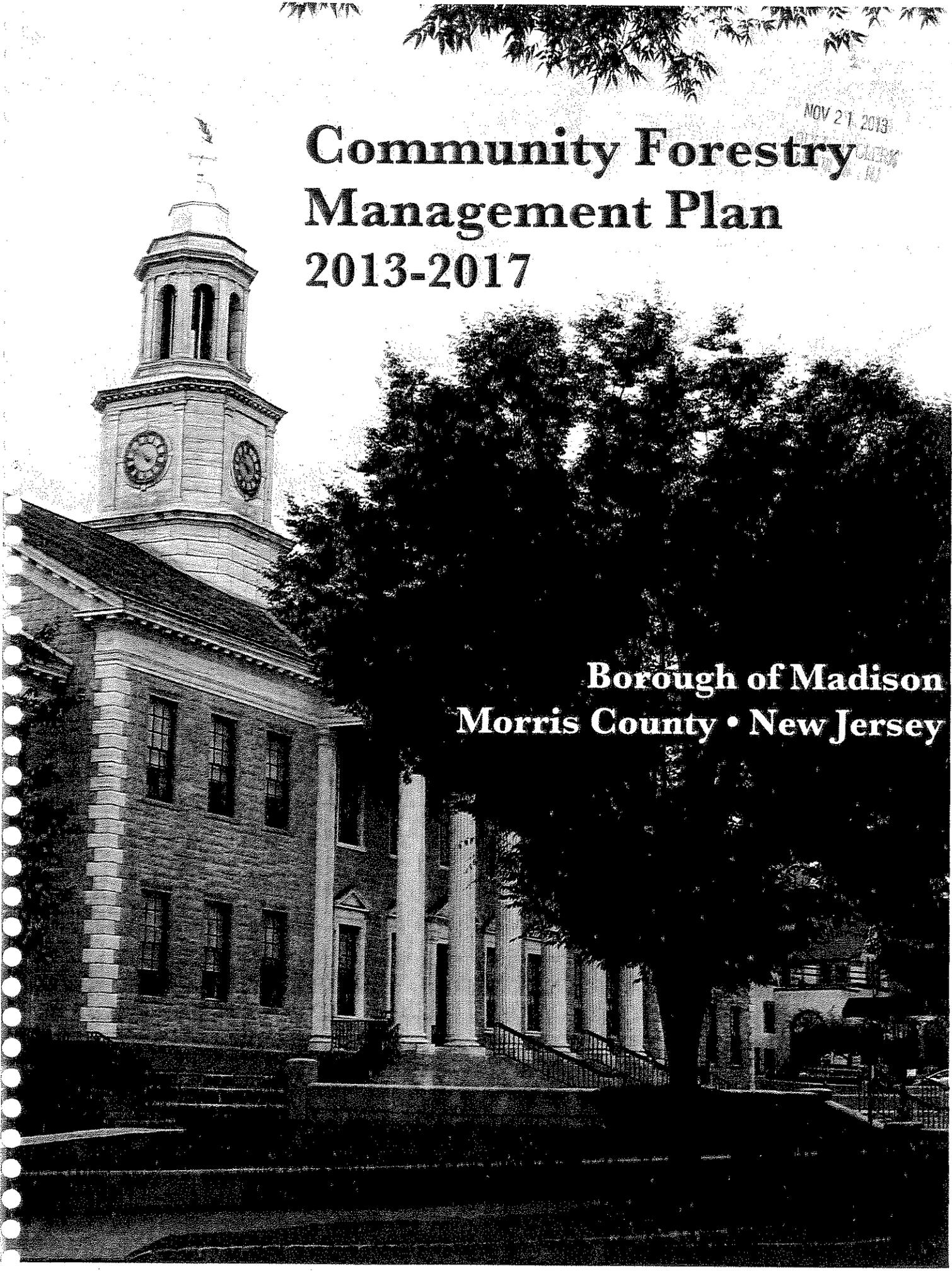


NOV 21 2013

# Community Forestry Management Plan 2013-2017

**Borough of Madison  
Morris County • New Jersey**





# COMMUNITY FORESTRY MANAGEMENT PLAN 2013-2017

Borough of Madison • Morris County • New Jersey

## **Mayor & Council**

Robert H. Conley, *Mayor*

Carmela Vitale, *Council President*

Astri J. Baillie

Robert G. Catalanello, *Council Liaison*

Robert Landrigan

Jeannie Tsukamoto

Benjamin Wolkowitz

## **Borough Administrator**

Raymond Codey

## **Shade Tree Management Board**

Mike Kopas, *Chairman, Arborist*

Alan Andreas, *Vice Chairman*

Stephen Miller, *Treasurer*

Christine Hammitt, *Secretary*

Nancy Bruce

Gene Cracovia

Penny Garman

Vince Licari, *Arborist*

Paul Allocca, *Parks Liaison*

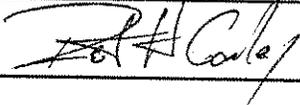
## **Superintendent of Public Works**

David Maines

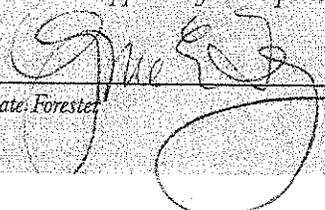
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# I. MUNICIPALITY INFORMATION

<b>Municipality:</b>	Borough of Madison
<b>County:</b>	Morris
<b>Address:</b>	Hartley Dodge Memorial, Madison, NJ 07940
<b>Contact Name and Title:</b>	Gene Cracovia, Nancy Bruce <i>Members Shade Tree Management Board</i>
<b>Phone #:</b>	973-301-9139, 973-514-1716
<b>Fax # and E-mail:</b>	973-301-9139, genecracovia@msn.com, 973-377-4964, nb83151@aol.com
<b>Organization Name:</b>	Shade Tree Management Board
<b>Mayor's Signature:</b>	
<b>Date of Management Plan Submission</b>	August 15, 2013
<b>Time Period Covered in Management Plan:</b>	January 1, 2013 – December 31, 2017
<b>Community Stewardship Incentive Program (CSIP)</b>	<input checked="" type="checkbox"/> CSIP #1 Training p. 16 <input checked="" type="checkbox"/> CSIP #2 Community Forestry Ordinance Establishment p. 17 <input checked="" type="checkbox"/> CSIP #3 Public Education and Awareness p. 17 <input checked="" type="checkbox"/> CSIP #4 Arbor Day p. 19 <input checked="" type="checkbox"/> CSIP #5 Tree Inventory p. 19 <input checked="" type="checkbox"/> CSIP #6 Hazard Tree Assessment p. 20 <input checked="" type="checkbox"/> CSIP #7 Storm Damage Assessment p. 21 <input checked="" type="checkbox"/> CSIP #8 Tree Maintenance and Removals p. 21 <input checked="" type="checkbox"/> CSIP #9 Insect and Disease Management p. 22 <input checked="" type="checkbox"/> CSIP #10 Wildfire Protection p. 22 <input checked="" type="checkbox"/> CSIP #11 Tree Planting p. 23 <input checked="" type="checkbox"/> CSIP #12 Tree Recycling p. 24 <input checked="" type="checkbox"/> CSIP #13 Sidewalk Maintenance Program p. 24 <input checked="" type="checkbox"/> CSIP #14 Storm Water Management p. 25 <input checked="" type="checkbox"/> CSIP #15 Other (Sustainable New Jersey) p. 26
<b>Practices Identified in Management Plan</b>	

*Official Use Only: The above named municipality/county has made formal application to the New Jersey Forest Service. I am pleased to advise you that after our review, the NJ Forest Service has concluded that this plan meets the standards set forth by the State and the NJ Community Forestry Council and is approved for the period covered.*

Signed  State Forester

 Approved Date

## II. INTRODUCTION

### **Scope**

The following sections outline programs and procedures for managing public shade tree resources within the Borough of Madison during the period 2013 – 2017.

Recognizing that trees help improve the quality of urban and suburban life, the Borough has developed this Community Forestry Management Plan in accordance with statewide efforts to preserve and promote sustainable community forest resources and the Goals and objectives of Madison's Master Plan.

This Third five-year Plan focuses primarily on public safety as it involves Borough – owned street trees as well as trees on other public properties and an updated tree inventory.

In developing this Plan, the Shade Tree Management Board has built on the expertise and work of Consulting Arborist, Paul Cowie, whose firm wrote the initial Plan. This third Plan has been developed with help from Lorraine Konopka, CTE of Timber View Consulting, LLC, who supplied advice and ideas to the Shade Tree Management Board.

### **Mission Statement**

To pro actively develop and promote a sustainable community forest and shade tree resource for the Borough of Madison and its residents' physical health and economic, environmental, and social well-being.

### **Goals and Objectives**

*The New Jersey Community Forestry Council has identified fifteen Community Stewardship Incentive Program (CSIP) practices that together comprise a complete and comprehensive community forestry program.*

Within each of the plan elements that follow, existing Borough programs, policies and procedures are described, intermediate and element-specific Goals are established, and CSIP-based objectives for the 2013 – 2017 management period are set.

Systematic fulfillment of these CSIP-specific Goals and objectives will continue to move Madison's Shade Tree Management Program toward its overall program Goals, which are established as follows:

1. Minimize the risk of trees to public safety, including conflicts between trees, sidewalks and other infrastructure.
2. Evaluate and update tree inventory.
3. Improve and maintain public interest, appreciation and support for trees and public shade tree programs and encourage volunteer participation.
4. Preserve and protect existing woodlands and other natural areas in a manner that maintains the character of the Borough, protects environmentally sensitive lands, maintains water quality, protects habitat, and provides scenic and recreation opportunities.
5. Improve tree protection enforcement during construction.

### **Liability Statement**

As with all municipal assets, trees require maintenance and it is inevitable that potentially hazardous conditions will emerge.

Nevertheless, it is widely recognized that comprehensive and proactive community forestry programs designed to prevent, anticipate, and correct such problems will cost-effectively maximize the benefits of trees while minimizing the threat to public safety and exposure to liability. All elements of this plan are designed to optimize the balance between tree benefits and risks.

The Borough of Madison acknowledges that not all hazardous conditions can or will be predicted. It must work with limited resources spread over a large physical expanse and may not be able to meet every need immediately.

The intent of this plan is to direct available resources toward the greatest needs and systematically develop and maintain a healthy shade tree resource with a commensurate reduction in threats to public safety.

Public safety will be a primary consideration in the development and implementation of all shade tree plans and programs. This plan provides a means of identifying and systematically addressing existing tree hazards. Further, it provides a means of reducing the potential for future hazards and liability through responsible planting and preventative maintenance.

### **History of Madison**

Madison's history as a crossroads began with its original settlers, the Lenape Indians whose Minnisink Trail passed along what is now Kings Road. The earliest settlers of European descent arrived in the early 1700s and established "Bottle Hill" at the crossroads of Ridgedale Avenue and Kings Road. The village of Bottle Hill, which changed its name to Madison in 1834, was part of Chatham Township until it seceded to become a separate borough in 1889 with a population of 3,250 people.

In 1837 the Morris and Essex railroad was completed, accelerating Madison's growth and allowing it to develop earlier than many neighboring towns. Later in the century, this access to the New York markets helped give rise to a flourishing rose growing business. Although there are no longer any rose greenhouses in the borough, the industry is commemorated in Madison's nickname, The Rose City. Madison quickly developed a diverse population, both economically and ethnically, with immigrants from England, France, Ireland, Italy and Germany. Today Madison remains a diversified community, with recent immigrants coming from Central and South America and Asia.

### III. COMMUNITY OVERVIEW

#### Ten Years of Progress

The Borough of Madison is a small, suburban community located in southeast Morris County. It is bordered by the Borough of Florham Park to the north and east, the Borough of Chatham to the east, Chatham Township to the south and west, and Harding and Morris Townships to the northwest.

The dominant land use, minimally changed from 2007, is single-family housing, occupying 62% of the developed land, largely on lots less than one acre. Parks and other public lands occupy 25% of the developed land and commercial uses occupy 13%. Very little industrial land exists in the Borough. Buildings within the Bottle Hill Historic District along Ridgedale Avenue and the Madison Civic Commercial Historic District, which includes much of “downtown” as well as the Hartley Dodge Memorial Borough Hall and the train station, are listed on the National and State Register of Historic Places. The downtown business district has been very successful with little vacant commercial space available. The Shade Tree Management Board (STMB) has been active and influential in preserving Landmark trees.

In 2004, the Open Space, Recreation and Historic Preservation Advisory Committee was formed to make recommendations to the Mayor and Council as to the properties to be acquired or otherwise protected for open space preservation; natural resources preservation, including water supplies; active and passive recreation preservation; and historic preservation.

In 2007, Madison received the largest open space grant ever awarded by the Morris County Open Space Trust Fund. The grant was \$6 million to assist Madison in the \$13 million purchase of the 49 acre property for the Madison Recreation Center. The property, adjacent to Madison High School, was part of the former Exxon Campus (which was originally part of the Twombly estate) and part of Florham Park. The property was annexed to Madison. It contains multiple active recreation fields, a community garden with a tree nursery established in 2013, an historic pin oak allée and planned walking and hiking trails.

Private tree protection was the number 1 issue that came from the Green Forum hosted in 2004 by STMB. From 2005 through 2009, STMB researched, wrote, and rewrote proposed private tree ordinances. Public meetings were held; it was discussed at length at council meetings, review of draft ordinances were held with builders. In 2008 – 2009, STMB proposed a final, simplified, minimally intrusive private tree ordinance that established baseline standards and provided for independent professional assessment of private tree issues. Unfortunately, an organized public opposition coalition made it an extremely controversial issue. In 2009, the sitting Mayor/Council voted to table it. Since then, with the downturn in the economy, there have been far fewer tear downs/rebuilding in Madison, and tree clear cutting/ other removals are no longer as frequent.

From 2009-2013, the Greening the Rose City campaign focused on planting hardwoods throughout Madison. STMB, FMST, Parks Advisory Committee and the Garden Club of Madison each committed to contributing a total of \$4000 per year to improve Madison's tree canopy. This allowed the borough to plant up to additional 15 trees per year.

In 2008 the Borough completed purchase of 49 acres of open space for the Madison Recreation Center project. The Shade Tree Management Board and a Borough committee (several STMB members served on the committee) were instrumental in the process of planning for the tract and

of applying for Open Space grants. STMB members Gene Cracovia and Mike Kopas, a Certified Tree Expert, with Drew University professor Dr. Sara Webb, conducted a horticulture survey of the vegetation and biodiversity of the site. Professor Webb issued an informal report on that survey which identified ecologically sensitive areas including a mature forest zone and other large native trees.

On May 1, 2010 STMB held its annual Arbor Day ceremony at the Madison Train Station to celebrate the completion of a renovation and landscape project that took a decade to plan and implement. NJ Transit began by restoring the historic stone building. The Friends of Madison Shade Trees along with the Friends of Madison Train Station received a large federal grant to install hardscape and extensive tree, shrub and groundcover in a historically accurate way. STMB used its budget and resources during that time to inspect, prune, remove, and care for trees on Transit property.

In early 2010, Madison's Shade Tree Management Board was awarded a 2009 Business Stimulus Fund in the amount of \$7,000. The grant was used to 1) reestablish the allée of pin oaks where trees had been removed, or were in decline by planting 6 pin oaks; and 2) continue reforestation efforts by planting 6 native trees (sweet gum, swamp white oak, red maple) in the wooded wetland area.

In 2010 Madison was certified by Sustainable Jersey at Bronze Level, and in 2013 applied for Silver certification status. The STMB provided information on its tree planting and tree maintenance programs to both applications. In 2010, STMB approved the "Madison Tree Canopy Goals and Objectives" which included developing a planting plan based on inventory of available planting sites, increasing the diversity of trees planted to reduce significant loss due to disease or pest infestation, "planting the right tree in the right place", continuing fundraising efforts in an attempt to increase the budget for tree planting, ensuring species diversity in development/re-development plans submitted for site or plan review, and continuing an awareness campaign.

In May 2011, the Shade Tree Management Board and Friends of Madison Shade Trees took part in Madison High School's Day of Service, an opportunity to have students apply what they have learned in the classroom to meet community needs. The STMB/FMST project was designed to document the value of the trees on the Madison High School property. The project had 8 high school students inventory all trees on the high school grounds that were > 2" in diameter. The information gathered was tree specie and diameter. The students entered data into i-Tree. Analytic reports were then produced based on the data.

STMB received a Green Communities Grant in 2012 (PF13-031) for \$2200 to develop third Community Forestry Management Plan. Lorraine Konopka, a CTE, of Timber View Consulting, LLC was hired to guide the process.

In 2013, STMB, Friends of Madison Shade Trees, Inc., Parks Advisory Committee and Garden Club of Madison established a tree nursery at the Community Garden, part of the Madison Recreation Center. Boy Scout Troop 7 planted nearly 100 saplings, a mix of red bud, northern red oak, shag bark hickory and sassafras, into pots which were then set into beds of mulch. When grown to appropriate size, the trees will be transplanted to Madison parks or other public spaces. Volunteers from the Shade Tree Management Board, Friends of Madison Shade Trees and the Garden Club of Madison rotate watering duties.

## **Current Public Tree Assessment**

Like most communities in New Jersey the past two years, Madison focused on cleaning up. The disastrous effects of the October Storm of 2011 were still being felt when Sandy hit. Madison's Shade Tree Management Board (STMB) spent the bulk of its 2012 budget (\$102,000) on storm related damage. Even that did not cover the total expense. Over \$350,000 was spent by the Borough, outside STMB's budget on damage from the combined storms. Madison lost over 300 street trees as a result of the two storms. That number does not count the massive damage to trees in the public parks and on private property. Additional windshield" surveys were undertaken by members of the Shade Tree Board as an aid to our Department of Public Works.

A detailed inventory of Madison's public trees was completed in 2007 by Arbor Pro, funded by a \$25,000 grant from the New Jersey Forest Service. The inventory is continually updated to reflect any changes. Software updates are included in a yearly contract with Arbor Pro that is part of STMB budget. Reports available from the database provide both individual and summary information about tree counts, tree pruning, tree removals, new tree plantings and tree diversity. After analyzing the information gathered from the street tree inventory, STMB has begun diversifying tree species away from the predominately maple varieties to other native species.

Based on an extrapolation of this partial data set, the impressions of the Shade Tree Management Board and Department of Public Works, and a windshield survey conducted during the development of this Plan, the following general conclusions have been reached.

Madison's street tree population contains roughly 6700 trees.

The street tree population is relatively well stocked with more than 80% of the sites currently planted. Older segments of the street tree population contain a relatively large number of Norway maples (*Acer platanoides*), sugar maples (*Acer saccharum*), red maples (*Acer rubrum*), pin oaks (*Quercus palustris*), sycamores (*Platanus x acerifolia* and *Platanus occidentalis*), and Callery pear (*Pyrus calleryana*).

Younger and middle-aged segments of the street tree population contain a wider variety of species, including red maple (*Acer rubrum*), red oak (*Quercus rubra*), pin oak (*Quercus palustris*), willow oak (*Quercus phellos*), elms (*Ulmus spp.*), Zelkova (*Zelkova serrata*), green ash (*Fraxinus pennsylvanica*), and littleleaf linden (*Tilia cordata*).

Conflicts between street trees and overhead wires, sidewalks and curbs continue to be a problem in some areas of the Borough.

Madison has 8 major park and recreation areas and several smaller neighborhood parks. The largest is the 68 acre Memorial Park. The newest is the Madison Recreation Center, 49 acres acquired from Florham Park. An i-Tree sampling inventory would provide information that would aid in reforestation efforts.

## **Madison's Shade Tree Management Program**

The Borough of Madison, with 54 miles of roads, has enjoyed the benefits of a well established and ambitious Shade Tree Management Program for many years. In addition, since 1989 the non-profit Friends of Madison Shade Trees, Inc. has supplemented the borough's tree planting program with private, state and federal grants and public fundraising.

The partnerships between the Shade Tree Management Board, the Department of Public Works, the Friends of Madison Shade Trees, the Parks Advisory Committee, the Open Space, Recreation and Historic Preservation Advisory Committee, and the Garden Club of Madison have proven effective in perpetuating the public shade tree resource and maintaining it in good condition.

### **Relation To The Borough's Master Plan**

All aspects of this Community Forestry Management Plan are consistent and compatible with the Goals, objectives, and general intent of the Borough's Master Plan and its Parks, Recreation & Open Space element.

All programs outlined in this Plan will be developed and implemented in a manner that will directly or indirectly satisfy or support these Goals and the general intent of the Madison Master Plan and Open Space Plan.

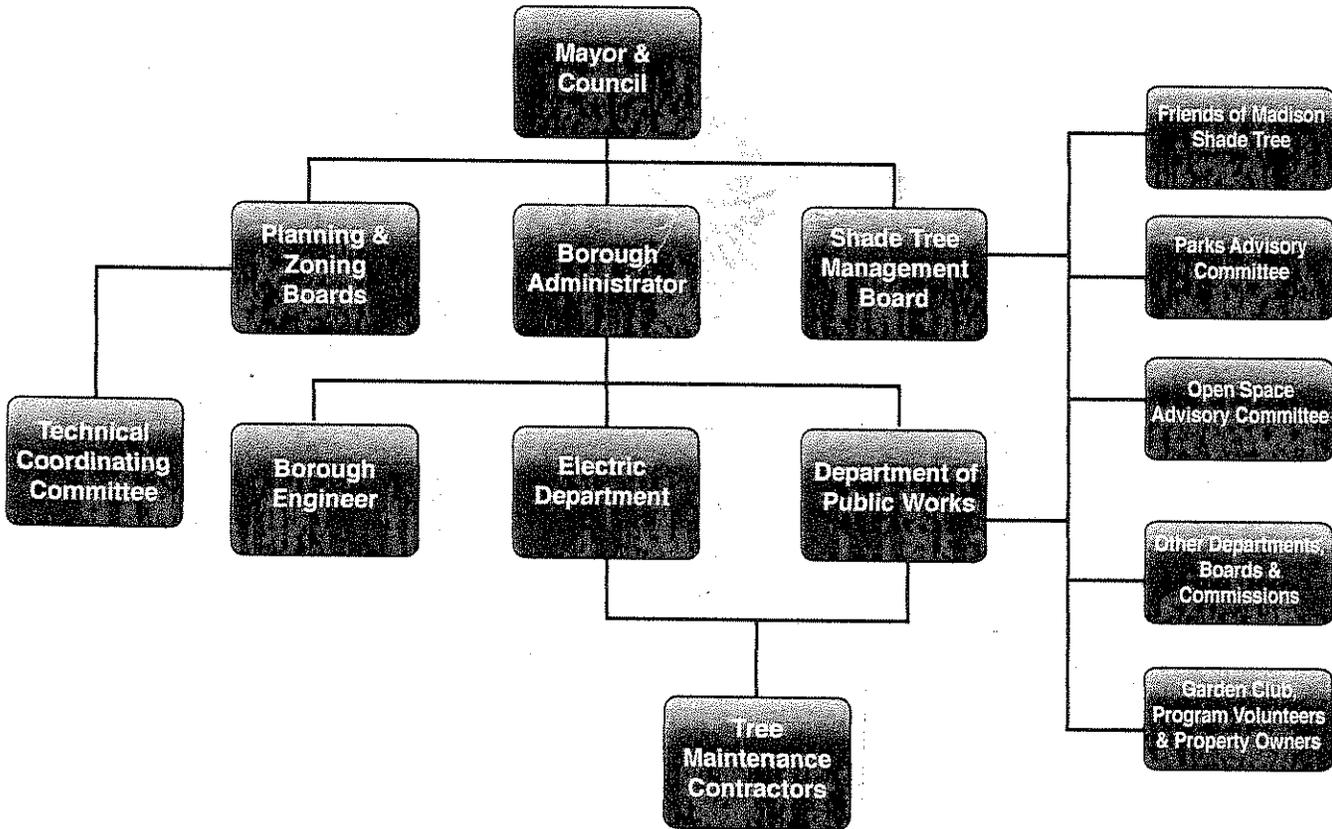
Specific Master Plan and Open Space Plan objectives supported by this Community Forestry Management Plan include:

- To promote a balanced variety of residential, commercial, recreational, public, and conservation land uses.
- To promote the preservation of natural systems and environmentally sensitive areas, particularly wetlands, flood hazard, and aquifer recharge areas.
- To maintain and improve the downtown business district.
- To provide adequate community facilities and services in order to maintain the quality of life for existing and future Borough residents.
- To provide for additional parkland and preserve existing open spaces.
- To encourage the preservation of existing vegetation.
- To promote a desirable visual environment through creative development techniques and good civic design and arrangements.
- To promote the maximum practicable recovery and recycling of recyclable materials.
- To integrate the East and Central Business districts.
- To extend the use of geographic information system (GIS).
- To preserve and expand Madison's urban forest.

In 2006, based on substantial input from the Shade Tree Management Board, the Madison Land Use Code was enhanced to regulate the movement of soil to protect root structure of existing private property trees. STMB continues to monitor and assess the Land Use ordinance and when appropriate will suggest updates.

# IV. COMMUNITY FORESTRY PROGRAM ADMINISTRATION

By ordinance, the Shade Tree Management Board of the Borough of Madison is responsible for the management of the Borough's public shade tree resources, administering Madison's Shade Tree Management Program and providing guidance to the Superintendent of Public Works on the care of the Borough's trees and shrubbery on streets, highways, and public places. The Shade Tree Management Board works with other Borough organizations as follows:



*The Technical Coordinating Committee & Garden Club has been added to this organization chart. The other listed organizations are the same as the last 5-year plan.*

# **STMB Program Responsibilities**

## **1. Mayor & Council**

- a) The Mayor is responsible, with the advice and consent of the Borough Council, for appointing members to the Shade Tree Management Board and other Borough boards and commissions.
- b) The Borough Council has ultimate authority over the policies, procedures, and programs of the Shade Tree Program and approves the STMB budget.
- c) In addition to his or her regular duties, each Council member is responsible for:
  - Chairing a Standing Committee that oversees the Borough's various departments and offices.
  - Serving as a Council Liaison to various Borough commissions, boards and committees.

## **2. Borough Administrator**

- a) The Borough Administrator serves as the chief administrative official of the Borough.
- b) Specifically, the Borough Administrator:
  - Implements the policies established by the governing body.
  - Manages the day-to-day operations of the Borough and assists the department heads with special projects.
  - Develops and prepares the budget with the Director of Finance.
  - Manages purchasing, personnel, insurance and grants.
  - Provides assistance to Borough volunteer committees.

## **3. Shade Tree Management Board**

- a) The Shade Tree Management Board is a group of volunteers who reside or work in Madison. The Board is comprised of seven regular and two alternate members.
- a) By ordinance, the Shade Tree Management Board is responsible for:
  - Exercising full and exclusive control over the selection, planting, and care of public shade and ornamental trees and shrubbery, including the planting, trimming, spraying, care and protection thereof.
  - Controlling the use of the ground surrounding Borough trees, so far as may be necessary for their proper growth, care, and protection.
  - Requiring the removal or pruning of any Borough trees, as necessary.
  - Developing and maintaining a Community Forestry Management Plan in compliance with the New Jersey Shade Tree & Community Forestry Assistance Act.
  - Providing guidance to the Superintendent of Public Works regarding all matters pertaining to Borough trees.
  - Reviewing site plans before the Planning Board or Zoning Board of Adjustment and advising on tree related issues.
  - Determining the need for tree removal or pruning in conjunction with road reconstruction projects and notifying residents of associated tree removal plans.
  - Locating, identifying, and selecting trees as "landmark trees."
  - Encouraging and advising the Borough on the proper care of trees, public and private.

## **4. Planning Board & Zoning Board**

- a) The responsibilities of the Boards follow the requirements of the Municipal Land Use Law: NJSA 40:55D-1 et seq. and the Borough Land Use Legislation Ordinance Chapter 195-1 et seq.
- b) The Planning Board and Zoning Board are responsible, with the advice from the Shade Tree Management Board and Technical Coordinating Committee, for implementing various

elements of the Borough Code and Borough Master Plan that relate to site development and the protection and care of trees and other natural resources.

#### **5. Parks Advisory Committee**

- a) The Parks Advisory Committee advises the Mayor and Council on uses of the Borough's parks.
- b) The Parks Advisory Committee does some limited tree planting in Borough parks in cooperation with the Shade Tree Management Board and the Department of Public Works.

#### **6. Borough Engineer**

The Borough Engineer is responsible for:

- a) Working with the Shade Tree Management Board to review building, road, and utility construction plans and their potential impact on Borough street trees.
- b) Final review, coordination (with STMB where appropriate), and approval of all site subdivision plans approved with conditions by the land use boards.
- c) Final review, coordination (with STMB where appropriate), and approval of all individual lot grading plans on single-family structures requiring a construction permit by the Building Department of the Borough of Madison.

#### **7. Department of Public Works**

The Department of Public Works operates in cooperation with the Shade Tree Management Board and is responsible for:

- a) Assisting in administering applicable regulations and policies relating to public trees.
- b) Completing or supervising and assisting contractors in the completion of public tree pruning, removal and other maintenance tasks with the advice of and in cooperation with the Shade Tree Management Board.
- c) Purchasing and planting new public trees and providing post-planting maintenance with the advice of and in cooperation with the Shade Tree Management Board.
- d) Planting and maintaining trees in Borough parks in cooperation with the Parks Advisory Committee and the Shade Tree Management Board.
- e) Providing emergency response service, when appropriate

#### **8. Tree Maintenance Contractors**

- a) Private contractors are routinely hired to complete work relating to the maintenance of public trees.
- b) Contractors are, within the terms of their agreement, responsible for:
  - Completing all work to the specifications of the Borough in an efficient and safe manner
  - Following all current and accepted arboricultural standards and practices and abiding by all current and applicable safety standards relating to tree care operations
  - Reporting any tree-related hazards or other problems immediately to the Borough

#### **9. Madison Electric Department**

- a) The Borough of Madison Electric Department is responsible for minimizing conflicts between trees and its facilities.
- b) While doing so, Electric Department crews and its contractors are responsible for:
  - Abiding by all applicable Borough ordinances, policies and procedures
  - Exercising reasonable diligence in the installation and maintenance of its facilities so as to avoid damage to public and private trees
  - Not removing any tree without prior approval of the Shade Tree Management Board or its private owner

- Following all current and accepted arboricultural standards and practices
- Assisting Department of Public Works personnel and contractors in completing tree removal and maintenance work around their facilities, where necessary

#### **10. Friends of Madison Shade Trees, Inc.**

- a) The Friends of the Madison Shade Trees, a private, non-profit organization, is organized for the purpose of supporting the Shade Tree Management Board. It offers volunteer services and resources to the Shade Tree Management Board.
- b) The Friends accept monetary donations and apply for and receive grants to supplement shade tree planting projects coordinated with the Shade Tree Management Board.
- c) Friends of the Madison Shade Trees by-laws mandate that at least three of its members be current members of the Shade Tree Management Board.

#### **11. Program Volunteers**

- a) Many other volunteer groups such as the Garden Club of Madison and the May Day Committee work with Shade Tree Management Board in improving Madison's tree canopy.
- b) Most of these volunteers reside or work in Madison.

#### **12. Open Space, Recreation and Historic Advisory Committee**

The Open Space, Recreation and Historic Preservation Advisory Committee was formed to make recommendations to the Mayor and the Council as to properties to be acquired or otherwise protected for:

- a) Open space preservation,
- b) Open natural resources preservation, including water supplies and
- c) Historic preservation.

#### **13. Other Borough Departments, Boards & Commissions**

Other departments and boards may call upon the Shade Tree Management Board to assist the administering and implementing Borough ordinances, policies and procedures that relate to the protection and management of public and private trees.

#### **14. Property Owners**

Private property owners assist the Shade Tree Program to the extent that they:

- a) Notify the Borough of problems and service requests for public trees (see procedures below)
- b) Assist in irrigating and protecting new public trees planted adjacent to their properties
- c) Are encouraged to plant and properly care for trees on private property
- d) Assist in identifying tree diseases and pests on private property that may threaten the entire community forest
- e) Nominate Landmark Trees



## VI. BUDGET & RESOURCES

### 1. Overview

The following is a summary of the resources available to Madison's Shade Tree Management Program. The data represents 2012 resources but the past 2 years have been atypical for the shade tree program due to two major storms affecting this area. Expenses for most of the tree related cleanup were handled outside of Shade Tree budget and are not reflected in this summary. Madison was reimbursed ~\$200,00 by FEMA for tree debris removal from the October, 2011 storm and has a pending request of ~\$350,000 for tree debris removal from Sandy/2012. What is reflected is the diversion of budgeted funds within our 2012 budget to tree maintenance and pruning from other line items, especially tree planting. Typical yearly tree planting budget would be \$17,000 which is supplemented by, on average \$2500 per year from volunteer organizations. Barring major weather events, our plan is to continue with a balanced tree pruning and tree planting program.

Several of the objectives contained within this Plan may require resources beyond those currently available. The Borough's ability to fully satisfy these objectives may be dependent upon its ability to secure additional funding through internal or external sources. The Shade Tree Board's budget for 2013 was the same as 2012 for the first time in several years after having reductions in prior years. The goal is to stabilize the Shade Tree Board budget at the 2013 number thru 2018.

### 2. Employee Salary & Wages

Load rate = 34%	Salary	Percent	Amount
Borough Administrator	\$156,884	2.5%	\$5,256
Asst. Borough Administrator	\$98,354	2.5%	\$3,295
Borough Engineer	\$129,232	1.0%	\$1,732
Planning Board Secretary	\$61,067	1.5%	\$1,227
DPW	\$478,864	8.33%	\$53,473
DPW Superintendent	\$155,328	5.00%	\$10,407
Electrical Department Personnel	\$817,262	3.0%	\$32,854
Clerical Staff	\$93,543	8.33%	\$10,446
<b>Subtotal</b>			<b>\$118,689</b>

### 3. Operations

	Amount
Contracted tree maintenance	\$93,975
Utility line clearance	\$57,805
Training & professional development	\$410
Memberships & subscriptions	\$190
Miscellaneous office expenses	\$180
Other expenses (Ag. Supplies - trees/planting)	\$2,035
<b>Subtotal</b>	<b>\$152,559</b>

### 4. Borough Equipment

10 year straight line amortization				
	Year and Make	Value (new)	%	Amount
45 foot Aerial Bucket Truck	2007 Ford	\$150,837	3.0%	\$1,820
45 foot Aerial Bucket Truck	2007 Ford	\$152,337	3.0%	\$1,830
40 foot Aerial Bucket Truck	2010 Ford	\$133,317	3.0%	\$2,809

Chip truck	2006 F-450	\$34,936	3.0%	\$320
Chipper	2011 Bandit	\$37,246	3.0%	\$907
Various related small tools and other equipment	Stihl Chain Saws	\$3,200	3.0%	\$68
<b>Subtotal</b>				<b>\$7,797</b>

**5. Tree Planting**

Cost of trees purchased and planting-- 2012 Madison Borough	\$2,035*
Average yearly contributions from volunteer organizations	\$2,500
<b>Subtotal</b>	<b>\$4,535</b>

*\*Typical tree planting budget was \$17,000 but funds were diverted in 2012 to tree maintenance*

**6. Tree Waster Recycling**

Cost of fall leaf & tree debris removal	
<b>Subtotal</b>	<b>\$78,495</b>

**7. Volunteer Services**

Shade Tree Management Board members	
Friends of Madison Shade Trees members	
Parks Advisory Committee members	
May Day project volunteers	
(6250 hrs. per year @ \$21.79) <b>Subtotal</b>	<b>\$136,188</b>

**8. Totals**

<b>Borough Resources</b>	<b>\$357,540</b>
<b>Value of Volunteer Contributions</b>	<b>\$136,188</b>

## VII. PLAN IMPLEMENTATION

### 2008-2012 Summary Accomplishments

Year	CEUs	Budget	Tree Planting	Tree Removal	Pruning	Resident Requests
2008	30	\$117,075	105	145	350 Trees	194
2009	12	\$116,650	120	122	9 Streets + 160 Trees	208
2010	25	\$112,900	120	141	16 Streets + 200 Trees	167
2011	19.5	\$107,250*	145	104	420 Trees	194
2012	39	\$101,850*	66	193	3 Streets + 622 Trees	264
<b>TOTALS</b>	<b>155.5</b>	<b>\$555,725</b>	<b>556</b>	<b>705</b>	<b>28 Streets +1752 Trees</b>	<b>1027</b>

*\* Does not include substantial FEMA money used for tree debris cleanup (reimbursed ~\$200K for Oct/2011 snowstorm and pending request of ~\$350K for Sandy/2012)*

### Major Five Year Accomplishments

1. Successful 5 year tree planting project, Greening the Rose City
  - a. Partnered with other groups: Friends of Madison Shade Trees, Inc, Parks Advisory Committee, and Garden Club of Madison. Each group pledged \$1000 for tree planting each of five years.
  - b. Business Stimulus grant (CSIP # 7: Tree Planting) for \$7,000 approved 2010 to continue pin oak alleé and add native trees to wetland area at Madison Recreation Center.
  - c. Green Communities Grant in 2012 (PF13-031) for \$2200 to develop third Community Forestry Management Plan.
2. Used tree inventory data to improve and maintain street tree health and diversity. Maintained inventory to keep up to date with tree conditions, removals, maintenance, and new tree plantings.
3. Although two major storms within two years were devastating to Madison's trees, the STMB's strong tree maintenance program lessened street tree damage. STMB's windshield surveys following the storms improved the timing for cleanup, pruning and stump removals.
4. Through 2012, Madison was awarded with Tree City USA designation for 28 successive years and the Tree City Growth award for 6 years.

### Major Five Years Challenges

1. Inventory day-to-day maintenance is time-consuming for single volunteer entering data
2. Inventory of park trees after storm damage
3. Educate public. Some residents preemptively had their private trees removed out of concern that trees could cause damage in a storm. Other residents refused new tree plantings for same reason.
4. Tree planting was not top priority after storms. Need to push to replace lost tree canopy, including in parks.

5. Although clear cutting trees during tear-down / rebuilding is not happening with the frequency it did during 2008-2012 and the public is no longer urging a private tree ordinance, enforcement of existing tree protection regulations is minimal.

## **Major Five Year Goals**

1. Public Safety
  - a. Storm response
  - b. Sidewalks
2. Inventory Update
  - a. Street trees
  - b. Parks
3. Reforestation
  - a. Streets
  - b. Parks
4. Enforcement/education of land use regulations regarding tree protection. Cross reference Management Plan with the Borough's Master Plan; work more closely with Zoning Board of Adjustments; give monthly reports to STMB Council Liaison to report to Mayor/Council.
5. Education/ incentive for residents to plant private trees

## **CSIP 1. Training**

### **Accomplishments**

- Currently, two STMB volunteers are certified arborists
- Currently all STMB members are CORE trained
- DPW superintendent with one or two crew members received CEUs yearly
- For last 5 years, STMB members have received 155.5 CEUs, more than required
- STMB members attend NJ Federation annual meetings and other tree related conferences and workshops
- STMB budget has a line item for Training that can be adjusted upward if a need arises

### **Challenges**

- To have sitting member(s) of Council and / or mayor to receive CORE training. During the period of the last 5 Year Management Plan, Madison's second, a council member had been trained but is no longer in office.
- Obtain additional training in areas we plan to work on in the next 5 years, e.g. hazardous tree identification, tree planting specifications, tree/sidewalk conflicts, etc.

### **Goals**

- All new STMB members to have CORE Training (2013-2017)
- Council Liaison and/or other Council member / Mayor to have CORE training (2014, 2016)
- STMB members, Borough employees to continue CEU training to meet or exceed standard of at least 2 members totaling 8 hrs. per year (2013-2017)
- Ensure Electric Department foreman has training in working with trees (2015)
- Each spring, STMB to go over planting specs with DPW tree planting foreman (2014-2017)
- Get speakers for specific issues e.g. tree pests (2014, 2015, 2017)
- STMB member(s) to receive technical training in sidewalk conflicts and to keep current on tree pest / identification (2016)

- Update STMB handbook to train any new members, liaisons. Include responsibilities, procedures, function of different roles on the board (2015)
- Arrange for Hazardous Tree training in Madison for STMB, FMST, Parks, DPW and interested public (2014).

## **CSIP 2. Ordinance**

### **Accomplishments**

- Researched and developed a Private Tree Ordinance, which was not approved by borough government.
- Established new Shade Tree Management Board Ordinance in 2001 (attached)
- Amended Land Use section of Master Plan to include soil movement (attached)
- Established check list for Technical Coordinating Committee (TCC) (attached)
- Continue to participate and review TCC plans (Planning Board) to identify needs, and enforcement issues

### **Challenges**

- From 2005 through 2009, STMB researched wrote, and rewrote proposed private tree ordinances. Public meetings were held; it was discussed at length at council meetings, review of draft ordinances were held with builders. In 2008 – 2009, STMB proposed a final, simplified, minimally intrusive private tree ordinance that established baseline standards and provided for independent professional assessment of private tree issues. Unfortunately, an organized public opposition coalition made it an extremely controversial issue. In 2009, the sitting Mayor/ Council voted to table it. An attached article appearing in the New York Times 11/29/09 highlighted several municipalities attempts at regulating private trees. Madison was one of the towns profiled. (see attachments)
- Enforcement of existing Land Use regulations regarding tree protection during construction continues to be a problem.

### **Goals**

- Assess, on a regular basis, the borough's need and /or residents' support for a private tree ordinance (2013-2017)
- Annually review any addendums to Land Use chapter in Master Plan (2013-2017)
- Improve tree protection enforcement during construction (2014-2017)
- Link Master Plan to CFMP (2014)
- Link Storm Water Management Plan to CFMP (2015)
- Link Environmental Resource Plan to CFMP (2016)

## **CSIP 3. Public Educations and Awareness**

### **Accomplishments**

- 2008-2013: Used dedicated website to post STMB ordinance, contact information, minutes, schedules and other information : [www.rosenet.org/gov/](http://www.rosenet.org/gov/)
- 2008-2013: Manned an information booth at the Borough's annual Bottle Hill Day (Bottle Hill was an earlier name for Madison). Bottle Hill Day is Madison's annual town festival and street fair held on the first Saturday of October. Madison residents, businesses and community organizations participate in this fun-filled day of food, entertainment, and shopping. The event attracts thousands of visitors each year. Each year STMB/Friends of Madison Shade Trees,

Inc (FMST) and partners focus on a particular tree-related project or concern. (e.g. highlighting spring tree planting, Eagle Scout project, storm damage, the role of STMB, and the importance of trees).

- 2009-2013: Participated in annual Green Fair organized by the Madison Environmental Commission and Boy Scout Troop 25 with the Borough support. Sponsored by corporations and non-profits, the Fair accepts exhibitors with a green focus. Includes local businesses, businesses from all over the state, and regional non-profits. STMB partnered with Parks Advisory Committee, Friends of Madison Shade Trees, Inc. (FMST), and Garden Club of Madison to display posters, offer hand outs and speak directly to residents about Madison's community forest.
- April 2009: With FMST joined with Sages Pages, a local bookstore, and the Madison Public Library to sponsor a simple tree identification contest, "Trees Are Wonderful", at the library. A display board with tree-related facts and pictures was set up in the library. The Children's Librarian and Sages Pages compiled a suggested reading list. Sages Pages donated seven books about trees to the Children's Library. Press releases were placed in local papers, and information was available at the bookstore. Contest winner announced at Arbor Day.
- 2010: With FMST sponsored an Eagle Scout Project at Trestle Park on Kings Road. Trained the Scout in tree planting techniques in order for him to organize his project. Fifty tree saplings were donated from NJ Tree Foundation for project. Stakes, anti-deer netting, mulch, watering system material (an ingenious system the scout came up with) were paid for by FMST.
- May 2011: Participated in Madison High School Day of Service by having 8 students use i-Tree program to inventory all trees on the high school grounds that were > 2" in diameter. The information gathered was tree specie and diameter. Analytic reports were produced based on the data.
- 2012: Added list of recommended native trees to STMB website
- January 24, 2013: Held Green Forum (STMB's fourth) with Sustainable Jersey groups at Drew University. Attendance was approx. 125, a cross-section of residents, educators, elected officials, students, on the coldest night of the year. Purpose was to gain a roadmap of priorities for a green Madison. Discussions were grouped into: Green Spaces, Getting Around Madison, Greening Homes and Businesses.
- 2013: Started a Tree Nursery at Community Garden with partners. Fifty trees (red buds and red oaks) were donated by NJ Tree Foundation's Celebrate Arbor Day 2013. Boy Scout troop 7 planted each sapling into individual pots which then put into a prepared bed of mulch. STMB, FMST and other volunteers have been watering.
- Important partners: Sustainable Madison Advisory Committee; BSA Troop 25 and BSA Troop 7; FMST; Parks Advisory Committee; Garden Club of Madison; Madison Environmental Commission; Open Space, Recreation and Historic Preservation Advisory Committee; Community Gardens Committee; Rotary Madison schools.

## Goals

- Continue to submit press releases to paper and on-line Patch for tree events, projects, and special concerns (storm damage) (2013-2017)
- Provide list of invasive plants. Website and spring article (2014)
- Update Landmark Tree list (2014)
- Hold Hazardous Tree workshop (2014)
- Speaker (tree pests) (2015)
- Walking tour - MRC natural forest (2016)
- Ask residents and businesses to "adopt a street tree" (i.e. take care of tree in front of/near their house/ place of business.) (2016)

- Prepare information packet for realtors, garden centers, (2015)
- Speaker (TBD - 2017)
- Work with local nursery and raffle off a native tree at Bottle Hill Day to encourage private tree planting (2017)

## **CSIP 4. Arbor Day**

### **Accomplishments**

- 28 years Tree City USA
- 6 years Growth award
- Arbor Day celebration held first Saturday in May in conjunction with May Day in Madison, a town-wide beautification event
- All 4 elementary schools participate (includes St. Vincent Catholic elementary). Students sing, perform orchestral music, read original poetry, perform a May Pole dance, and provide art work for the Arbor Day program covers.
- Mayor, council people, other elected officials from state and county have participated. Mayor reads Arbor Day proclamation and invites Council members up to receive Tree City flag.
- Tree related displays, activities and giveaways by STMB, FMST, Parks Advisory and Garden Club of Madison have included acorn planting kits, small trees from state, tree quizzes, wrist bands, lollipops plus information about Madison's tree reforestation projects.
- Printed programs give information about Arbor Day projects, memorial tree plantings etc
- Tree City USA flag is flown by borough for month of May.

### **Goals**

- Continue programs for Tree City USA status and Tree City Growth Awards (2013-2017)
- Plant a dedicated Arbor Day tree each year (2014-2017)
- Rotate an Arbor Day tree planting at each school on NJ Arbor Day (last Friday in April) (2015-2017)
- Apply for Tree Line USA (2016)

## **CSIP 5. Tree Inventory**

### **Accomplishments**

- Street tree inventory was completed in 2007 by ArborPro - funded by \$25,000 CSIP grant
- On 2009, updated ArborPro software
- Used inventory information to remove all hazardous and potentially failing trees, to prune by critical need, to broaden species mix in tree planting.
- Arbor Pro inventory yearly maintenance fee is an STMB budget line item - \$1750
- Inventory has been kept current by STMB volunteer who updates all tree planting, removal, maintenance information
- In 2011, participated in Madison High School Day of Service by having students perform a tree inventory using i-Tree on their school campus
- Used inventory to illustrate tree loss from Sandy by showing replacement tree planting sites for exhibit at Arbor Day, Green Fair and Bottle Hill Day
- Used inventory to assess storm damage to canopy and define subsequent tree pruning/maintenance programs.

## **Challenges**

- Upkeep of current street tree data in inventory is time consuming and done by STMB volunteer
- Arbor Pro program is costly - \$1750 per year

*Due to times spent on street tree inventory maintenance and three major storms within the past 5 years, unable to complete tree inventory in parks.*

## **Goals**

- Continue to update current tree inventory (2013-2014); update using new or old inventory tool (2015-2017)
- Re-assess current inventory program with ArborPro – including having ArborPro give presentation about ways to update (2013-2014)
- Research use of i-Tree (2014)
- Determine what tree inventory tool to use (2015)
- Sample one park every other year, starting in 2014. (2014, 2016)
- Work with borough employee to take more active role in up keeping inventory program (2014-2015)
- Link Sustainable NJ tree canopy cover goal to tree inventory (2016).

## **CSIP 6. Hazardous Trees**

### **Accomplishments**

- After initial tree inventory was performed all hazardous trees and critical priority 1 trees were removed.
- In addition to semi-annual Windshield Surveys, performed additional Windshield Surveys after October 2011 and Sandy storms to assess damage
- Responded to all residents who reported trees that might be hazardous
- In the spring of 2013, called in Bartlett to provide a detail assessment of a large public tree resident wanted down. STMB members were given brief tutorial at the site.
- After the October 2011 and Sandy storms, ran an article in paper about storm damage to trees (attached)
- Attended Hazardous Tree identification lectures at NJ Tree Federation annual conference (the 2012 conference was the weekend before Sandy and the talks were adjusted to try to prepare for the storm).

### **Challenges**

The major challenge in the last 5 years has been in response to the major storms that heavily impacted the Madison tree canopy. Part of this challenge is to educate residents so that there is not an overreaction to the danger of both public and private trees.

### **Goals**

- Use inventory to keep track of trees that are identified as declining for potential hazards. (2013-2017)
- Continue 2 windshield surveys by quadrant per year. (2013-2017)
- Document how to do a detail windshield survey, what and where to look etc. (2013)
- Sponsor class on Hazardous Trees in Madison. (2014)

## **CSIP 7. Storm Damage Assessment**

### **Accomplishments**

- Borough administrator had private landscapers as well as DPW crews on alert before Sandy hit.
- Nixle alerts kept residents informed about road closings, power outages etc.
- STMB teams did extra windshield surveys by quadrants after both Irene and Sandy.
- STMB's strong tree removal program lessened the amount of street tree damage.
- FEMA was contacted early on with tree damage numbers.
- STMB researched which species of tree were hardest hit, although arborists reported that no particular kind of tree sustained more damage.
- Madison owns its electrical utility; the electric department worked swiftly to remove or prune trees damaging wires. Major problem: many utility poles came down; poles are owned by Verizon.

### **Challenges**

- In the immediate aftermath of each storm, it was difficult to assess what worked and what did not.

### **Goals**

- Continue to do windshield surveys after storm for hangers, leaners and other hazardous conditions. (2013-2017)
- Develop storm plan. Implement plan to walk main streets after major storms. (2014)
- Link to Office of Emergency Preparedness.
- Enhance borough emergency alert process to include STMB when appropriate.

## **CSIP 8. Tree Maintenance and Removal**

### **Accomplishments**

- Madison is part of the Morris County Cooperative Pricing Council (MCCPC) for tree removal/stump grinding services. MCCPC was established in 1974 by four municipalities—Randolph, Dover, Denville and Roxbury. Currently managed by the Township of Randolph (referred to as the lead agency), membership has grown exponentially, from the original four towns to a current roster of over two hundred government entities. Along with other municipalities, Madison joined in an effort to pool its purchasing power to receive discounted prices and save tax payer dollars. The contract period is for two years. For the period of January 1, 2013 – December 31, 2013 the contract was awarded to Tree King, Inc. Lists of street trees to be removed are generated by STMB and passed to DPW to contact Tree King.
- In the past 5 years, 705 trees have been removed with a major increase in 2012 due to storms.
- Pruning work is contracted out with bid package (from STMB for tree pruning, from Madison Electric Department for line pruning).
- 28 streets and over 1,752 trees have been pruned over the past 5 years.
- DPW periodically (< 5%) performs tree maintenance work (tree removal, tree pruning) if tree is small.
- Residents are directed to call DPW with tree service requests, which are written up by DPW office staff and forwarded to STMB for action. STMB strives to respond to 100% of these requests. STMB received and responded to 1,027 resident requests from 2008-2012.
- STMB volunteer records all work done on individual trees in the Tree Inventory.
- Residents are given information on tree volcanoes and asked to water their new trees when a street tree is planted in ROW abutting their property.
- Tree guards are placed on new trees where needed.

## **Challenges**

- Two major storms in 2011 and 2012 meant extraordinary clean up/ tree maintenance for Madison. STMB spent the bulk of its 2012 budget on storm related damage. Even that did not cover the full expense. Over \$350,000 was spent by the Borough outside STMB budget. Madison lost over 300 street trees as a direct result of the two storms. These numbers do not reflect the massive damage to trees in our public parks and on private property.
- The amount of tree damage after the storms in the entire area meant that the contractors awarded the tree removal and tree pruning bids were overwhelmed. Response time to Madison was slower than usual.

## **Goals**

- Use inventory to establish pruning program (2013-2017)
- Continue young tree pruning program (2013-2017)
- Use weed-whacking preventative guards where needed. (2013-2017)
- Work with Land Use to enforce tree protection during construction (2014-2017)
- Adopt-a-Tree program to get residents to maintain borough trees planted near their property (2016)

## **CSIP 9. Insect and Disease Management**

### **Accomplishments**

- Handed out information about Asian long-horned beetle at Arbor Day, the Green Fair and Bottle Hill Day (2008-2012)
- Monitored Drew University forest during outbreak of gypsy moths (2008-2009)
- No longer planting ash trees due to emerald ash borer damage potential
- Members attended lectures on tree pests at annual NJ Forestry Convention and at Frelinghuysen Arboretum. Reports were disseminated to the Shade Tree Management Board.

### **Challenges**

The challenge is to continue to attend classes or obtain and distribute current information on tree insects/diseases. Once the information is obtained, an assessment of the impact on Madison's trees needs to be developed.

### **Goals**

- Subscribe to Master Gardeners national tree information quarterly alerts (2013-2017)
- Continue CEU classes on tree pests/disease (2013-2017)
- Schedule Rutgers speaker to address pest/disease problems (2015)

## **CSIP 10. Wildfire Protection**

### **Accomplishments**

Madison has:

- A paid fire department supplemented with volunteer squad
- Hydrants located in or adjacent to all open spaces and there are trails that provide access into those spaces.
- Participants in County planning and resource pooling programs
- Bans private open burnings and in times of droughts bans all forms of fire within the parks
- Stocks Class A Foam which can be used for brush fires
- Borough had contractor remove downed trees in the three parks most damaged by Sandy to reduce risk potential wild land fire hazard.

## Goals

- Continue to monitor brush in parks and public open spaces (2013-2017)
- Meet with fire officials to review Wildfire Plan (2013,2016)

## CSIP 11. Tree Planting

### Accomplishments

- From 2008-2012, 556 new trees have been planted on Madison's streets and in its parks.
- 2008-2013 "Greening the Rose City" program had STMB, FMST Parks, and Garden Club of Madison commit to planting trees each year. Each group agreed to/ did spend \$1000 per year for five years to plant trees in the borough.
- In early 2010, the Borough of Madison was awarded a 2009 Business Stimulus Fund in the amount of \$7,000. The funds were designated for a tree planting project to enhance newly acquired borough property of almost fifty acres. The property included space for much-needed recreation fields as well as an historic pin oak allée and an area of wooded wetlands. The Shade Tree Management Board (STMB) sought to 1) reestablish the allée where trees had been removed, or were in decline; and 2) continue reforestation efforts by planting native trees (sweet gum, swamp white oak, red maple) in the wetland area. The plans for the recreation complex were delayed by an adverse economy and the need to include input from many groups. STMB could not begin planting within the allée until it was determined where entrance drives into a proposed parking lot and access areas for heavy equipment would be. All planting was completed in July 2011 by Madison design and landscape business Coviello Brothers. Trees were planted in accordance with state specifications and alligator bags installed. Madison Department of Public Works had a program of watering the first year. All trees have survived.
- At Arbor Day 2010, an extensive landscape planting at the historic Madison train station was unveiled. FMST and partners, who were awarded a federal (T-21) grant, renovated the hardscape and landscape of the station. Besides numerous shrubs, perennials, groundcover, the planting plan designed by Davies Associates Landscape Architects, LLC included: 1 sugar maple, 6 river birch, 4 white firs, 1 American holly, 6 Alleghany serviceberries, 12 Eastern redbuds, 11 Rutgers Hybrid dogwoods, 1 Saucer magnolia, 6 Yoshino Flowering cherries, and 6 Japanese stewartias.
- In 2012 FMST and the Garden Club of Madison planted 11 trees on high priority streets in downtown to replace some of the trees lost in the October 2011 storm.
- A list of recommended native trees was placed on STMB website in 2012.
- In spring 2013, FMST presented STMB with \$10,000 to supplement street trees replacement plantings due to tree loss from Sandy.
- In spring 2013, STMB began a tree nursery (25 northern red oaks, 25 redbuds, and 25 shagbark hickories) at the community garden, a designated spot in the Madison Recreation Complex. It was a joint project with FMST, Parks, Garden Club of Madison, Community Garden and Madison Troop 7 Boy Scouts. In April, the scouts helped STMB and FMST members plant each sapling into pots which were then set into beds. The trees, when grown to appropriate size, will be transplanted into parks or other public spaces.
- STMB developed a checklist for use by the Technical Coordinating Committee in reviewing Planning Board applications.
- STMB used the tree inventory to diversify its tree-planting list.

## **Challenges**

- After two major storms, focus was on tree maintenance/removals. Need to recuperate tree canopy, especially in parks.
- Will need an inventory of trees in parks.

## **Goals**

- Using inventory, continue with tree diversity planting and document newly planted trees success rate (2013-2017)
- Continue Greening Rose City program with partners (2013-2017)
- Use Arbor Day project (planting tree at each school on rotating basis) to engage children (2015-2017)
- Continue to research trees to plant under wires. (2014-2015)
- Get DPW feedback after spring tree planting. (2014-2017)
- Each spring, put on STMB website what trees were planted and location. (2014-2017)
- Develop a detailed written and drawn tree planting specification to be included in all Bid packages when project goes out to bid. Research guidelines set forth by NJ Forestry Council associated with the CSIP program. Include use of tree root guard device, if applicable. (2015)
- Develop a specification for tree procurement including tagging trees in field, health of plants, and refusal of plant material on day of delivery due to damage or presence of insects, disease, girdling roots, or absence of root collar. (2015)
- Explore alternative planting site markings methodologies. (2016)
- Use "Tree Raffle" at Bottle Hill Day to encourage private tree planting. (2017)

## **CSIP 12. Tree Recycling**

### **Accomplishments**

- Tree debris from storms were recycled by borough and offered back to public as free mulch, or woodchips.
- After major storms, DPW had special pickups for all tree/ plant debris, including from private trees.
- Logger was hired by borough to clean out lengths of fallen trees in worst hit parks/public land.
- Christmas trees are recycled by borough
- Borough offers free woodchips to residents.

### **Challenges**

- Limited residence composting
- Establish tree material recycling within borough, not just after storms.

### **Goals**

- Educate public on composting. Team with Garden Club, Environmental Commission and schools (2014, 2016)
- Assess and propose improvement to borough recycling program for leaves, lawn clippings and tree material (2015).

## **CSIP 13 Sidewalk Maintenance**

### **Accomplishments**

- Borough has ordinance stating residents are responsible for sidewalks which states: Every owner of land abutting upon or containing a sidewalk shall be responsible at the owner's sole cost and expense for maintaining and repairing such sidewalks so as to prevent or eliminate broken,

- raised or uneven pavement or other conditions creating a potential safety hazard for pedestrians.
- All resident complaints regarding public trees causing sidewalk problems are recorded and investigated.

### **Challenges**

Need to focus more on sidewalk / tree conflicts since there are places where public trees are causing the sidewalk to elevate/crack.

### **Goals**

- Prune young trees for sidewalk clearance (2013-2017)
- Develop root cutting / sidewalk repair guidelines (2015)
- Research different products that help ease sidewalk / tree conflicts (2015)
- Trial sidewalk repair using new products (2016-2017)
- Educate residents about responsibilities of sidewalk upkeep/repair (2014-2015)

## **CSIP 14. Storm Water Management**

### **Accomplishments**

- Madison's Storm Water Management Plan was approved in 2005. The plan documents:
- The strategy for the Borough of Madison to address storm water related impacts. It addresses groundwater recharge, storm water quantity, and storm water quality impacts by incorporating storm water design and performance standards for new major developments (projects that disturb one or more acres of land). The plan may also be used as a model for small developments.
- Management of both existing and proposed site vegetation, which can reduce a development's adverse impacts on groundwater recharge and storm water runoff quality and quantity. Based on recommendations of the Madison Environmental Commission in its Environmental Resource Inventory, natural vegetation shall be retained, protected and supplemented wherever possible. Based on recommendations of the Madison Shade Tree Management Board in its Community Forestry Management Plan, the shade tree resources must be developed and perpetuated for the benefit of residents' health, economic, environmental and social well-being.
- Three rain gardens were re-developed/planted at Madison Recreation Center with input from the Shade Tree management Board (2012)
- Shade Tree management Board works with the Planning Board's Technical Coordinating Committee to recommend specific plantings to reduce run off (2007-2012)
- In 2011, the Shade Tree management Board received and completed a CSIP grant to plant trees in Madison Recreation Center wetlands. This was part of the overall Madison Reforestation Program.

### **Challenges**

The major Challenges in the last 5 years have been:

- Loss of trees on both public and private lands and the planting of replacement and new trees. The challenge in Madison's open spaces is the lack of funds. Since there is no private tree ordinance in Madison, the challenge for private lands is one of education and special tree planting offers.
- Enforcement of tree protection requirements during construction. This results in loss of trees 3-5 years after the construction has been completed.

## **Goals**

- Continue reforestation efforts (2013-2017)
- Team with Garden Club and the Environmental Commission to extend the use of rain gardens throughout the borough (2016-2017).
- See CSIP 2 for Goals on improving the tree protection enforcement during construction.

## **CSIP 15 Other (Sustainable New Jersey)**

### **Accomplishments**

- Bronze level was achieved in 2010 which obtained approval on the following Tree and Woodlands Management sections:
- Tree Hazard and Health Assessment Inventory Program (10pts)
- Tree Planting Programs (10pts)
- Tree Maintenance Programs (10pts)
- Community Forestry Plan and Tree Canopy Goal (20pts)

### **Challenges**

After Madison received its Bronze certification there was limited interest by the Borough government to plan for the next level of certification. This changed in 2013 with new council members and with renewed leadership from Madison's Environmental Commission

## **Goals**

- Update the following sections in support of Madison's Silver application (2013)
- Community Forestry Plan and Tree Canopy Goal
- Tree Maintenance Programs
- Update reassessment of Madison's Sustainable level (2016)
- Community Forestry Plan and Tree Canopy Goal
- Tree Maintenance Programs

# SUMMARY OF 2013-2017 GOALS

<b>CSIP 1 Training</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Core Training/CEUs	X	X	X	X	X
2. New Tree Planting Specs for DPW			X		
3. Hazardous Tree Workshop		X			
4. STMB Handbook Update			X		
5. Speaker (Tree Pests)			X		
6. Tree / Sidewalk Conflicts				X	X

<b>CSIP 2 Ordinances</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Assess Council/Residents Support for Private Tree Ordinance	X	X	X	X	X
2. Review Land Use Ordinance Changes	X	X	X	X	X
3. Improve Tree Protection Enforcement During Construction		X	X	X	X
4. Link Master Plan to CFMP		X			
5. Link Environmental Resource Plan to CFMP				X	
6. Link Storm Water Management Plan to CFMP			X		

<b>CSIP 3 Public Education</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Press Releases	X	X	X	X	X
2. List of Invasives		X			
3. Landmark Tree Update		X			
4. Hazardous Tree Workshop		X			
5. Speaker (Tree Pests)			X		
6. MRC Walking Tour				X	
7. Adopt-a-Tree-Program				X	
8. Tree Nursery Tree Transplant/ MHS Service Day				X	
9. Develop Realtor Tree Info Packet			X		
10. Speaker (TBD)					X
11. Tree Raffle					X

<b>CSIP 4 Arbor Day</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Tree City USA	X	X	X	X	X
2. Tree City Growth Award	X	X	X	X	X
3. Plant Arbor Day Tree		X	X	X	X
4. i-Tree Planting at School			X	X	X
5. Apply for Tree Line USA				X	

<b>CSIP 5 Tree Inventory</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Update Tree Inventory	X	X			
2. Assess ArborPro	X	X			
3. Research i-Tree		X			
4. i-Tree Sample in a Park		X		X	
5. Tree Inventory Tool Decision			X		
6. Update Tree Inventory			X	X	X

<b>CSIP 6 Hazardous Tree</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Use Inventroy & Windshield Surveys	X	X	X	X	X
2. Document How To Do Windshield Survey	X				
3. Hazardous Tree Workshop		X			

<b>CSIP 7 Storm Damage</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Windshield Survey After Major Storm	X	X	X	X	X
2. Develop Storm Plan		X			

<b>CSIP 8 Tree Maintenance</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Use Tree Inventory to Manage Pruning	X	X	X	X	X
2. Young Tree Pruning/Tree Guard Program	X	X	X	X	X
3. Work with Land Use to Enforce Tree Protection		X	X	X	X
4. Adopt -a -Tree Program				X	

<b>CSIP 9 Insect/Disease</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Subscribe/Disseminate National Tree Alerts Program	X	X	X	X	X
2. CEU Classes on Pests/Diseases	X	X	X	X	X
3. Speaker - Tree Pests			X		

<b>CSIP 10 Wildfire</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Monitor Brush in Parks	X	X	X	X	X
2. Assess Fire Dept.'s Wildfire Plan	X			X	

<b>CSIP 11 Tree Planting</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Utilize Tree Inventory for Diversity/ Calculate New Tree Success Rate	X	X	X	X	X
2. Continuing <i>Greening Rose City Program</i> with Partners	X	X	X	X	X
3. Start Arbor Day Planting in Each School			X	X	X
4. Refine List of Trees to Plant Under Wires		X	X		
5. DPW Spring Planting Feedback		X	X	X	X
6. List of Trees Planted on Website			X	X	XX
7. Develop Tree Planting Spec for Tree Procurement			X		
8. Explore Alternate Planting Site Markings Methodology				X	
9. Tree Raffle on Bottle Hill Day					X

<b>CSIP 12 Recycling</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Team with Partners on Composting Programs		X		X	
2. Assess/Enhance Borough Tree Recycling Program			X		

<b>CSIP 13 Sidewalk Maintenance</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Prune Young Trees for Sidewalk Clearance	X	X	X	X	X
2. Develop Root Cutting/Sidewalk Repair Guide			X		
3. Research Sidewalk/Root Remediation Products			X		
4. Trial New Sidewalk Product (s)				X	X

<b>CSIP 14 Storm Water</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Continue Reforestation	X	X	X	X	X
2. Extend Use of Rain Gardens				X	X

<b>CSIP 15 Other (Sustainable New Jersey)</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
1. Update Tree Inventory, Maintenance and Canopy Sections	X			X	

## IX. ATTACHMENTS

### **A. Borough of Madison Code:**

1. STMB Ordinance : Chapter 45 of the Code of the Borough of Madison New Jersey, Shade Tree Management Board (Ordinance #21-2001, adopted May 30, 2001), which:
  - a. Establishes the Shade Tree Management Board.
  - b. Provides for the planting, protection and care of trees on public lands within the Borough.
  - c. Provides for identification and designation of Landmark Trees on public and private lands within the Borough.
2. Chapter 195 of the Code of the Borough of Madison, Land Use, which contains various requirements for the protection of natural resources, landscaping and buffers in conjunction with land development application.
3. STMB By-Laws adopted in 2001, which detail programs, policies and procedures under which the Board shall operate
4. Technical Coordinating Committee (TCC) Checklist, Reference Document of Borough Code Pertaining to Landscape developed by STMB in 2008.

### **B. Private Tree Ordinance:**

New York Times article dated 11/29/09

### **C. Storm Information:**

1. Arbor Day 2010 handout
2. STMB Hurricane Irene press release September 2011

### **D. Greening the Rose City project**

Brochure 2012

### **E. Green Forum 2013**

Press release Madison Eagle, 1/31/13

### **F. Arbor Day**

1. Mighty Oaks project brochure 2011
2. Arbor Day/ Tree Nursery press release, Madison Eagle, May 2, 2013
3. Arbor Day 2013 article/picture, Madison Eagle, May 23, 2013

# ATTACHMENTS A1

## Chapter 45: SHADE TREE MANAGEMENT BOARD ORDINANCE

*[HISTORY: Adopted by the Mayor and Council of the Borough of Madison 2-15-1984 by Ord. No. 1-84; amended in its entirety 5-30-2001 by Ord. No. 21-2001. Subsequent amendments noted where applicable.]*

### GENERAL REFERENCES

**Parks** — See Ch. 136.

**Streets and sidewalks** — See Ch. 166.

§ 45-1 Definitions.

§ 45-2 Establishment; membership.

§ 45-3 Terms of office.

§ 45-4 Organization.

§ 45-5 Vacancies.

§ 45-6 Powers and duties.

§ 45-7 Maintenance and removal of Borough trees and shrubs.

§ 45-8 Permission required for certain actions.

§ 45-9 Non-Borough trees.

§ 45-10 Advisory services.

§ 45-11 Landmark trees.

§ 45-12 Annual appropriation.

§ 45-13 Public improvements affecting trees.

§ 45-14 Notification of Management Board of trees and shrubs needing attention.

§ 45-15 Violations and penalties.

§ 45-16 Application for and issuance of permits.

§ 45-17 Minutes of Shade Tree Management Board.

§ 45-18 Severability.

§ 45-1 Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

### ADVISE THE SUPERINTENDENT OF PUBLIC WORKS

Wherever this chapter refers to the Shade Tree Management Board acting with the advice of the Superintendent of Public Works, it shall mean that the Shade Tree Management Board shall notify the Superintendent of Public Works so that the Superintendent may coordinate the work and inform the Shade Tree Management Board as to:

A. Date.

B. Time.

C. Workload of the Department of Public Works.

D. Such other factors as the Superintendent determines could affect the planting, pruning or removal of trees and shrubs.

E. Proper notification to affected property owners and/or utilities in the case of planned removals or pruning of trees or shrubs that have an impact on private property.

**BOROUGH:** Borough of Madison, New Jersey.

**BOROUGH COUNCIL:** The Borough Council of the Borough of Madison.

**BOROUGH SHRUB:** A shrub located on land owned by the Borough or which is otherwise located on a street, highway, public place, right-of-way, Borough easement, park or parkway or within the sidewalk lines.

**BOROUGH TREE:** A tree located on land owned by the Borough or which is located on a street, highway, public place, right-of-way, Borough easement, park or parkway or within the sidewalk lines.

**BUILDING:** A combination of materials to form a construction adapted to permanent, temporary or continuous occupancy and having a roof.

**DRIP LINE:** A line connecting the tips of the outermost branches of a tree projected vertically onto the ground.

**EMERGENCY:** An event or events, disease or condition which has damaged or destroyed a tree or trees, such that the continued presence of such damaged or destroyed tree or trees imminently threatens life or property in proximity thereto.

**LANDMARK TREE:** Any tree designated and identified as such by the Shade Tree Management Board pursuant to the standards set forth herein.

**NONBOROUGH TREE:** Any tree other than a Borough tree as heretofore defined.

**PERSON:** Any individual, partnership, corporation, agency or other entity.

**PROTECTIVE BARRIER:** A barrier constructed to protect the root system or trunk of a tree from damage during construction or from equipment or soil or material deposits.

**ROOT SYSTEM:** Tree roots within the drip line perimeter.

**SHRUB:** A woody plant that does not have a center trunk and does not grow over 10 feet high.

**TREE:** Any living, woody perennial plant having a diameter greater than four inches measured at a point four feet above the ground.

#### § 45-2 Establishment; membership.

A Shade Tree Management Board is hereby established, to be known as the "Shade Tree Management Board of the Borough of Madison." The Management Board shall consist of seven members, and may include not more than two additional alternate members. The members and alternate members shall be appointed by the Mayor with the advice and consent of the Council. In the event that the Mayor fails to make a nomination at least 15 days prior to the date of the second regular public meeting of the Council after a position becomes vacant or the Borough Council fails to confirm a nomination, then the appointment shall be made by the Borough Council by the vote of a majority of the members present at the meeting, provided that at least three affirmative votes shall be required, with the Mayor to have no vote thereon except in case of a tie.

#### § 45-3 Terms of office.

The first Shade Tree Management Board members shall be appointed within 60 days after the effective date of this chapter, and their terms of office shall commence upon the day of their appointment and be for the respective periods of one, two, three, four and five years. The initial terms of the sixth and seventh members of the Management Board shall be such that they expire simultaneously with the expiration of the initial terms of the fourth and fifth members of the Management Board respectively. The term of each appointee shall be designated in his appointment. All subsequent appointments, except to fill vacancies, shall be for the full five-year term, to take effect on January 1 next succeeding such appointment. If the ordinance provides for the appointment of two alternate members, the terms of each alternate member shall be five years commencing on January 1 of the year of appointment; provided, however, that in the event that two alternate members are appointed, the initial term of "Alternate No. 1" shall be five years, and the initial term of "Alternate No. 2" shall be four years. An alternate member may participate in discussions of the proceedings but may not vote except in the absence or disqualification of a regular member. A vote shall not be delayed in order that a regular member may vote instead of an alternate member.

#### § 45-4 Organization.

The Management Board shall organize within 30 days after the appointment of its total membership for the remainder of the then calendar year and thereafter annually by the election of one of its members as Chairman and the appointment of a secretary, who need not be a member. The salary of the secretary, who may be compensated even if a member of the Management Board, shall be fixed by the Madison Borough Council.

#### § 45-5 Vacancies.

Any vacancy occurring by reason of the death, resignation or removal of any member shall be filled for the unexpired term by the Mayor with advice and consent of the Council.

#### § 45-6 Powers and duties.

A. The selection, planting, care and control of shade and ornamental trees and shrubbery upon and in the streets, highways and public places of the Borough of Madison, except state highways and except county highways, parks and parkways, shall be exercised by the Shade Tree Management Board with advice to the Superintendent of Public Works. The powers of the Shade Tree Management Board shall include:

- (1) Exercise full and exclusive control over the selection, planting and care of shade and ornamental trees and shrubbery, including the planting, trimming, spraying, care and protection thereof.
- (2) Control the use of the ground surrounding the same, so far as may be necessary for their proper growth, care and protection.
- (3) Move or require the removal of any Borough trees or shrubs or part thereof under the conditions set forth herein.

- B. The duties of the Shade Tree Management Board shall include:
- (1) Develop and maintain a community Forestry Management Plan in compliance with the New Jersey Shade Tree and Community Forestry Assistance Act. Editor's Note: See N.J.S.A. 13:1L-17.1 through 13:1L-17.9.
  - (2) Encourage arboriculture.
- C. The Management Board shall develop any plans and specifications needed to solicit bids for planting, care or removal of Borough shade trees. Bids for such work, when required, shall be let by the Borough according to the applicable statutes, ordinances and regulations. Nothing in this section shall be construed to delegate to the Management Board the power to solicit bids directly for planting, care or removal of Borough shade trees.

**§ 45-7 Maintenance and removal of Borough trees and shrubs.**

- A. All Borough trees and Borough shrubs located on property owned by the Borough or on a street, highway, right-of-way, park or parkway or within the sidewalk lines of any street shall be maintained by the Shade Tree Management Board.
- B. No Borough trees, as heretofore defined, shall be removed except by order of the Shade Tree Management Board, who shall advise the Superintendent of Public Works unless otherwise provided in this section. The Shade Tree Management Board may remove such Borough tree if, but only if:
- (1) Such tree is so diseased or so infested so as to be a danger to other trees in the Borough or surrounding communities.
  - (2) Such tree is dead or dying and its presence would cause hardship or endanger the public or an adjoining property owner.
  - (3) Such a tree or shrub is a hazard to the public safety because it obstructs the view of motor vehicle operators or otherwise interferes with traffic or pedestrian safety. In the event that the full removal of the tree or shrub is not required, it may be pruned pursuant to § 45-8.
  - (4) Such a tree, if the Shade Tree Management Board determines for other reasons, is necessary to be removed.
  - (5) In the case of construction on Borough property as provided in Subsection C below:
    - (a) The presence of such tree would cause hardship or endanger the public or an adjoining property owner.
    - (b) Such tree is located in an area to be occupied by buildings, driveways, recreation areas or other construction or within a distance of 15 feet around the perimeter of such construction, depending on tree species and conditions to be determined by the Shade Tree Management Board.
    - (c) Such tree is located in an area to have a cut or fill of land deemed injurious or dangerous to such tree. The determination of the Shade Tree Management Board in this respect shall depend on the species of trees and degree of injury.
- C. If the Borough Council directs the construction of any building, driveway, recreation area or anything else upon the property owned by the Borough, such construction shall be located to the extent practicable so as to conserve a maximum number of trees consistent with the appropriate and practical use and enjoyment of the land in question. The Shade Tree Management Board shall be advised prior to the start of such work and shall advise the Borough or other party performing the work how the work can be accomplished, minimizing the number of trees to be removed and the damage done to remaining trees. To prevent damage to remaining trees, no material, machinery or temporary soil deposits shall be placed within the drip line of any existing tree, and proximity of said construction shall be established to prevent damage to such tree during construction.
- D. The electric utility of the Borough of Madison shall have the right to remove trees, without the prior approval of the Management Board, when an emergency as defined herein exists and when obtaining the prior approval of the Management Board is not practical. At all times, the electric utility shall have the right to trim trees which reasonably are required to be trimmed for the purpose of ensuring continuous electric utility service or to avoid danger to the public or electric utility personnel or equipment.
- E. In the event that the governing body has reason to believe that the removal of a Borough tree at the direction of the Shade Tree Management Board, or otherwise, does not meet the criteria set forth in this section or will be detrimental to the welfare of the Borough, the Council may stay the removal of said tree pending a report on the reasons for removal, which report shall be submitted promptly by the Shade Tree Management Board. After consideration of the Shade Tree Management Board's report and such other information as is pertinent to the decision to remove the tree, the Council shall either approve or disapprove the removal of the tree.
- F. In the event that the governing body has reason to believe that the Shade Tree Management Board's refusal to agree to a requested removal of a Borough tree is inconsistent with the criteria of this chapter or will be detrimental to the welfare of the Borough, the Council may order the Shade Tree Management Board to submit a report explaining its reason for refusing to remove the tree, which report shall be promptly submitted by the Management Board. After consideration of the Shade Tree Management Board's report and such other information as is pertinent to the decision of whether or not to remove the tree, the Council shall either approve the Shade Tree Management

Board's refusal to remove the tree or order the removal of the tree, which the Shade Tree Management Board shall promptly do.

**§ 45-8 Permission required for certain actions.**

A. It shall be unlawful to commit any of the following acts with respect to Borough trees without the prior written consent of the Shade Tree Management Board:

- (1) Cut, prune, break, injure, alter or remove any tree; or cut, unduly disturb or interfere in any way with any root of a tree or trees, except as provided in § 45-7.
- (2) Fasten any object, rope, wire, sign, insulator or other device to a tree or trees or to any guard about such a tree or trees in any public street or park.
- (3) Install, remove or injure any guard or device placed to protect trees.
- (4) Close or obstruct any open spaces provided about the base of a tree or trees to permit the access of air, water and fertilizer to the roots of such tree or trees.
- (5) Cut any tree roots within 10 feet of any trunk or any roots four inches in diameter.
- (6) String or bury wires or lines through a public park.

B. The Shade Tree Management Board shall grant such written permission if the activity for which such permission is requested is in the public interest and is not likely to injure any Borough tree. The Shade Tree Management Board will notify the Superintendent of Public Works if written permission is granted for any of the above so that the terms of the consent are followed.

C. Any person or persons who cause damage to any Borough tree or Borough trees by machines, autos, etc., shall be held liable for damages to said tree or trees. Damages shall be corrected or repaired and the liable person or persons billed for the damages.

D. Any and every person having or maintaining any electric, telephone, telegraph or other wires or lines running through a public street or park shall securely fasten and maintain such wires and lines in such a manner as will safeguard Borough trees against any damage therefrom and shall make periodic adjustments whenever necessary to prevent damage to Borough trees and Borough shrubs.

E. When necessary to prune or remove any Borough tree or Borough trees along a public street, any person having any wires or lines running through or along said public street shall temporarily remove such wires or lines within 24 hours after the serving upon the owner of said wires or lines, or his agent, of a written notice from the Superintendent of Public Works.

F. Any person except the Madison electric utility having line clearance operations (tree trimming) done for them by any other person or persons shall first obtain the written approval of the Shade Tree Management Board.

G. No person shall move or cause to be moved any building or large object along any street without having first obtained a valid permit from the Borough Engineer, which, if the Borough Engineer deems necessary, may require the mover to furnish a bond or cash deposit in an amount sufficient to cover any damage to or destruction of Borough trees on such street or streets as a result of such moving operations.

H. No person shall operate, place or maintain, within the drip line of any Borough tree, any machinery, equipment, heavy object, stone, rocks, cement, earth, soil or other substance which may harmfully affect such Borough trees by unduly compressing the earth or otherwise impeding or preventing the access of water or air to the roots of such tree or excavate around to remove earth or soil from or cause any water to flow upon the roots of any tree. The Borough Engineer may waive, in whole or in part, such provisions, but only to the extent absolutely necessary to alleviate undue hardship in the appropriate use and enjoyment of property.

**§ 45-9 Non-Borough trees.**

The Management Board shall not exercise any of the powers granted to it herein over care and planting of trees or shrubbery located on private property. In the following circumstances, the Management Board shall notify the owner of the tree of the existence of the danger or disease and report to the Council the need for action with respect to non-Borough trees, and the Council may direct such action as is necessary to protect the public safety and welfare:

- A. Where any non-Borough trees, whose drip line is partly within the area of any property owned by the Borough or within the area of any street, highway, public place, right-of-way, park or parkway or within the sidewalk lines of any street, endanger the public safety, interfere with public travel or traffic on sidewalks, streets, highways or the right-of-way or interfere with the lighting of sidewalks, streets, highways or the right-of-way.
- B. Where any tree is believed to harbor a disease or insects readily communicable to neighboring healthy trees in the care of the Borough.

**§ 45-10 Advisory services.**

A. The Management Board will provide assistance to any Borough resident on the planting, treatment and care of non-Borough trees, including but not limited to:

- (1) Advice on the species of trees most appropriate for the owner's location and purpose.
  - (2) Advice on minimizing or eliminating adverse impact on existing trees due to proposed construction.
  - (3) Advice on whether tree removal is necessary and how best to effect removal.
- B. Advisory work with Planning Board.
- (1) One copy of all plans for major and minor subdivisions and site plans submitted to the Madison Planning Board or Board of Adjustment shall be forwarded by the Planning Board/Board of Adjustment Secretary at the same time such plans are distributed to Planning Board/ Board of Adjustment members to the Chairman of the Management Board for his or her review. The Shade Tree Management Board, in appropriate cases, shall submit to the Planning Board/Board of Adjustment and the owner written recommendations with respect to the following:
    - (a) Minimizing removal of trees located on the property.
    - (b) Appropriate species of trees that could be used to replace trees that must be removed because of construction and appropriate locations for the trees.
    - (c) Minimizing damage that may occur during construction to trees that will not be removed.
    - (d) The number of shade trees, their species and variety, if any, to be placed within the Borough right-of-way at the property owner's expense.
  - (2) All such recommendations shall be submitted to the Planning Board or Board of Adjustment on or before the date the matter is scheduled to be heard unless a shorter or longer period is directed by the Planning Board or Board of Adjustment. Failure of the Shade Tree Management Board to approve its recommendations to the Planning Board/Board of Adjustment within the required time shall be deemed a waiver of its right to submit comment.
  - (3) Whenever the Planning Board or Board of Adjustment incorporates in its approval of plans the recommendation of the Shade Tree Management Board with respect to planting of trees on Borough property, it shall require each tree so planted to be nursery-grown stock, two inches to three inches in diameter, characteristic of its species, balled and burlapped and planted in accordance with American Nursery Association specifications. Each tree shall bear a two-year guaranty by the permit holder and shall be guaranteed further by a two-year maintenance bond or cash bond. If any tree so guaranteed must be replaced, a new two-year guaranty and maintenance or cash bond shall apply to the replacement. Upon acceptance, such trees shall become Borough trees. The Management Board's recommendations shall be advisory only.

**§ 45-11 Landmark trees.**

- A. The Shade Tree Management Board shall have, as one of its duties, the location, selection and identification of any trees, which qualify as "landmark trees." A tree may qualify as a landmark tree if it meets one or more of the following criteria:
  - (1) The tree species is rare.
  - (2) The tree is more than 100 years of age.
  - (3) The tree has been connected with a significant historical event.
  - (4) The tree is of an outstanding trunk diameter or drip line diameter for a tree of its species.
  - (5) The quality of the tree foliage is outstanding for a tree of its species.
  - (6) The location, shade value, fragrance, erosion control, aesthetic features or scenic enhancement of such tree is of especial importance to the Borough.
- B. All trees designated as "landmark trees" by the Shade Tree Management Board shall be shown on an official Borough Map with appropriate code marks signifying each tree's designation, number, species, age, size and other distinguishing characteristics for ready reference and periodic monitoring.
- C. If the owner or owners of the property on which a landmark tree is located consent thereto; the Shade Tree Management Board shall identify such tree as a landmark tree by the placement of a suitable marker thereon.
- D. If and when any landmark tree is removed, the Shade Tree Management Board shall arrange for the necessary changes to be made to the official landmark tree inventory records and the Borough Map.

**§ 45-12 Annual appropriation.**

- A. During the month of October in each year, the Shade Tree Management Board, with consultation of Superintendent of Public Works, shall certify to the Mayor of the Borough the estimated sum necessary for the proper conduct of its work during the ensuing fiscal year, which shall include the sums estimated to be expended for the following items, namely:
  - (1) Expenses of the Management Board members in discharging official duties, including expenses incident to attendance at professional meetings.
  - (2) Purchase of trees and shrubbery.
  - (3) Purchase of necessary equipment and materials and the cost of services for the prudent promotion of the work.

(4) Purchase of professional services.

B. The governing body of this Borough shall annually appropriate such sums as it may deem necessary for said purposes.

**§ 45-13 Public improvements affecting trees.**

The laying of any sidewalk along any street within the Borough or the opening, constructing, curbing or paving of any such street or any similar act undertaken by the Borough or requiring the consent of the Borough, if done by a party other than the Borough, shall be done to the extent practicable so as to conserve a maximum number of trees consistent with the appropriate and practical construction of the public improvement. The Shade Tree Management Board shall advise the Superintendent of Public Works prior to the start of such work and the Superintendent shall advise the Borough or other party performing the work how the work can be accomplished without injury to any trees, and he shall monitor such project for the protection of any tree, consistent with the conditions set forth in § 45-7C. Nothing in this section shall be construed to prohibit or impede the construction of any public improvement.

**§ 45-14 Notification of Management Board of trees and shrubs needing attention.**

It is hereby declared to be the duty of all persons having knowledge thereof to immediately notify the Shade Tree Management Board or the Superintendent of Public Works of the Borough of Madison of any tree or shrub in or upon any street, highway, road, park or other property of or under the jurisdiction of the Borough of Madison which has suffered any accident or injury, is in need of attention or care or has become dangerous to the public or to the adjacent property. This provision shall be considered as directive only and for the public good, and no penalty shall be imposed for the failure to comply with this provision.

**§ 45-15 Violations and penalties.**

[Amended 5-8-2006 by Ord. No. 19-2006]

Any person, firm or corporation who shall violate any of the provisions of this chapter shall be liable, upon conviction thereof, to a fine of not less than \$100 nor more than \$2,000 or imprisonment in the county jail for a period not to exceed 90 days, or community service not to exceed 90 days or a combination of fine, imprisonment and/or community service in the discretion of the judge, for each violation hereof. Each 24 hours of continuous violation of any of the provisions hereof shall be considered a separate offense and shall be punishable accordingly.

**§ 45-16 Application for and issuance of permits.**

- A. Applications for a permit, where required under this chapter, shall be made directly to the Borough Engineer pursuant to § 45-8G and H, with a copy to the Shade Tree Management Board, which application shall be filed with the office of the Borough Engineer and shall contain the name of the applicant, location of the property or street affected and, in addition thereto, the purpose for which the application is being made.
- B. Within seven business days after the submission of an application for a permit, the Borough Engineer, shall review the site and the application and either grant or deny said permit or extend for an additional seven business days the period for review, by the end of which he shall grant or deny said permit. Failure of the Borough Engineer to act within the aforesaid time shall be deemed approval of the application.
- C. Fees. There shall be no fee charged for the issuance of a permit by the Borough Engineer.
- D. Appeal. Any applicant shall have the right to appeal the decision of the Engineer to the Borough Council by filing with the Borough Clerk of the Borough of Madison a letter requesting such appeal within 14 days from the decision of the Borough Engineer. The Council may solicit the advice of the Shade Tree Management Board, Environmental Commission or other experts and shall review the decision of the Borough Engineer. The Council shall, by resolution duly adopted by it within 45 days of the submission date of the appeal, either affirm the denial of said permit or direct the Borough Engineer to issue such permit with such conditions as may be appropriate.

**§ 45-17 Minutes of Shade Tree Management Board.**

The minutes of the Shade Tree Management Board's regular meetings shall be presented to the Borough Clerk as soon as possible.

**§ 45-18 Severability.**

If any section, subsection, paragraph, sentence, clause, phrase or word contained in this code shall be declared invalid for any reason whatsoever, such decision shall not affect the remaining portions of this code, which shall remain in full force and effect, and to this end the provisions of this chapter are here declared to be severable

## ATTACHMENT A2

### Chapter 195, LAND DEVELOPMENT

[*HISTORY: Adopted by the Mayor and Council of the Borough of Madison 3-12-1984 by Ord. No. 2-84.EN(1) Amendments noted where applicable.*]

§ The title of this chapter shall be "A Comprehensive Ordinance Regulating and Limiting the Uses of Land and the Uses and Locations of Buildings and Structures; Regulating and Restricting the Height and Bulk of Buildings and Structures and Determining the Area of Yards and Other Open Spaces; Regulating and Restricting the Density of Population; Dividing Madison Borough into Districts for Such Purposes; Adopting a Map Editor's Note: Said map is located in the office of the Borough Clerk of Said Borough Showing Boundaries and the Classification of Such Districts; Establishing Rules, Regulations and Standards Governing the Development of Land Within the Borough, Including Site Planning and Land Subdivision; Establishing a Planning Board and a Board of Adjustment; and Prescribing Penalties for the Violation of Its Provisions."

#### § 195-27. Construction requirements.

**A. Borough standards.** All standards and specifications of the Borough as now or hereafter adopted, if any, shall govern the design, construction and installation of all required improvements. Failure of the developer, his contractor or agent to conform to said specifications shall be just cause for the suspension of the work being performed. No developer shall have the right to demand or claim damages from the Borough, its officers, agents or servants by reason of said suspension.

**B. Other standards.** In the event that the Borough has not adopted standards for a specific type of improvement, then generally accepted engineering standards, as set forth in current engineering and construction manuals as may be approved and modified by the Borough Engineer for a specific situation, shall be used.

**C. Grades.** All construction stakes and grades shall be set by or under the supervision of a licensed land surveyor. One copy of all cut sheets shall be filed with the Borough Engineer prior to the commencement of any construction.

**D. Approved plans.** Prior to commencement of construction of required improvements, the Borough Engineer shall have received and approved the complete plans and profiles of all improvements to be installed or constructed. No improvements shall be accepted by the governing body and no performance guaranties released until the Borough Engineer has received and approved drawings showing the plans, grades and profiles of all improvements as finally constructed.

**E. Site conditions.** During construction, the site shall be maintained and left each day in a safe, clean and orderly manner, and any condition which could lead to personal injury or property damage shall be immediately corrected by the developer or upon an order by the Construction Official or other authorized personnel.

**F. Disposal of dead trees, litter and building materials.** All stumps, litter, rubbish, brush, weeds, dead and dying trees, debris and excess or scrap building materials shall be removed or destroyed immediately upon the request of and to the satisfaction of the Construction Official prior to issuing an occupancy permit. No such refuse shall be buried on the site.

#### **G. Changes in elevation.**

(1) No change shall be made in the elevation or contour of any lot or site by the removal of earth to another lot or site other than as shown on an approved preliminary plan.

(2) Minimal changes in elevation or contours necessitated by field conditions may be made only after approval by the Borough Engineer. All said changes shall be shown on the final

plan and indicated as a change from the preliminary, or if final approval has been granted, all changes shall be shown on the as-built plans.

**H. Excavations.** No excavation shall be created or maintained, except when required for the foundations of structures or in connection with and during the installation of facilities for permitted uses. Such excavation shall be used for the intended purpose or shall be refilled to the average surrounding ground level, in such a manner as to prevent the collection of water, erosion of earth or collapse or sliding of banks, within six months from the date of commencement of such excavation. All open excavations of greater than four feet in depth shall be fully encircled with durable and stable four-foot-high construction fence (or six-foot-high chain link fence if required elsewhere in the Code due to excavation depth or proximity to public facilities). Topsoils must have an approved stockpile location. Subsoils can not function as screened, well-graded organic topsoils. Subsoils can only be used for structural backfills where suitable engineered properties can be demonstrated. Tree root systems must be protected from grading cuts and fills. Excess excavation subsoils must be removed from the site entirely in conjunction with soil movement ordinances. Individual lot grading plans are required wherever new grades are to be established on a property. [Amended 10-23-2006 by Ord. No. 50-2006]

**I. Topsoil removal.** The applicant shall obtain all necessary permits.

**J. Preconstruction meeting.** Prior to the commencement of construction, the developer shall arrange for and attend a preconstruction meeting in conformance with the requirements of the

# ATTACHMENT A3

## Shade Tree Management Board Bylaws

### **ARTICLE I: Purpose of the Shade Tree Management Board (Management Board)**

The purpose of the Shade Tree Management Board (referred to hereafter as the "Management Board"), as established by Chapter 45 of the Borough of Madison Code, shall be to promote a sustainable and productive community forest and shade tree resource for the Borough of Madison and its residents' physical health and economic, environmental and social well being.

The Management Board will work to improve and enhance public open space areas in Madison with plantings; promote general tree stewardship among the citizens; educate the public about tree benefits; reduce tree/sidewalk conflicts; develop a no-net-loss policy and practice; develop a natural disaster plan for the tree resource; and develop a comprehensive tree inventory and management plan in accordance with the New Jersey Shade Tree and Community Assistance Act of 1996.

Specific duties and powers of the Management Board are detailed in Chapter 45 of the Borough of Madison Code.

### **ARTICLE II: Membership of the Shade Tree Management Board**

1. General Membership. Number of Members and Classification of Members. The membership of the Management Board shall be constituted of those persons appointed and classified by Ordinance. The Management Board shall consist of seven (7) general members and up to two (2) alternate members. (Chapter 45, Borough Code)

The Management Board shall seek broad membership, involving representatives of government entities, institutions, businesses and residents involved in and interested in community forestry matters in New Jersey. The Management Board shall also seek members with a range of experience and expertise, including forestry, business, finance, grant writing, non-profits, etc. Members shall represent, reside, or work in Madison or adjoining communities.

The expectations of members are to attend all meetings of the Management Board, to vote upon questions that are considered by the Management Board, and to serve on committees and/or task forces established by the Management Board. General members and alternate members have the same expectations and rights with the exception of voting (see Article III: Voting Powers).

No member of the Management Board, other than Officers of the Board, may speak in the name of the Management Board or act on its behalf without prior authorization of the Management Board or its Officers.

2. Appointments and Terms of Office. Appointments of all regular and alternate members shall be made by the Mayor with the advice and consent of the Borough Council. The terms of the first appointed members shall be for one (1), two (2), three (3), four (4) and five (5) years as designated by the Mayor and Council. All subsequent appointments, except to fill vacancies, shall be for the full five-year (5) term. (Chapter 45, Borough Code).
3. Vacancy. In the event of a vacancy, the Management Board will recommend a successor who may be appointed by the Mayor with the advice and consent of the Borough Council to fill the unexpired term. (Chapter 45, Borough Code)

### **ARTICLE III: Voting Powers**

1. **Voting Members.** The voting members of the Management Board shall be all regular members.
2. **Non-Voting Members.** The alternate members shall participate in discussions of the proceedings but may not vote except in the absence or disqualification of a regular member. A vote shall not be delayed in order that a regular member may vote instead of an alternate member.

### **ARTICLE IV: Officers**

1. **Number of Officers.** The officers of the Management Board shall be the Chairman, Vice-Chairman, Secretary, and Treasurer.
2. **Election.** The Chairman, Vice-Chairman, Secretary and Treasurer shall be elected annually in the month of January by a majority vote of the Management Board and shall hold their respective offices for one (1) year or until their successors are elected.
3. **Vacancies.** All vacancies occurring prior to the expiration of the term of any of the offices shall be filled at the next meeting by the Management Board who shall elect an officer to fill the unexpired term.
4. **Removal.** Any officer elected by the Management Board may be removed by the Board whenever, in its judgment, the best interests of the Board will be served thereby.

### **ARTICLE V: Duties of Officers and Members**

#### **1. Chairman.**

The Chairman of the Management Board shall preside at all meetings of the Management Board at which the Chairman shall be present; set the agenda for each meeting of the Management Board and distribute it to the members in advance of the meeting; establish working committees and/or task forces and appoint members and assign duties; serve as spokesperson for the Management Board on issues where the Board has adopted positions; supervise the preparation of reports and annual budgets, all subject to approval by the full Management Board. The Chairman and other officers shall make an annual report to the Borough Council detailing the operations and results during the preceding twelve months. The Chairman shall be the chief executive officer and perform other duties as are incident to the office or as are properly required by the Management Board.

#### **2. Vice-Chairman.**

The Vice-Chairman of the Management Board shall perform the duties and exercise the functions of the Chairman in the Chairman's temporary absence or during the Chairman's temporary inability to act. The Vice-Chairman shall perform such other duties as may be assigned by the Management Board or by the Chairman of the Management Board.

#### **3. Secretary.**

The Secretary shall issue notices of meetings, shall keep the minutes of all meetings, shall send out notices to residents, shall have charge of the records of the Management Board and shall make reports and perform such other duties as are incident to the office or as are required by the Management Board or the Chairman. The Secretary shall regularly forward the minutes of the Management Board meetings to the Mayor and Council and to the Management Board members. The Secretary shall ensure that a copy of the agenda, developed by the Chairman, is sent to the Mayor and Council and Management Board members prior to each meeting. The Secretary shall ensure that an annual report, developed by the Chairman and the Management Board members, is provided to the Mayor and Council and to the public.

#### 4. **Treasurer.**

The Treasurer shall work through the Superintendent of Public Works and the Financial Officer of the Borough of Madison for creating budgets, financial reporting, and requests for goods and services. The Treasurer, Chairman and other officers, in cooperation with the Superintendent of Public Works, shall certify to the Mayor and Council the estimated sum necessary for the proper conduct of the Management Board's work during the ensuing fiscal year, and see to it that the annual expenditures of the Management Board shall not exceed the total sum of any appropriation from the Council.

#### 5. **Members.**

All members and alternate members are expected to attend all meetings of the Management Board and to serve on one or more committees or task forces formed by the Management Board to fulfill its duties and responsibilities.

### **ARTICLE VI: Committees**

1. The Management Board has established the following committees and positions:

Media Liaison

Technical Coordination Committee (TCC) Liaison Friends of Madison Shade Trees (FMST)

Liaisons Arbor Day Committee

Tree City USA Committee

Landmark Trees Committee

Grant Development Committee

STMB Management Plan Committee

Board Development Committee

2. The Management Board may, from time to time, establish other committees, ad hoc committees, or task forces, and confer upon them such powers as it deems expedient for the conduct of the Management Board's business.

3. Actions to be taken by each committee shall be determined and reviewed by the Management Board in its monthly meetings. Each committee shall submit periodic reports to the Management Board for the inclusion on the agenda of the monthly Management Board meetings. If the responsible member is unable to be present at a Management Board meeting, the report should be submitted prior to the meeting.

### **ARTICLE VII: Meetings**

1. **Schedule.** The Management Board shall meet twelve times a year. The schedule is established in January and posted on the Borough's web site. The time and place of the monthly meeting shall be fixed annually by resolution of the Management Board.

2. **Notice.** Notice of the annual schedule and any special or additional meetings shall be made to the public pursuant to the Open Public Meetings Act.

3. **Open Meetings.** The meetings of the Management Board shall be open to the public unless determined by a majority of its members that a closed session is required to discuss any of the following category of matters:

a) Any matter of pending or anticipated litigation.

b) Any matter of contract negotiations.

c) Any matter falling within the attorney/client privilege.

d) Any private and or sensitive personnel matters.

4. **Quorum.** A majority of the voting members (regular members or in their absence alternate members) of the Management Board shall constitute a quorum for the transaction of business.

**5. Absence from Meetings.** All members are expected to attend all meetings. The Chairman may excuse a member from attendance for unavoidable absences. Each member shall be allowed up to two (2) unexcused absences during anyone calendar year. When a member has exceeded two (2) unexcused absences, the Management Board may request the member's resignation and recommend a replacement to the Mayor for approval by the Council.

**6. Rules of Order.** The deliberation of the Management Board shall be governed by Roberts Rules of Order

## **ARTICLE VIII: Shade Tree Management Board Procedures**

- 1. Management Plan and Tree Inventory and Assessment.** The Management Board shall complete an annual tree assessment, detailing annual tree pruning, planting and hazardous tree removal plans. This shall form the basis for the Management Board's ongoing tree management. Longer term, the Management Board shall develop and implement a management plan for the Borough of Madison's public trees, including a comprehensive tree inventory and assessment.
- 2. Service Requests.** In addition to the Management Board's ongoing tree management, service requests received from the public shall be handled by the Management Board, in cooperation with the Borough's Department of Public Works.

Requests from the public to the Shade Tree Management Board shall be made to a separate telephone line established for the Shade Tree Management Board and identified as such, and administered by the Department of Public Works (DPW), which shall act as the Management Board's message center. The DPW shall initiate (complete sections a, b, and c below) the Shade Tree Review form that shall be completed by the Shade Tree Management Board and shall include the following types of information:

- a) Name of resident making inquiry, date and time of inquiry
- b) Address, telephone number, tax lot number, tax block number of property (if available)
- c) Inquiry type (notification that tree needs attention; request for pruning, tree removal, tree planting; other inquiry)
- d) Shade Tree Management Board review and assessment (situation and action required) and date received
- e) Tree measurement and location (date and results of measurements taken of both location within Borough right-of-way and the size of the tree)
- f) Marking of tree if to be removed (date that tree was marked for removal by Shade Tree Management Board)
- g) Notification of planting or removal (date that notification letter was mailed to resident)
- h) Replacement information (will tree be replaced)

The Shade Tree Management Board shall routinely pick up these Shade Tree Review forms from the DPW for action by the Management Board. If the DPW determines that the request or inquiry is of an urgent nature, the DPW shall immediately contact the Management Board's Chairman or Secretary.

**3. Notification.** The Management Board shall notify residents of the intent to remove or plant a tree or trees on the Borough's right-of-way adjoining a resident's property. Notification shall be in the form of a post card hand delivered to the resident by the Shade Tree Management Board's representative. This shall be followed by a notification letter delivered via first class mail, and shall include a Shade Tree Management Board contact point in case of questions or concerns. Any tree that is to be removed shall also be marked by the Shade Tree Management Board in a manner clearly visible to residents at least two weeks prior to removal.

**4. Department of Public Works.** The Shade Tree Management Board shall work cooperatively with the Borough's Department of Public Works to carry out its duties. The Shade Tree Management Board shall establish a separate telephone line, identified as The Shade Tree Management Board, for inquiries, requests and communications from the public. This telephone line shall be administered by the DPW as the message center to receive residents' inquiries. In addition, the DPW shall perform the work requested by the Shade Tree Management Board and shall supervise the outside contractors required to perform the work directed by the Shade Tree Management Board. The Shade Tree management Board is responsible and accountable to the Borough for decisions made and actions taken regarding shade tree management.

**5. Dispute Resolution.** If any resident has questions or concerns about public shade tree management in Madison or about any actions taken or not taken by the Shade Tree Management Board, the resident shall first contact the Shade Tree Management Board to attempt to address the issue. The Chairman or Vice-Chairman of the Management Board shall be responsible for meeting with residents to resolve problems. Residents may also attend the Shade Tree Management Board meetings to discuss their concerns or issues. In the event that a dispute cannot be resolved between the resident and the Shade Tree Management Board, the Management Board will alert the Borough Council and provide a summary of the key issues, the Management Board's position, and the Board's understanding of the resident's position. Chapter 45 of the Borough of Madison Code (45-7 E and F) outlines actions the Council may take after consideration of the Shade Tree Management Board's report and such other information as appropriate.

#### **ARTICLE IX: Conflict of Interest**

- 1. Disclosure of Interest.** No Management Board member shall have or shall acquire any interest, direct or indirect, personal or financial, in any project which the Management Board is promoting or in any contract or proposed contract related to the Management Board without forthwith making written disclosure to the Management Board of the nature and extent of the interest. Such disclosure shall be entered in writing upon the minutes of the Management Board. The Management Board will seek the guidance of the Borough Attorney on all questions relating to potential conflicts of interest.
- 2. Voting.** No Management Board member having an interest as described in Section 1 shall vote on matters relating to such interest.

#### **ARTICLE X. Amendments**

These bylaws may be altered, amended or repealed and new bylaws may be adopted by the Management Board after ten (10) business days' written notice of the proposed alteration, amendment or change has been given to each Management Board member, provided that no alteration, amendment or change shall be made without the affirmative vote of a majority of the total (regular and alternate) number of Management Board members.

# ATTACHMENT A4

## Technical Coordinating Committee Checklist

Reference Document of Borough Code Pertaining to Landscape

Source: Borough of Madison Code MA 0608-195

Chapter 195, Land Development and

Chapter 45, Shade Tree Management Board

Prepared by the Shade Tree Management Board

### Article IV Development Requirements and Standards

1. **Is there a description and map of existing vegetation?**
2. **Is a landscape plan provided?**
3. **Does the landscape plan show the size and type of all plant material?**
4. **Does the environmental impact statement address damage to plant, tree and wildlife systems?**

#### Section 195-23

B. Plats and plans for preliminary approval. The following information shall accompany any proposed subdivision or site plan submitted for preliminary approval:

(16) All proposed landscaping, fences, walls, hedges or similar facilities. The landscaping plan shall show in detail the location, size, and type of all plant material, including ground cover, to be used on the site.

C. Environmental impact assessment

(4) A listing and evaluation of adverse environmental impacts which cannot be avoided, with particular emphasis upon air and water pollution, including sedimentation and siltation, increase in noise, damage to plant, tree and wildlife systems, damage to natural resources...etc.

Also reference Article 195-20 F. 3 c. 4: Vegetation: A description and map of existing vegetation on the site showing the location of major vegetation groupings such as woodlands, open fields, and isolated trees greater than 6" in caliper shall be provided.

#### Section 195-24.5 Landscaping

A. Landscaping shall be provided as part of any overall site plan design and integrated into building arrangements, topography, parking and buffering requirements. Landscaping includes trees, bushes, shrubs, ground cover, perennials, annuals, plants, sculpture, art/and of the use of building and paving materials in an imaginative manner.

B. The existing sense and appearance of any natural scenic qualities on a tract shall be retained by the careful placement of buildings and improvements.

#### 5. **Is Buffering required and provided in plan?**

#### 6. **If buffering is required, does it meet the following requirements:**

A. Minimizes noise, light and movement of people?

B. Provides year-round screening

C. If evergreens are used are they of sufficient size and planted in a staggered pattern?

D. Are buffers at least 20 feet in width?

E. Are there any structures or signs within the buffer?

F. If berms are used, are they natural, park-like and allowing for drainage to pass through?

**14. If there is any outdoor recycling area, is there landscaping and/or fencing provided around it?**

**Section 195-25.5 Fences and walls**

**Section 195-25.10 Recycling Facilities**

- F. Landscaping and/or fencing shall be provided around any outdoor recycling area and shall be developed in an aesthetically pleasing manner.

**15. Are Street Trees being planted?**

**Section 195-25.12 Street Names and Appurtenances**

- G. Street trees shall be required on all development applications. Trees shall be approximately 40 feet apart and located between the setback line and the street right-of-way line if possible (including the side street on corner lots) and not closer than 25 feet to any existing or proposed streetlight or street intersection.
1. The trees shall be planted so as not to interfere with utilities, roadways, or sidewalks.
  2. Trees shall be nursery-grown stock of not less than 2 ½ inches in caliper at breast height (DBH), with branches commencing not less than eight feet above grade when planted and staked in an approved manner. Where there is adequate existing growth, the Borough may waive this requirement.

**16. If off-street parking:**

- a. Is at least 10% of the outdoor parking surface landscaped?
- b. Is there at least 1 shade tree per 20 parking spaces?
- c. Is the landscaping located at the entrance of the lots, in protected areas along walkways, center islands and at the end of bays?

**Section 195-25.15 Off-street Parking**

C. A minimum of 10% of any surface parking facility shall be landscaped and shall include one shade tree for every 20 parking spaces.

M. Landscaping, paving and drainage for parking areas.

1. In outdoor parking lots with 10 or more spaces, not less than 10% of the parking area shall be suitably landscaped to minimize noise, glare and other nuisance characteristics, as well as to enhance the aesthetics, environment and ecology of the site and surrounding area. Waived required parking areas which are landscaped shall not be included in the required 10%.
2. The landscaping shall be located at the entrance of the lots, in protected areas along walkways, center islands and at the end of bays. In narrow islands, low-spreading plants, such as creeping juniper, English ivy, Myrtle and pachysandra, are appropriate.
3. All landscaping in parking areas shall be carefully located so as not to obstruct sight distance.
4. Off-street parking areas shall be effectively screened where required by the Board by a berm, fence or wall not less than four nor more than six feet in height, maintained in good condition; provided, however, that a screening hedge or other natural landscaping may be substituted for the required fence or wall if approved by the Board. The screening, as required by this subsection, may be waived by the Board if, in its judgment, because of topographic or other unusual conditions, said fence is not necessary to buffer adjoining property.

**17. Does excavated topsoil have an approved stockpile location?**

**18. Is any subsoil to be used as a top layer of soil?**

19. Are tree root system protected from grading cuts and fill?
20. Is any excess subsoil to be removed from the site?
21. Is any topsoil to be removed from the site?
22. If topsoil is to be removed from the site, has a permit been obtained? (see

**Section 195-45 Soil moving**

**Section 195-27 Construction requirements**

H. Excavations. No excavation shall be created or maintained, except when required for the foundation of structures or in connection with and during the installation of facilities for permitted uses....Topsoils must have an approved stockpile location. Subsoils cannot function as screened, well-graded organic topsoils. Subsoils can only be used for structural backfills where suitable engineered properties can be demonstrated. Tree root systems must be protected from grading cuts and fills. Excess excavation subsoils must be removed from the site entirely in conjunction with soil movement ordinances...etc.

I. Topsoil removal. The applicant shall obtain all necessary permits.

**23. For Commercially Zoned properties:**

- a. Is there a 5' landscape buffer on each side?
- b. Is there a 7' landscape bugger on the rear of the property?
- c. For non-impervious areas in the front, is there lawn, ground cover or a mix of trees?

**Section 195-32.5 CC Community Commercial Zone regulations.**

A. ...The standards of this zone are intended to create a visually pleasing streetscape which establishes a positive aesthetic relationship between the public spaces...and the building facades and layout of the sites.

**4.. Landscaping**

- (a) A five-foot landscaped buffer shall be required along each side yard, and a seven-foot landscaped buffer shall be required along the rear property line. The non-impervious areas in the required front yard and/or between the front building façade and the street right-of-way shall be fully planted and maintained in lawn areas or ground cover or landscaped with a mix of deciduous and evergreen shrubbery and trees.
- (b) Compliance with other regulations, specifically those for street trees, shall be required.

**24. For Gateway Zoned properties:**

- a. Is the outside parking area screened by landscaping and/or fencing?
- b. Is the parking area beneath a building screened by a mix of deciduous/evergreen plantings?
- c. Is there a 5' landscape buffer on each side?
- d. Is there a 7' landscape bugger on the rear of the property?
- e. For non-impervious areas in the front, is there lawn, ground cover or a mix of trees?
- f. Does the streetscape design include landscaping and street trees?

**Section 195-32.13 Gateway Zone**

H. Supplemental requirements: design standards for gateway uses:

- 1.(b) Parking areas shall be screened from view of adjacent residential zones, existing residential uses and public roads by landscaping, fencing or a combination of these to create a buffer at least four feet in height. Landscaping shall contain a mix of deciduous and evergreen plantings sufficient to screen the view of vehicles in all seasons.

1.(c) Parking areas located beneath a building shall be fully screened from public view by a mix of deciduous and evergreen plantings and be physically enclosed from view by extension of the front façade of the building to shield all such parking.

2.(a) Landscaping. A minimum five-foot landscaped buffer shall be required along each side yard and a seven-foot landscaped buffer shall be required along the rear property line. All pervious areas in the required front yard and/or between the front building façade and the street right-of-way shall be fully planted and maintained in lawn area of ground cover or landscaped with a mix of deciduous and evergreen shrubbery and trees. The landscape plan shall be prepared by a licensed landscape architect.

4.(c) Streetscape design should include landscaping, street trees, pedestrian-scale streetlights, and similar features appropriate to a gateway location.

**25. For Gateway Zoned properties:**

- a. Is there a curbed landscape area, at least 5' wide in the front?
- b. Is there a curbed landscape area, at least 5' wide along any other abutting streets?

**26. For retirement properties CCRC('s) is there landscape buffering of at least 25' around the perimeter?**

**27. For a Wireless antenna:**

- c. Is there a landscape plan?
- d. Was the landscape plan prepared by a licensed landscape architect?
- e. Is there sufficient number of trees planted to screen the view of the tower?
- f. If evergreens are planted, are they at least 8' high?
- g. If deciduous trees are planted, are they at least 2" in diameter?

**Section 195-33 Conditional Uses**

B.2.(d) Public garages. A curbed landscaped area, at least five feet wide, shall be installed and maintained and shall extend across the front and any other street line abutting the public sidewalk, and no sign or other object or device shall be parked or placed thereupon. A landscaped buffer of at least five feet shall be required along all sides and property lines.

B.8.(k) Buffering and screening. All CCRC's shall be landscaped and buffered. A landscaped buffer not less than 25 feet shall be planted or installed around the perimeter of the developed area of any CCRC site.

B.8.(h) At any public garage or gasoline service station where motor vehicles to be repaired will remain more than 24 hours, a solid fence, at least six feet in height, made of a composition which will effectively screen the property, shall be placed to effectively screen views from the street.

B.10.(i) 12 [a] Wireless communications antenna. The landscaping shall consist of a combination of existing and/or newly planted evergreen and deciduous trees and shrubs of sufficient density to screen the view of the tower, particularly at its base, to the maximum extend reasonably possible, and to enhance the appearance of the building from the surrounding residential properties and any public street.

[b] The landscaping plan shall be prepared by a licensed landscape architect who shall

present testimony to the Planning Board regarding the adequacy of the plan to completely screen the tower from view and the enhance the appearance of the building; and

[c] Any newly planted evergreen trees shall be at least eight feet high a time of planting, and any newly planted deciduous trees shall be a minimum caliper of two inches at time of planting.

### **Section 195-45 Soil moving**

**A. Permit required.** No person shall remove or deposit soil on any premises in the Borough of Madison other than on the premises from which the soil shall be moved, unless a permit therefore is first secured from the Borough Council as hereinafter set forth; provided, however, that no permit shall be required for the following:

1. The moving of excess soil resulting from foundation or cellar excavations up to 100 cubic yards total.
2. The moving of soil upon any lot containing less than 20,000 square feet on which there is an existing one-or two-family dwelling.
3. The moving of soil for gardening primarily for home consumption of landscaping for aesthetic purposes, not to exceed 20% of the lot area and 100 cubic yards.
4. The moving of soil which does not result in either substantial changes in grade and/or elevation of does not significantly alter drainage runoff patterns from said lot.

**B. Information required for permit application (see code book).**

### **28. For Borough owed trees:**

- a. Is there a need to cut or prune any tree?
- b. Is there a need to cut any 4" in diameter root within 10' of the trunk?

### **Chapter 45: SHADE TREE MANAGEMENT BOARD**

45-8. Permission required for certain actions.

A. It shall be unlawful to commit any of the following acts with respect to Borough trees without the prior written consent of the Shade Tree Management Board:

- (1) Cut, prune, break, injure, alter or remove any tree; or cut, unduly disturb or interfere in any way with any root of a tree or trees, except as provided in § 45-7.
- (2) Fasten any object, rope, wire, sign, insulator or other device to a tree or trees or to any guard about such a tree or trees in any public street or park.
- (3) Install, remove or injure any guard or device placed to protect trees.
- (4) Close or obstruct any open spaces provided about the base of a tree or trees to permit the access of air, water and fertilizer to the roots of such tree or trees.
- (5) Cut any tree roots within 10 feet of any trunk or any roots four inches in diameter.
- (6) String or bury wires or lines through a public park.

B. The Shade Tree Management Board shall grant such written permission if the activity for which such permission is requested is in the public interest and is not likely to injure any Borough tree. The Shade Tree Management Board will notify the Superintendent of Public Works if written permission is granted for any of the above so that the terms of the consent are followed.

C. Any person or persons who cause damage to any Borough tree or Borough trees by machines, autos, etc., shall be held liable for damages to said tree or trees. Damages shall be corrected or repaired and the liable person or persons billed for the damages.

D. Any and every person having or maintaining any electric, telephone, telegraph or other wires or lines running through a public street or park shall securely fasten and maintain such wires and lines in such a manner as will safeguard Borough trees against any damage therefrom and

shall make periodic adjustments whenever necessary to prevent damage to Borough trees and Borough shrubs.

- E. When necessary to prune or remove any Borough tree or Borough trees along a public street, any person having any wires or lines running through or along said public street shall temporarily remove such wires or lines within 24 hours after the serving upon the owner of said wires or lines, or his agent, of a written notice from the Superintendent of Public Works.
- F. Any person except the Madison electric utility having line clearance operations (tree trimming) done for them by any other person or persons shall first obtain the written approval of the Shade Tree Management Board.
- G. No person shall move or cause to be moved any building or large object along any street without having first obtained a valid permit from the Borough Engineer, which, if the Borough Engineer deems necessary, may require the mover to furnish a bond or cash deposit in an amount sufficient to cover any damage to or destruction of Borough trees on such street or streets as a result of such moving operations.
- H. No person shall operate, place or maintain, within the drip line of any Borough tree, any machinery, equipment, heavy object, stone, rocks, cement, earth, soil or other substance which may harmfully affect such Borough trees by unduly compressing the earth or otherwise impeding or preventing the access of water or air to the roots of such tree or excavate around to remove earth or soil from or cause any water to flow upon the roots of any tree. The Borough Engineer may waive, in whole or in part, such provisions, but only to the extent absolutely necessary to alleviate undue hardship in the appropriate use and enjoyment of property.

**29. For privately owned trees, have you asked the Shade Tree Management Board for advice on:**

- a. Which trees should be removed?
- b. The type and number of private trees to be planted?
- c. How to protect existing trees?
- d. The type and number of trees to be planted in the borough right-of-way?

**45-10. Advisory services.**

- A. The Management Board will provide assistance to any Borough resident on the planting, treatment and care of non-Borough trees, including but not limited to:
  - (1) Advice on the species of trees most appropriate for the owner's location and purpose.
  - (2) Advice on minimizing or eliminating adverse impact on existing trees due to proposed construction.
  - (3) Advice on whether tree removal is necessary and how best to effect removal.
- B. Advisory work with Planning Board.
  - (1) One copy of all plans for major and minor subdivisions and site plans submitted to the Madison Planning Board or Board of Adjustment shall be forwarded by the Planning Board/ Board of Adjustment Secretary at the same time such plans are distributed to Planning Board/ Board of Adjustment members to the Chairman of the Management Board for his or her review. The Shade Tree Management Board, in appropriate cases, shall submit to the Planning Board/ Board of Adjustment and the owner written recommendations with respect to the following:
    - (a) Minimizing removal of trees located on the property.
    - (b) Appropriate species of trees that could be used to replace trees that must be removed because of construction and appropriate locations for the trees.

- (c) Minimizing damage that may occur during construction to trees that will not be removed.
  - (d) The number of shade trees, their species and variety, if any, to be placed within the Borough right-of-way at the property owner's expense.
- (2) All such recommendations shall be submitted to the Planning Board or Board of Adjustment on or before the date the matter is scheduled to be heard unless a shorter or longer period is directed by the Planning Board or Board of Adjustment. Failure of the Shade Tree Management Board to approve its recommendations to the Planning Board/ Board of Adjustment within the required time shall be deemed a waiver of its right to submit comment.
- (3) Whenever the Planning Board or Board of Adjustment incorporates in its approval of plans the recommendation of the Shade Tree Management Board with respect to planting of trees on Borough property, it shall require each tree so planted to be nursery-grown stock, two inches to three inches in diameter, characteristic of its species, balled and burlapped and planted in accordance with American Nursery Association specifications. Each tree shall bear a two-year guaranty by the permit holder and shall be guaranteed further by a two-year maintenance bond or cash bond. If any tree so guaranteed must be replaced, a new two-year guaranty and maintenance or cash bond shall apply to the replacement. Upon acceptance, such trees shall become Borough trees. The Management Board's recommendations shall be advisory only.

## ATTACHMENT B

**New York Times**

November 29, 2009

### **When Trees Fall Next Door, Neighbors Make the Noise**

By **COREY KILGANNON**

JENNIE SUNSHINE doesn't need horror movies. She has witnessed numerous chain-saw massacres right on Ravenscrest Road, her sleepy suburban block in this upper Westchester town.

"It seems like every time someone moves onto the block, they begin cutting down trees," said Ms. Sunshine, 38, a stay-at-home mother of a 2-year-old girl. Three neighbors have deforested parts of their yards in the past two years, she said.

"I'm not a nosy neighbor, but every time I hear the saws, I'm like, 'Oh, my God, there it is again,'" she said. "These trees were not sick or a safety hazard; these people just wanted to rearrange the landscape. I thought, 'If this continues, what's Yorktown going to look like in 30 years, the Lower East Side?'"

Ms. Sunshine never confronted her neighbors, but she joined a group of like-minded residents who are pushing for a town ordinance requiring property owners to get approval before removing certain trees on their property.

Protecting trees on public land and parkland, and on property under development, is standard in municipalities in the New York area. But more local governments — Larchmont and Rye in Westchester County, and Chatham, Madison and Rutherford in New Jersey, to name a few — have considered or are debating more controversial restrictions on what homeowners can do with the trees on their own property.

Protecting the tree canopy and preventing soil erosion and flooding — as well as preserving a town's character — are among the aims of the rules.

In many places, these ordinances were a backlash to the building boom that preceded the recession, when developers were clear-cutting many lots for housing.

As a result of the new regulation of private trees, homeowners in many municipalities who assume they can chop impulsively and ask questions later may have to rethink their plans. Or they may have to at least familiarize themselves with the intricacies of their town codes to prove that a candidate for cutting is not a specimen that merits government protection. The criteria include the age and species of the tree, as well as arboreal intricacies like D.B.H. (diameter at breast height).

Fines and penalties for failing to obtain a tree removal permit can be stiff. In Yorktown Heights, for example, the proposed fines for violators are laid out in detail: up to \$250 a tree, plus \$25 for each inch of tree diameter up to 18 inches, measured at the stump. The fine rate would be increased for bigger trees, and multiple offenders could face a \$1,500 civil penalty, doubled fines or, in some cases, jail.

Not surprisingly, the proposal has raised hackles. Opponents call the members of Ms. Sunshine's group, the Yorktown Tree Conservation Advisory Commission, tree huggers and deride their mission as a threat to private property rights.

A local weekly newspaper, North County News, recently called the proposal a "barking up the wrong tree ordinance," one that messed with private property, "the heart and soul" of the American dream. "Prison time for people who cut down trees on their own property?" the paper asked. "We don't think so."

Nick DiTomaso, 79, a Yorktown resident, agrees with North County News. "If a person wants to own property, why shouldn't he be able to do what he wants with his trees?" Mr. DiTomaso asked. "Before you know it, you have no rights."

In Madison, N.J., Mr. DiTomaso's point of view has prevailed. A tree preservation group's proposal for regulating tree removal on private property, similar to an ordinance passed in 2004 in adjacent Chatham, was decisively rebuked.

"It really caused a revolution," said Mary-Anna Holden, the mayor of Madison. "Each time it came up, it was resoundingly defeated. A lot of people basically said, 'If you want to pay my taxes, then you can touch my trees,' and quite frankly, I'm one of those people."

"Just considering the issue caused us to lose more trees because of the hysteria," Ms. Holden added. "People said, 'I'm going to take these trees down now,' because they feared having to pay fees or being denied permits if an ordinance was passed. You saw tree companies all over town."

In other cases, town officials have faced court challenges. In May, the New Jersey Supreme Court ruled against a builders' association that sued to stop Jackson Township from passing an ordinance relating to trees on private land. The township passed the ordinance shortly thereafter.

In Rutherford, N.J., Steven Savitsky, a homeowner who notes that nearby towns like Paramus, Maywood, Cliffside Park and Fair Lawn have enacted tree-cutting ordinances, is seeking an ordinance that would, among other things, assign certain trees — like American elms and magnolias — landmark status on private land. The Rutherford proposal also outlines a "tree replacement formula," which offers guidelines for replacing trees whenever they are removed. Violators of the proposed regulations could face \$500 to \$5,000 fines.

"A red flag goes up whenever you tell people they can't do something on their own property," Mr. Savitsky acknowledged. "But we just need to preserve trees here. The tree canopy is going down the tubes, and what you do on your private property affects the public."

These tree ordinances are enacted at the town and village level, and the resulting large number and variety of rules can cause confusion.

"You have more than 40 different towns in Westchester, and each one has a different tree ordinance," said Kenneth G. Almstead, whose family owns Almstead Tree and Shrub Care in New Rochelle. He ran down a short list.

"Let's see: In Larchmont, you need a \$250 bond, and have to plant a replacement tree," Mr. Almstead said. "In New Rochelle, you get more leeway if you have more than an acre of land. In Rye, you need to specify the tree's distance from the road. In Pelham, there are no real regulations."

Mr. Almstead called such ordinances necessary in many cases, but they do add to delays and paperwork for tree companies, which can be fined along with homeowners for violating the rules.

In Yorktown Heights, the big issues have always been "ticks and taxes," said Ron Buehl, a member of the tree commission. But now, the debate over trees on private land has joined them.

"We'd bring up the need for an ordinance, and some people called it socialism," Mr. Buehl recalled about earlier town meetings. "They said, 'My home is my castle, and you can't tell me I can't cut down a 150-year-old oak on my property.'"

On Ravencrest Road, Ms. Sunshine pointed out the stumps in a neighbor's yard where tall trees once provided privacy. She held "before" pictures — printouts of satellite photos she found online — that showed the live trees several years ago.

"If people had to get a permit, it might encourage them to educate themselves and rethink the decision," she said.

## Arbor Day Handout

*After a bad storm,* you may be thinking of evaluating the damage to your trees and possible corrective action. Here are some things to consider –

- Identification of potentially hazardous or endangered trees should always be done by an experienced, professional arborist. An arborist's credentials should include designations such as **I.S.A. Certified Arborist** or **NJ Certified Tree Expert**.
- For help in selecting a tree care provider, you can go to [njaes.rutgers.edu/pubs/](http://njaes.rutgers.edu/pubs/) and type **FS019** in the **Search** box.
- As trees age, they become more susceptible to disease, decay, and other structural weaknesses. Mature trees should be regularly evaluated by a professional arborist, as not every problem is immediately visible. An arborist can diagnose problems before they threaten the life of the tree.
- There *are* remedies for many problems, even severe ones – when asked for their professional opinion, qualified tree care providers should not automatically recommend tree removal without providing a clear risk assessment and explaining all the facts.
- Regular pruning (at least every 8 – 10 years) by well-trained personnel is one of the best ways to ensure both the shapeliness and well-being of your trees.
- Trees that are part of the public domain are assessed annually and maintained by **STMB** and **DPW** (The Department of Public Works). Hazardous trees in this domain are identified, removed, repaired, or moved by **STMB** and **DPW**. Friends of Madison Shade Trees and The Parks Commission work closely with both of these groups.
- *The Shade Tree Management Board* is charged with caring for over 6,700 of the Borough's trees located in the public right-of-way. A computerized tree inventory database of these trees has been developed and maintained by **STMB**. It can be used to verify what trees are in the public right-of-way, to identify potential tree planting sites, and to recommend native and diverse species.
- If you have questions or concerns, not only about your existing trees, but about trees you are considering planting, please do not hesitate to contact **STMB** at (973) 593-3088.

## ATTACHMENT C2

### **STMB Hurricane Irene Press Release submitted 9/20/11**

As some residents in Madison and the surrounding communities continue to clean up from the aftermath of Hurricane Irene, the Shade Tree Management Board would like to help by providing some information you can use as you evaluate the trees on your property. Although Madison weathered the storm relatively well when compared to some of our neighboring communities, we also know that many residents did lose trees to the storm. Events like this often make property owners wonder about their trees and become concerned about their safety.

Although healthy and sound trees are tremendous assets, hazardous trees can present a risk to people and property. Identification of potentially hazardous trees should be done by an experienced and professional arborist. An arborist is a specialist in the care of individual trees. Arborists are knowledgeable about the needs of trees and are trained and equipped to provide proper care and assessment. The designations as an I.S.A. Certified Arborist or a N.J. Certified Tree expert are great indications of knowledge and experience in the field of arboriculture. Hiring an arborist is a decision that should not be taken lightly. Proper tree care is an investment that can lead to substantial returns. Well cared-for trees are attractive and can add considerable value to your property. Poorly maintained trees can be a significant liability and risk.

As trees age, they become more susceptible to wood decay and other defects. Many old trees gradually deteriorate before they decline and die. The first priority for arborists caring for trees is evaluating their structural integrity and providing necessary remedial treatments to reduce the risk of branch, stem, and root failures. Professional arborists are trained to identify symptoms of decay and other defects such as weakly attached branches, cracks, and splits indicating imminent failure, poor structure, dead and hanging branches, and root related defects. Some obvious defects are seen easily by visual inspections, but others require a more detailed assessment. If evaluation indicates the tree represents a high risk of failure, remedial treatments can be developed to reduce that risk. Treatments could involve pruning to reduce branch weight and wind resistance and installation of structural supports including cables and brace rods that help to limit branch movements during storms. When treatments will not reduce the risk of failure to an acceptable level, tree removal must be considered to prevent personal injury and property damage. When asked for their professional opinion, qualified tree care providers should not automatically recommend tree removal as the best option before first providing a risk assessment and presenting all the facts.

It is very important to state that Hurricane Irene was an unusual and extreme condition. Tree failures during this particular storm should not be considered indicative of normal circumstances. Trees that would normally not be at risk under more traditional weather conditions became vulnerable as a result of extremely saturated soil and heavy wind.

The Madison Shade Tree Management Board is charged with caring for over 6,700 of the Borough's trees located in the public right-of-way. A computerized tree inventory database is utilized to verify what trees are in public right of way, potential tree planting sites, and specie diversity. Windshield surveys are completed twice yearly to update tree inventory and direct the tree management program. Pruning is completed throughout the entire year with every tree pruned within a 10 year cycle. In addition to caring for the existing trees, between 100 and 125 new trees are planted on a yearly basis. As recommended earlier for your private trees, the Boroughs trees are assessed yearly with 141 trees removed in 2010. The Board members have volunteered thousands of in-kind hours working in association with the Department of Public Works and the Friends of Madison Shade Trees caring for and managing the Borough's trees. In addition to the care of Madison's trees, the Shade Tree Management Board is also a great reference for the entire community. If you have any questions about a tree care, the health of a tree, or new tree specie selection, please do not hesitate to reach out to the Shade Tree Management Board at (973) 593-3088. For additional information on how to select a tree care provider, you can also go to [njaes.rutgers.edu/pubs/](http://njaes.rutgers.edu/pubs/) and type in FS019 in the search box.

## Greening the Rose City Brochure

### *Non-Profits partnering to support Borough Programs*

Like many other towns across the country, Madison's community forest is in need of renovation.

This has never been truer than now, after the record October snowstorm that dumped as much as 19 inches of wet snow on parts of New Jersey. The storm's wet, heavy snow on the fully leafed-out trees caused massive damage to the tree limbs and trunks.

The 2011 snow storm devastated Madison's public tree canopy. Many of the over 6,700 public trees were damaged, some severely. The first priority for the Borough's Shade Tree Management Board must be focused on removal, pruning and maintenance, particularly where safety is a concern.

Thankfully, Madison also has a non-profit organization, the Friends of Madison Shade Trees (FMST), to help supplement tree planting in Madison and to allow individuals to contribute to the tree planting projects. The Garden Club of Madison and the Parks Advisory Committee have partnered with the STMB and FMST on tree-related projects such as the "Greening the Rose City" project, where we are sharing resources to replant the parks in Madison with native New Jersey hardwood trees.

### *"Greening the Rose City"*

The Madison Shade Tree Management Board, the Friends of Madison Shade Trees, the Garden Club of Madison and the Parks Advisory Committee are partnering in a project to re-plant the public spaces of Madison with native hardwood trees.

*The joint project "Greening the Rose City" is a true example of sharing resources and capabilities across organizations to benefit our community.*

As part of "Greening the Rose City" our organizations will plant native hardwood trees, over the next four years, in the public spaces in Madison in order to reforest our public areas.

### *The Shade Tree Management Board*

The Borough of Madison has an outstanding tree planting and maintenance program managed by the Borough's Shade Tree Management Board (STMB).

We are understandably proud of our public tree program and our 27 years as a *Tree City USA*. Madison's Shade Tree Management Board proactively manages its urban forest, and Madison has been recognized with its fifth *Tree City USA Growth* award for achievement in higher levels of community tree care.

### *"Greening the Rose City"*

#### *A Partnership of:*

*The Shade Tree Management Board  
The Friends of Madison Shade Trees  
The Garden Club of Madison  
The Parks Advisory Committee*



**Madison Green Fair** May 3, 2012  
**Arbor Day** May 5, 2012  
**Bottle Hill Day** October 6, 2012

# ATTACHMENT D

## Greening the Rose City Brochure

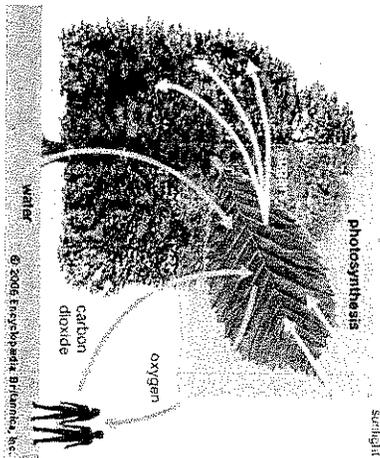
**"Trees suffer extensive damage under weight of New Jersey's October snowstorm"**  
Star Ledger Headline of October 31, 2011



*Expanding the "Greening the Rose City" Project to Meet the Needs of a Community with a Devastated Tree Canopy*

With severely limited planting resources available for the Borough, nonprofit organizations such as the Friends of Madison Shade Trees and the Garden Club of Madison have stepped in to help supplement the Borough's planting program in this extraordinary time of need.

The FMST and the GCM will partner with the Shade Tree Management Board and the Parks Advisory Committee to plant trees along the heavily traveled and high priority streets in downtown—Main Street, Central Avenue and Park Avenue.



### *Why Plant Trees*

The value of trees is well proven, and includes economic contributions, such as energy savings, enhanced aesthetics and increased property values.

Trees improve our environmental health by improving air quality, reducing noise pollution, filtering water, reducing runoff, and providing habitat for wildlife.

Less well known are the many social advantages of trees. Trees have been shown to reduce medical costs, calm nervousness and stress, reduce anxiety and depression, reduce crime, and even fight tumors and viruses.

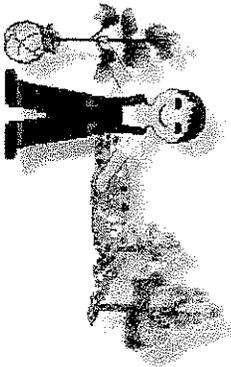
Trees also provide recreational opportunities and allow us to connect with nature. Finally, trees connect us with our communities and ourselves, increasing our community pride and our quality of life.

### *Why Trees Matter*

*Jim Robbins, the author of the forthcoming book "The Man Who Planted Trees," writes in the New York Times on April 12, 2012:*

"We have underestimated the importance of trees. They are not merely pleasant sources of shade but a potentially major answer to some of our most pressing environmental problems. We take them for granted, but they are a near miracle."

According to an ancient Chinese Proverb: "The best time to plant a tree was 20 years ago. The next best time is now."



## Green Forum Article

PAGE 1-31-13

# 'Green Forum' solicits ideas to save energy, promote parks

**MADISON** - More than 100 people braved one of the coldest nights in several years to lend their voices to the borough's many "green" issues at a "Green Forum" held Thursday night, Jan. 24, at the Ehinger Center on the campus of Drew University, 36 Madison Ave.

Following introductions by Mayor Robert Conley, Michael Kopas, chairman of the Shade Tree Management Board, and Melissa Honohan, chairwoman of the Open Space, Recreation and Historic Preservation Advisory Committee, participants joined color-coded brainstorming groups to tackle the issues of "Green Spaces in Madison," "Getting Around Madison," and "Greening Homes and Businesses in Madison."

## Seeking A 'Template'

Organizers said the goal of the forum was to incorporate the combined results in the creation of a "template" for the continued "greening" of Madison through conservation, transportation alternatives and energy-saving measures.

The Ehinger Center was a fitting site for the "Green Forum" because it is the newly certified Leadership in Energy and Environmental Design (LEED) renovated student center, one of 114 buildings so certified in New Jersey for their energy-saving designs, Conley said.

In his introductory remarks, Kopas, who is also the executive director of facilities at Drew, added that McLondon Hall, a new residential hall built in 2009, also has achieved the LEED silver certification.

The groups discussed each of the three topics for 20 minutes before they moved to another topic, giving all the participants the chance to weigh in on the three focus issues.

## 'What Matters Most?'

First up was "Greening Homes and Businesses in Madison," and one of the groups was led by Ellen Kanefuss, a member of the Sustainable Madison Advisory Committee, who asked her group, "What matters most to you?"

Suggestions included salvaging discard-

ed furniture for possible use by victims of Hurricane Sandy, and the need for recycling opportunities in the downtown area.

Judy Mullins, co-owner of Poor Herbie's restaurant on Waverly Place, proposed the inclusion of fliers in utilities bills that offered recycling tips and contact information.

Resident Susan Manna of West Street said environmental endeavors could be started on a small scale, and expanded according to what proves workable for the individual.

In Round 2, participants discussed "Getting Around Madison," and one group was led by Heather Shepard of the Sustainable Madison Advisory Committee and Joseph Weiss of TransOptions, a nonprofit based in the Cedar Knolls section of Hanover Township that encourages alternative commuting options in northwest New Jersey.

Suggestions included a jitney service, school carpooling, the possibility of electric

PLEASE SEE GREEN, PAGE 21

FROM PAGE 1

vehicles, pedestrian-activated crosswalk lights, and making streets like Waverly Place into pedestrian zones.

## Parks Underused

A "Green Spaces" group, led by Kopas and Honohan, zeroed in on the borough's 20 parks and recreational fields.

The group determined that not only were the parks underused, but that many residents are not aware of the spaces or what they offer.

Hazel England, director of education and outreach at the Great Swamp Watershed Association, recommended a stewardship plan and management goals for the open spaces.

She also suggested that environmental group members visit parks in other communities to see what Madison might learn from them.

At the close of the meeting, moderators reported on the most important "takeaways" from the discussions.

For "Getting Around Madison," the need for traffic calming and ride-sharing led those conversations, Shepard said.

Parks topped the agenda for the "Green

Spaces" discussions, said Gene Cracovia, chairman of the Shade Tree Management Board.

"Nobody knows where the parks are and what to do there," he said.

"We need to make reasons for people to go there.

"People want parks to be useful places in the community," Cracovia said.

## Education Is Key

As far as "Greening Homes and Businesses," the main issue is education, education, education, said Betsy Uhlman, chairwoman of the Sustainable Madison Advisory Committee.

"We have a community of environmental advocates, and people want to know more," she said, urging participants to sign up for a task force related to their particular area of interest.

"Renewable energy is also a big topic and ways to reduce waste," Uhlman said.

Kanefuss noted that "all the themes are beginning to connect."

"Education is huge.

"People want to know where to get information and how to share it," she said.

Madison is seeking silver certification by

Sustainable Jersey in June 2013, after achieving bronze certification in November 2010. Sustainable Jersey is a statewide certification program for municipalities that want to "go green," save money, and take steps to sustain their quality of life over the long term, and the program awards grants to municipalities to implement "green" initiatives.

Sustainable Jersey's partners include the New Jersey League of Municipalities, the N.J. Department of Environmental Protection (DEP) and the N.J. Board of Public Utilities (BPU). The Geraldine R. Dodge Foundation is among Sustainable Jersey's sponsors.

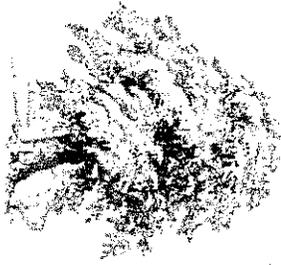
Uhlman said the Sustainable Madison Advisory Committee, formed in May 2012 by the mayor and council, welcomes new volunteers. Information about Madison's projects is available on the Sustainable Madison page at [www.rosenet.org](http://www.rosenet.org). Uhlman also advised that information on the statewide Sustainable Jersey program, and ideas for additional projects, can be found at [www.sustainablejersey.org](http://www.sustainablejersey.org).

• SALLY CAPONE

# ATTACHMENT F1

## Mighty Oaks Arbor Day Project

### Mighty Oaks From Little Acorns



#### Growing Your Own Oak Trees

Watching a tiny acorn grow into a towering, majestic oak is a rewarding experience for adults and children alike. It's easy, fun, and a great way to leave a legacy for future generations.

What better way to celebrate Arbor Day!

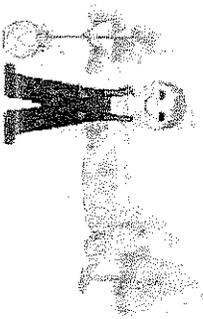
Tree Needs:		
Seed	Water	Soil
Sun	Air	Space

A tree is a large plant. There are many kinds of trees including hardwoods and softwoods. A tree has many parts: leaves, branches, bark, trunk, and roots. The trunk is the stem of the tree and is covered with bark. The roots of a tree are underground. Roots help the tree stand; they also get water and nutrients from soil. Sap is the liquid inside the tree that supplies food to the tree.

A tree is a living organism. Like any living thing, a tree has certain needs that are essential for it to grow and thrive. Most trees start from a seed. Starting as a seed, a tree requires water, soil, sun, air, and space to grow.

Trees provide us with wood. Many items are made from wood, such as houses, chairs, tables, some toys, doors, fences, paper.

Trees provide homes for many animals like birds and squirrels. Trees provide us with shade to keep us cool and shelter us from sun.



#### Why Oaks?

The Nonflaming Red Oak *Quercus rubra* is New Jersey's State Tree. The red oak is a hardwood tree, native to NJ. It produces many acorns, an important food source to Native Americans of long ago. In autumn the leaves turn a vibrant red, adding color to our landscape.

The Oak tree is also **America's National Tree**. The oak has long been an enduring and mighty tree. It represents our nation's strength, as it grows from a small acorn into a mighty oak!

- **Leaf shape:** leaves have pointy tips
- **Acorns:** inside of "cup" is velvety; require two seasons to mature before germinating
- **Bark:** blackish; deeply furrowed
- **Wood:** hard; porous; used for fuel and finished lumber (furniture, flooring, etc.)

## Mighty Oaks Arbor Day Project

### "Greening the Rose City"

In honor of the GCA Centennial, and in partnership with the Borough of Madison Shade Tree Management Board, the Borough of Madison Parks Committee, and the Friends of Madison Shade Trees, the **Garden Club of Madison** announces "Greening the Rose City."

As part of "Greening the Rose City" our organizations will plant native hardwood trees, over the next four years, in the parks and other public spaces in Madison in order to reforest our public areas.

We are understandably proud of our public tree program and our 24 years as a Tree City USA. We believe that Madison's Shade Tree Management Board is without peer in New Jersey. However, like many other towns across the country, Madison's community forest is in need of renovation. This project will have a major impact on all of the residents of Madison—all of those who live, work or play in Madison and its Parks and public spaces.

The trees chosen for the project will be a diverse selection of native hardwood trees of New Jersey and its region, including the New Jersey state tree, the *Quercus rubra* Northern Red Oak.

The Garden Club has already held workshops to propagate trees from seed. These trees will be grown by members for eventual planting in Madison parks. We are also holding a series of public programs and workshops to involve the community in this worthwhile effort.

### Track Your Tree's Growth

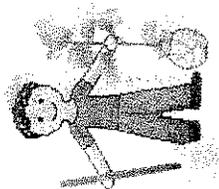
Record the date that you planted your acorn

Record the date when the first sprouts appear

Measure your tree with a ruler at 3 months, 6 months, and 1 year

Ask your parents to take a photograph of you with your tree

Record the date when the tree is as tall as you are!



### Who does your acorn come from?

**Step 1**  
The Garden Club has already collected the acorns and treated them so that they will grow. We have also provided a perfect pot for your acorn to grow—an empty milk carton with holes for drainage. Included in your growing kit are the pot, soil, acorn, plant label and plastic bag.

**Step 2**  
Write the name of your tree on the plant label. The correct name for this tree is *Quercus rubra* Red Oak.

**Step 3**  
Place an acorn in your pot and cover with a layer of soil (place the acorn 1-2 inches down from the top of the soil). Dampen the soil. Cover your pot with a plastic bag and put it in a sunny place on the windowsill. The soil needs to be kept damp and should never be allowed to completely dry out.

**Step 4**  
As soon as you see the seedlings appear remove the bag. Make sure you water the seedlings once or twice a week and keep the soil moist.

**Step 5**  
Keep watering your plant and place the seedling and container outside in the summer. This fall, the sapling can be moved to a bigger pot. The sapling then needs to grow for one, or maybe two, more years, after which time it will be strong enough to be planted outside.

Arbor Day Tree Nursery Project

COMING UP

Madison Eagle - Florham Park Eagle - Chatham Courier



Madison's Boy Scout Troop 7 pitched in for a "greener Madison" April 24 at the new tree nursery at the Madison Community Garden off Ridgedale Avenue. Helping to plant saplings that will later find new homes in Madison parks and along Madison streets, from left, are Scouts James Ottomanelli, Nick Johansen, Spencer Moore, Joey DeBiasse, Neil Petrosino and Miles Bird with Steve Miller of the Madison Shade Tree Management Board.

# Madison Scouts get a jump on Saturday's Arbor Day festivities

Annual ceremony to see children sing the praises of trees

**MADISON** - The Borough of Madison's official Arbor Day celebration is scheduled for 9 a.m. this Saturday, May 4, with its annual ceremony on the steps of the Hartley Dodge Memorial municipal building at 50 Kings Road. But Madison Troop 7 Boy Scouts began the celebration early.

On April 24, the Scouts extended their ongoing commitment to a "greener Madison" by volunteering to help plant nearly 100 saplings delivered to the new tree nursery at the Madison Community Garden, part of the Madison Recreation Center off Ridgedale Avenue.

Ten Scouts - Trevor Moore, Spencer Moore, Peter Donahoe, Thomas Johansen, Nick Johansen, James Ottomanelli, Joey DeBiasse, Neil Petrosino and Miles Bird - along with "Scout sisters" Rebecca Moore and Theresa Donahoe, "Scout moms" Debbie

Moore, Ellen Petrosino and Pip Donahoe, plus Steve Miller and Christine Hammitt of the Madison Shade Tree Management Board, and Cathie Coultas of the Madison Parks Advisory Committee, the Garden Club of Madison, and the Friends of Madison Shade Trees set the tiny trees in pots, which were then set in beds of mulch.

The saplings, a mix of red oak, redbud, sassafras, and shag bark hickory, are all native to New Jersey and will, when they have grown to an appropriate size, be planted in Madison's parks and along local streets. The red oaks and redbuds were a gift of the New Jersey Tree Foundation.

### 'Tree City USA'

The public is invited to join in the Arbor Day fun at 9 a.m. this Saturday May 4, at the Hartley Dodge Memorial building. Mayor

Robert Conley will open the ceremony by reading an Arbor Day proclamation, and accepting the Tree City USA flag from the national Arbor Day Foundation, a symbol of a national award that Madison has received for 28 years. The borough has also been recognized with its sixth "Tree City Growth" award for achievement in higher levels of community tree care.

Students from Madison's Kings Road, Central Avenue, Torey J. Sabatini and St. Vincent Martyr schools will participate, with Michael Post, principal of the grades K-5 Torey J. Sabatini School, coordinating the school portion of the Arbor Day program. Students will recite poetry about trees, perform instrumental selections and sing songs with an environmental theme, and first graders from St. Vincent Martyr School will perform a traditional May Pole dance.

# ATTACHMENT F3

Arbor Day 2013

MADISON EAGLE FRONT PAGE 5/23/13

## MADISON'S ARBOR DAY



Photo by Judi Whiting

During Madison's annual and festive Arbor Day celebration May 4, borough officials accept a banner from the National Arbor Day Foundation, declaring Madison a "Tree City USA" for the 28th consecutive year in recognition of its comprehensive community tree care program. Displaying the banner outside the Hartley Dodge Memorial municipal building, from left, are Borough Council members Robert Catalanello, Robert Landrigan, Carmela Vitale and Astri Baillie with Mayor Robert Conley.