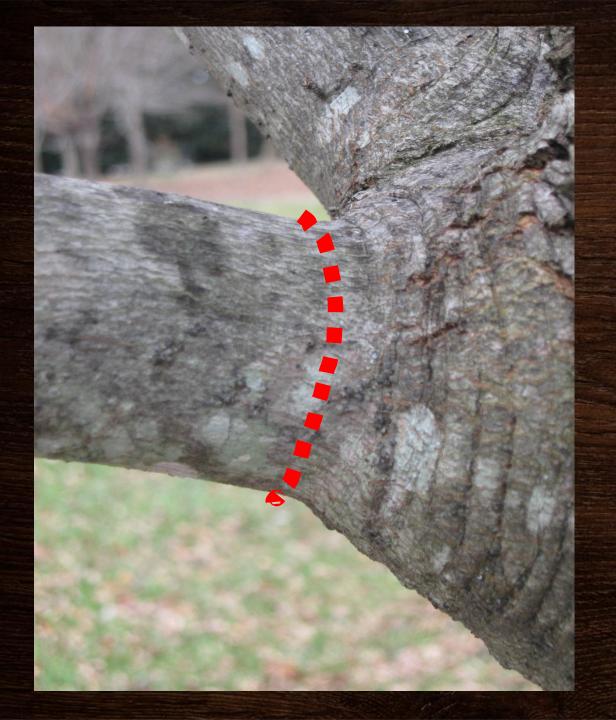
Allowing stubs to remain or cutting to flush will cause excessive regrowth at the site of the pruning cut and will require additional pruning in 1-2 years depending on species, size, and location.





Allowing bark to rip or damaging bark during a pruning operation will cause decay. Same with cutting a limb too flush to the trunk or remaining branch. No method to correct poor cuts once they have been made.

Improper Pruning Cut: Too flush to trunk Proper Pruning Cut: Will not decay Healed Pruning Cuts Decay from flush cut



Proper location for the cut to made on this Maple. Notice cut to be made outside of swollen branch collar which contains vascular tissue responsible for water and nutrient flow. Branch cut made perpendicular to the branch angle orientation

Proper Cut

Conclusion:

Proper pruning cuts will increase the time between pruning efforts, reduce risk, and reduce decay. Proper thinning, dead limb removal, removal of lower limbs, and clearing limbs away from lighting and buildings will reduce risk and create our desired aesthetic for our portfolio.

Before



After

