

**VILLAGE OF GREAT NECK PLAZA**



# **TREE MANAGEMENT PLAN**

JULY 2014

Prepared for by







# TABLE OF CONTENTS

<b>1. INTRODUCTION</b>	<b>1</b>
1.1 MISSION STATEMENT	1
1.2 URBAN FOREST	1
1.3 BENEFITS OF TREES	1
1.3.1 SOCIAL AND COMMUNITY BENEFITS	1
1.3.2 ENVIRONMENTAL BENEFITS	2
1.3.3 ECONOMIC BENEFITS	2
1.4 WHY DO WE NEED A VILLAGE TREE MANAGEMENT PLAN	3
1.5 INTERESTING FACTS ABOUT TREES	3
1.5.1 AIR QUALITY	3
1.5.2 ENERGY	4
1.5.3 WATER	4
1.6 DEFINITIONS	4
<b>2. URBAN FOREST GOALS &amp; NEEDS</b>	<b>9</b>
2.1 BIOLOGICAL NEEDS	9
2.1.1 INCREASE SPECIES DIVERSITY	9
2.1.2 INCREASE AGE DIVERSITY	9
2.1.3 SELECTING THE RIGHT TREE FOR THE RIGHT PLACE	9
2.2 MANAGEMENT NEEDS	11
2.2.1 LONG TERM PLANNING	11
2.3 COMMUNITY NEEDS	11
2.3.1 INCREASE PUBLIC AWARENESS	11
<b>3. TREE INVENTORY</b>	<b>13</b>
3.1 STREET TREE INVENTORY BY CORNELL SWAT	13
3.2 RESULTS OF TREE INVENTORY	13
3.3 UPDATES FROM THE VILLAGE OF GNP AFTER HURRICANE SANDY	16
3.4 UPDATED TREE INVENTORY BY THE RBA GROUP	16
<b>4. PUBLIC EDUCATION AND AWARENESS PROGRAM</b>	<b>17</b>
4.1 PUBLIC EDUCATION	17
4.2 PUBLIC AWARENESS PROGRAM	17



4.2.1	VIDEOTAPED PUBLIC WORKSHOP	17
4.2.2	INFORMATION AVAILABLE THROUGH THE VILLAGE’S WEBSITE	18
4.2.3	EDUCATIONAL BROCHURE	19
<b>5.</b>	<b>MAINTENANCE RECOMMENDATIONS</b>	<b>21</b>
5.1	TREE PLANTING	21
5.1.1	WHEN TO PLANT	21
5.1.2	HOW TO PLANT	21
5.1.3	WHAT TO PLANT	23
5.1.4	WHERE TO PLANT	24
5.1.5	WHERE NOT TO PLANT	24
5.2	TREE MAINTENANCE	25
5.2.1	YOUNG TREE MAINTENANCE	25
5.2.2	MATURE TREE CARE	26
5.2.3	VETERAN TREE CARE	27
5.2.4	DO-NOT-DO FOR URBAN TREES	28
5.3	TREE REMOVAL	28
5.3.1	WHEN TO REMOVE A TREE	28
5.3.2	PROPERTY OWNER – TREE ON PRIVATE PROPERTY	29
5.3.3	PROPERTY OWNER – TREE ON PUBLIC PROPERTY	30
5.3.4	PRIVATE TREE OBSTRUCTION PUBLIC PROPERTY	30
5.4	TREE REPLACEMENT	31
<b>5.</b>	<b>APPENDIX</b>	<b>33</b>
A.	APPROVED STREET TREE LIST	
B.	NEW STREET TREE LOCATION MAP	
C.	TREE PLANTING DETAILS	
D.	PUBLIC OUTREACH TREE WORKSHOP	
E.	VILLAGE OF GREAT NECK PLAZA INFORMATIONAL BROCHURE	
F.	ISA INFORMATION PAMPHLETS	
G.	EXISTING STREET TREE LOCATION MAP & SPREAD SHEET	
H.	FEMA & LEHMAN PLANT CARE TREE ASSESSMENT AFTER SANDY	
I.	SWAT TREE INVENTORY BY CORNELL UNIVERSITY	
J.	RECOMMENDED URBAN TREES – CORNELL UNIVERSITY	
K.	REFERENCES	



# 1. INTRODUCTION

## 1.1 MISSION STATEMENT

It is the intent of the following document to recognize the values and benefits that our Urban Forest brings to the Village of Great Neck Plaza, and to do everything within our power to preserve this ecosystem within our Village borders for future generations.

## 1.2 URBAN FOREST

Urban forests are ecosystems of trees and other vegetation in and around communities that may consist of street and yard trees, vegetation within parks and along public rights of way and water systems. Urban forests provide communities with many benefits (see following chapter). Thus, urban forests are not only about the trees in the Village, but rather, they are a critical part of the green infrastructure that makes up the Village ecosystem. The care and management of urban forests is called urban forestry.

Because of their proximity to human activity, urban forests are exposed to more man-made disturbances than their rural counterparts, which can negatively affect their health, and therefore their ability to providing benefits. Many non-native invasive species and diseases are introduced in urban areas, threatening the urban forest and potentially spreading to rural forests. Urban areas are subject to much higher rates of pollution than rural areas, threatening the health of both people and urban forests. As urban areas continue to expand, forests become fragmented and destroyed, decimating forest health and biodiversity.

All trees provide a wide range of benefits to their ecosystems. In an urban forest, many of those benefits are directly related to the people who live around them. More than 80 percent of Americans live in urban areas, so urban forests are playing a very important role in these urban settings.

## 1.3 BENEFITS OF TREES

The benefits of trees can be grouped into three categories: Social and community benefits, environmental benefits and economic benefits.

### 1.3.1 SOCIAL AND COMMUNITY BENEFITS

- 1.3.1.1 People have strong emotional ties to trees.
- 1.3.1.2 Hospital patients have been shown to recover from surgery more quickly when their hospital room offers a view of trees.



- 1.3.1.3 Recent studies suggest trees can reduce crime in two important ways: Street trees will encourage more people to use the outdoor space and thereby defend the community against crime. Well maintained vegetation and trees imply that residents care about their home and community and that an intruder could be noticed and reported.
- 1.3.1.4 A pleasing urban forest can encourage people to walk in their neighborhood which in return improves the physical well-being of people.

**1.3.2 ENVIRONMENTAL BENEFITS:**

- 1.3.2.1 Trees alter the environment in which we live by moderating the climate, improving air quality, conserving water and supporting wildlife.
- 1.3.2.2 Trees provide shading in summer, reduce wind speed, deflect rain and slow down stormwater runoff.
- 1.3.2.3 Trees offer habitat for birds and other wildlife, improve air quality by removing dust and other solid particles and they absorb carbon dioxide.

**1.3.3 ECONOMIC BENEFITS:**

- 1.3.3.1 Tree-shaded homes have a decreased air-conditioning use; tree-windbreaks reduce heating cost.
- 1.3.3.2 Landscaped homes have a higher real-estate value than non-landscaped ones. Homes on tree-lined streets sell faster at a higher price than homes on barren streets.
- 1.3.3.3 Tree-lined business and retail districts encourage patrons to linger and shop longer.
- 1.3.3.4 U.S. Forest Service developed a cost-benefit model to evaluate the public investment in their tree population. The overall value of trees is compared to the costs of planting and maintaining a community's tree population. Every \$1.00 invested in the planting and care of public trees, the city and citizens receive an average of \$4.00 in services and benefits.

The Village of Great Neck Plaza finds and declares that there is a direct relationship between the preservation, maintenance and planting of trees, shrubs and associated vegetation and the health, safety and general welfare of its Village residents. This connection is directly related to the environmental values and the physical and visual qualities of such environment, which the Town is obligated to protect. It shall be the policy of the Village to improve and maintain the Urban Forest within its border.



## **1.4 WHY DO WE NEED A VILLAGE TREE MANAGEMENT PLAN?**

The Village faces many challenges with its urban forest. This holds especially true for its street trees. Street trees are defined as any tree or part of a tree, existing or new planting, including the canopy and root system, that lies on or has grown onto or over public property, or in public “right of way” owned by a public entity. Specifically, these are the trees that line the streets and lie in the grassy utility strip between the street curb and sidewalks. As street trees continue to grow, they continue to encroach on sidewalks, curbs, streets, and utility services. The outcome has led to sidewalks cracking and lifting, curb cracking, and sewer and utility lines being invaded. Or sometimes trees just grow old and begin to die of old age, becoming a dangerous situation for Village residents and visitors.

The development of a tree management plan is an important tool in managing the urban forest. A management plan establishes a clear set of priorities and objectives in written form. Having a plan in place will decrease the risk and the cost associated with tree or tree branch failures by maintaining the trees at their best condition while taking advantage of all the benefits trees contribute to the community.

There are 4 major objectives that should be achieved through developing a Tree Management Plan.

- Develop and provide the tools necessary for defining a long-term vision for all trees within the Village of Great Neck Plaza, may these be public or private trees.
- Establish rules and practices relating to the protection, management and appropriate maintenance of Village street trees and sidewalks.
- Increase the number of trees planted based on the principle of replacing diseased and felled trees and planting new trees in the right location.
- Step up information publications and awareness initiatives with a view to involving everyone – residents, municipal employees and elected officials, commercial property and business owners, and concerned special interest groups.

## **1.5 INTERESTING FACTS ABOUT TREES**

### **1.5.1 AIR QUALITY:**

Trees keep the air supply fresh by absorbing carbon dioxide and producing oxygen.

1.5.1.1 In one year, an acre of trees can absorb as much carbon as is



produced by a car driven up to 8700 miles.

- 1.5.1.2 One large tree can provide a day's supply of oxygen for four people.
- 1.5.1.3 A tree does not reach its most productive stage of carbon storage for about 10 years.

### **1.5.2 ENERGY:**

Trees lower air temperature by evaporating water in their leaves.

- 1.5.2.1 Trees properly placed around buildings can reduce air conditioning needs by 30 percent and save 20-50 percent in energy used for heating (USDA Forest Service).
- 1.5.2.2 The net cooling effect of a young, healthy tree is equivalent to ten room-size air conditioners operating 20 hours a day.
- 1.5.2.3 Each year, one person uses wood and paper products equivalent to a 100 foot tree 18 inches in diameter.

### **1.5.3 WATER:**

Trees lower air temperature by evaporating water in their leaves.

- 1.5.3.1 In one day, one large tree can lift up to 100 gallons of water out of the ground and discharge it into the air.
- 1.5.3.2 For every (5%) five percent of tree cover added to a community, stormwater runoff is reduced by approximately (2%) two percent.
- 1.5.3.3 Trees improve water quality by slowing and filtering rain water as well as protecting aquifers and watersheds.

*Source: American Forest*

## **1.6 DEFINITIONS**

**ARBORIST** - An individual with related training and experience to demonstrate competency in arboriculture or urban forestry and must be certified by the International Society of Arboriculture and be approved by the Village of Great Neck Plaza.

**APPLICANT** - The property owner, or his/her duly authorized agent, requesting a tree removal permit from the Village pursuant to this chapter.

**BUILDING INSPECTOR** - The Building Inspector of the Village of Great Neck Plaza.



**CALIPER** - The measurement of the diameter of the trees taken at a specific point above ground level or as near to that point as possible:

1. Transplantable trees having less than four (4) inch calipers shall be measured six (6) inches above the ground.
2. Transplantable trees having four (4) to eight (8) inch calipers shall be measured twelve (12) inches above the ground.
3. Non-transplantable trees having calipers of eight (8) inches or more shall be measured four and one-half (4 ½) feet above the ground.

**COMMISSIONER** - The commissioner of the Department of Parks, or the Department of Public Works of the Village of Great Neck Plaza, as indicated.

**CRITICAL ROOT ZONE** - The area around a tree requiring protection as determined by an Arborist; generally the area one (1) foot outside the drip line of the tree and in no case closer than five (5) feet to the trunk of the tree.

**CURBSIDE AREA** - Includes all land lying between the curb line of the public highway and the property line of the abutting premises, which has not been surfaced or improved with concrete or other paving material.

**DESTRUCTION OR REMOVAL** - Includes, but is not limited to, such practices as girdling, ringing the tree, excessive peeling of bark, compacting or overburdening the roots, trenching within the critical root zone, application of herbicides or poisons, or any other practice or action which may reasonably be expected to cause disease or decline of a tree, either immediately or within the course of time or result in the unnatural death of a tree, but shall not include regular maintenance such as pruning of a tree or elimination of dead or dangerous trees or limbs.

**DIAMETER AT BREAST HEIGHT (DBH)** - The tree trunk diameter or caliper at a height of four and one-half (4 ½) feet above ground level at the base of the uphill side of the tree. If a tree splits into multiple trunks below four and one-half (4 ½) feet, then the trunk is measured at its most narrow point beneath the split.

**DRIP LINE** - An imaginary, roughly circular line extending from the maximum spread of the branches of a tree to the ground.

**EMERGENCY** - Any condition in which the continued existence of any tree or portion of any tree shall represent an imminent danger to human life, physical health or property.

**HABIT** - The natural growing characteristics of any tree which includes branch spread and distribution, branch height above ground and root spread and distribution.

**HAZARD TREE** - A tree with a structural defect and/or disease, which makes it subject to a high probability of failure and an imminent danger to human life,



physical health and property.

**LANDSCAPE ARCHITECT** - A certified professional who holds a degree in landscape architecture, which involves training and experience in horticulture, landscape design and planning, demonstrates competency in such areas and is licensed by the State of New York.

**LOT** - A parcel of land, which may include, one or more platted lots, occupied or intended for occupancy by a use permitted in this chapter, including one main building, together with its accessory buildings, the yard areas and parking spaces, and having its principal frontage upon a public street or other way which provides safe and adequate access.

**PERSON** - Any individual, firm, partnership, association, corporation, company, public agency, public utility or organization of any kind or agent thereof.

**PLANNING BOARD** - The Planning Board of the Village of Great Neck Plaza.

**PRUNING** - The trimming of a tree designed to retain the tree's natural habit, balance and stature in accordance with the latest American Nurseryman's Association standards.

**PUBLIC ROADS** - Roads, streets or highways owned by the Village of Great Neck Plaza, County of Nassau or the State of New York.

**REAL PROPERTY** - Includes all unimproved real property and improved property, which is subject to further subdivision within the zoning district in which it is located.

**REPLACEMENT TREE** - Any tree that is planted or is an existing tree that is designated by the Commissioner as a substitute for a removed Tree.

**SUBSTANTIAL ALTERATION** - Any cutting, pruning, elevating or other alteration of the habit of a tree which impairs or endangers the life of such tree or destroys its natural symmetry; and shall include but is not limited to heavy or unnecessary cutting of top branches (topping), cutting of major lower limbs (severe elevating) or drastic pruning and shall not include customarily accepted or ornamental procedures.

**TREE** - Any living, woody plant with an erect perennial trunk and a definitely formed crown of foliage, its root system and the environment within the area defined by the outermost limits of its branches, which has a DBH of six (6) inches or more.

**TREE PRESERVATION PLAN** - A plan indicating the location, species, size and condition of all trees on a property which are eight (8) or more inches DBH and detailing the methods and practices to be used to provide protection for all such trees to be preserved.



**TREE REMOVAL** - An act, which will cause a tree to be removed or to die within a one (1) year period.

**TREE REMOVAL PERMIT** - A permit granted pursuant to the requirements of this chapter, which allows the removal of one or more trees.

**UTILITY STRIP** - The space between the curb and the sidewalk. Often also referred as planting strip.

**VEGETATION** – Includes trees, shrubs, bushes, grasses, flowers and similar plant life.

**VILLAGE BOARD** - The Village Board of the Village of Great Neck Plaza.

**VILLAGE OF GREAT NECK PLAZA**- The geographical area of the Village of Great Neck Plaza excluding incorporated villages.

**VILLAGE ROAD OR HIGHWAY** - A street or roadway maintained by the Village.

**WOODLAND** - A group of trees of any size forming a common canopy of intertwined tree branches which may also contain understory vegetation of any size, including but not limited to flowering dogwood (*Comus florida*), shadbush (*Amelanchier* subspecies), mountain laurel (*Kalmia latifolia*), sumac, wild rose or similar vegetation. Any and all understory vegetation shall be considered part of the woodland and shall therefore be protected as defined within this chapter.





## 2. URBAN FOREST GOALS AND NEEDS

The goals and needs to sustain a healthy and thriving urban forest are further subdivided into biological, management and community needs. The following paragraphs compare the general requirements of a healthy urban forest against the current condition of the urban forest in the Village of Great Neck Plaza and make specific recommendations for improvement.

### 2.1 BIOLOGICAL NEEDS

#### 2.1.1 INCREASE SPECIES DIVERSITY

As a general rule, no one tree species should constitute more than 10% of the street tree population and no one tree genus should exceed 20% of the street tree population. Having an equally distributed diversity of tree species reduces the risk of disease susceptibility. If a species or genus becomes susceptible to an insect or disease, a majority of the community's trees will likely not be affected.

In the Village of Great Neck Plaza the percentages of Callery Pear and Pin Oak exceed the 10% rule and indicate these species are overrepresented in the population. Callery Pear with over 20% representation indicated a significant overrepresentation in the population.

Goal: New plantings should primarily include genera other than Pears (Pyrus) and species other than Callery Pear (Pyrus calleryana) and Pin Oak (Quercus palustris).

#### 2.1.2 INCREASE AGE DIVERSITY

As a general rule, the older and larger a tree is, the more benefits it provides. Younger trees in the street tree population account for the future loss of trees over time and thereby warranty a sustainable community forest. A community which plants trees regularly, has a high amount of young trees tapering off to a small amount of old trees.

The Village of Great Neck Plaza has an overall tree stocking level of 59.34%, which is consistent with the national average. However, the age distribution is not ideal in the Village, since the majority of trees is comprised of middle aged to old trees, specifically for the predominant species Callery Pear and Pin Oak.

Goal: Additional trees need to be planted along the Village's streets to compensate for the future loss of older trees.

#### 2.1.3 SELECTING THE RIGHT TREE FOR THE RIGHT PLACE

As a general rule, the key to long-term tree survival and reduced maintenance is the selection of the right tree for the right place. The



following site conditions need to be considered before selecting a planting site:

- Space constraints through overhead or underground utilities, driveways, sidewalks, street curbs, building foundations, light poles, fire hydrants, etc.
- Exposure to sun and wind (full or partial sun – only a few trees tolerate full shade; wind can be damaging – requires initial staking).
- Soil conditions, including soil type, depth of top soil, pH of soil, drainage.
- Function of tree, following the guiding principle of “form follows function”. Selecting the right form (habit, fruits, flowers, foliage, ...) of a tree to complement the desired function (what you want the tree to do, like shading, screening, conserve energy, reduce erosion, wildlife benefits, enhance looks) can significantly reduce maintenance costs and increase the tree’s value in the landscape.
- Hardiness zone, a plants ability to survive cold temperatures of a particular geographic region. The Village is located in plant hardiness zone 7b (low temperatures are very seldom below 5-10 degree Fahrenheit)
- Maintenance requirements like messy fruits clean up, spraying for disease susceptibility, cleanup of leaves.
- Insect and disease resistance of selected plants.

In the Village of Great Neck Plaza the inventoried street trees are generally in good condition.

But the results of the inventory show that 28% of the trees have an existing wire conflict.

5 Ash trees (*Fraxinus*) have been identified, which are a potential host for the Emerald Ash Borer (EAB), an invasive pest that has devastated Ash trees in the Midwest and has now spread to New York State.

75 Maple trees (*Acer*) have been identified, which are a potential host for the Asian Longhorned Beetle (ALB), an invasive pest that has been found in New York City, in Amityville and Islip on Long Island, and elsewhere in the United States and Canada. Maple (*Acer*) and Horsechestnut (*Aesculus*) have been found to be tree genera attacked and killed by the ALB, both of which have been excessively planted as street trees in New York State.

Goal: For new street tree plantings, the presence or absence of overhead utility wires is important to consider when selecting a street tree species to be planted. Where overhead utility wires are present, smaller growing tree species maturing at less than 30’ in height are advisable. Where overhead utility wires are not present, and where planting volumes are adequate,



taller growing tree species maturing at more than 30' in height should be considered to maximize the benefits provided by street trees

Already planted trees which have an existing overhead wire or underground utility conflict should be added to a priority maintenance list. Removal and replacement of those trees should be carefully out weight against future maintenance requirements and general health for each tree an on individual basis.

New plantings of Ash trees and trees of the Maple species should be avoided and consideration should be given to the likely need to remove established Ash and Maple trees in the future.

## **2.2 MANAGEMENT NEEDS**

### **2.2.1 LONG TERM PLANNING**

As a general rule, the main goal of urban forestry is to manage tree resources to maximize their environmental, social, and economic benefits while managing any associated risks and costs. A comprehensive management plan is needed to manage large populations of trees under urban pressures and financial restraints of a municipality. Such a plan develops and documents the strategies and procedures for managing the trees within a specific area.

The Village of Great Neck Plaza has completed a comprehensive tree inventory of all their community trees (see Chapter 3). This inventory is the basis for the currently developed tree management plan.

Goals: The management plan will include a detailed information about tree planting (when, how, what, where), tree maintenance, and tree removals. All information will need to be updated on an annual basis to evaluate the progress and outcome. Educational training courses of the Village's own personnel on topics such as tree pruning, planting and general maintenance will be part of the on-going effort to improve the management of the urban forest.

## **2.3 COMMUNITY NEEDS**

### **2.3.1 INCREASE PUBLIC AWARENESS**

As a general rule, public education is a key element to improving the health and management of the Village's urban forest.

The Village of Great Neck Plaza values the benefits of its community trees for their beauty, shade, attractiveness for the business district and increase in property values. The leader's commitment to its trees is unquestionable as indicated by the investment into the tree inventory by SWAT and this report. The Village recognizes the need to further invest into its urban forest and engage its residents, business owners and own



personnel.

Goals: The intent of this document is to increase public awareness of the importance of the urban forest, educate the Village residents about the value trees add to the community, provide planting tips and tool which one can use on their private property, and further train the Village's own personnel on the proper maintenance of trees. The specific programs the Village selected are outlined in more detail in Chapter 4.



## 3. TREE INVENTORY

### 3.1 STREET TREE INVENTORY BY CORNELL SWAT

In May 2011 The Village of Great Neck Plaza engaged Fred Cowett, Ph.D. from the Department of Horticulture at Cornell University to conduct a village wide tree inventory. This project was in pursuance of Mr. Cowett's Ph.D. research and fulfillment of conditions for the "NYS Modeling Street Tree Populations on a Statewide Basis", a New York State Department of Environmental Conservation grant inventory data.

Mr. Cowett with the support of a Cornell SWAT team (student weekend arborist team) completed the inventory on May 22 and 23, 2011. A total of 715 trees were inventoried in the Village's right-of-way. Mr. Cowett completed the tree inventory utilizing i-Tree Streets Software developed by the USDA Forest Service to obtain further information on the Village's public street trees. Mr. Cowett's team identified the following values for each tree:

- GPS location
- Street address location
- Species
- Diameter at breast height
- Condition wood
- Condition leaves
- Percent deadwood
- Maintenance recommendation
- Consultation requirement
- Wire conflict

The i-Tree Streets Software was developed by the USDA Forest Service for urban forest management. It uses street inventory data to quantify the dollar value of annual urban forest benefits such as energy conservation, air quality improvements, CO2 reduction, storm water control, and property value increase.

Mr. Cowett submitted his inventory report in December 2011, which included an electronic GIS file with the inventoried tree locations, and an electronic EXCEL file with all the collected data about the trees. A complete copy of the report can be found in the Appendix of this document. Below is a summary of his findings:

### 3.2 RESULTS OF TREE INVENTORY

3.2.1 Overall a total of 34 different tree species were inventoried. The tree population is insufficiently diverse with an over representation of Callery Pears (plus Pears in general) and Pin Oaks. with Callery Pear (26.43%)



and Pin Oak (18.46%) occurring most often. As a general rule, no one tree species should constitute more than 10% of the street tree population (see Fig. 2.2.1.).

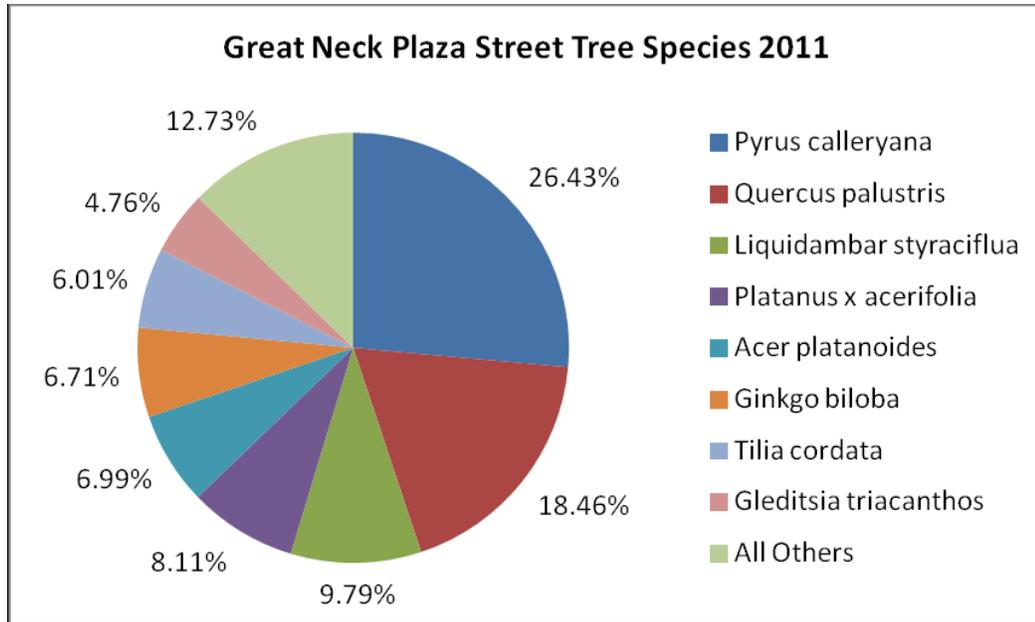


Fig. 2.2.1. - Cornell SWAT: Tree Species Distribution

- 3.2.2 The DBH distributions indicate that additional trees need to be planted to account for the future loss of older trees. 42.38% of trees have a diameter between 1-12", while 57.62% have diameters greater than or equal to 12". In general, the older and larger the tree, the more the benefits provided. At the same time, it is preferred to see a relatively large number of younger trees to account for the loss of trees over time. The size of the trees (DBH) indicates that additional trees need to be planted to account for the future loss of older trees. Ideally, the percentage of young trees should be approximately 30%, tapering down to less as the trees get older. Fig. 2.2.2. plots the DBH distribution for inventoried street trees in Great Neck Plaza against an ideal, J-shaped distribution for community trees
- 3.2.3 Trees are generally in good condition. 704 trees (98.46%) are in need of a Routine Prune at most; 11 trees (1.54%) were given a rating of High Priority Prune and 47 trees were given a rating of Consult Needed (6.57%) and should be inspected by a certified arborist. Callery Pears comprise a high proportion of the trees rated Consult Needed. and these concerns are highly correlated with poor condition wood (see Fig. 2.2.3.).

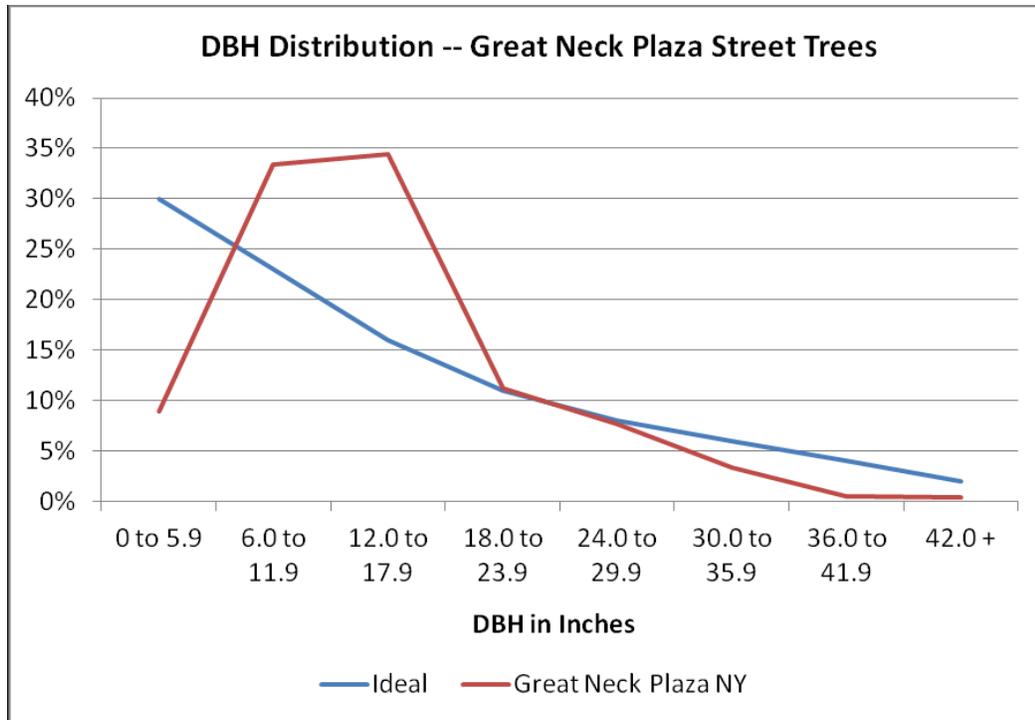


Fig. 2.2.2. - Cornell SWAT: DBH Distribution

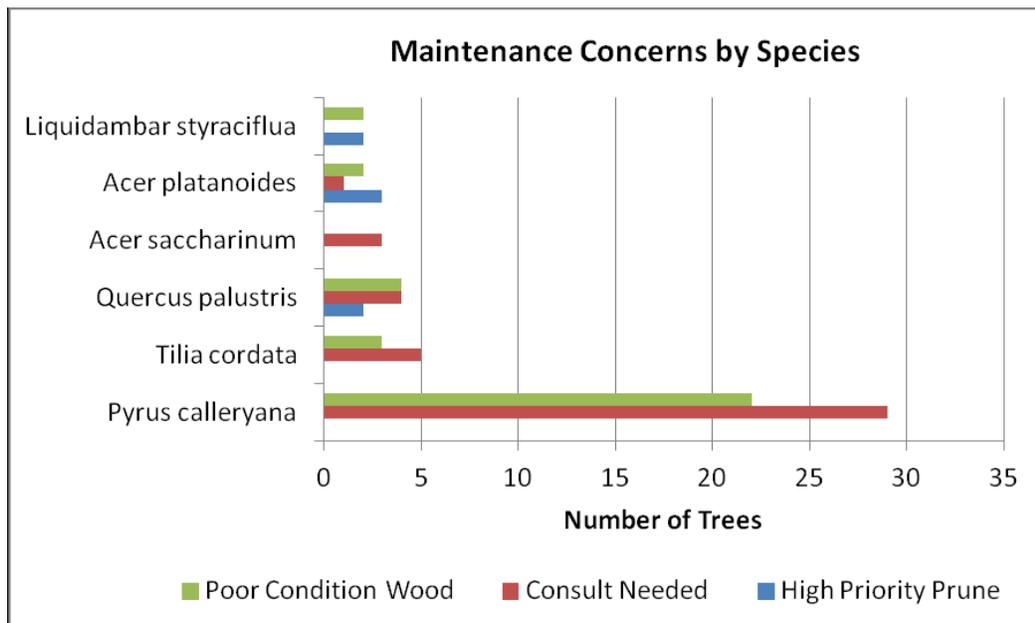


Fig. 2.2.3. - Cornell SWAT: Maintenance Concerns by Species

- 3.2.4 Of this total, energy conservation is \$40,613, CO2 reduction is \$1,082, air quality improvement is \$7,210, stormwater mitigation is \$9,718, and property value increase is \$47,875.
- 3.2.5 Not surprisingly, Callery Pear and Pin Oak, the most prevalent species among inventoried trees, contribute many of these benefits. Callery Pears account for \$34,944 in annual benefits, or 32.8% of the total; Pin Oaks account for \$20,904 in annual benefits, or 19.6% of the total.
- 3.2.6 The replacement value of all inventoried street trees as calculated by US



Forest Service i-Tree software is \$3,527,723. The replacement value of inventoried Callery Pears is \$404,341 or 11.46% of the total; the replacement value of inventoried Pin Oaks is \$519,835, or 14.74% of the total; the replacement value of inventoried Sweetgums is \$623,317, or 17.67% of the total; and the replacement value of inventoried London Planetrees is \$848,501, or 24.05% of the total.

### **3.3 UPDATES FROM THE VILLAGE OF GREAT NECK PLAZA AFTER HURRICANE SANDY**

The Village of Great Neck Plaza took a hit during Hurricane Sandy and lost a number of trees, other trees got damaged. Larry Lowe, a FEMA representative reviewed all the street trees and issued a list of further tree removals as a result from the Hurricane. A copy of this report can be found in the Appendix. The Village is in the process of acquiring the funds and following through with the tree removal recommendations.

In January 2013, Jon Hickey, from Lehman Plant Care, whose company has assisted in the maintenance of the Village trees in the past, reviewed all street trees to assess required storm damage repair by the removal of hanging branches, or complete tree removal. A copy of this compiled list can be found in the Appendix as well.

### **3.4 UPDATED TREE INVENTORY BY THE RBA GROUP**

In July 2013 The RBA Group was engaged by the Village of Great Neck Plaza to update the existing tree inventory and create a map of the Village which would graphically show all street tree locations including their species and identification number. With this identification number each tree can be linked to inventory chart, where more information about each tree can be found, such as the DBH, maintenance requirements, condition of wood and leaves, etc.

RBA updated the tree inventory done by Cornell SWAT by random field verification. A handful of projects had been implemented within the Village boundary since the original tree inventory took place. Amongst them the renovation of the Long Island Railroad train station plaza on North Station Plaza in 2011, and streetscape improvements on Maple Drive, which included some tree removals and new tree plantings. Any tree removals following Hurricane Sandy have been reflected as well. However, if a tree was called out to be removed on the FEMA removal's list, but in actuality was still there, such tree was shown as existing. The collected data was updated and reflected on the Village Tree Inventory Map and in the spread sheet file. A copy of both products can be found in the Appendix.

The results of the SWAT inventory as analyzed above are not significantly impacted by the update completed by The RBA Group.



## **4. PUBLIC EDUCATION & AWARENESS PROGRAM**

### **4.1 PUBLIC EDUCATION**

Public education is a key element to improving the health and management of the Village's urban forest. The Village recognizes that Great Neck Plaza's urban forest is an important and valuable resource, and properly managed and maintained, the Village trees will provide important benefits for its residents that will increase in the future. The Village wants to develop an extensive database of its urban forest and the public's attitudes and desires related to it. This data can be utilized to help improve and sustain the resources for years to come. Educating the village residents and municipal personnel about the significance of the Village's existing tree canopy and the relevance of replanting more trees for the future is an essential tool for preservation.

Currently the two responsible parties to maintain the Village's urban forest are the Commissioner of Public Services and the Department of Public Works. Village personnel provide the labor for tree removal and replacement of aged and diseased trees, manages tree pruning and stump removal services. For more complex pruning projects, the Village contracts these services to a certified arborist consulting firm, such as Lehman Plant Care Company.

The intent of this document is to increase public awareness of the importance of the urban forest and educate the Village residents about the value trees add to the community. This document also provides hands-on planting tips and tools to further train the Village's own personnel on the proper maintenance of trees and for application on private properties.

The following programs have been implemented, are part of this document or are in the process of development:

### **4.2 PUBLIC AWARENESS PROGRAM**

#### **4.2.1 VIDEOTAPED PUBLIC WORKSHOP**

With the assistance of the landscape architects from the The RBA Group as the Village's consultant, a one-day public workshop discussing the value of trees and property maintenance techniques was held on October 24<sup>th</sup>, 2013. The workshop was held in the court room of the Village Hall in two repeating one-and-a-half hour sessions, one starting at 4:00PM, a secondary session starting at 6:00PM. Attendants included residents of the Village of Great Neck Plaza and neighboring incorporated villages, government representatives and business owners.

The event was videotaped by Public Access Television Corporation (PATV) located in Lake Success. PATV produces television programming



of an educational, literary, cultural and civic nature. PATV is a 501© 3 not-for-profit organization serving the Village of Great Neck Plaza and fourteen other incorporated villages of Great Neck North Shore. The PATV programs are broadcast on cable TV to Cablevision (Channel 20) and Verizon FIOS (Channel 37) and are aired multiple times a month. Copies of the program in DVD format will be given to the local public library for residents to view who may not have had an opportunity to view it on cable TV or are not subscribers. PATV will soon be adding a component on their website for videos of this nature “on demand” that have a broad public interest. The public website is open to all users of the Internet and would not be restricted to just cable TV viewers.

Key components of the public workshop included the following topics:

- Facts about trees.
- Biology of trees.
- Benefits of trees.
- What is an urban forest?
- Results of the Great Neck Plaza tree inventory.
- What is the Village’s current maintenance plan?
- What is a tree management plan & why do we need one?
- Selecting the right tree for each location.
- What’s important when planting a tree?
- Best tree maintenance practices.

The presentation included many graphics, illustrative images and two video clips and was an education for all senses.

A hardcopy of the full presentation is included in the appendix. A DVD copy of the workshop is obtainable at the Village Hall.

#### **4.2.2 INFORMATION AVAILABLE THROUGH THE VILLAGE’S WEBSITE**

The Village is in the process of updating its website for their tree care program. Information pamphlets with various topics around tree care will be posted and available for downloads, as well as video clips about tree care and maintenance. Further information will include a FAQ page, addressing questions such as “What is the Village’s program for pruning and tree maintenance?”, “Will the Village prune or remove a tree that is blocking the visibility of my business or signage?”, and “Who can I contact about specific questions or problems with a tree?”. This information offers another opportunity to educate residents, business owners and municipal personal about the importance of the maintenance and replanting of the urban forest.

The pamphlets, developed by the International Society of Arborists (ISA),



are also part of the Appendix of this document and include the following topics:

- Avoiding Tree and Utility Conflicts
- Avoiding Tree Damage During Construction
- Benefits of Trees
- Buying High Quality Trees
- Insect and Disease Problems
- Mature Tree Care
- New Tree Planting
- Plant Health Care
- Proper Mulching Techniques
- Pruning Mature Trees
- Pruning Young Trees
- Recognizing Tree Risk
- Treatment of Trees Damaged by Construction
- Tree Selection and Placement
- Tree Values
- Trees and Turf
- Why Topping Hurts Trees

#### **4.2.3 EDUCATIONAL BROCHURE**

The Village is in the process of developing an educational brochure that will be distributed to the general public in hard copies at Village Hall and downloadable form its website. The brochure will include the following information:

- Information presented in the comprehensive Tree Management and Implementation Plan;
- How to properly plant, prune, and maintain trees;
- Recommended tree species for the Village.





## 5. MANAGEMENT RECOMMENDATIONS

### 5.1 TREE PLANTING

#### 5.1.1 WHEN TO PLANT

The best time to plant trees is during the dormant season — in the fall after the leaves drop or in early spring before the buds break. Weather conditions are cool and allow plants to establish roots in the new location before spring rains and summer heat stimulate new top growth. Healthy balled and burlapped or container trees, however, could be planted throughout the growing season if given appropriate care, but will need prior approval by the Village.

All trees and shrubs should be planted between March 15<sup>th</sup> and June 1<sup>st</sup> (in the spring), or between September 1<sup>st</sup> and November 15<sup>th</sup> (in the fall). Any planting outside of these dates will require a written approval by the Village.

Planting operations should always be conducted under favorable weather conditions. One should not plant in frozen ground or in weather conditions that make it impractical to work.

#### 5.1.2 HOW TO PLANT

All trees to be planted within the Village should be selected from the Approved Street Tree List (document included in Appendix) and must be appropriate for the specific planting site.

When trees are dug at the nursery, they lose a large portion of their root system. As a result, trees often go through a stage, called “transplant shock.” Transplant shock is a state of slowed growth and reduced vitality following transplanting. This is truer for balled and burlapped trees, but container trees may also experience transplant shock, particularly if they have circling or kinked roots that must be cut.

To reduce transplant shock and assure faster recovery, careful handling of the plant material and proper site preparation are the key to success, and the following guidelines should be followed:

5.1.2.1 Check for underground and overhead utilities.

5.1.2.2 Identify the trunk flare. The trunk flare is where the trunk expands at the base of the tree. This point should be partially visible after the tree has been planted. Remove excess soil from the top of the root ball prior to planting if the root flare is not visible



- 5.1.2.3 Dig a shallow, broad planting hole. Make the hole wide, as much as three times the diameter of the root ball but no deeper than the root ball. It is important to make the hole wide because the roots on the newly establishing tree must push through surrounding soil in order to establish. Breaking up the soil in a large area around the tree provides the newly emerging roots room to expand into loose soil.
- 5.1.2.4 Remove the containers or cut away the wire basket. Inspect container tree root balls for circling roots. Straighten, cut, or remove them. Expose the trunk flare, if necessary.
- 5.1.2.5 Place the tree at the proper height. Take care to dig the hole to the proper depth — and no more. The majority of a tree's roots develop in the top 12 inches (30 cm) of soil. If the tree is planted too deep, new roots will have difficulty developing because of a lack of oxygen. In poorly drained or heavily clayed soils, trees can be planted with the base of the trunk flare 2 to 3 inches (5 to 7.5 cm) above grade. To avoid damage when setting the tree in the hole, always lift the tree by the root ball and never by the trunk.
- 5.1.2.6 Straighten the tree in the hole. Before backfilling, have someone view the tree from several directions to confirm it is straight. Once planted, it is difficult to reposition the tree.
- 5.1.2.7 Backfill the hole gently, but firmly. Most of the time it is best to backfill the hole with the same soil that came out of it – only broken up as much as possible. Unless the soil is extremely poor, mixing peat moss, fertilizer, or other amendments is not recommended. Gravel at the bottom of the hole is not recommended. Pack soil around the base of the root ball to stabilize it. If the root ball is wrapped, carefully cut and remove any fabric, plastic, string, and/or wire from around the trunk and root ball to prevent girdling and to facilitate root growth. Fill the remainder of the hole, firmly packing the soil to eliminate air pockets that may dry out roots. Further reduce air pockets by watering periodically while backfilling.
- 5.1.2.8 Tree support. If the tree is grown and dug properly at the nursery, staking for support will not be necessary in most landscape situations. Possible exceptions include bare root stock and trees planted in areas with frequent high winds. Research has shown that trees establish faster and develop stronger trunk and root systems if they are not staked at the time of planting.

Staking is often used in urban settings as a means of preventing mower damage or vandalism. To minimize trunk injury it is best to use two stakes in conjunction with a wide, flexible tie material on the lower half of the tree trunk. This will keep the tree upright



and minimize injury while still allowing movement. It is very important to remove the support stakes and ties after the first year of growth to prevent injuries. Many trees are damaged or even killed because the staking material is left in place and eventually girdles the tree.

- 5.1.2.9 Create a shallow berm – saucer – around the outside of the planting hole with the remaining soil. This will help in directing the water straight to the tree roots
- 5.1.2.10 Mulch the base of the tree. This will maintain moisture, reduce grass and weed competition, and moderate soil temperature extremes while adding organic matter. The mulch layer should be no more 2-4 inches thick, to avoid reductions in oxygen and moisture levels. Do not pile mulch right up against the base of the tree (tree flare). Keep the mulch about 6 inches away around the tree flare to avoid moist bark conditions and decay. Common mulches include leaf litter, pine straw, shredded bark, peat moss, or composted wood chips.
- 5.1.2.11 Soak the tree with water. Give the newly planted tree a long, slow soaking. Make sure the water gets into the actual root ball.
- 5.1.2.12 Follow-up care. Keep the soil moist, but not water-logged. Trees need to be watered at least once a week, barring rain, and more frequently during hot, windy weather. Check the moisture level of the soil by touching the surface below the mulch. When the soil is dry, it is time to water. Continue watering until mid-fall, tapering off as lower temperatures require less-frequent watering. Remove branches damaged during planting. Wait with necessary corrective pruning until one full season of growth in the new location has occurred.

A list of typical planting details for various different applications can be found in the Appendix of this document.

### 5.1.3 WHAT TO PLANT

A tree list with Approved Street Trees for various applications is included in the Appendix of this document. The trees are categorized by size, shape, growth rate, visual interest, environmental tolerances and sensitivities, special needs, overhead and underground utilities. Any tree planted in the Village of Great Neck Plaza on public land will need to be selected from this approved list.

This list is compiled using the following source documents:

- Recommended Urban Trees, Site Assessment and Tree Selection for Stress Tolerance, by the Urban Horticulture Institute, Department of Horticulture, Cornell University, Ithaca, New York.



- Approved Tree Species List, New York City, Department of Parks and Recreation
- Right Tree Right Place, PSEG Long Island

#### **5.1.4 WHERE TO PLANT**

New potential street tree locations have been identified throughout the Village boundary and indicated on the New Tree Planting Map, which is included in the Appendix of this document. Trees to be planted should be selected from the Approved Street Tree List.

#### **5.1.5 WHERE NOT TO PLANT**

For spacing and locations, the tree planting should follow the following guidelines:

- Tree planting should not be permitted in areas where the distance between the curb and the sidewalk is less than 4 feet.
- No tree shall be planted closer than 20 to 30 feet to another tree, depending upon the tree species.
- No tree shall be planted closer than 15 feet to any utility pole or street light.
- No tree shall be planted closer than 5 feet to any fire hydrant.
- Trees may be planted on either side of sidewalks (if any exist) in lawn areas where there is sufficient room between the property line and the street curb.
- Do not plant in front of building entrances in order to permit easy access by the Fire Department.
- No trees can be planted within bus stops.
- Minimum distance from a stop sign is 30'.
- Minimum distance from other traffic signs is 6'.
- Suggested distance from a parking meter is no more than 5' behind the meter, to allow for the swing of car doors.
- Minimum distance from a curb cut or driveway is 7'.
- Minimum distance from the middle of a street intersection is 40'.



## 5.2 TREE MAINTENANCE

Regular preventative maintenance, designed to promote tree health and structural integrity, ensures a tree's value will continue to grow and prevents the development of more costly problems in the future. An effective maintenance program, including regular inspections and necessary follow-up care — pruning, mulching, fertilizing, and additional soil management — can identify problems and correct them before they become damaging or fatal.

All tree maintenance follows the criteria set by the International Society of Arboriculture, the National Arborist Association and the American National Standards Institute. Depending on the age of the tree, the maintenance differs for young, mature and veteran trees:

### 5.2.1 YOUNG TREE MAINTENANCE

A newly-planted tree or a small-caliper tree that has been planted for less than 3 to 5 years can be considered a young tree. A young tree that has been recently planted is still establishing its root system and adjusting to its new site, and requires a different level of care. Proper care of your young, newly-planted tree will speed up root establishment and help it grow to its full potential.

Proper watering and mulching are needed to get young, newly planted trees off to a good start. Newly planted trees can be vulnerable to stress until they become established in the landscape. A young tree must be watered regularly during its first few years. The soil should be moist to a depth of 12 inches (0.3 m) below the soil surface. Slow, deep watering once a week is preferred over fast, shallow watering.

Applying mulch will keep the soil moist and cool, and will protect its trunk from mower damage. Apply mulch around your tree with a layer no more than 2-4 inches in depth of organic mulch. Make sure the mulch layer extends outward to at least the tree's drip line (extent of the canopy). Avoid building a "volcano" of mulch around your tree. Mulch should never be piled close to the tree's trunk as this can cause the trunk to decay, and it provides habitat for diseases, fungi, insects, and small mammals. The mulch ring should be a thin layer and be as wide as practical.

Fertilization is not recommended at the time of planting. Careful consideration should be given before you fertilize or prune a young tree. After the third growing season, a slow-release fertilizer can be applied if the soil has nutrient deficiencies. Sample the soil around the tree, verify if there are any nutrient deficiencies, and recommend the best way to correct it.

Pruning newly planted trees should be avoided until the tree is established in the landscape. Remove only dead, dying, or broken limbs and prune lightly to remove crossing or rubbing branches. Remember that newly planted trees need as much of their canopy as possible to produce the



food and energy necessary to establish their root systems quickly. Proper pruning is essential in developing a tree with a strong structure and desirable form. Pruning can start after the first growing season and/or after the tree has recovered from transplant shock. Trees that receive appropriate pruning while they are still young will require little corrective pruning when they mature. The goals of young tree training are to develop a central leader, well-spaced scaffold branches, and a strong trunk.

## 5.2.2 MATURE TREE CARE

A mature tree is a tree that is planted for at least 5 years and is established at its current location.

Regular tree inspections can pick up changes in a tree's health before a disease, insect, or environmental problem becomes too serious to address. Mature trees should be inspected once a year to assess four characteristics of tree vitality: new leaf or bud formation, leaf size, twig growth, and absence of crown dieback (gradual death of the upper part of the tree).

Reductions in growth, trunk decay, or crown dieback are fairly reliable cues that the tree's health has recently changed. These symptoms often indicate problems that began several years before. Loose bark, deformed growths, and mushrooms are common signs of stem decay. Any abnormalities found during these inspections, such as insect activity and/or spotted, deformed, discolored, or dead leaves and twigs, should be noted and monitored closely

Watering a mature tree is usually only necessary during unexpected drought conditions. During this time the tree should be watered once a week. The amount of water needed depends on the tree's size. Generally, it is best to use ten gallons of water per inch of trunk diameter for each watering. Again, slow, deep watering is preferred to fast, shallow watering.

Organic mulches can reduce environmental stress by moderating soil temperature, retaining moisture, reducing soil compaction, and keeping weeds and grass away. Mulches made from plant matter, such as shredded leaves, pine straw, peat moss, or composted wood chips, will add nutrients to the soil as they decompose and help improve overall soil biology. But most important, mulch keeps lawnmowers away from the trunk.

Soil management is also an important element of mature tree care. Trees in urban areas are often situated in soils that lack the nutrients, pH (acidity or alkalinity), drainage, or pore space (air and water space) needed for growth and development. Proper fertilization individually based on plant requirements can improve many deficiencies that limit growth. Insufficient



pH levels may prevent plant uptake, even though the soil nutrients may be sufficient. Soil amendments, such as sulfur, lime, can change the soil chemistry and help alleviate plant stress. It is very important to test the soil first to determine the proper fertilization measurements. Fertilizing can improve growth, but if not applied correctly, can adversely affect the tree's health.

Drainage systems or grading can help correct saturated soil conditions. Any trenching or earthmoving activities within the tree's root zone need to be done manually or with an air spade, to avoid damaging the root system of the tree.

Pruning mature trees is done to remove broken, dead, and/or diseased branches, improve tree structure or reduce risk. Ideally, large-diameter branches should not be removed. Mature trees have a hard time compartmentalizing (closing) large wounds and these may become an entry point for disease and/or decay. Pruning large trees requires special equipment, training, and experience. The use of personal safety equipment, such as protective eyewear and hearing protection is absolutely necessary if pruning work requires climbing, the use of a chain or hand saw, or the removal of large limbs.

### 5.2.3 VETERAN TREE CARE

A senescing or veteran tree is an old tree that has reached the upper limits of its lifespan and is not adding significant height or crown spread each growing season. The vitality and survival of a veteran tree can be dramatically affected by changes to its site conditions. Too much or too little of anything can stress these senior citizens of the urban forest.

Senescing (veteran) trees require watering and mulching just as they have all of their lives. Over time, the soil around veteran trees can become compacted by foot and mower traffic. To help avoid compaction and to maintain a vigorous root system, a wide mulch layer should be applied. If compaction is already a problem, arborists can use special techniques, such as soil aeration, to increase water and air movement in the soil.

However, a senior tree cannot tolerate the same level of fertilizing and pruning as a mature tree. These tasks should be performed with careful consideration and after consultation with a Certified Arborist.

If a veteran tree has sentimental or historic value, protection and support systems such as cabling and bracing, and lightning protection can be installed by Certified Arborists.

Veteran trees should be inspected at least annually for signs of decline or failure, insect and disease problems, and nutrient deficiencies.



## 5.2.4 DO-NOT-DO FOR URBAN TREES:

The following is a list of good practices for what NOT-TO-DO with your urban street trees. This list is address to home owners, business owners and municipal personnel.

- Don't let your dog do its business on the tree! - Curb your dog!
- Don't put any flags or flyers on trees! – It can cause damage to the bark of the tree and open up entry points for decease.
- Don't put out your garbage bags into the tree pit! – Garbage fluids could leach into the tree pit, the bags will cause compaction of the soil and therefore reduce oxidant intake of the tree roots.
- Don't chain your bike to a tree! – The chain can cause damage to the bark of the tree and open up entry points for decease.
- Don't plant any groundcover in the tree pit! – It is too much competition for the tree roots.
- Don't put signs up on trees using nails! – The nails will penetrate the bark and open up entry points for decease.

## 5.3 TREE REMOVAL

### 5.3.1 WHEN TO REMOVE A TREE

The Village recognizes the value of its Urban Forest and promotes not only the conservation but also the on-going expansion of its forest canopy in the continually evolving complex environmental setting that the urban landscape provides. The Village also recognizes that there are situations, where the removal of Village trees become inevitable, but sees the tree removal as the last resort. The determination of a tree's condition and recommended removal will be made by a Certified Arborist. Removal is only recommended when a tree:

- 5.3.1.1 is dead, dying, critically diseased or damaged beyond reasonable repair.
- 5.3.1.2 is causing an obstruction or is crowding and causing harm to other trees and the situation is impossible to correct through pruning.
- 5.3.1.3 is a danger of falling or dropping limbs.
- 5.3.1.4 is in danger of falling or uprooting.
- 5.3.1.5 is damaging vital infrastructure such as a sewer line, water line, gas or electrical conduit or is causing other major structural damage.
- 5.3.1.6 is host to aggressive, life-threatening disease or pests that threaten to spread to other trees.



The Village will not allow the removal of a tree solely because of leaf, flower and/or berry debris, and/or personal preference.

### **5.3.2 PROPERTY OWNER – TREE ON PRIVATE PROPERTY**

It shall be prohibited for any person to cut down, remove, or destroy any tree larger than six inches or substantially alter the habit of any tree larger than six inches within the Village without obtaining a permit.

It shall be prohibited for any person who owns or occupies real property to cause, suffer, permit, or allow the cutting down, removal, or destruction of any tree or the substantial alteration of the habit of any tree on real property, unless a valid permit shall have been issued for said work.

An application for a permit shall be made to the Commissioner of Public Works and shall include, but not be limited to, the following:

- 5.3.2.1 The name, address and telephone number of the applicant and property owner.
- 5.3.2.2 The street address and tax map designation of the subject property.
- 5.3.2.3 If the owner is not the applicant, a statement of authority from the owner to make said application.
- 5.3.2.4 Purpose of proposed tree removal.
- 5.3.2.5 Location of property, including street number and address and legal description as shown on the official map of the Village of Great Neck Plaza.
- 5.3.2.6 An attached plan of the area indicating the following:
  - 5.3.2.7 Graphic scale and north arrow.
  - 5.3.2.8 Locations, species, state of health and sizes of trees to be preserved.
  - 5.3.2.9 Locations, species, state of health and sizes of trees to be removed.
- 5.3.2.10 Location of any existing and proposed structures on the property.
- 5.3.2.11 An outline of existing heavily wooded areas on site
- 5.3.2.12 Any proposed grade changes that might adversely affect or endanger any trees on the site and specifications of how to maintain them.
- 5.3.2.13 Proposed measures to be used for tree preservation.



- 5.3.2.14 A tree preservation plan for all trees to be preserved in the vicinity of the proposed tree removal and site disturbance.
- 5.3.2.15 Tree removal contractor, if any and Nassau County consumer affairs license number.
- 5.3.2.16 The size, species and planting method of all replacement trees.
- 5.3.2.17 A plan of mitigation measures designed to reduce the potential impacts of the proposed tree removal activities, including flooding, erosion, and sedimentation, loss of buffer screening and disturbance of wildlife habitat.

Applications for permits shall be submitted not less than ten (10) workdays prior to the proposed tree removal date. All information related to the permit application shall be maintained on file in the office of the Village of Great Neck Plaza.

### **5.3.3 PROPERTY OWNER – TREE ON PUBLIC PROPERTY**

If a property owner is requesting tree removal of a tree on public property, because of re-occurring damage to utilities on his property, caused by the tree, which cannot be prevented by pruning the tree on a regular maintenance schedule, the property owner may request the removal of said tree. The property owner shall provide proof of such damage, verified with invoiced repair costs by a licensed contractor.

### **5.3.4 PRIVATE TREE OBSTRUCTING PUBLIC PROPERTY**

A property owner can be directed for a tree or shrub on his/her property to be removed if it is considered a public nuisance, as outlined below. The Village will direct the property owner to remove or abate such tree or shrub. If the public nuisance is not abated or removed within seven days after notice is served, the Village may spray, trim, prune, treat or remove all or any part of the tree or shrub. The Village shall determine the cost of the work performed by the Village employees and bill the property owner the cost of the work performed.

- 5.3.4.1 Any tree or shrub located on private property infested with a disease or insects, which is infectious and may spread such disease or insects to the urban forest, shall constitute a public nuisance.
- 5.3.4.2 Any tree or shrub located on private property interfering with utility poles or utility lines, restricting traffic flow or visibility of the street, sidewalk or intersection shall constitute a public nuisance.
- 5.3.4.3 Any tree on private property which is dead, deceased, or weakened in such a manner that there is a danger of falling



limps, uprooting and proposes a danger to persons lawfully using the streets or sidewalks shall constitute a public nuisance.

## **5.4 TREE REPLACEMENT**

Tree replacement will be subject to the following:

- 5.4.1 The Village will replace any tree it removes within a 6 months period. In many cases, new trees cannot be replanted in the same location as the removed tree due to the remaining root system. The replacement location should be as close as possible following the plant spacing guidelines of this chapter to the location of the originally removed tree. The tree replacement shall be selected from the Approved Street Tree List.
- 5.4.2 If a property owner wishes to plant a tree in an area where a tree once existed, he/she shall obtain a no-fee permit from the Public Works Department. The permit allows the Village to insure that the property owner selects a tree from the Approved Street Tree List and that such tree can be added to the Village's tree inventory for future maintenance work. The property owner shall bear all costs and liabilities associated with the planting of said tree and the initial maintenance of the tree during the first year. If a tree is planted without a permit and not on the Approved Street Tree List, the property owner will be required to remove and replace the tree at his/her own expense.

