



2007 – 2011

Community Forestry Management Plan

**Borough of Hawthorne
Passaic County, NJ**

2007 – 2011 COMMUNITY FORESTRY MANAGEMENT PLAN

Borough of Hawthorne Passaic County New Jersey

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Municipal Information

Municipal / County Information Form

| | |
|--|---|
| MUNICIPALITY | Borough of Hawthorne |
| COUNTY | Passaic |
| ADDRESS | 445 Lafayette Avenue Hawthorne, NJ 07506 |
| CONTACT | Rick Hockenberry, Chairman |
| PHONE | (973) 427 – 1168 |
| FAX & EMAIL | (973) 427 – 2320 |
| ORGANIZATION | Shade Tree Commission |
| MAYOR'S SIGNATURE | <i>Original Copy Signed</i> |
| | <small>* I certify that this Community Forestry Management Plan was developed specifically and exclusively for the Borough of Hawthorne.</small> |
| DATE SUBMITTED | December 21, 2006 |
| TIME PERIOD | January 2007 – December 2011 |
| CSIP PRACTICES IDENTIFIED IN PLAN | <input checked="" type="checkbox"/> CSIP #1 Plan Preparation p. 42 <input checked="" type="checkbox"/> CSIP #2 Training p. 21 <input checked="" type="checkbox"/> CSIP #3 Public Education & Awareness p. 24 <input checked="" type="checkbox"/> CSIP #4 Arbor Day Activities p. 24, 25 <input checked="" type="checkbox"/> CSIP #5 Assessment / Inventory p. 27 <input checked="" type="checkbox"/> CSIP #6 Tree Hazard Identification Plan p. 29 <input checked="" type="checkbox"/> CSIP #7 Tree Planting p. 31 <input checked="" type="checkbox"/> CSIP #8 Tree Maintenance p. 35 <input checked="" type="checkbox"/> CSIP #9 Tree Recycling p. 38 <input checked="" type="checkbox"/> CSIP #10 Ordinance Establishment p. 16, 17 <input checked="" type="checkbox"/> CSIP #11 Tree Care Disaster Plan p. 40 <input checked="" type="checkbox"/> CSIP #12 Insect and Disease Management p. 32, 33, 36, 40 <input checked="" type="checkbox"/> CSIP #13 Other various sections |

Official Use Only Certification

The above named municipality 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 _____ *Original Copy Signed & Dated*
 State Forester _____ Approved Date _____

SCOPE

The following sections outline programs and procedures for managing public tree resources within the Borough of Hawthorne during the period January 2007 – December 2011.

Recognizing that trees help improve the quality of urban 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 the Borough's Master Plan.

This second five-year Plan builds upon the successes realized in implementing the Borough's 1999 – 2003 Community Forestry Management Plan, the goals and objectives of which were carried through 2006. During the 2007 – 2011 management period, the Borough will continue to enhance programs for managing public street trees and begin to more actively apply its goals and objectives to trees in Borough parks and on Borough properties.

In addition, it is expected that elements of this Plan will continue to help stimulate the public's appreciation for trees and the planting, protection and proper care of trees on private property.

MISSION STATEMENT

To improve the quality of life in the Borough of Hawthorne by maximizing the environmental, social and economic benefits of trees to the community while minimizing their costs and liabilities.

OVERALL PROGRAM GOALS

The New Jersey Community Forestry Council has identified twelve 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 2007 – 2011 management period are set.

Systematic fulfillment of these CSIP-specific goals and objectives will gradually move the Borough's Community Forestry Program toward its overall program goals, which are established as follows:

1. Minimize the risk of trees to public safety.
2. Achieve and perpetuate the public tree population at maximum practical stocking.
3. Maximize long-term stability in the public tree population.
4. Optimize the balance between tree health, maintenance costs and budgetary constraints.
5. Minimize conflicts between trees and infrastructure.
6. Stimulate and maintain public interest, appreciation and support for the Borough's Shade Tree Program and encourage volunteer participation.
7. Encourage the planting and proper stewardship of trees on private property.

8. Meet all eligibility requirements of the NJ Shade Tree & Community Forestry Assistance Act.

**TREE HAZARDS
& LIABILITY**

The Borough of Hawthorne fully recognizes the benefits that a well established shade tree resource provides to the community.

The Borough also recognizes, however, that the benefits of trees do not come without costs and liabilities. As with all municipal assets – perhaps even more so – trees require maintenance and, as they mature, eventually require replacement. It is inevitable that potentially hazardous conditions will emerge. The Borough acknowledges that not all such hazardous conditions can or will be predicted.

Nevertheless, experience has shown that comprehensive and proactive community forestry programs that strive 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.

Comprehensive and proactive management will reduce the probability of hazards, but unpredictable events will still occur. The Borough must work with limited resources 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 community forest with a commensurate reduction in threats to public safety.

Public safety will be a primary consideration in the development and implementation of all community forestry 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.



1999 – 2006 SHADE TREE PROGRAM ACHIEVEMENTS

In implementing its first five-year Community Forestry Management Plan (1999 – 2003 and carried through 2006), the Borough of Hawthorne enjoyed success and faced difficult challenges. It was successful in completing the many of the objectives it set in the Plan, but changing circumstances and shifting priorities prevented it from meeting others.

Although the Borough failed to meet some of its stated objectives, it maintained forward progress by addressing and satisfying emerging new needs while continuing to successfully implement all of its existing programs.

The following is a summary of the Shade Tree Program's during the 1999 through 2006 period.

1. Program Administration

- a) The Borough continued to implement all of its previously existing administrative programs, policies and procedures during the 1999 – 2006 period.
- b) On December 30, 2004, Chapter 174 of the Borough Code, *Trees*, was amended with regard to monetary fines for violation of its provisions.
- c) In January 2006, the Shade Tree Commission met with the Mayor and Council to review and discuss the Shade Tree Program's accomplishments, as well as the various issues it continues to face. This was a highly productive and beneficial meeting. As such, an objective has been set for the upcoming five-year management period to hold a similar meeting annually.

2. Training & Professional Development

- a) The Borough continued to implement its previously existing training and professional development programs during the 1999 – 2006 period, met its New Jersey Shade Tree & Community Forestry Assistance Act, Training Skills & Accreditation Program continuing education requirements, and maintained Approved Status under the Act. (*Training & Professional Development, Objective #1*)
- b) Four different individuals complete New Jersey Community Forestry CORE Training during the 1999 – 2006 period. (*Training & Professional Development, Objective #2*)
- c) The Borough Arborist, Shade Tree Commission members, and Department of Public Works employees attended and participated in educational training sessions on an ongoing basis. Sessions attended include, among others:
 - i) Tree hazard evaluation training through the Cook College Office of Continuing Professional Education by the Borough Arborist. (*Training & Professional Development, Objective #3*)
 - ii) ACRT Qualified Line Clearance Tree Trimmer training in 2003 by the Borough Arborist and in 2004 by two Department of Public Works employees. (*Training & Professional Development, Objective #4*)
 - iii) A variety of applicable training sessions at New Jersey Shade Tree Federation Annual Meetings by the Borough Arborist and Shade Tree Commission members.
 - iv) Ongoing First Aid and CPR training for the Borough Arborist and Department of Public Works Employees.

3. Public Education, Awareness & Outreach

- a) The Borough continued to implement its previously existing public education, awareness and outreach programs during the 1999 – 2006 period. These included its Adopt-A-Spot Program, periodic press releases and announcements, and contractor and property owner relation efforts. (*Public Education, Awareness & Outreach, Objective #1*)
- b) Arbor Day celebrations were held during the 1999 – 2006 period. These celebrations included programs at Borough elementary schools, tree plantings, distribution of tree tublings that were potted by local cub scouts, distribution of tree planting instructions, tree climbing demonstrations by the Borough Arborist, an Arbor Day Story Time program, and a craft making program. (*Public Education, Awareness & Outreach, Objective #1*)
- c) The Borough has maintained its Tree City USA designation through the National Arbor Day Foundation for fifteen years and received the Growth Award in 2004 and 2005. The Tree City USA designation has been proudly displayed on all Shade Tree Program materials. (*Public Education, Awareness & Outreach, Objective #2*)
- d) The Borough produced and developed *A New Leaf*, a multi-page public awareness brochure describing Hawthorne's Shade Tree Program, the benefits of trees, and a summary of related ordinances and property owner responsibilities. This brochure was distributed to all Borough residents in 2004 with the assistance of a Community Stewardship Incentive Program grant. (*Public Education, Awareness & Outreach, Objective #3*)
- e) The Borough school system, the Environmental Commission and the Shade Tree Commission have partnered to hold annual "Cel-Earth-Bratton" events. The purpose of this event, which is held each year on or about Earth Day, is to educate and increase the public's awareness of environmental issues. The event includes a number of activities, competitions using recycled materials, the distribution of information regarding trees, environmental protection and energy, and the distribution of tree tublings. In addition, a tree and its planting are donated and raffled to a Borough resident.

4. Tree Inventory & Assessment

- a) The Borough continued to utilize its street tree inventory during the 1999 – 2006 period. Completed in 1998 and stored and accessed through a *TreeFiles Shade Tree Inventory & Management System* database, the inventory was periodically updated to reflect all tree planting, removal and maintenance tasks completed and to develop planting projects in accordance with the goals of this Plan.
- b) In 2004, the Borough purchased a *Panasonic Toughbook* laptop computer to better permit the Borough Arborist to access the *TreeFiles*-based tree inventory, utilize its built-in service request and work order systems, and update the inventory data in the field on a more consistent basis. (*Tree Inventory, Objective #1*)
- c) Each year and at the end of the first five-year management period, the Borough utilized the *TreeFiles* reporting systems to review changes in the tree population and adjusted its management strategies accordingly. (*Tree Inventory, Objective #3*)

5. Tree Hazard Management

- a) The Borough continued to implement its previously existing programs, policies and procedures for identifying and addressing trees requiring priority maintenance to minimize potential tree hazards on an ongoing basis.
- b) The 1998 Street Tree Inventory included the individual evaluation of each Borough street tree and identified 700 trees that required high or medium priority pruning or removal. The Borough successfully addressed all of the priority needs identified by the inventory, as well as new pruning and removal needs that emerged. (*Tree Hazard Management, Objective #1*)

- c) The Borough Arborist attended the Tree Hazard Evaluation training session provided by the Cook College Office of Continuing Professional Education. *(Tree Hazard Management, Objective #3)*
- d) The Borough reviewed and analyzed its records and experiences regarding trees requiring priority maintenance and has made adjustments in species selection, selecting and evaluating planting locations, selecting and providing developmental pruning for new trees, and correcting tree and sidewalk conflicts. *(Tree Hazard Management, Objective #4)*

6. Tree Planting

- a) The Borough continued to implement all of its previously existing tree planting programs, policies and procedures during the 1999 – 2006 period. *(Tree Planting, Objective #1)*
- b) The Borough invested \$45,000.00 in the planting of over 325 trees from 2001 – 2005. The fact that this planting rate fell somewhat short of the number of trees removed during the same period was an expected result of the Borough aggressively addressing trees identified as requiring removal and improved the overall condition and safety of the public tree resource.
- c) Although it has not yet formally established goals regarding tree stocking and species composition, the Borough has continued to work to increase the number of public trees and increase species diversity based on the clear needs illustrated by summaries of the 1998 street tree inventory data. *(Tree Planting, Objective #2 and #3)*
- d) The Borough began implementing and continually evaluating the effectiveness of alternative methods for correcting and preventing tree and sidewalk conflicts. The methods include installing root control barriers where warranted, cutting sidewalk slabs to permit future growth, and cutting, re-leveling and/or ramping sidewalk slabs in cooperation with a tree-friendly sidewalk contractor. *(Tree Planting, Objective #4)*

7. Tree Maintenance

- a) The Borough continued to implement all of its previously existing tree maintenance programs, policies and procedures during the 1999 – 2006 period. *(Tree Maintenance, Objective #1)*
- b) The Borough completed a cost-benefit analysis and purchased an aerial bucket truck to improve the efficiency and safety of tree maintenance activities of the Borough Arborist and crew. *(Tree Maintenance, Objective #2)*
- c) The Borough implemented an Annual Tree Pruning Rotation program designed to systematically prune all trees in one-eighth of the Borough each year. Though ongoing service request demands and the assignment of other tasks to the Borough Arborist have prevented the Borough from maintaining the one-zone-per-year schedule it set, it continues to complete systematic work as time and resources permit. *(Tree Maintenance, Objective #3)*
- d) The Borough began implementing and continually evaluating the effectiveness of alternative methods for correcting and preventing tree and sidewalk conflicts. The methods include installing root control barriers where warranted, cutting sidewalk slabs to permit future growth, selectively pruning roots, and cutting, re-leveling and/or ramping sidewalk slabs in cooperation with a tree-friendly sidewalk contractor. *(Tree Maintenance, Objective #4)*
- e) The Shade Tree Commission prepared a form letter that is now distributed by the Building Department to all applicants for sidewalk and driveway repair permits. This letter informs the applicant of requirements for protecting Borough trees and contacting the Borough Arborist for his review and approval prior to beginning work. During his review, the Borough Arborist will evaluate and recommend to the property owner various repair alternatives and modifications for protecting trees. *(Tree Maintenance, Objective #4)*

8. Tree Waste Recycling

- a) The Borough continued to implement all of its previously existing tree waste recycling programs, policies and procedures, including the composting of leaves, tub-grinding of wood and chips, and the utilization of the resulting materials on Borough properties and by Borough residents. *(Waste Recycling, Objective #1)*

9. Tree Care Disaster Plan

- a) The Borough tree populations did not face any acute, widespread threats during the 1999 – 2006 period. However, the Borough stood ready to implement its previously existing tree care disaster plan programs, policies and procedures. *(Tree Care Disaster Plan, Objective #1)*
- b) The Borough Arborist developed, solidified and maintained an effective working relationship with the Borough Administration, Police Department, Public Service Electric & Gas Company, neighboring municipalities, and local tree maintenance contractors in accordance with the Borough's Emergency Operations Plan. *(Tree Care Disaster Plan, Objective #2 and #3)*

10. Plan Preparation & Evaluation

- a) During the 1999 – 2006 period, the Shade Tree Commission continually reviewed the Borough's Community Forestry Management Plan, monitored progress toward its goals and objectives, and made the necessary adjustments in the Shade Tree Program's activities to address current needs. *(Plan Preparation & Evaluation, Objective #1 and #3)*
- b) The Borough submitted all necessary Annual Accomplishment Reports to the NJ Forest Service in accordance with the Requirements of the New Jersey Shade Tree & Community Forestry Assistance Act *(Plan Preparation & Evaluation, Objective #2)*
- c) The Borough has prepared this second five-year Community Forestry Management Plan, with the assistance of a NJ Green Communities Challenge Grant, based on a thorough review of its goals, objectives and current needs. *(Plan Preparation & Evaluation, Objective #4)*

1999 – 2006 SHADE TREE PROGRAM BENEFITS

The Borough of Hawthorne has realized a number of benefits through implementation of its first five-year Community Forestry Management Plan (1999 – 2003 and carried through 2006). These benefits include:

1. Public education, awareness and outreach efforts have continued to garner the public's support and participation in Hawthorne's Shade Tree Program.
2. Training and professional development completed in accordance with the requirements of the New Jersey Shade Tree & Community Assistance Act has increased the number of individuals participating in the Borough's Shade Tree Program that have improved their knowledge in the principles and day-to-day practices of community forest management.
3. Completion of the 1998 Street Tree Inventory revealed a number of issues regarding past management practices and problems the Borough's Shade Tree Program is facing as a result. The Borough's Community Forestry Management Plan helped clarify the interrelationships between these issues and emphasized how important a comprehensive, multi-faceted approach that extends beyond planting is to an effective municipal tree program. As a result, the Borough has strived to improve all aspects of the Shade Tree Program by, for example, investing in a new aerial bucket truck for tree maintenance and a laptop computer for more effectively utilizing its tree inventory.
4. The Borough has realized increased safety as a result of constantly evaluating the public tree populations, identifying potentially hazardous conditions, and directing

efforts toward the pruning and removal of problem trees in an efficient, proactive manner.

5. Both long-term decision making and day-to-day operations are more focused and accurately directed at existing needs and long-term goals. For example, continued use of the 1998 Street Tree Inventory gives the Borough the ability to know precisely what the current composition of the tree population is, how problems in its composition affect its long-term sustainability, and how it can be improved over the long term. Day-to-day-maintenance activities are now better identified, tracked and completed in a more logical, priority-based order.

SHADE TREE PROGRAM ISSUES

Implementation of the Borough's first five-year Community Forestry Management Plan (1999 – 2003 and carried through 2006) produced several benefits and aided in successfully addressing several key issues that were facing the Shade Tree Program. However, the Borough continues to be faced with the following key issues and will continue to direct its efforts accordingly.

1. Although the 1999 – 2003 Community Forestry Management Plan formally established the roles and responsibilities of the various groups and individuals that comprise Hawthorne's Shade Tree Program and outlined certain policies and procedures under which they operate, efforts are needed to solidify the Program's administration in day-to-day practice.
2. A number of groups and individuals comprise and are actively involved in Hawthorne's Shade Tree Program. Nevertheless, a relatively small number of individuals are burdened with disproportionately large portions of the work. Changes, such as expanding the Shade Tree Commission to seven members and/or reallocating certain tasks, should be considered to further improve the Program's effectiveness.
3. The Borough recognizes the importance of technical training for those individuals implementing the Shade Tree Program on a day-to-day basis. However, getting key employees and volunteers out for regular training remains difficult. Therefore, the Borough should consider bringing in-house training to the Borough through periodic, brief training sessions to make training more accessible for a greater number of individuals.
4. To date, the Shade Tree Commission has not been integrally involved in the Site Plan Review process, as stipulated in Borough Code. An objective has been set in this Community Forestry Management Plan for developing a working relationship with Planning Board and establishing procedures for the Commission's review of site plan applications.
5. Although efforts to introduce new species and cultivars into the Borough's public tree population over the past several years has begun to improve species diversity, Norway and other maples still comprise the vast majority. The Borough is acutely aware of the dangers that a near-monoculture present and will continue to make increased diversity one of its primary long-term goals.

CURRENT PUBLIC TREE ASSESSMENT

The Borough conducted a complete, computerized inventory of its existing street tree population in 1998. The Borough currently lacks a detailed inventory and assessment of trees in Borough parks and on public properties.

Based on the 1998 inventory and ongoing updates, the following is currently known about the Borough's public street tree population. Original figures from the 1998 inventory are provided in parenthesis for comparison to the current figures.

1. The street tree resource is 68.2% (70%) stocked with 3423 (3496) trees, 64 stumps, and 1530 (1505) vacant planting sites.
2. Street-side sites in Hawthorne offer a limited amount of growing space.

Approximately 64% of the existing trees are growing in sites with four feet or less of exposed soil surface (e.g. between sidewalk and curb).

3. The street tree population contains 64 different species representing 38 different genera.
4. The street tree population is comprised of a disproportionately large number of maples (*Acer*), which account for 64.3% (65%) of the street tree population. The next most frequent genera are oak (*Quercus*) at 6.8% (4.5%), and planes (*Platanus*) at 6.5% (6.2%).
5. The street tree population is comprised of a disproportionately large number of Norway maples, which account for 39.9% (41%). The next most frequent species include red maple at 16.9%, Callery pear at 4.8%, sugar maple at 4.8%, and London plane at 4.2%.
6. The age structure of the street tree population is relatively young to middle aged and irregular uneven aged, meaning that there are significant numbers of trees in at least three age classes, but they are not evenly distributed from young to old.
 - a) 72% of the trees are 18-inches in diameter and smaller and unevenly distributed among the 1"-3", 4"-6", 7"-12", and 13"-18" diameter classes.
 - b) Less than 13% of the trees are 25-inches in diameter and larger.
 - c) The majority of the trees are in the 7" – 12", 13" – 18" and 19"-24" diameter classes.
7. The majority of the street trees are rated in good to fair condition.
 - a) 65.2% (65%) are currently rated in "Good" condition.
 - b) 28.1% (29%) are currently rated in "Fair" condition.
 - c) 6.1% (6%) are currently rated in "Poor" condition.
 - d) 0.6% (<1%) are currently dead.
8. Certain species are performing significantly better than others.
 - a) Major species in which significantly more trees are rated in Good condition than Fair or Poor include Callery pear, London plane, pin oak, and red maple.
 - b) Norway maples are frequently rated in fair or poor condition.

Changes in the street tree population over the past five years include:

1. A moderate reduction in the number of street trees and increase in the number of unoccupied street-side planting sites. This reduction in stocking is the result of the Borough aggressively addressing priority tree removal needs that were identified when the inventory was completed in 1998 and since.
2. A significant increase in the species diversity among younger trees as new species and cultivars are introduced.
3. A slight reduction in the number of maples, as well as their relative frequency among all genera and species.
4. A significant reduction in the number of potentially hazardous trees as a result of proactive efforts to identify and address these trees in priority order.

RELATION TO THE BOROUGH 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 (1968 and last re-examined December 19, 2000). The Borough currently lacks a separate open space plan.

Presently, there is no formal link between the Borough Master Plan and this Community Forestry Management Plan. However, their parallel goals provide a strong informal link and common purpose. Specific goals and objectives of the Master Plan to which this Community Forestry Management Plan directly or indirectly relate include:

- To preserve the existing high quality of the one and two family homes.
- To make appropriate proposals for alleviating any hazardous traffic conditions.
- To provide a safe and efficient street system which adequately serves both local and through traffic [in the Central Business District].
- To preserve the existing public buildings and open space [in the Central Business District].
- To add unifying design elements [to the Central Business District] through the use of an architectural theme encompassing: building facades, lighting, landscaping, and advertising signs.
- To provide small sitting parks at strategic location in the heart of the Central Business District.
- To design parking areas [in the Central Business District] in an aesthetic manner.

The Plans are further linked through existing zoning, subdivision, land use, and site plan review code, which contain specific requirements regarding trees, landscaping and buffers.

Chapter 206 of the Borough Code, *Tree Removal*, which regulates the removal and destruction of trees on unimproved or vacant private lands, is designed to help preserve the important physical and aesthetic benefits trees provide to the character and livability of Hawthorne. However, given that the Borough is almost fully developed, there are few opportunities to apply the ordinance and there are no provisions for the preservation and proper management of trees on previously developed private lands. Therefore, it is critically important that effective tree management be applied where true opportunities exist.

Implementation of this Community Forestry Management Plan – directly in the management of trees along public streets and on public lands and indirectly in encouraging the management and perpetuation of trees on developed private lands by their owners – will better and more widely support and help satisfy certain goals and objectives of the Borough's Master Plan.

The Borough has established an objective for the current five-year management period in which it will solidify procedures to ensure that the Shade Tree Commission reviews and provides recommendations to the Planning Board for all site plan applications under consideration. This process will help ensure that the technical aspects of all tree-related issues are addressed and the results are consistent with the goals and objectives of both the Borough Master Plan and this Community Forestry Management Plan.

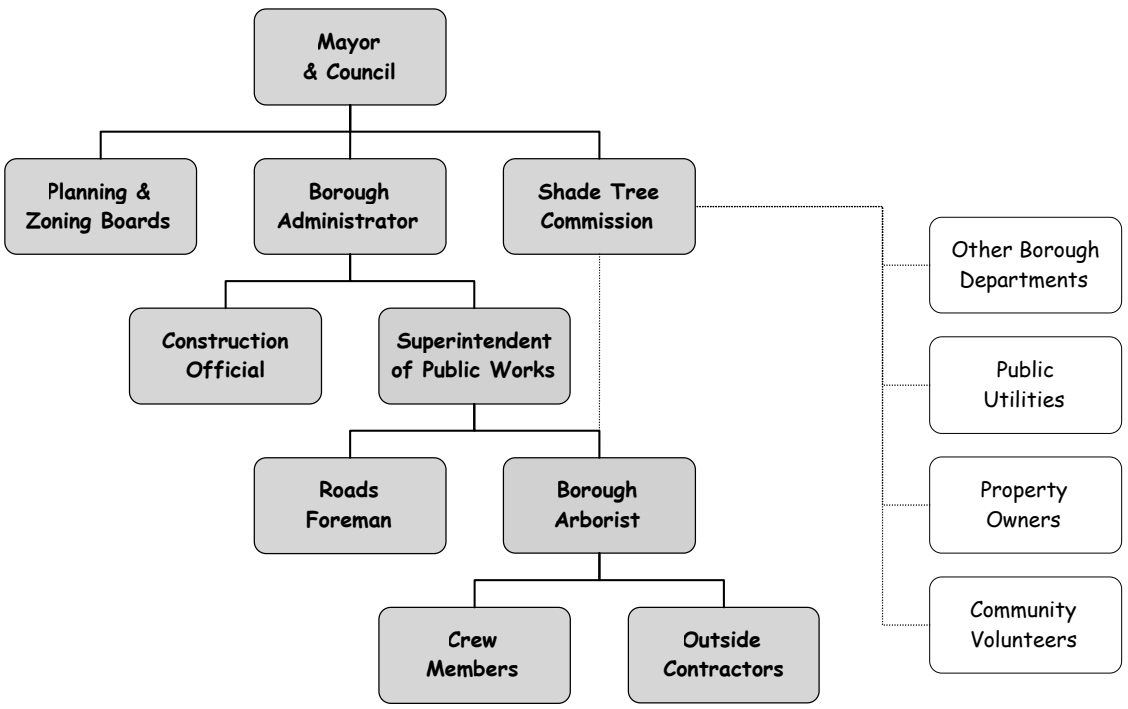
Further, the Borough has established an objective to identify and consider other means of creating a more formal link to this Community Forestry Management Plan during the next re-examination of the Master Plan.

REGIONAL MAP

BOROUGH STREET MAP

SHADE TREE PROGRAM STRUCTURE

Administration of Hawthorne's Shade Tree Program is a cooperative effort of the Mayor and Council, the Shade Tree Commission, the Borough Administrator, the Department of Public Works, the Borough Arborist, and other internal and external groups, as follows:



SHADE TREE PROGRAM RESPONSIBILITIES

1. **Mayor & Council**
 - a) The Mayor is responsible for appointing members to the Shade Tree Commission and the Borough's other boards, commissions and committees.
 - b) The Council is the legislative body of the Borough and has all executive responsibility not held by the Mayor.
 - c) The Mayor and Council have ultimate authority over the policies, procedures, and programs of the Shade Tree Program and are responsible for approving its budget.
2. **Planning & Zoning Boards**
 - a) The Planning Board and Zoning Boards are responsible for implementing and enforcing various elements of the Borough Master Plan and Borough Code that relate to land use and the conservation of natural resources.
3. **Borough Administrator**
 - a) The Borough Administrator serves as the chief administrative officer of the Borough and serves as a liaison between the Mayor and Council and the various

Borough departments.

- b) The Borough Administrator confirms that the Borough follows all applicable laws, policies and procedures relating to personnel, the procurement of resources, and the hiring of private contractors.

4. Shade Tree Commission

- a) The Shade Tree Commission consists of five regular members appointed by the Mayor, all of whom are residents of the Borough and serve on a volunteer basis.
- b) The Shade Tree Commission is responsible and accountable for the management of public trees in the Borough of Hawthorne pursuant to N.J.S.A. 40:64-1
- c) Specifically, the Shade Tree Commission is responsible for:
 - i) Exercising full and exclusive control and authority over the regulation, planting and care of shade and ornamental trees and shrubbery in public rights-of-way and on Borough properties.
 - ii) Regulating and control the ground surrounding public trees as necessary for their growth, care and protection.
 - iii) Requiring the pruning or removal of any tree dangerous to public safety.
 - iv) Making, altering, amending or repealing any ordinances necessary to carry out its duties.
 - v) Administering treatment to or removing any tree on private property which is confirmed to be a hazard or to harbor disease or insects that threaten the health of neighboring trees.
 - vi) Encouraging arboriculture.
 - vii) Prescribing fines and tree replacement assessments for violation of ordinances relating to public trees.
 - viii) Developing the long, intermediate and short-term goals that steer Hawthorne's Shade Tree Program.
 - ix) Developing the policies that govern the day-to-day operation of the Shade Tree Program.
 - x) Reviewing the activities of the Borough Arborist.
 - xi) Authorizing related expenditures.
 - xii) Tracking and annually evaluating progress toward the goals of this Community Forestry Management Plan and adjusting short-term goals and tasks, as necessary.
 - xiii) Reviewing applications and development plans before the Planning and Zoning Boards and making recommendations regarding shade trees.
 - xiv) Responding in a timely manner to service requests from property owners.

5. Construction Official

- a) The Construction Official, in cooperation with the Planning Board, is responsible for administering and enforcing Chapter 206 of the Borough Code, *Tree Removal*, which regulates the removal and destruction of trees on unimproved or vacant private lands within the Borough.

6. Borough Arborist & Crew

- a) The Borough Arborist is a full-time Borough employee of the Department of Public Works and is responsible for implementing much of the day-to-day operations of the Shade Tree Program.
- b) Specifically, the Borough Arborist is responsible for:
 - i) Enforcing the policies and ordinances of the Shade Tree Commission and invoking penalties for ordinance violation, as appropriate.
 - ii) Completing nearly all planting, maintenance and inspection activities

required for Borough trees at the direction of the Shade Tree Commission and under the supervision of the Superintendent of Public Works.

- iii) Receiving, responding to and addressing service requests and complaints from property owners.
 - iv) Supervising and inspecting private contractors that may be hired by the Borough to complete tree planting and maintenance tasks.
 - v) Advising and assisting the Shade Tree Commission in technical matters, organizing Arbor Day programs, etc.
 - vi) Maintaining an inventory of all trees and records of planting, pruning, removal, and other management activities.
 - vii) Following all current and accepted arboricultural standards and practices.
 - viii) Following all current safety standards relating to tree care operations.
 - ix) Maintaining all assigned equipment in a safe and efficient operating condition.
 - x) Completing other Department of Public Works tasks that may be required from time to time.
- c) Other Department of Public Works personnel are periodically assigned to assist the Borough Arborist in completing tree planting and maintenance tasks.

7. Outside Contractors

- a) Private contractors are occasionally hired by the Borough to complete, or assist in completing, public tree pruning, removal and planting work.
- b) Contractors are, within the terms of their agreement, responsible for:
 - i) Completing all work to the specifications of the Shade Tree Commission in a safe and efficient manner.
 - ii) Following all current and accepted arboricultural standards and practices.
 - iii) Following all current safety standards relating to tree care operations.
 - iv) Providing proof of insurance as required by the Borough.
 - v) Providing proof of all required licenses and certifications to the Borough.
 - vi) Reporting any tree-related hazards or other problems immediately to the Borough.

8. Other Borough Departments

- a) Other Borough departments assist the Shade Tree Program to the extent that they:
 - i) Administer or implement Borough ordinances, policies and procedures that directly or indirectly relate to the protection and management of public and private trees.
 - ii) Notify the Shade Tree Commission, Department of Public Works and/or Borough Arborist of tree-related emergencies, service requests, or other issues.
 - iii) Cooperate with the Shade Tree Commission and others in developing and implementing plans and projects as they may relate to the planting and protection of public trees.

9. Public Utilities

- a) Public utility firms are responsible for minimizing conflicts between trees and their facilities.
- b) While doing so, public utility firms and their contractors are responsible for:
 - i) Abiding by all applicable ordinances.
 - ii) Keeping the Shade Tree Commission informed of their work plans and schedules.

- iii) Exercising reasonable diligence in the installation and maintenance of their facilities so as to avoid damage to public and private trees.
- iv) Not removing any tree without prior approval of the Shade Tree Commission or its owner.
- v) Following all current and accepted arboricultural standards and practices.
- vi) Assisting Borough personnel and contractors in completing tree removal and maintenance work around their facilities, where necessary.

10. Property Owners

- a) Private property owners currently assist the Shade Tree Program and contribute to Hawthorne's community forest to the extent that they:
 - i) Notify the Borough of problems they may note and requests for the maintenance and planting of public trees.
 - ii) Assist in irrigating and ensuring the protection of new public trees planted adjacent to their properties.
 - iii) Are encouraged to plant and properly care for trees on private property.
 - iv) Comply with Chapter 206 of the Borough Code, *Tree Removal*, with regard to the removal or destruction of trees on unimproved or vacant private land.
 - v) Comply with all applicable ordinances and policies relating to the protection of public trees.

11. Community Volunteers

- a) Volunteer groups and individuals assist Hawthorne's Shade Tree Program by:
 - i) Serving as volunteers on the Borough's relating commissions, boards and committees.
 - ii) Assisting in the implementation of various tree maintenance tasks and special projects, such as Arbor Day celebrations and the Cel-Earth-Bration event.
 - iii) Participating in the Borough's Adopt-A-Spot program.
 - iv) Donating trees and other materials.

**CURRENT
ORDINANCES**

The following sections of the *Code of the Borough of Hawthorne* directly or indirectly authorize, govern or relate to Hawthorne's Shade Tree Program:

1. Chapter 54, *Shade Tree Commission*, which establishes and authorizes the Hawthorne Shade Tree Commission pursuant to N.J.S.A. 40:64-1 (see *Appendix*).
2. Chapter 174, *Shade Trees*, which provides for the planting, care and protection of public trees within the Borough of Hawthorne under the authority of the Shade Tree Commission (see *Appendix*).
3. Chapter 206, *Tree Removal*, which regulates the removal and destruction of trees on unimproved or vacant private lands within the Borough of Hawthorne (see *Appendix*).
4. Various other section of the Borough Code relating to zoning, the subdivision of land, and property maintenance, which contain requirements for the planting, protection and/or maintenance of trees, buffers and landscaping. These other sections include:
 - a) Chapter 34, *Land Use Procedures*
 - b) Chapter 186, *Streets and Sidewalks*
 - c) Chapter 190, *Subdivision of Land*
 - d) Chapter 225, *Zoning*

**TREE
SERVICE
REQUEST
PROCEDURES**

Requests for the pruning, removal, planting or other treatment of public trees are most frequently initiated by adjoining property owners, but may also be generated internally by Borough personnel and other sources. All service requests are processed in the following manner.

1. All service requests are forwarded to the Borough Arborist.
2. The Borough Arborist inspects all service requests to determine whether the request is justified and what corrective work is necessary.
3. Non-emergency requests for removal are forwarded to the Shade Tree Commission, with the Borough Arborist's recommendation, for approval or denial. Requests for removal deemed to be an emergency are completed immediately by the Borough Arborist to mitigate any potential hazards.
4. Any necessary tree maintenance work resulting from the service request is entered as a job order in the *TreeFiles* inventory system and prioritized and scheduled for completion by the Borough Arborist.
5. Emergency service requests are completed immediately to mitigate any potential hazards. All other service requests are completed in order of priority as time and resources permit.
6. Completed service requests and job orders are retained in the *TreeFiles* system to provide a maintenance history for each tree.

**2007 – 2011
OBJECTIVES**

1. Ongoing Administrative Programs

a) 2007 – 2011

- i) Continue implementing all administrative programs, policies and procedures already in effect with changes dictated by the following objectives.

2. Ordinance Review

a) January – March 2007

- i) Complete the review, which is already underway, of all existing ordinances directly or indirectly relating to the Borough's Shade Tree Program to identify deficiencies and/or conflicts requiring revision.
- ii) Complete the evaluation, which is already underway, of the effectiveness of the ordinances relative to current needs and issues, past enforcement, and the past successes and failures of the Shade Tree Program.
- iii) Evaluate the merits of revising Chapter 54 of the Borough Code, *Shade Tree Commission*, to increase membership on the Shade Tree Commission to seven and/or provide for the appointment of alternate members.
- iv) If necessary based on the review and evaluation, draft revisions to the ordinances with the ongoing review and input of the Mayor and Council, the Borough Administrator, all related departments and boards, the Borough Attorney, consultants, and experienced individuals from other municipalities during the revision process.

b) April – June 2007

- i) Adopt or submit the revised ordinances for approval by the Mayor and Council, as appropriate.

3. Shade Tree Program Policies & Procedures

a) July – December 2007

- i) Draft a written manual that details the various policies and procedures under which the Shade Tree Program will operate.
- ii) The purpose of this manual will be to formalize day-to-day operating procedures and criteria for day-to-day decision making. This, in turn, will help improve program efficiency and long-term consistency within the Shade Tree

Program.

- iii) Some issues that should be addressed in these policies and procedures include:
 - Centralization and maintenance of records and files.
 - Budget development and administration.
 - Preparing and submitting reports to the Mayor and Council and others, as necessary.
 - Service Request handling, including administrative procedures for receiving, responding to, and maintaining records of the requests received.
 - Procedures and schedules for inspection of service requests by the Borough Arborist within a set period of time.
 - Formalized procedures for addressing property owner requests and complaints in an equitable and consistent manner (e.g. reasons why a request for tree removal is not justified and, therefore, not granted).
 - Tree removal (e.g. specific circumstances that justify removal of live "nuisance" trees).
 - Utility pruning (e.g. Shade Tree Commission notification and supervision)
 - Sidewalk repair procedures.
 - Remedies for sewer intrusion.
 - Species selection criteria.
 - Tree placement criteria.
 - A schedule for periodically reviewing and updating these policies and procedures as needs and conditions change.
- b) *January – March 2008*
 - i) Seek and incorporate the input of all appropriate departments, boards, committees, the Mayor and Council, and others, as appropriate.
- c) *April – June 2008*
 - i) Finalize and distribute the final policies and procedures manual to all appropriate departments, boards, committees, and individuals involved in the Shade Tree Program's operation.

4. Site Plan & Master Plan Review Procedures

- a) *January – June 2009*
 - i) Develop and begin implementing procedures to ensure that the Shade Tree Commission receives and reviews site plan applications under consideration and provides appropriate recommendations to the Planning Board or Construction Official in a timely fashion, as provided for in Chapter 190, *Subdivision of Land* and Chapter 206, *Tree Removal* of the Borough Code. The process of developing these procedures will include:
 - Opening a productive dialog between the Planning Board, the Planning Board Attorney, the Borough Engineer, the Construction Official, and others.
 - Specifying the process for transmitting site plan applications from the Planning Board or Construction Official to the Shade Tree Commission.
 - Defining the specific role and responsibilities of the Shade Tree Commission in the review process.
 - Establishing time limits for transmitting requests and responses between the various parties to ensure that applications are not delayed.
 - ii) Establish protocols to ensure that the Shade Tree Commission provides input during the next reexamination of the Borough Master Plan with regard to developing a formal link between the Master Plan and this Community Forestry Management Plan.



Budget & Resources

OVERVIEW

The following is a summary of the annual resources available to Hawthorne's Shade Tree Program, on average, in recent years.

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.

CSIP GRANTS RECEIVED

The Borough received the following Community Stewardship Incentive Program (CSIP) grants to aid in the implementation of its 1999 – 2003 Community Forestry Management Plan.

- 1. A \$3,200.00 CSIP grant in 2001 that was used by the Borough to develop, produce and distribute a public awareness brochure entitled, *A New Leaf* (CSIP #3). The grant proved critical in allowing the Borough to meet its objective of raising awareness and participation by creating and distributing a bulletin containing information about Hawthorne's Shade Tree Program, the benefits of trees, and a summary of related ordinances and property owner responsibilities.

EMPLOYEE SALARY & WAGES

Borough Arborist
Other DPW personnel
Administrative and clerical staff

Subtotal (total salary and benefits prorated by percent of time dedicated to the Shade Tree Program)

\$115,535.00

OPERATIONS

Training & professional development
Memberships & subscriptions
Contracted tree pruning and removal
Miscellaneous operating expenses

Subtotal

\$11,500.00

| | | |
|------------------------------|--|-------------|
| BOROUGH EQUIPMENT | (1) 55-foot bucket truck | |
| | (1) Chipper | |
| | (1) Stump grinder | |
| | (1) 7-yard dump truck | |
| | (1) 3-yard loader | |
| | Various chainsaws | |
| | Related small tools and related equipment | |
| | <i>Subtotal (estimated annual value based on value amortized over 5 – 15 year service life, plus annual maintenance, repairs, etc. and prorated by percent of time used by the Shade Tree Program)</i> | \$22,000.00 |

| | | |
|--------------------------|-------------------------|------------|
| TREE PLANTING | Cost of trees purchased | |
| | <i>Subtotal</i> | \$9,000.00 |

| | | |
|---------------------------------|---|--------|
| TREE WASTE RECYCLING | Borough Recycling Center operated by private contractor at no cost to the Borough | |
| | <i>Subtotal</i> | \$0.00 |

| | | |
|-------------------------------|---|-----------|
| VOLUNTEER SERVICES | Shade Tree Commission members | |
| | Other volunteer organizations and individuals | |
| | <i>Subtotal (450 hrs per year @ \$18.05)</i> | \$8122.50 |

| | | |
|---------------|------------------------------------|---------------------|
| TOTALS | Borough Resources | \$158,035.00 |
| | Value of Volunteer Services | \$8122.50 |

TRAINING & PROFESSIONAL DEVELOPMENT GOALS

1. Provide individuals serving the Shade Tree Program with sufficient knowledge to make technically sound and effective management decisions.
2. Ensure that the Borough Arborist and Crew have the ability to complete all tree maintenance and planting tasks in accordance with the latest technical information and industry standards.
3. Maximize the number of knowledgeable and capable individuals available to assist in continually monitoring the public tree population.
4. Ensure that tree inspections and evaluations follow accepted standard procedures and that the results are objective, accurate, and consistent.
5. Ensure continuity in the overall level of knowledge and expertise within the Shade Tree Program as individuals leave the Program and new ones join.
6. Satisfy the requirements of the New Jersey Shade Tree & Community Forestry Assistance Act, Training Skills & Accreditation Program.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. **Training Provisions & Funding**
 - a) Training and professional development opportunities in arboriculture and urban forestry continue to be made available to employees and volunteers serving Hawthorne's Shade Tree Program.
 - b) These opportunities include CORE Training and Continuing Education as required under the New Jersey Shade Tree & Community Forestry Assistance Act.
 - c) The cost of training is funded by the operating budget of the attendee's respective commission, board or department.
2. **NJ Community Forestry's Training Skills & Accreditation Program**
 - a) At the time this Plan was prepared, four individuals currently involved in the Shade Tree Program have satisfied the CORE Training requirements of the New Jersey Shade Tree & Community Forestry Assistance Act Training Skills & Accreditation Program including:
 - b) 2 Borough employees.
 - c) 0 elected officials.
 - d) 2 program volunteers.
3. **Other Training**
 - a) The Borough Arborist and members of the Shade Tree Commission routinely attend training programs and seminars related to urban forestry and arboriculture and maintain membership in related professional organizations.
 - b) Training programs and seminars recently attended include, among others:
 - i) Tree hazard evaluation training through the Cook College Office of Continuing Professional Education.
 - ii) Electrical Hazard Awareness training sessions.
 - iii) The New Jersey Shade Tree Federation Annual Meeting.
 - iv) CPR, First Aid and other safety-related training.

**CURRENT
TRAINING
NEEDS**

The Borough has evaluated its existing programs and personnel and identified the following areas in which training is currently needed or desired.

1. New Jersey Community Forestry CORE Training for new Shade Tree Commission members and Borough Council members.
2. Ongoing training in tree hazard identification and evaluation for the Borough Arborist, other Department of Public Works personnel, and Shade Tree Commission members.
3. Preparatory training for the ISA Certified Arborist and New Jersey Certified Tree Expert exams for the Borough Arborist.
4. Planting site analysis and tree species selection for Shade Tree Commission members and the Borough Arborist.
5. New species and cultivars to consider for future planting and problematic and invasive species to avoid for Shade Tree Commission members.
6. Young tree pruning techniques for encouraging the development of a structurally sound branch structure in young trees for the Borough Arborist, preferably through hands-on training.
7. Ongoing electrical hazard awareness and tree worker safety for the Borough Arborist and Department of Public Works personnel.
8. Tree species identification for Shade Tree Commission members and Department of Public Works personnel.
9. Insect and disease diagnosis for the Borough Arborist and Shade Tree Commission members.

**2007 – 2011
OBJECTIVES**

1. **Ongoing Training Programs**
 - a) *2007 – 2011*
 - i) Continue to attend training programs, in addition to the following objectives, that address the Current Training Needs listed above as appropriate programs become available.
 - ii) Maximize the number of different individuals who increase their level of expertise.
2. **NJ Community Forestry's Training Skills & Accreditation Program**
 - a) *January – March, Annually*
 - i) Review training needs versus upcoming training opportunities.
 - ii) Ensure that the Borough will accumulate the necessary continuing education credits as required under the New Jersey Shade Tree & Community Forestry Assistance Act by the end of each year.
 - iii) Schedule CORE Training for additional individuals, as necessary, to maintain at least two CORE trained Borough employees or elected officials and at least two CORE trained volunteers.
3. **ISA Certified Arborist Exam Preparation**
 - a) *January – December 2007*
 - i) Provide the Borough Arborist with all necessary study materials, opportunity to attend a preparatory course, and opportunities to prepare for, test for, and become an International Society of Arboriculture (ISA) Certified Arborist by the end of 2007.

4. Tree Hazard Evaluation Training

a) January – December 2007

- i)** Train the Borough Arborist to refresh and further advance his skills in recognizing and evaluating potential tree hazards.
- ii)** This training will most likely be completed locally, in cooperation with other neighboring municipalities and an appropriate speaker, via hands-on field training and/or Cook College Office of Continuing Professional Education courses.

b) January – December 2009

- i)** Train the Borough Arborist, appropriate Department of Public Works personnel, and Shade Tree Commission members to recognize and evaluate potential tree hazards.

5. Young Tree Developmental Pruning Training

a) July – December 2008

- i)** Train the Borough Arborist and appropriate Department of Public Works personnel in the pruning of young trees to promote the development of a structurally sound trunk and crown form, minimize conflicts with roads and utilities, and minimize the need for severe pruning as they mature.

6. NJ Certified Tree Expert Exam Preparation

a) January 2008 – July 2009

- i)** Provide the Borough Arborist with all necessary study materials, opportunity to attend a preparatory course, and opportunities to prepare for, test for, and become a New Jersey Certified Tree Expert by July 2009.

7. Electrical Hazard Awareness Training

a) January – December 2010

- i)** Train the Borough Arborist and appropriate Department of Public Works personnel to recognize and avoid electrical hazards relating to tree care operations in accordance with current industry standards.



Public Education, Awareness & Outreach

PUBLIC EDUCATION, AWARENESS & OUTREACH GOALS

1. Increase and maintain interest and support for Hawthorne's Shade Tree Program.
2. Encourage public assistance in implementing various programs and protecting public trees.
3. Encourage the planting, protection and proper care of trees on private property for the benefit of the entire community.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. **Arbor Day**
 - a) Formal Arbor Day celebrations continue to be held annually in Hawthorne.
 - b) Recent Arbor Day programs have included:
 - i) Programs at Borough elementary schools.
 - ii) Tree plantings.
 - iii) Distribution and planting of tree tublings with local scout groups.
 - iv) Distribution of tree planting instructions.
 - v) Tree climbing demonstrations by the Borough Arborist.
 - vi) Arbor Day story time programs.
 - vii) Craft programs.
2. **Tree City USA**
 - a) The Borough has been designated as a Tree City USA by the National Arbor Day Foundation continuously since 1990.
 - b) The Borough received the Tree City USA Growth Award in 2004 and 2005.
3. **Press Releases**
 - a) Press releases and educational articles are periodically submitted to local newspapers and the Borough newsletter. These press releases and articles cover:
 - i) Announcements and summaries of Arbor Day programs.
 - ii) Receipt of annual Tree City USA awards.
 - iii) General interest and educational subjects related to arboriculture and urban forestry.
4. **Public Relations, Awareness & Outreach Programs**
 - a) *100 Year Old Tree Program:* In 1998, the Borough sponsored a community-wide program in which 100-plus year old trees were identified and recognized. Candidate trees were reported by residents in response to local newspaper ads and scouted and confirmed by the Borough Arborist. The owner of each confirmed 100 year old tree was presented with a blue ribbon and certificate signed by the Mayor at a special Arbor Day event. This was a one-time event that has not been repeated since 1998, but may be in the future.
 - b) *Adopt-A-Spot Program:* Various small public areas are landscaped and maintained by local businesses and residents. This program encourages community involvement and pride while helping to beautify areas that would otherwise be neglected.

- c) *Contractor Relations*: Local tree and landscape contractors are periodically informed of the requirements to notify the Shade Tree Commission before working on public trees. Qualified contractors are generally given permission to complete certain work or are assisted by the Borough Arborist, when necessary.
- d) *Property Owner Relations*: The Shade Tree Commission employs several efficient methods of maintaining contact with property owners regarding public trees including:
 - i) Prior to planting, tree locations are staked and a letter explaining the proposed planting is left with the property owner. The property owner is asked to return the letter indicating their approval of the proposed planting location.
 - ii) Following planting, the adjacent property owner is given a letter that provides detailed instructions for watering and protecting the new tree.
- e) *"A New Leaf" Pamphlet*: The Borough distributed its *New Leaf* pamphlet to inform residents about Hawthorne's Shade Tree Program, the benefits of trees, and a summary of related ordinances and property owner responsibilities.
- f) *Cel-Earth-Bratton Event*: The purpose of this event, which is held each year on or about Earth Day, is to educate and increase the public's awareness of environmental issues. It includes a number of activities, competitions using recycled materials, the distribution of information regarding trees, environmental protection and energy, and the distribution of tree tublings. In addition, a tree and its planting are donated and raffled to a Borough resident.
- g) *Cable Channel 77 Bulletin Board*: Announcements, meeting dates, and other information regarding Shade Tree programs and events are periodically posted on this local cable television station.
- h) *Community Calendar*: Meeting dates and other Shade Tree Program information and events are included on the Borough's Community Calendar, which is distributed to all Borough residents at the beginning of each year.

**2007 – 2011
OBJECTIVES**

1. Ongoing Public Education, Awareness & Outreach Programs

- a) *2007 – 2011*
 - i) Continue all existing public education, awareness and outreach programs on a regular basis.

2. Press & Information Releases

- a) *2007 – 2011*
 - i) Issue at least two new articles and/or hand-out pieces per year that are dedicated to general interest subjects, educational subjects, and program announcements.
 - ii) These articles may be produced in-house or reprints of articles from various sources and published as press releases to local newspapers, in the Borough Newsletter, on the Borough internet website, printed handouts left with property owners during service request inspections, take-home fliers distributed at Borough schools and to civic organizations, or other means.
 - iii) Applicable subjects may include, among others:
 - Measures for protecting trees during construction.
 - The hazards of cutting roots during sidewalk repair, the Borough's policies and procedures for providing root pruning, and alternative repair methods to consider.
 - The environmental, social and economic benefits of trees to property values and the community in general.
 - Timely tree health issues (drought, maple decline, Asian longhorned beetle, bacterial leaf scorch, sudden oak death, hemlock woolly adelgid, etc.) and recommendations for preventive care.

- General tree maintenance tips.
- Selecting and planting trees on private property.
- Proper mulching of trees.
- The critical damage that 'weed whackers' and other lawn equipment can cause to trees and how it can be avoided.

3. Annual Arbor Day Programs

a) January – April, Annually

- i)** Continue to organize and conduct annual Arbor Day celebrations.
 - Continue to seek assistance from local civic groups, the Board of Education, local businesses, and others to help spread the workload and maximize visibility and attendance at the events.
 - Vary the location, activities and target audience each year to help increase interest and support for the Borough's Shade Tree Program.

4. Tree City USA

a) October – December, Annually

- i)** Continue to submit the annual application for designation as a Tree City USA through the National Arbor Day Foundation.
- ii)** Prepare and submit the application for Tree City USA Growth Awards when eligibility requirements have been met.
- iii)** Continue to advertise the designation throughout the Borough and in other public relations materials (road signs, plaques, truck decals, stationary logo, etc.).



Tree Inventory & Assessment

TREE INVENTORY & ASSESSMENT GOALS

1. Provide the baseline information necessary for making sound short and long-term management decisions.
2. Provide data upon which proactive tree planting, maintenance and other implementation programs can be established and improved.
3. Provide a system for accessing and utilizing tree inventory data to improve the efficiency and effectiveness of day-to-day tree management activities.
4. Maintain maintenance histories for individual trees.
5. Monitor and evaluate changes in the tree population and the impact of management activities over time.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. **Existing Tree Inventory & Assessment**
 - a) The Borough Arborist conducted a complete, computerized inventory of Hawthorne's existing street tree population in 1998 and maintains and utilizes the data through a *TreeFiles, Shade Tree Inventory & Management System* database.
 - i) A current assessment of the street tree population and how it has changed over the past five years is provided in the Current Public Tree Assessment section on page 8.
 - b) The Borough currently lacks a detailed inventory and assessment of trees in Borough parks and on public properties.

2007 – 2011 OBJECTIVES

1. **Ongoing Tree Inventory & Assessment Programs**
 - a) *2007 – 2011*
 - i) Continue using the existing computerized street tree inventory to:
 - Obtain up-to-the-minute information regarding the composition and condition of the street tree population and using this information as the basis for short and long-term management decisions.
 - Create, prioritize, schedule, and record service requests and work orders.
 - Update tree and planting site data as trees are planted, inspected, maintained, and removed.
 - b) *January – March, Annually*
 - i) Produce and retain a full compliment of summary reports so that a permanent history of the state of the street tree population is maintained and trends may be analyzed in the future.
2. **Park Tree Inventory**
 - a) *October – December 2009*
 - i) Begin developing plans to inventory shade trees in Borough parks and on Borough properties. In developing these plans, consideration will be given to:
 - The scope of the inventory and whether it will be limited to individual shade trees in high and medium use areas or extended to include natural stands of trees in low use and "natural" areas.
 - Methods for identifying and locating individual trees (GIS systems,

digitized aerial photos, field surveying and mapping, tree tagging, etc.).

- Merging the Park Tree Inventory data with the existing *TreeFiles*-based Street Tree Inventory.
- Whether the inventory will be completed by in-house employees and volunteers or through a contracted consultant.

b) January – March 2010

- i)** Finalize plans and specifications for completing the Park Tree Inventory.
- ii)** Mobilize a group of in-house employees and volunteers or hire a consultant to complete the inventory, as appropriate.

c) April – September 2010

- i)** Complete all necessary field data collection, mapping, and tree tagging, as dictated by the plans and specifications developed.
- ii)** Complete all necessary data entry work concurrently.

d) October – December 2010

- i)** Complete any software installations and data merges that may be necessary to merge the new Park Tree Inventory data with the existing *TreeFiles*-based Street Tree Inventory.
- ii)** Produce appropriate charts and reports to document the current state of the park tree populations for future reference and comparison.
- iii)** Begin integrating the Park Tree Inventory into existing management programs and begin addressing the maintenance needs identified, in order of priority.

**TREE HAZARD
MANAGEMENT
GOALS**

1. Minimize the risk of trees to public safety.

**EXISTING
PROGRAMS,
POLICIES
& PROCEDURES**

1. *Tree Hazard Identification*

- a) The Borough strives to identify potentially hazardous trees on a continuous basis via:
 - i) Ongoing observations by the Borough Arborist, other Department of Public Works personnel, Shade Tree Commission members, and other Borough personnel during the course of their daily activities.
 - ii) Service requests from property owners.
 - iii) Street-by-street and individual tree inspections by the Borough Arborist while serving on leaf pickup crews.

2. *Tree Hazard Abatement Procedures*

- a) All emergency situations brought to the Borough's attention are investigated and addressed promptly by the Borough Arborist.
- b) All other potentially hazardous tree conditions brought to the Borough's attention are addressed in accordance with the Borough's established Service Request Procedures.
- c) All work required to mitigate potentially hazardous conditions brought to the Borough's attention is completed in priority order based on the degree of hazard potential and the availability of the necessary resources.

3. *Record Keeping*

- a) Records of all service requests, inspections and completed work are maintained by the Borough Arborist.

**2007 – 2011
OBJECTIVES**

1. *Ongoing Tree Hazard Management Programs*

- a) *2007 – 2011*
 - i) Continue to address hazard abatement needs as they are identified in order of priority.
 - ii) Continue to review and analyze records for trees that required hazard abatement work for trends in species, age, location, prior maintenance history, etc. and adjust future planting and maintenance efforts accordingly to help minimize the occurrence of similar conditions in the future.
 - iii) Continually strive to improve the Borough's ability to identify and mitigate potentially hazardous conditions as new programs and procedures outlined in this Plan are implemented.

2. Existing Priority Maintenance Work

a) January – December 2011

- i)** Complete any high priority tree pruning and removal work identified during the Park Tree Inventory.
 - This work will be completed by the Borough Arborist and Crew to the extent that personnel and the necessary equipment are available.
 - However, the Borough's ability to satisfy this objective may be fully dependent upon external funding to hire contractors to supplement in-house efforts.

TREE PLANTING GOALS

1. Achieve and perpetuate the public tree population at maximum practical stocking (the maximum number of public trees the Borough can effectively manage given available resources).
2. Optimize and maintain tree species diversity to maintain long-term stability in the public tree population to the extent that:
 - a) No single genus comprises more than 20% of the public tree population.
 - b) No single species comprises more than 10% of the public tree population.
3. Optimize and maintain age diversity in the public tree population so that the number of trees lost to advanced age is relatively consistent from year to year.
4. Minimize conflicts between trees and sidewalks, utilities and other public and private fixtures.
5. Minimize future maintenance needs and costs.
6. Improve aesthetic appeal, seasonal variation, and physical benefits to adjacent properties and the Borough overall.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. **Planting Jurisdiction**
 - a) The Borough currently plants trees:
 - i) In Borough and County rights-of-way.
 - ii) In Borough parks.
 - iii) On Borough-owned properties.
 - b) The Borough does not plant trees on private property.
2. **Planting vs. Removal Ratio**
 - a) Over the past five years, the Borough saw a net loss of public trees. This was primarily a result of the continued, proactive removal of older, severely deteriorating trees coupled with a somewhat insufficient replanting rate.
 - i) During this period, the Borough removed 80 – 100 public trees per year.
 - ii) During this same period, the Borough planted an average of 90 new public trees per year.
3. **Planting Location & Tree Placement**
 - a) Planting locations are typically identified by the Shade Tree Commission and Borough Arborist via:
 - i) Observations made during the course of their ongoing activities.
 - ii) Preexisting vacant planting sites identified by the 1998 Street Tree Inventory and records of trees subsequently removed.
 - iii) Planting requests from adjacent property owners.
 - b) Trees are placed:
 - i) Within the right-of-way in the case of street trees – trees are not currently planted outside the right-of-way on private property.
 - ii) In a manner that will minimize future conflicts with above and belowground

utilities, structures, hardscape fixtures, and traffic by maintaining minimum distances from driveways, intersections, utilities, and other fixtures. Root control barriers are occasionally installed with new plantings to help minimize sidewalk conflicts, where appropriate.

- iii) On the lawn side of the sidewalk where there is sufficient space within the right-of-way and cooperation from the adjacent property owner.
- iv) With consideration to the preferences of the adjacent property owner.

4. Species Selection

- a) Species are selected:
 - i) By the Shade Tree Commission with the advice of the Borough Arborist.
- b) Species are selected with consideration to:
 - i) Shade Tree Program goals for improving and maintaining species diversity.
 - ii) Recommendations by the New Jersey Shade Tree Federation and other resources.
 - iii) Existing soil conditions, available growing space, and above and below ground restrictions at each site.
 - iv) Insect and disease resistance, future maintenance needs, and past performance.
 - v) Availability.

5. Tree Supply & Installation

- a) The majority of the trees planted each year are selected and purchased directly from growers or wholesalers by the Shade Tree Commission and planted by the Borough Arborist.
- b) Periodically, some trees are furnished and planted by contractors as part of capital improvement and road reconstruction projects.

6. Post-Planting Care

- a) Post-planting maintenance includes:
 - i) Irrigation by adjacent property owners in accordance with written instructions provided by the Shade Tree Commission and supplemented, as necessary, by the Borough Arborist.
 - ii) Stake removal by the Borough Arborist after the trees have become established.
 - iii) Developmental and elevation pruning by the Borough Arborist a few years after the trees have become sufficiently established.
 - iv) Ongoing monitoring and corrective treatments, as necessary, by the Borough Arborist.

7. Funding

- a) The purchase and planting of public trees is funded by:
 - i) The Shade Tree Commission operating budget.
 - ii) The Borough capital budget.
 - iii) Occasional donations from individuals.

1. Ongoing Tree Planting Programs

- a) 2007 – 2011
 - i) Continue implementing all existing tree planting programs where appropriate and with changes dictated by the following objectives.

2. Tree Planting Sling Purchase

a) January – March 2008

- i) Purchase a self-adjusting nylon tree root ball lifting sling to improve the ease and safety of handling and planting new trees while minimizing the potential for damage to the root ball.

3. Street Tree Stocking & Age Structure Guidelines

a) January – March 2008

- i) Using current street tree inventory data, calculate "maximum practical stocking" – the maximum number of public street trees that the Borough can effectively manage in accordance with all elements of this Plan, given available resources.
- ii) Calculate the number of street trees that must be planted each year to achieve maximum practical stocking over a period of time that will ensure that the uneven age structure of the existing young trees is carried through to all age classes over the long term. Although the tendency is to plant more trees faster, achieving maximum practical stocking over a longer period of time will result in more age diversity and more stability in the tree population over the long term.
- iii) Establish a feasible target date for achieving maximum practical stocking based on these calculations with realistic allowances for existing tree mortality, transplant mortality, etc.
- iv) Establish intermediate progress goals for increasing the level of stocking during each five-year management period to maintain consistent progress toward the long-term stocking goal.

b) April 2008 – 2011

- i) Design and complete planting programs in accordance with the stocking goals and planting rates established.

4. Street Tree Species Composition Guidelines

a) January – March 2008

- i) Using current street tree inventory data, establish a long-term goal for an optimum street tree species mix that provides sufficient genus and species diversity, provides insect and disease resistance, etc.
 - No single genus should comprise more than 10%-20% of the street tree population.
 - No single species should comprise more than 5%-10% of the street tree population.
 - A variety of improved, insect and disease resistant cultivars should be favored over historically problematic species.
- ii) Establish intermediate progress goals for altering the existing street tree species composition by the end of each five-year management period (e.g. reducing Norway maples by 5% by 2012, keeping the number of Callery pears below 5%, etc.) to help maintain consistent progress toward the long-term goal.

b) April 2008 – 2011

- i) Design and complete planting programs in accordance with the species composition goals set.
- ii) Vary the species planted from year to year to provide species diversity over all age classes.

5. Commercial District Planting Initiative

a) July – September 2009

- i)** Develop a planting initiative to provide for the planting of additional public trees adjacent to commercial properties throughout the Borough and to enlist the business owners' assistance in caring for those trees. In developing this initiative, consideration will be given to:
- Educating business owners in the physical, environmental and economic benefits that trees provide.
 - Cost-sharing alternatives for the initial planting of the trees.
 - Selecting appropriate species to minimize issues with sign interference, sidewalk and building conflicts, and tree litter.
 - Post-planting maintenance programs.
 - Long-term, ongoing tree maintenance.

b) October 2009 – 2011

- i)** Begin and continue implementing the planting initiative by soliciting business owner participation and planting and caring for trees on an ongoing basis.

**TREE
MAINTENANCE
GOALS**

1. Improve and maintain the long-term health and structural condition of the Borough's public trees.
2. Maximize the service life of existing trees.
3. Minimize tree hazards and maintain public safety.
4. Maximize the benefits that trees provide to the community relative to the cost of maintaining them.
5. Maximize the cost-efficiency of tree maintenance activities.

**EXISTING
PROGRAMS,
POLICIES
& PROCEDURES**

1. *In-House Crews*

- a) Nearly all tree maintenance tasks are completed by the Borough Arborist, an employee of the Department of Public Works.
 - i) The Borough Arborist is normally assisted by one additional Department of Public Works employee.
 - ii) Additional Department of Public Works employees may be added to the crew, when necessary to complete certain jobs.
- b) The Borough Arborist is equipped with:
 - i) (1) 55-foot bucket truck
 - ii) (1) Chipper
 - iii) (1) Stump grinder
 - iv) (1) 7-yard dump truck
 - v) (1) 3-yard loader
 - vi) Various chainsaws
 - vii) Related small tools and related equipment
- c) The Borough Arborist is currently dedicated to public tree planting and maintenance approximately 85-percent of the year and completes approximately:
 - i) 85% of all tree removal work.
 - ii) 100% of all tree pruning work.
 - iii) 85% of all stump grinding work.
 - iv) 100% of all specialty maintenance work.
 - v) 85% of all emergency response work.

2. *Private Contractors*

- a) A crane or other specialized equipment are periodically rented for private tree maintenance firms are periodically hired to assist the Borough Arborist in completing certain tree pruning and removal work.
- b) Contractors and/or in-house crews working on behalf of Passaic County complete maintenance of trees in County parks and on County properties.
- c) Contractors working on behalf of local utility companies complete all line clearance pruning along Borough and County rights-of-way.

3. Inter-Local & Mutual Assistance Agreements

- a) Public Service Electric & Gas Company is responsible for assisting in the pruning and removal of Borough trees that in proximity to their electric lines.
- b) The Borough of Hawthorne participates in the Passaic County Municipal Mutual Aid program through which certain services may be provided to or by other municipalities on a shared or as-needed basis.

4. Systematic Maintenance Programs

- a) The Borough has and continues to implement a program in which it strives to prune all street trees in one of eight tree management zones each year. In the past, the logistics of renting a bucket truck to prune near electric lines, a constant stream of service request work, and other factors have somewhat hampered the Borough's efforts to maintain the desired schedule.

5. Work Identification, Prioritization & Scheduling

- a) Currently, most tree maintenance needs are identified via:
 - i) Observations by the Borough Arborist, Shade Tree Commission members, and other Borough personnel.
 - ii) Service requests from adjacent property owners.
- b) Tree maintenance needs are prioritized and scheduled for completion based on the degree of hazard potential, subject to available personnel, equipment and budget.
- c) Records of service requests, work orders and tree maintenance work completed are maintained by the Borough Arborist through the *TreeFiles* street tree inventory database.

6. Tree Removal

- a) It is the Borough's policy to not remove live public trees unless they pose a threat to public safety.
- b) Requests for removal must be made in writing to the Shade Tree Commission, inspected and evaluated by the Borough Arborist, and approved by the Shade Tree Commission.
- c) The Borough has removed an average of 80 – 100 public trees per year over the past five years, primarily due to death and structural deterioration.

7. Plant Health Care & Specialty Treatments

- a) The Borough generally does not complete insect and disease treatments except on an occasional, small scale basis to control significant problems on high value trees.
- b) Cabling and bracing are completed on a limited basis where justified and feasible.
- c) Post-planting maintenance treatments are routinely provided for young trees including irrigation by the adjacent property owners and supplemented by the Borough Arborist and stake removal, developmental and elevation pruning, and ongoing monitoring by the Borough Arborist.

8. Root & Sidewalk Conflicts

- a) When sidewalks are damaged by the roots of Borough trees, the Borough is responsible only for the selective pruning and removal of the offending roots, to the extent doing so is feasible. The adjacent property owner is responsible for removing and replacing the damaged slab(s) after the Borough Arborist has pruned the roots.
- b) Property owners are required to notify and obtain the written approval of the Borough Arborist prior to beginning any sidewalk, curb or driveway repairs or

other construction in proximity to Borough trees. Notice of this requirement is provided with all building permits.

- c) The Borough Arborist will prune and remove some surface roots of Borough trees from private lawns when necessary and when it can be completed without undo harm to the tree.
- d) The Borough continues to utilize a variety of methods to help minimize tree and sidewalk conflicts in the future, such as careful species selection and tree placement, sidewalk and curb modifications such as sidewalk "round-outs" and curb "skips," and the occasional use of root control barriers at planting time.

9. Funding

- a) The cost of tree maintenance work completed by the Borough Arborist and other Department of Public Works personnel is covered by the Department of Public Works operating budget.
- b) The costs associated with contractors hired or equipment rented by the Borough for tree maintenance work is covered by the Shade Tree Commission operating budget.

**2007 – 2011
OBJECTIVES**

1. Ongoing Tree Maintenance Programs

- a) *2007 – 2011*
 - i) Continue implementing all existing tree maintenance programs, policies and procedures on a regular basis.
 - ii) Continue implementing the existing systematic zone pruning cycle as time and resources permit.

2. New Chipper Purchase

- a) *October – December 2008*
 - i) Complete a cost-benefit analysis of purchasing a new brush chipper to replace the existing aging chipper to improve the efficiency of in-house tree maintenance activities.
 - ii) If justified, research available equipment models, develop purchase specifications, identify funding sources, and set plans for procurement.
- b) *January – June 2009*
 - i) If justified, purchase the new chipper.



Tree Waste Recycling

TREE WASTE RECYCLING GOALS

1. Minimize the cost of tree waste disposal to the Borough.
2. Produce beneficial recycled products for use on public properties and by Borough residents.
3. Generate income that can be used to subsidize shade tree programs and projects.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. **Recycling Facilities**
 - a) The Borough owns one composting facility within the Borough, which is used to process leaf waste, temporarily store the resulting products, distribute the products to residents, and sell surplus products to commercial contractors.
 - b) Currently, the facility is operated by a private contractor at no cost to the Borough. In return, the contractor is entitled to sell all recycled materials.
 - c) The facility accepts organic wastes from the Borough crews and Borough residents. Organic wastes are also accepted from local tree and landscape contractors who purchase a permit.
2. **Material Processing, Use & Distribution**
 - a) *Leaves*
 - i) Leaves are composted to produce compost, humus and blended topsoil for planting, lawn repairs and other uses where organic soil is desired.
 - ii) The resulting compost, humus and topsoil are:
 - Made available to Borough residents at no cost.
 - Used by the Borough for various landscaping projects in Borough parks, recreation field repairs, etc.
 - Sold to commercial vendors and contractors by the Borough's recycling contractor.
 - b) *Wood Chips*
 - i) Wood chips and stump grindings are used as-is for mulch or tub-ground to produce decorative mulch.
 - ii) The resulting wood chips and tub-ground mulch are:
 - Made available to Borough residents at no cost.
 - Used by the Borough to mulch plantings on Borough lands.
 - Sold to commercial vendors and contractors by the Borough's recycling contractor.
 - c) *Bulk Wood & Brush*
 - i) The majority of the bulk wood and brush received at the facility is tub-ground to produce decorative mulch. Some bulk wood is made available for pick-up by Borough residents as firewood.
 - ii) The resulting wood and tub-ground mulch are:
 - Made available to Borough residents at no cost.
 - Used by the Borough to mulch plantings on Borough lands.
 - Sold to commercial vendors and contractors by the Borough's recycling contractor.

**2007 – 2011
OBJECTIVES**

3. Recycling Income

- a) Currently, the Borough derives no direct income from the sale of recycled products. However, the cost savings realized by operating the facility through a private contractor are substantial.

1. Ongoing Tree Waste Recycling Programs

a) *2007 – 2011*

- i) Continue implementing all existing tree waste recycling programs, policies and procedures.



TREE CARE DISASTER PLAN GOALS

1. Enable the Borough to respond to tree-related emergencies promptly and efficiently.
2. Maintain strong inter-local assistance agreements with neighboring municipalities for the mutual benefit of all during emergencies and disasters.
3. Minimize the extent of tree-related damage and losses caused by weather, disease, and other forces.
4. Provide the Borough with a viable plan to repair or replace widespread tree damage or losses.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. **Tree Emergency & Disaster Threats**
 - a) Mass structural damage and uprooting during severe weather, particularly wind and ice, is currently considered the most serious threat to the Borough's tree populations.
 - b) In addition to the threat to the trees themselves, widespread tree failures pose a serious threat to electrical service, communications, and the Borough's ability to provide critical emergency services.
 - c) The risk of widespread tree damage and losses to biotic threats is currently considered moderate, but manageable through increased species diversity and cultivar selection. Currently, there is particular concern regarding:
 - i) The threat of Asian longhorned beetle infestation due to Hawthorne's proximity to infestation centers in the New York / New Jersey metropolitan area.
 - ii) Emerald ash borer, which is expected to spread from the Great Lakes area to much of the eastern United States.
 - iii) Bacterial leaf scorch and its apparent spread throughout New Jersey.
 - iv) Sudden oak death, which was recently discovered in a New Jersey nursery.
2. **Existing Emergency & Disaster Plans**
 - a) The Borough currently lacks a formal plan specific to the repair and replacement of widespread tree damage and losses beyond initial emergency response efforts. However, it is believed that technically sound and responsible planting, preventive maintenance, and hazard identification and abatement efforts described elsewhere in this Plan will, over the long term, help insulate the Borough against certain catastrophic losses.
 - b) The Borough's *Emergency Management Procedures* outline procedures for vital services and cooperative efforts between all Borough departments and neighboring communities during an emergency or disaster.
3. **Emergency Response**
 - a) The Department of Public Works, in cooperation with the Office of Emergency Management, local utilities, and contractors, is responsible for clearing trees and debris to open roadways and permit restoration of electrical service and communications.
 - b) The Borough Arborist is on 24-hour call through the Police Department to respond to tree-related emergencies.

**2007 – 2011
OBJECTIVES**

- c) The Borough Arborist maintains a working relationship with local tree maintenance contractors who can provide specialized equipment and/or manpower on an emergency basis.

1. Ongoing Programs

- a) *2007 – 2011*
 - i) Continue implementing existing programs, policies and procedures.
 - ii) Implement or expand technically sound and responsible planting, preventive maintenance and hazard identification and abatement programs, as detailed elsewhere in this Plan, to reduce the risk of future tree failures and losses.



Plan Preparation & Evaluation

PLAN PREPARATION & EVALUATION GOALS

1. Ensure that Hawthorne's Shade Tree Program continues to follow a well-defined, consistent and efficient course of action toward its overall goals.
2. Provide a means of continually evaluating the success of past programs and activities and making adjustments to address changing conditions and needs.
3. Remain in compliance with and eligible for the benefits of the New Jersey Shade Tree & Community Forestry Assistance Act.

EXISTING PROGRAMS, POLICIES & PROCEDURES

1. Preparation of this second five-year Community Forestry Management Plan was the cooperative effort of the Shade Tree Commission, the Borough Arborist, and their consulting arborist.
2. Goals and objectives contained in this Plan are based on an ongoing evaluation of the Borough's implementation of its 1999 – 2003 Plan.
3. Preparation of this Plan was made possible through a 2003 Green Communities Challenge Grant from the New Jersey Forest Service and the in-kind services of Borough volunteers and employees.

2007 – 2011 OBJECTIVES

1. **Annual Program Evaluation**
 - a) *December, Annually*
 - i) Evaluate the success of the year's activities and accomplishments relative to the goals and objectives contained within this Plan.
 - ii) Adjust programs, as necessary, based upon the evaluation.
 - iii) Prepare and submit the Annual Accomplishment Report to the New Jersey Forest Service in accordance with the requirements of the New Jersey Shade Tree & Community Forestry Assistance Act.
 - iv) Provide an annual report to the Mayor and Council.
 - Provide a written annual report that details the Shade Tree Program's activities and accomplishments, its shortfalls and the issues that it will face in the coming years.
 - Meet with the Mayor and Council to review the report and plans for the coming year.
2. **Five-Year Evaluation**
 - a) *April – June 2011*
 - i) Evaluate the success of all objectives completed to date.
 - ii) Evaluate progress toward the overall goals of the Shade Tree Program.
 - iii) Begin formulating new objectives and adjustments to existing policies, programs and procedures, if necessary to address changing needs, for the 2012 – 2016 management period.
3. **2012 – 2016 Management Plan Development**
 - a) *July – September 2011*
 - i) Finalize new objectives and adjustments to existing policies, programs and







procedures for the 2012 – 2016 management period.

- ii)** Prepare and submit a Community Forestry Management Plan for the 2012 – 2016 management period.
- b)** *October – December 2011*
- i)** Obtain Plan approval from the New Jersey Community Forestry Council.



Summary of 2007 – 2011 Objectives

| Objectives / Tasks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---|--|-------------------|-------------------|------|------|------|
| PROGRAM ADMINISTRATION | | | | | | |
| 1. <i>Ongoing Administrative Programs</i> | | | | | | |
| <input type="checkbox"/> Continue all existing administrative programs already in effect, with changes dictated by the following objectives (p.17, #1.a.i) | [Solid black bar spanning 2007 through 2011] | | | | | |
| 2. <i>Ordinance Review</i> | | | | | | |
| <input type="checkbox"/> Complete the review of ordinances relating to the Shade Tree Program and draft revisions to the ordinances, if appropriate (p.17, #2.a.i-iv) | [Solid black bar] | | | | | |
| <input type="checkbox"/> Adopt or submit the revised ordinances for approval, as appropriate (p.17, #2.b.i) | | [Solid black bar] | | | | |
| 3. <i>Shade Tree Program Policies & Procedures</i> | | | | | | |
| <input type="checkbox"/> Draft a written manual that details the policies and procedures under which the Shade Tree Program will operate (p.17, #3.a.i-iii) | | [Solid black bar] | | | | |
| <input type="checkbox"/> Seek and incorporate the input of all appropriate departments, boards, committees, the Mayor and Council, and others, as appropriate (p.18, #3.b.i) | | | [Solid black bar] | | | |
| <input type="checkbox"/> Finalize and distribute the final Shade Tree Program Policy Manual to all those involved in the Shade Tree Program's operation (p.18, #3.c.i) | | | [Solid black bar] | | | |
| 4. <i>Site Plan & Master Plan Review Procedures</i> | | | | | | |
| <input type="checkbox"/> Develop and begin implementing procedures to ensure that the Shade Tree Commission receives and reviews site plan applications under consideration and provides appropriate input to the Planning Board or Construction official; Establish protocols to ensure that the Shade Tree Commission provides input during the next reexamination of the Borough Master Plan (p.18, #4.a.i-ii) | | | [Solid black bar] | | | |

| Objectives / Tasks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--|--|--|--|---|------|------|
| <p>PUBLIC EDUCATION, AWARENESS & OUTREACH</p> <p>1. <i>Ongoing Public Education, Awareness & Outreach Programs</i> <input type="checkbox"/> Continue all existing public education, awareness and outreach programs on a regular basis (p.25, #1.a.i)</p> <p>2. <i>Press & Information Releases</i> <input type="checkbox"/> Issue at least two new articles and/or hand-out pieces per year that are dedicated to general interest subjects, educational subjects, and Shade Tree Program announcements (p.25, #2.a.i-iii)</p> <p>3. <i>Annual Arbor Day Programs</i> <input type="checkbox"/> Plan, organize and conduct annual Arbor Day celebrations (p.26, #3.a.i)</p> <p>4. <i>Tree City USA</i> <input type="checkbox"/> Prepare and submit the annual application for designation as a Tree City USA; Prepare and submit the application for Tree City USA Growth Awards after eligibility requirements have been met; Continually advertise the designation by displaying the program's promotional materials (p.26, #4.a.i-iii)</p> |  |  |  |  | | |
| <p>TREE INVENTORY & ASSESSMENT</p> <p>1. <i>Ongoing Tree Inventory & Assessment Programs</i> <input type="checkbox"/> Continue using the computerized street tree inventory to obtain and use current information as the basis of short and long-term management decisions, create, prioritize, schedule, and record service requests and work orders, and update tree and planting site data as trees are planted, inspected, maintained, and removed (p.27, #1.a.i)</p> <p><input type="checkbox"/> Produce and retain a full compliment of summary reports so that a permanent history of the state of the street tree population is maintained and trends may be analyzed in the future (p.27, #1.b.i)</p> |  |  | | | | |

| Objectives / Tasks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--|------|------|------|------|------|------|
| TREE INVENTORY & ASSESSMENT, cont'd | | | | | | |
| 2. <i>Park Tree Inventory</i> | | | | | | |
| <input type="checkbox"/> Begin developing plans to inventory shade trees in Borough parks and on Borough properties (p.27, #2.a.i) | | | | ■ | | |
| <input type="checkbox"/> Finalize plans and specifications for the Park Tree Inventory; Mobilize a group of in-house employees and volunteers or hire a consultant to complete the inventory, as appropriate (p.28, #2.b.i-ii) | | | | ■ | | |
| <input type="checkbox"/> Complete all necessary field data collection, mapping, and tree tagging, as dictated by the plans and specifications developed; Complete all necessary data entry work concurrently (p.28, #2.c.i-ii) | | | | ■ | | |
| <input type="checkbox"/> Complete software installations and data merges necessary to merge the Park Tree Inventory with the existing Street Tree Inventory; Produce appropriate charts and reports to document the current state of the park tree populations for future reference and comparison; Begin integrating the Park Tree Inventory into existing management programs and begin addressing the maintenance needs identified (p.28, #2.d.i-iii) | | | | | ■ | |
| TREE HAZARD MANAGEMENT | | | | | | |
| 1. <i>Ongoing Tree Hazard Management Programs</i> | | | | | | |
| <input type="checkbox"/> Continue addressing hazard abatement needs as they are identified; Continue to review and analyze records for trees requiring hazard abatement work for trends and adjust future planting and maintenance efforts accordingly; Continually strive to improve the Borough's ability to identify and mitigate potentially hazardous conditions (p.29, #1.a.i-iii) | ■ | | | | | |
| 2. <i>Existing Priority Maintenance Work</i> | | | | | | |
| <input type="checkbox"/> Complete any high priority tree pruning and removal work identified during the Park Tree Inventory (p.30, #2.a.i) | | | | | ■ | |
| TREE PLANTING | | | | | | |
| 1. <i>Ongoing Tree Planting Programs</i> | | | | | | |
| <input type="checkbox"/> Continue all existing tree planting programs with changes dictated by the following objectives (p.32, #1.a.i) | ■ | | | | | |
| 2. <i>Tree Planting Sling Purchase</i> | | | | | | |
| <input type="checkbox"/> Purchase a self-adjusting nylon tree root ball sling to improve the ease and safety of handling and planting new trees while minimizing the potential for root ball damage (p.33, #2.a.i) | | ■ | | | | |

| Objectives / Tasks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--|------|------|------|------|------|------|
| TREE PLANTING, cont'd | | | | | | |
| 3. <i>Street Tree Stocking & Age Structure Guidelines</i> | | | | | | |
| <input type="checkbox"/> Calculate maximum practical stocking for Borough street trees; Establish feasible goals for achieving maximum practical stocking with a suitable age structure within an appropriate time-frame (p.33, #3.a.i-iv) | | ■ | | | | |
| <input type="checkbox"/> Design and complete planting projects in accordance with the stocking goals and planting rates set (p.33, #3.b.i) | | ■ | ■ | ■ | ■ | ■ |
| 4. <i>Street Tree Species Composition Guidelines</i> | | | | | | |
| <input type="checkbox"/> Establish a long-term goal for optimum species composition in the street tree population; Establish intermediate progress goals for adjusting the existing species composition (p.33, #4.a.i-ii) | | ■ | | | | |
| <input type="checkbox"/> Design and complete planting projects in accordance with the goals set; Vary the species planted from year to year to maintain species diversity over all age classes (p.33, #4.b.i-ii) | | ■ | ■ | ■ | ■ | ■ |
| 5. <i>Commercial District Planting Initiative</i> | | | | | | |
| <input type="checkbox"/> Develop a planting initiative to provide for the planting of additional public trees adjacent to commercial properties and enlist the business owners' assistance in caring for those trees (p.34, #5.a.i) | | | ■ | | | |
| <input type="checkbox"/> Begin and continue implementing the planting initiative on an ongoing basis (p.34, #5.b.i) | | | | ■ | ■ | ■ |
| TREE MAINTENANCE | | | | | | |
| 1. <i>Ongoing Tree Maintenance Programs</i> | | | | | | |
| <input type="checkbox"/> Continue implementing all existing maintenance programs, policies and procedures on a regular basis; Continue implementing the existing zone pruning cycle as time and resources permit (p.37, #1.a.i-ii) | ■ | ■ | ■ | ■ | ■ | ■ |
| 2. <i>New Chipper Purchase</i> | | | | | | |
| <input type="checkbox"/> Complete a cost-benefit analysis of purchasing a new chipper; If justified, research available models, develop purchase specifications, identify funding sources, and set plans for procurement (p.37, #2.a.i-ii) | | ■ | | | | |
| <input type="checkbox"/> If justified, purchase the new chipper (p.37, #2.b.i) | | | ■ | | | |

**CURRENT
ORDINANCES**

1. Chapter 54, *Shade Tree Commission*, which establishes and authorizes the Hawthorne Shade Tree Commission pursuant to N.J.S.A. 40:64-1.
2. Chapter 174, *Shade Trees*, which provides for the planting, care and protection of public trees within the Borough of Hawthorne under the authority of the Shade Tree Commission.
3. Chapter 206, *Tree Removal*, which regulates the removal and destruction of trees on unimproved or vacant private lands within the Borough of Hawthorne.

Chapter 54, SHADE TREE COMMISSION

[HISTORY: Adopted by the Board of Commissioners of the Borough of Hawthorne 10-27-37 as Ord. No. 796. Section 54-1 amended at time of adoption of Code; see Ch. 1, General Provisions, Art. I. Other amendments noted where applicable.]

GENERAL REFERENCES

Officers and employees -- See Ch. 40.

Salaries -- See Ch. 50.

§ 54-1. Duties. ^{EN}

The regulation, planting, care and control of shade and ornamental trees and shrubbery upon or in the highways, parks or parkways of the Borough of Hawthorne (except county parks or parkways) shall be exercised by and be under the authority of a Commission consisting of five (5) residents of the Borough of Hawthorne, which Commission shall be known as the "Shade Tree Commission of the Borough of Hawthorne."

§ 54-2. Creation.

The Shade Tree Commission of the Borough of Hawthorne, as authorized by Chapter 325 of the Laws of 1915, its amendments and supplements, ^{EN} be and is hereby created and established.

Chapter 174, SHADE TREES

[HISTORY: Adopted by the Municipal Council of the Borough of Hawthorne 5-6-1998 by Ord. No. 1694. ^{EN} Amendments noted where applicable.]

GENERAL REFERENCES

Shade Tree Commission -- See Ch. 54.

Streets and sidewalks -- See Ch. 186.

§ 174-1. Authority.

The regulation, planting, care and control of shade and ornamental trees upon and in the streets, highways, public places, parks and parkways of the municipality (except highways, parks or parkways of the County of Passaic or State of New Jersey) shall be exercised by and under the authority of a Commission consisting of five residents of the Borough of Hawthorne, who shall be appointed by the Mayor. The Commission shall be known as the "Shade Tree Commission of the Borough of Hawthorne."

§ 174-2. Permit required; no fee charged.

- A. No person, firm or corporation shall do or cause to be done any of the following acts upon any of the streets, highways, public places, parks and parkways within the Borough of Hawthorne without a written permit issued by the Shade Tree Commission:
- (1) Cut, trim, break, climb with spikes, disturb the roots of or otherwise injure, or spray with any chemical or remove any living tree; or injure, misuse or remove any structure or device placed to support or protect such tree.
 - (2) Plant any tree.
 - (3) Fasten any rope, wire, electric attachment, sign or other device to a tree, or to any guard about such tree.
 - (4) Close or obstruct any open space provided about the base of a tree to permit the access of air, water or fertilizer to the roots of such tree.
 - (5) Pile any building material, or make any mortar or cement within six feet of a tree.
 - (6) No fire shall be started within 10 feet of any tree or planting regulated by this chapter.
 - (7) Remove, authorize or procure the death or removal of any tree.
- B. The permit shall be issued by the Shade Tree Commission without fee to the applicant.

§ 174-3. Removal.

- A. The Shade Tree Commission shall have the authority to cause the removal or order the removal of any tree or planting from any areas which are subject to the authority of the Shade Tree Commission and which have become dangerous to the public safety.
- B. A property owner affected may request the removal of a tree or other planting for any reason. The property owner shall submit a request for removal of said tree or planting, in writing, indicating the reason for the request. A copy of the request for removal shall be served upon adjoining property owners no less than 10 days prior to the review of that application by the Shade Tree Commission. The applicant shall file an affidavit of service with the Shade Tree Commission certifying to the service upon adjoining property owners by either certified mail, return receipt requested, or personal service. Prior to the review by the Shade Tree Commission, the Shade Tree Commission shall cause the area to be examined by the Shade Tree Commission's designee, and a report shall be filed with the Shade Tree Commission to be reviewed at the hearing. The applicant and any adjoining property owners shall have the right to be heard at the hearing before the Shade Tree Commission. The Shade Tree Commission shall review the application and, if the application is granted, the costs of removal shall be the responsibility of the applicant. The Shade Tree Commission may provide for reasonable security prior to the removal of any such tree or planting.
- C. Trees removed by the authority of the Commission alone will be replaced either on or off the site of removal at the Commission's discretion. Trees removed at a property owner's request which are not dangerous to the public safety will be replaced either on or off the site of removal at the Commission's discretion. The property owner applicant who receives

permission to have a healthy tree removed will, prior to removal, pay a fee to the Commission of \$100 for each such tree to be removed.

§ 174-4. Indemnification.

- A. Any property owner who is granted approval to remove a tree shall assume all liability for, and shall defend, indemnify and save harmless the Shade Tree Commission of the Borough of Hawthorne and the Borough of Hawthorne (all of their boards, authorities, employees and other respective agents) from and against all losses and expense (including costs and attorney's fees) by reason of liability imposed by law upon any of the aforementioned for damages because of injury or death resulting therefrom, to any person or persons; and damage to or destruction of property, including the loss of use thereof, by reason of an accident or occurrence arising out of owner/applicant's operations or that of the owner/applicant's subcontractors or anyone directly or indirectly employed by the owner/applicant or the owner/applicant's subcontractors.
- B. In addition, the owner/applicant shall provide to the Shade Tree Commission a certificate of insurance naming the Borough of Hawthorne and the Shade Tree Commission of the Borough of Hawthorne as named insured in form and content with insurers acceptable to the borough and the Shade Tree Commission.
- C. The Commission retains the authority granted to it under N.J.S.A. 40:64-8 and 40:64-9.

§ 174-5. Use of deleterious substances.

It shall be unlawful for any person, firm or corporation to cause, authorize or procure any brine water, oil, liquid, dye, gas or other substance harmful to tree life to lie, lead, pour, flow or drift on or into the soil about the base of a tree or other planting subject to the jurisdiction of the Shade Tree Commission, at a point whence such substance may be lying on, or flow, dripping or seeping into such soil, or in any other manner whatsoever.

§ 174-6. Hitching of animals.

It shall be unlawful for any person, firm or corporation to fasten any animal to any tree or other planting subject to the jurisdiction of the Shade Tree Commission or to any guard or support provided for the same, or permit any animal to bite or otherwise injure any such tree or other planting subject to the jurisdiction of the Shade Tree Commission.

§ 174-7. Electric wires.

- A. It shall be unlawful for any person, firm or corporation to cause, authorize or procure a wire or another conductor charged with electricity to come into contact with any tree or planting subject to the jurisdiction of the Shade Tree Commission in such a manner as may injure, destroy, damage or kill said tree or other planting.
- B. Every person, firm or corporation having control over any wire for the transmission of electric current upon a public highway shall, at all times, guard all trees or other plantings through which or near which such wire passes against any injury from the wire or electric current carried by said wire. The device or means used shall, in every case, be subject to the approval of the Shade Tree Commission.

§ 174-8. Interference with Commission.

It shall be unlawful for any person, firm or corporation to interfere or cause or authorize or procure any interference with any lawful work undertaken by the Shade Tree Commission, or any of its authorized agents, while they are engaged in and about the planting, cultivating, pruning, spraying or removal of any tree or other planting subject to the jurisdiction of the Shade Tree Commission.

§ 174-9. Powers and duties of Commission.

It shall be the duty of the Shade Tree Commission, subject to its review and approval, which shall be subject to the sole discretion of the Shade Tree Commission, from time to time, to plant trees and other plantings in those areas which are subject to the jurisdiction of the Shade Tree Commission.

§ 174-10. Definitions.

As used in this chapter, "park" means a park, playground, picnic area, recreation area, conservation area, or similar place or property, or any open space, owned or controlled by the Borough of Hawthorne.

§ 174-11. Violations and penalties; replacement assessment.

- A. Any person, firm or corporation convicted of violating any of the provisions of this chapter shall be subject to a fine not to exceed \$1,500 for each violation.
- B. In addition to the penalties provided by Subsection A, the Shade Tree Commission may require a person who removes or otherwise destroys a tree or other planting subject to the jurisdiction of the Commission in violation of this chapter to pay a

replacement assessment to the borough. The replacement assessment shall be the value of the tree or other planting as determined by the appraisal of a trained forester or certified tree expert retained by the Commission for that purpose. In lieu of an appraisal, the Commission may adopt a formula and schedule based upon the number of square inches contained in a cross section of the trunk of the tree or other planting, multiplied by a predetermined value per square inch, not to exceed \$27 per square inch. The square inch cross section shall be calculated from the diameter at breast height and, if there is a multiple stem tree, then each trunk shall be measured and an average shall be determined for the tree. For the purpose of this section, diameter at breast height shall mean the diameter of the tree taken at a point 4 1/2 feet above ground level. The Commission shall modify the value of the tree based upon its species, variety, location and its condition at the time of removal or destruction.

Chapter 206, TREE REMOVAL

[HISTORY: Adopted by the Municipal Council of the Borough of Hawthorne 5-3-1995 as Ord. No. 1619. Amendments noted where applicable.]

GENERAL REFERENCES

Land use procedures -- See Ch. 34.
Shade Tree Commission -- See Ch. 54.
Shade trees -- See Ch. 174.
Zoning -- See Ch. 225.

§ 206-1. Findings.

The Borough of Hawthorne finds that the development of unimproved or vacant land for the purpose of erecting buildings or structures has resulted in indiscriminate and excess removal of trees upon tracts of land and has resulted in creating increased surface drainage and soil erosion, thereby increasing municipal costs to control drainage within the borough. It further finds that such excessive removal and destruction of trees impairs the proper occupancy of existing residential areas and impairs the stability and value of improved and unimproved real property in such areas, with attendant deterioration of conditions affecting the health, safety and general welfare of the inhabitants of the borough, and further finds that regulations for the indiscriminate removal of trees is within the police power of the borough.

§ 206-2. Definitions.

For the purposes of this chapter, the following words shall have the meanings indicated:

BUFFER AREA -- The distance from the side and rear property lines beginning at the front setback line of the lot and running to the rear line.

BUILDING PLOT -- A parcel of land upon which a building or structure has been or may be erected in accordance with Ch. 255, Zoning.

PERMIT -- A license issued by the Construction Official to remove or destroy trees from any unimproved or vacant land as defined in this chapter.

TREE -- Any living tree having a trunk of a diameter of eight (8) inches or greater measuring at a height of three (3) feet above natural grade.

UNIMPROVED OR VACANT LAND -- Such privately owned land upon which no building or structure has been completely built, for a period of two (2) years after the certificate of occupancy is issued.

§ 206-3. Applicability.

The provisions of this chapter shall apply to all unimproved or vacant lands within the borough.

§ 206-4. Permit required; application procedures.

- A. Permit required. No property owner shall remove or destroy or cause to be removed or destroyed by any person any tree on any unimproved or vacant tract of land within the borough unless a permit is obtained for such removal.
- B. Application fee. The permit shall be obtained from the Construction Official upon an application being made therefor and a fee of ten dollars (\$10.) being paid with each application.
- C. Application information where no building permit is requested. An application for a permit for removal or destruction of any tree or tract where no building permit is requested or contemplated shall contain the name of the applicant, the name of the owner of the property with the consent of the owner if different from the applicant, the location and species of trees on a sketch of the property and the reasons for the removal or destruction.
- D. Application information where building permit is sought. An applicant/owner shall file, along with an application for a permit for removal or destruction of trees where a building permit for construction is being sought, a site plan, and a tree plan showing the location and species of trees on site and which trees on the property are to be removed, together with the condition of such trees shown on the plan by the architect or engineer, under the seal of such architect or engineer.

- E. Determination of Planning Board; issuance of permits. In the event of an application for development pending before the Planning Board, the Planning Board shall determine which trees may be removed, and the permit for such removal shall be issued by the Construction Official at the time of the issuance of the building permit.
- F. Referral to other agencies. The Planning Board shall refer all applications to the Shade Tree Commission for their examination and opinion. Their report shall be submitted to the Planning Board within twenty (20) days of receipt of same. The Planning Board shall not be bound by the recommendations of these committees, and failure to submit a report to the Planning Board within twenty (20) days shall not be construed as a restriction at any time following the expiration of the twenty-day period.
- G. Surety bond required where building permit is sought. In all cases of application for permit where a building permit is applied for, there shall accompany the application a cash or surety bond in a minimum sum of five hundred dollars (\$500.) for each acre with the application for building permit, with the amount to be determined by the Construction Official, which bond shall assure compliance with the preservation of those trees not to be removed, which bond shall be returned with the certificate of occupancy, less any costs expended by the borough to replace trees improperly removed or destroyed in violation of the permit.
- H. In cases where the service of a tree expert is required in cases where a building permit is applied for at the same time, the cost thereof shall be borne by the applicant and payment of the same shall be a condition precedent to the release of the bond filed or the issuance of a permit.
- I. Appeal. In the event of denial of any permit by the Construction Official, the applicant may appeal that decision to the Zoning Board of Adjustment as provided by statute.

§ 206-5. Standards for removal.

The following shall be the standards to be applied in determining which tree may be removed:

- A. Hardship in such cases shall be based on an examination of all the circumstances considering the applicant's hardship. If the hardship of the owner outweighs the public benefit promoted by retention of trees, a hardship requiring removal may be found to exist.
- B. Any area to be occupied by a building, driveway, walkway, drainage field, septic tank or recreation area (tennis courts, swimming pools or similar facilities) may have the trees removed but not more than fifteen (15) feet around the perimeter of such facilities.
- C. The area in the required buffer shall remain undisturbed.
- D. The area that has a cut or fill deemed injurious or dangerous to trees may have removal of trees in such area, as determined by the Construction Official.
- E. The Construction Official shall view the land where the tree or trees are to be removed, as well as drainage or other physical conditions existing on the subject or adjoining property, and may consider the opinion of the Shade Tree Commission.
- F. The permit shall be granted if there is a finding that the removal and destruction will not impair the growth and development of remaining trees on the property of the applicant or adjacent properties and would not cause erosion of soil, impair existing drainage, lessen property values in the neighborhood or impair the aesthetic value of the area.

§ 206-6. Regulations.

- A. Protection of trees. No soil material, permanent or temporary, shall be placed within six (6) feet of any tree. Where grading may be required, trees shall be walled in with extension tile to the outer crown of the tree. No structure, equipment or movable machinery which would injure the tree shall be permitted to operate within six (6) feet of any trees in order not to disturb the soil and thereby injure the tree. Prior to removal for construction activity, all trees to be retained shall be tagged. Said tagging shall be reviewed by the office of the Construction Official.
- B. Exempt lands or activities. The following lands or activities shall be exempt from the provisions of this section:
 - (1) Borough land.
 - (2) County land.
 - (3) State land.

§ 206-7. Removal of diseased trees.

No fee shall be charged or a permit required for the removal of diseased or damaged trees.

§ 206-8. Violations and penalties.

Any person violating any of the provisions of this chapter shall be subject to fines, imprisonment or community service not exceeding the penalties provided in N.J.S.A. 40:69A-29(b).