

**BOROUGH OF RIVER EDGE
ORDINANCE NO. 24-10**

**AN ORDINANCE AMENDING THE REVISED GENERAL ORDINANCES OF THE
BOROUGH OF RIVER EDGE, CHAPTER 384, ENTITLED “TREES”**

BE IT ORDAINED by the Mayor and Council of the Borough of River Edge, County of Bergen, State of New Jersey, as follows:

Section 1. Chapter 384 entitled “Trees” of the Revised General Ordinances of the Borough of River Edge is hereby amended to read in full as follows:

Chapter 384. Trees

Article I – Shade Tree Advisory Committee

§ 384-1 Findings

- A. The shade trees existing within the Borough of River Edge are of vital importance to the public good due to their aesthetic and environmental benefits and the economic value that they lend to properties within the Borough of River Edge as a consequence of their existence.
- B. The loss of any shade tree within the Borough of River Edge is a loss to the entire community and, as such, should be avoided except when removal is necessary for reasons of safety, public necessity, or unavoidable development.

§ 384-2. Creation; organization.

- A. A Shade Tree Advisory Committee is hereby created to discharge the duties hereinafter detailed with the goal of preserving the shade trees in the Borough of River Edge.
- B. The Committee shall be organized as follows:
 - 1) The Committee shall consist of five (5) five regular members and two (2) alternate members. All Committee members shall be residents of the Borough of River Edge and shall serve without compensation. All Committee members shall be appointed by the Mayor with the advice and consent of the Council.
 - 2) The first Committee members shall be appointed within 60 days after the effective date of this article, and their initial terms of office shall commence upon the date of their appointment and be for the respective periods: The terms of the initial appointments of the regular members shall be staggered such that one member shall be appointed for a one-year term, two members for a two-year term, and two members for a three-year term,. Thereafter all regular members shall be appointed for a term of three (3) years.
 - 3) There shall be two alternate members, designated as “Alternate No. 1” and “Alternate No. 2” who shall serve during the absence or disqualification of any regular member or members. Alternate members may attend and speak at all meetings of the Committee but shall not vote except in the absence or disqualification of any regular members. Alternate No 1 may vote in the absence or disqualification of a regular member. Alternate No 2 may vote in the absence or disqualification of more than one regular member or in the absence or disqualification of Alternate No. 1 and a regular member. One alternate member shall be initially appointed for a one-year term and one alternate member shall be initially appointed for a two-year term. Thereafter, alternate members shall be appointed for a term of 2years.
 - 4) There shall be elected a Chairperson and Secretary by and from the regular membership of the Shade Tree Advisory Committee on an annual basis. No member shall serve as Chairperson or Secretary for more than 2 consecutive years.

- 5) Members are eligible to obtain Continuing Education Credits (CEUs) for the Borough as required under the New Jersey Community Forestry Program, in addition to the CORE training for new members. The Committee needs to coordinate with the Superintendent of the Department of Public Works to determine which 2 individuals will obtain the (CEUs) for the Borough annually, which are a minimum total of 8 credits. The Borough shall only pay for the training courses for Committee Members. Members may select any courses listed by the Rutgers University Urban Forestry Program. Members are required to notify the Borough Administrator which course they wish to be registered for so that a purchase order can be generated.

§ 384-3. Duties.

The duties of the Shade Tree Advisory Committee shall be as follows:

- A. The advising of the Mayor and Council, in writing, at least annually, of such policies, practices, procedures, and actions that should be considered for the replacement and preservation of shade trees within the municipality as part of the Borough's overall governmental philosophy.
- B. Developing and implementing, subject to the approval of the Department of Public Works Superintendent (for all trees planted throughout the Borough), Chief of Police (for trees planted near street corners or street/traffic signage to not impede the line of sight for pedestrians and motorists), and Director of Recreation (for trees planted in Borough parks), procedures calculated to prevent the unnecessary damage or destruction of trees located in the public rights-of-way or within public parks throughout the Borough by utilizing Public Works crews, contractors, members of the Committee or members of the general public.
- C. To advise, through a liaison to be decided by the Mayor and Council, the Department of Public Works concerning the maintenance of shade trees within the Borough and, in general, to be a resource for the Mayor and Council in facilitating the various agents and employees of the Borough in protecting and/or replacing such trees as presently exist.
- D. To recommend and, with the approval of the Mayor and Council, develop programs for the systematic replacement or addition of shade trees, in which funding will be determined by the Mayor and Council.
- E. To generally act as a subject matter expert in preparing reports to the Mayor and Council for submission to the New Jersey Community Forestry Program, coordinating with the Borough Grant Writer for the submission of any grants, and in the absence of a grant writer, submit grant applications associated with shade trees to the Mayor and Council for further action.
- F. Coordinate Arbor Day activities with the River Edge Board of Education and River Dell Board of Education.
- G. The Committee shall meet on a monthly basis, except for the months of July and August. At least 30 days prior to the end of a calendar year, the Committee shall provide the Borough Clerk with a calendar of meetings for the next year.
- H. Notwithstanding that the Committee is advisory only and not subject to the Open Public Meetings Act (OPMA), meetings shall be held in accordance with the Open Public Meetings Act (OPMA) and the requirements of the Open Public Records Act (OPRA). Agendas must be provided to the Borough Clerk for posting on the Borough website no less than a week prior to the meeting. Minutes of the meetings must be approved at the following meeting and forwarded to the Borough Clerk for posting on the Borough's website after approval.
- I. The Committee shall refer to the DPW Superintendent and recommend a reply to all emails and phone calls submitted by residents, whether directly or through the Borough website within 48 business hours.
- J. Help the DPW Superintendent or its designee to administer the provisions enumerated in Article IV – Tree Protection.

K. Such other advisory duties as the Mayor and Council shall, from time to time by resolution, entrust to the Shade Tree Advisory Committee in furtherance of the aforementioned goals and objectives.

§ 384-4. Tree planting participation.

Members of the Shade Tree Advisory Committee and designated volunteers who have signed a participation agreement and waiver, may plant trees as part of the Borough's shade tree replenishment program in accordance with this section. Volunteers shall not plant any trees without the expressed consent of the DPW Superintendent, Chief of Police, and Director of Recreation and Cultural Affairs. The process shall be as follows:

- A. The Advisory Committee shall identify a location in the right-of-way for planting a tree.
- B. The Advisory Committee shall mark the tree location with stakes.
- C. The Advisory Committee shall notify the DPW Superintendent, Chief of Police, and Director of Recreation and Cultural Affairs via email of the proposed tree location.
- D. The DPW Superintendent, Chief of Police, and Director of Recreation and Cultural Affairs shall review the location and any other related concerns and shall advise the Advisory Committee whether the tree planting and location are approved or disapproved, together with the reasons therefor, via email. The Borough Administrator shall also be informed of any approved or disapproved planting.
- E. If the tree planting and location are approved, the Advisory Committee shall be responsible for calling 811 for utility mark-outs and shall inform in writing the resident about the tree planting, which shall include obtaining a commitment to water and otherwise care for the tree.
- F. If the tree planting and location are approved, the Advisory Committee shall coordinate the planting with the DPW Superintendent, who shall provide the shade tree and tools for planting. The tools for planting are only to be provided in the event that the planting has not been outsourced to a private contractor.
- G. The Advisory Committee shall provide care instructions specific to the tree species planted to the property owner.

Article II – Tree Removal and Replacement

§ 384-5. Purpose:

As required by the New Jersey Department of Environmental Protection, under the Municipal Stormwater Regulation Program, the Borough of River Edge must establish requirements for tree removal and replacement to reduce soil erosion and pollutant runoff, promote infiltration of rainwater into the soil, and protect the environment, public health, safety, and welfare.

§ 384-6. Definitions:

For the purpose of this ordinance, the following terms, phrases, words, and their derivations shall have the meanings stated herein unless their use in the text of this ordinance clearly demonstrates a different meaning. When consistent with the context, words used in the present tense include the future, words used in the plural number include the singular number, and words used in the singular number include the plural number. The use of the word "shall" mean the requirement is always mandatory and not merely directory.

Applicant - means any "person", as defined below, who applies for approval to remove trees regulated under this ordinance.

Critical Root Radius (CRR) - means the zone around the base of a tree where the majority of the root system is found. This zone is calculated by multiplying the diameter at breast height (DBH) of the tree by 1.5 feet per inch of DBH. For example, a tree with a 6" DBH would have a CRR of 9 feet (6 inches x 1.5 feet/inch=9 feet).

Diameter at Breast Height (DBH) - means the diameter of the trunk of a mature tree generally measured at a point four and a half feet above ground level from the uphill side of the tree. For species of trees where the main trunk divides below the 4 ½ foot height, the DBH shall be measured at the highest point before any division.

Hazard Tree - means a tree or limbs thereof that meets one or more of the criteria below. Trees that do not meet any of the criteria below and are proposed to be removed solely for development purposes are not hazard trees.

- 1) Has an infectious disease or insect infestation;
- 2) Is dead or dying;
- 3) Obstructs the view of traffic signs or the free passage of pedestrian or vehicles, where pruning attempts have not been effective;
- 4) Is causing severe damage to structures (such as building foundations, sidewalks, , etc.); or
- 5) Is determined to be a threat to public health, safety, and/or welfare by a certified arborist or Licensed Tree Expert (L.T.E.).

Person - means any individual, resident, corporation, utility, company, partnership, firm or association.

Planting Strip - means the part of a street right-of-way between the public right-of-way and the portion of the street reserved for vehicular traffic or between the abutting property line and the curb or traveled portion of the street, exclusive of any sidewalk.

Resident- means an individual who resides on the residential property where a tree(s) regulated by this ordinance is removed or proposed to be removed.

Street Tree - means a tree planted in the sidewalk or a planting strip in the public right-of-way adjacent to the portion of the street reserved for vehicular traffic. This also includes trees planted in planting strips within the roadway right-of-way, i.e., islands, medians, pedestrian refuges.

Tree - means a woody perennial plant, typically having a single stem or trunk growing to a considerable height and bearing lateral branches at some distance from the ground.

Tree Caliper - means the diameter of the trunk of a young tree, measured six (6) inches from the soil line. For young trees whose caliper exceeds four (4) inches, the measurement is taken twelve (12) inches above the soil line.

Tree removal - means to kill or to cause irreparable damage that leads to the decline and/or death of a tree. This includes, but is not limited to, excessive pruning, application of substances that are toxic to the tree, over-mulching or improper mulching, and improper grading and/or soil compaction within the critical root radius around the base of the tree that leads to the decline and/or death of a tree. Removal does not include responsible pruning and maintenance of a tree, or the application of tree treatments intended to manage invasive species. Removal includes grinding of the tree stump.

§ 384-7. Tree Replacement Requirements

A. Within a five-year period, any person who removes one or more street tree(s) with a DBH of 2.5" or more, unless exempt under Section 384-8, shall be subject to the requirements of the Tree Replacement Requirements Table below.

B. Any person, other than a resident, who removes one or more tree(s) with a DBH of 6" or more per acre, unless exempt under 384-8, shall be subject to the requirements of the Tree Replacement Requirements Table.

The species type and diversity of replacement trees shall be in accordance with the most recent list of native trees published by the New Jersey Department of

Environmental Protection which shall be listed in Appendix A.

Replacement tree(s) shall:

- 1) Be replaced in kind with a tree that has an equal or greater DBH than the tree removed or meet the Tree Replacement Criteria in the table below;
- 2) Be planted within twelve (12) months of the date of removal of the original tree(s) or at an alternative date specified by the municipality;
- 3) Be monitored by the applicant for a period of two (2) years to ensure their survival and shall be replaced as needed within twelve (as) months; and
- 4) Shall not be planted in temporary containers or pots, as these do not count towards tree replacement requirements.

Tree Replacement Requirements Table:

Category	Tree Removed (DBH)	Tree Replacement Criteria (See Appendix A)	Application Fee
1	DBH of 2.5" (for street trees) or 6" (for non-street trees) to 12.99"	Replant 1 tree with a minimum tree caliper of 1.5" for each tree removed	\$50
2	DBH of 13" to 22.99"	Replant 2 trees with minimum tree calipers of 1.5" for each tree removed	\$100
3	DBH of 23" to 32.99"	Replant 3 trees with minimum tree calipers of 1.5" for each tree removed	\$150
4	DBH of 33" or greater	Replant 4 trees with minimum tree calipers of 1.5" for each tree removed	\$200

C. Replacement Alternatives: If the Superintendent of the Department of Public Works or any other entity designated by the Municipality, determines that some or all required replacement trees cannot be planted on the property where the tree removal activity occurred, then the applicant shall do one of the following:

- a. Plant replacement trees in a separate area(s) approved by the municipality.
- b. Pay a fee of \$500.00 per tree removed. This fee shall be placed into the Borough's Shade Tree Replacement Fund.

§384-8. Exemptions:

All persons shall comply with the tree replacement standard outlined above, except in the following cases. Proper justification shall be provided, in writing, to the municipality by all persons claiming an exemption including photos, a detailed explanation as to why they should be exempt and any statements from a licensed tree expert or arborist.

- A. Residents who remove less than four (4) trees per acre that fall into category 1, 2, or 3 of the Tree Replacement Requirements Table within a five-year period.
- B. Tree farms in active operation, nurseries, fruit orchards, and garden centers;
- C. Properties used for the practice of silviculture under an approved forest stewardship or woodland management plan that is active and on file with the Borough;
- D. Any trees removed as part of a municipal or state decommissioning plan. This exemption only includes trees planted as part of the construction and predetermined to be removed in the decommissioning plan;
- E. Any trees removed pursuant to a New Jersey Department of Environmental Protection (NJDEP) or U.S. Environmental Protection Agency (EPA) approved environmental clean-up, or NJDEP approved habitat enhancement plan;

F. Approved game management practices, as recommended by the State of New Jersey Department of Environmental Protection, Division of Fish, Game and Wildlife;

G. Hazard trees may be removed with no fee or replacement requirement, provided however, that the grinding of the tree stump is required as part of the removal process.

§ 384-9. Enforcement:

This ordinance shall be enforced by the DPW Superintendent and by the River Edge Police Department and/or Code Enforcement Officer, during the course of ordinary enforcement duties.

§ 384-10. Violations and Penalties:

Any person(s) who is found to be in violation of the provisions of this ordinance shall upon conviction be subject to a fine of not less than \$100 nor more than \$2,000, imprisonment for a term not to exceed 90 days or community service for a period of up to ninety (90) days, or any combination thereof. In addition, the Borough may recover the sum of \$500 for each tree that would have been required for mitigation pursuant to Section 384-7. Any additional sums recovered shall be deposited into the Borough's Shade Tree Replacement Fund.

Article III – Utilities

§ 384-11. Wire and utility trimming:

A. Any public utility or its agents may upon receiving (written) permission from the Superintendent of Public Works or his designee, at least 72 hours prior to the start of work, prune or remove trees for line clearance of utility wires in nonemergency situations pursuant to a line-clearance program.

B. Any public utility or its agents may undertake emergency tree work to restore electrical service or spot work to prevent interruption of electrical, telephone, telegraph, cable television or other wire services. In such event, the utility shall notify the Superintendent of Public Works or his designee, of said work within three business days of its beginning.

C. The Superintendent of Public Works shall notify the Advisory Committee and coordinate with the River Edge Police Department in writing for its records of any pruning or removal of trees by any public utility or its agents.

Article IV – Tree Protection

§ 384-12. Purpose.

A. The Mayor and Council of the Borough of River Edge finds that the preservation, protection, and planting of trees and other plants conserves and enhances the Borough's physical and aesthetic appearance, and generally protects the public health and safety and general welfare.

B. The intent of this article is to limit the adverse impact of damage and removal of Borough trees associated with construction. This article preserves and perpetuates the Borough's tree stock located on public property and within the public right-of-way, through the establishment of regulatory controls for the preservation of street trees.

§ 384-13. Definitions.

As used in this article, the terms hereinafter set forth shall be defined and deemed to have the following meanings:

Cash Landscape Bond - A cash deposit in United States currency, bank or certified check made out payable to the Borough of River Edge.

Committee -- The Shade Tree Advisory Committee of the Borough of River Edge including any of its duly appointed members and any of its duly authorized agents.

Gross Floor Area - The gross floor area of a principal structure or building measured from exterior walls of the building or principal structure.

ISA - The International Society of Arboriculture.

Public Property - Any road, easement, passageway or area under the jurisdiction and control of the Borough of River Edge.

Regulated Project - Any undertaking involving new construction or development of existing residential property affecting 50% or more of the existing gross floor area or demolition of an existing principal structure or building affecting 50% of the total gross floor area.

Regulated Tree - Any living woody perennial plant having a diameter greater than 1 1/2 inches measured at a point four inches above the base of the root flare. This definition shall apply to any tree situated in or along any public property, park, field, public right-of-way, easement or encumbrance under the ownership and control of the Borough of River Edge. The term "regulated tree" shall also mean public tree(s) as provided in the context within the article.

Shade Tree Replacement Fund - "Trust Other Fund - Dedicated Shade Tree Escrow Account" and is the dedicated depository account Committee for tree permit fees, tree replacement fees, expert fees and cash landscape bonds.

§ 384-14. Tree protection permit required.

A. Any person undertaking a regulated project shall secure a tree protection permit from the DPW Superintendent and will provide the Borough of River Edge with a cash landscape bond in the amount of up to \$5,000 for each Borough of River Edge street tree adjacent to or on said property for a duration of up to a maximum of three years starting from the time a certificate of occupancy is issued. After two years, the tree/trees will be evaluated by the Committee, and based upon the evaluation, the DPW Superintendent will determine whether the cash bond should be extended or utilized to remove and replace any or all of the Borough of River Edge trees on said property. Valuation of trees shall be based upon current ISA standards.

B. In the undertaking of a regulated project, the owner, contractor or other person in charge thereof shall place such guards around all nearby trees as will effectually prevent injury to such trees.

C. All deposits from this section shall be deposited into the Borough's Shade Tree Replacement Fund.

§ 384-15. Project permit application process.

A. Project permit application submission. Upon filing of a demolition or building permit for a regulated project, a tree protection project permit shall be required for the removal and/or protection of public trees. A permit application for the removal and/or protection of said trees shall be submitted to the DPW Superintendent, together with a copy thereof to the Shade Tree Advisory Committee for review.

B. Application contents. An application for a tree removal and protection project permit shall consist of the following:

- 1) The name and address of the owner of the land.
- 2) The description of the lands in question, including the lot and block numbers of the land as shown on the current Tax Map of the Borough of River Edge; a survey or plot plan locating public and private trees; tree location placed on existing survey or plot plan need not be certified by any licensed professional.
- 3) The quantity, DBH caliper size, location and species of regulated tree(s).
- 4) The proposed dates for commencement and completion of the project.
- 5) Name and address of the person having express charge, supervision, and/or control of the proposed protection or removal of tree(s).
- 6) A tree protection plan.

C. Application review.

- 1) The Shade Tree Advisory Committee shall review the project permit application and advise within 10 calendar days the DPW Superintendent as to the applicability with this article. The DPW Superintendent shall then provide written notice to the applicant indicating one of the following determinations and the valuation of regulated trees and landscape bond amount:
 - a) The protection permit is granted; or
 - b) The project permit is granted subject to prescribed conditions attached to such notice.
- 2) The DPW Superintendent shall render a decision on a project permit application and furnish the required notices within 30 calendar days following submission of a completed application.
- 3) Failure of the DPW Superintendent to render a decision within the thirty-day period, or within any extension of time granted by the applicant, shall constitute and have the same effect as an approval of the application.
- 4) Any proposed change in the approved project shall be submitted to the DPW Superintendent and referred to the Shade Tree Advisory Committee for its review and recommendation. The DPW Superintendent's determination concerning the approval of the amended project shall be determined in the same manner as an original application for a protection permit.
- 5) The applicant shall maintain a copy of the approved protection permit at the project location. A copy of the protection permit shall be available for inspection by the DPW Superintendent and a representative of the Shade Tree Advisory Committee.
- 6) Cash landscape bonds must be submitted and posted prior to the start of the project. It shall be the responsibility of the permit holder to make the cash deposit.
- 7) Appeals.
 - a) The valuation determinations and decisions of the DPW Superintendent shall be reviewable on written appeal to the Mayor and Council. Said appeal shall be filed within 21 days of written notice of the decision of the DPW Superintendent. The appeal before the Mayor and Council shall be a de novo hearing in which the DPW Superintendent shall produce testimony supporting the disputed tree valuations or actions.
 - b) In the event of a dispute concerning the release of a cash landscape bond, said dispute shall be submitted to the Mayor and Council for final resolution and direction.

D. Jurisdiction. The protection assessment of regulated trees may be determined based upon the appraisal of a trained forester or licensed tree expert or the DPW Superintendent or designee.

§ 384-16. Fees.

An application for a tree protection permit shall be accompanied by the required fees as set forth below:

- A. Administration or application fee for the processing of each tree removal permit is \$25. Any subsequent application or request shall be subject to the same fee requirement.
- B. Escrow deposit where the DPW Superintendent determines that a tree expert is needed for tree evaluation. Expert fees incurred by the DPW Superintendent shall be the responsibility of the applicant.
- C. All deposits from this section shall be deposited into the Borough's Shade Tree Replacement Fund.

Section 2. Any and all other ordinances or parts thereof in conflict or inconsistent

with any of the terms hereof are hereby repealed to such extent as they are so in conflict or inconsistent.

Section 3. In case any article, section or provision of this ordinance shall be held invalid in any court of competent jurisdiction, the same shall not affect any other article, section or provision of this ordinance except insofar as the article, section or provision so declared invalid shall be inseparable from the remainder or any portion thereof.

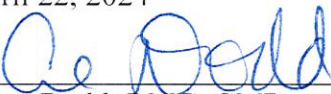
Section 4. This Ordinance shall take effect immediately upon final passage and publication as required by law.

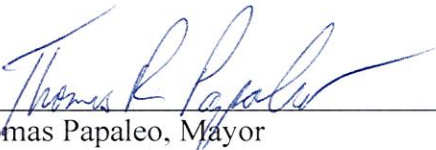
INTRODUCED: April 8, 2024

ADOPTED: April 22, 2024

	Motion	Second	Yes	No	Abstain	Absent
Kaufman	X		X			
Montisano-Koen		X	X			
Kinsella			X			
Malellari			X			
Benson						X
Glass			X			
Mayor Papaleo						

I hereby certify the above to be a true copy of an Ordinance adopted by the Governing Body of the Borough of River Edge on April 22, 2024


Anne Dodd, RMC, CMR
Borough Clerk/Assistant Administrator


Thomas Papaleo, Mayor

Appendix A

Approved list of Replacement tree Species and Planting Standards for Borough of River Edge

Tree Species	Cultivars	Planting Season	Planting Procedure
<u>Acer Rubrum</u> Red Maple		Spring / Fall	Full Sun to Part Shade, Soil Moisture - average to wet, Soil Type wide range (clay to sandy loam)
<u>Acer Saccharum</u> Sugar Maple		Fall / early winter	Full Sun to Part Shade, Soil Moisture - average to dry, Soil Type wide range (clay to sandy loam)
<u>Acaer x Freemanii</u> Freeman Maple	Armstrong, Fairfall, Marmo, scarlet Sentinel	Spring / Fall	Full Sun, Soil Moisture - average to dry, Soil Type wide range (clay to sandy loam)
<u>Amelanchier laevis</u> Shadblow Serviceberry		Spring / Fall	Full Sun to Part Shade, Soil Moisture - average to wet, Soil Type wide range (prefers well-drained loams)
<u>Betula Nigra</u> River Birch		Spring / Fall	Full Sun, Soil Moisture - average to wet, Soil Type- Prefers moist, acidic, fertile soils
<u>Carpinus Caroliniana</u> American Hornbeam	Native Flame	Spring	Part Shade, Soil Moisture - average to wet, Soil Type - Prefers moist, organically rich soils
<u>Celtis Occidentalis</u> Hackberry		Spring	Full Sun to Part Shade, Soil Moisture - average to dry, Soil Type wide range (clay to sandy loam)
<u>Cercis Canadensis</u> Eastern Red Bud		Fall	Full Sun to Part Shade, Soil Moisture - average to wet, Soil Type - Performs best in moderately fertile soils
<u>Cercis Chinensis</u> Chinese Redbud		Late Spring / Early Summer	Full Sun to Part Shade, Soil Moisture - average to wet, Soil Type - Performs best in moderately fertile soils
<u>Cladrastis Kentukea</u> Yellowwood	Sweetshade, Perkins Pink	Spring	Full Sun, Soil Moisture - average, Soil Type - Prefers moist well drained, organically rich soils.
<u>Crataegus Crus-galli</u> Cockspurn Hawthorn	Thornless varieties only	Spring / Fall	Full Sun, Soil Moisture - average to medium moisture, Soil Type wide range (clay to sandy loam)
<u>Ginkgo Bilobra</u> Ginkgo, Maidenhair Tree		Spring / Fall	Full Sun, Soil Moisture - average to medium moisture, Soil Type wide range (clay to sandy loam)
<u>Gladitsia Triacanthos</u> Honey Locust	Moraine, Shademaster, Sunburst,	Spring / Fall	Full Sun, Thornless, Soil Moisture - average to medium moisture, Soil

	Imperial		Type wide range (clay to sandy loam)
<u>Gymnocladus Dioicus</u> Kentucky Coffeetree		Early Winter / Early Spring	Full Sun, Soil Moisture - Medium moisture, Soil Type organically rich, well-drained soils
<u>Liquidambar</u> <u>Styraciflua</u> American Sweetgum	Cherokee, Rotundiloba, Slender Silhouette, Worplesdon	Early Winter / Early Spring	Full Sun to Part Shade, Soil Moisture - average to wet, Soil Type wide range (clay to sandy loam)
<u>Liriodendron Tulipifera</u> Tulip Tree	Ardis, Arnold, Emerald City, Fastigiatum	Spring / Fall	Full Sun, Soil Moisture - average, Soil Type - organically rich, well-drained loams
<u>Metasequoia</u> <u>Glyptostrobooides</u> Dawn Redwood		Fall	Full Sun to Part Shade, Soil Moisture - average to wet, Soil Type - well-drained loam
<u>Nyssa Sylvatica</u> Black Gum		Spring / Fall	Full Sun, Soil Moisture - average to wet, Soil Type sandy loam
<u>Ostrya Virginiana</u> Eastern Hop Hornbeam		Spring / Fall	Full Sun to Part Shade, Soil Moisture - Medium moisture, Soil Type organically rich, well-drained soils
<u>Platanus x Acerifolia</u> London Planetree		Spring / Fall	Full Sun to Part Shade, Soil Moisture - average to wet, Soil Type wide range (clay to sandy loam)
<u>Prunus Cistena</u> Purple-leaf Sand Cherry		Early Spring	Full Sun, Soil Moisture - average, Soil Type - organically rich, well-drained loams
<u>Prunus Sargentii</u> Sargent Cherry		Early Spring	Full Sun, Soil Moisture - Medium moisture, Soil Type organically rich, well-drained soils
<u>Prunus Virginiana</u> Chokecherry		Spring / Early Summer	Full Sun to Part Shade, Soil Moisture - average to dry, Soil Type wide range (clay to sandy loam)
<u>Quercus Bicolor</u> Swamp White Oak	Hightower	Spring	Full Sun, Soil Moisture - average to wet, Soil Type wide range (clay to sandy loam) Prefers acidic soil
<u>Quercus Coccinea</u> Scarlet Oak	Kindred Spirit, Fastigiata, Skyrocket	Spring	Full Sun, Soil Moisture - average to dry, Soil Type wide range (clay to sandy loam)
<u>Quercus Macrocarpa</u> Bur Oak		Spring	Full Sun, Soil Moisture - average to dry, Soil Type wide range (clay to sandy loam) Prefers moist well-drained loams
<u>Quercus</u> <u>Muehlenbergii</u> Chinkapin Oak		Spring	Full Sun, Soil Moisture - average to dry, Soil Type wide range (clay to sandy loam) Prefer moist fertile loams

<u>Quercus Michauxii</u> Chestnut Oak		Spring	Full Sun, Soil Moisture - average to wet, Soil Type wide range (clay to sandy loam) Prefer moist fertile loams
<u>Quercus Palustris</u> Pin Oak		Spring	Full Sun, Soil Moisture - average to wet, Soil Type wide range (clay to sandy loam) Prefer moist fertile loams
<u>Quercus Phellos</u> Willow Oak		Spring	Full Sun, Soil Moisture - average to medium moisture, Soil Type wide range (clay to sandy loam) Prefer moist well-drained loams
<u>Quercus Robur</u> English Oak		Spring	Full Sun, Soil Moisture - average to medium moisture, Soil Type wide range (clay to sandy loam) Prefer moist well-drained loams
<u>Quercus Rubra</u> Northern Red Oak		Spring	Full Sun, Soil Moisture - average to medium moisture, Soil Type wide range (clay to sandy loam) Prefers acidic soil
<u>Tilia Americana</u> American Linden		Spring / Fall	Full Sun to Part Shade, Soil Moisture - average to medium moisture, Soil Type wide range (clay to sandy loam) Prefers moist, fertile, well-drained loams
<u>Tilia cordata</u> Little Leaf Linden		Spring / Fall	Full Sun to Part Shade, Soil Moisture - average to medium moisture, Soil Type wide range (clay to sandy loam) Prefers moist, fertile, well-drained loams
<u>Ulmus Americana</u> American Elm	Accolade, Frontier	Spring / Fall	Full Sun to Part Shade, Soil Moisture - average to medium moisture, Soil Type - Prefers moist, fertile, well-drained loams
<u>Ulmus Parvifolia</u> Lacebark Elm		Spring / Fall	Full Sun, Soil Moisture - average to medium moisture, Soil Type - Prefers rich, moist loams
<u>Zelkova Serrata</u> Zelkova		Spring	Full Sun, Soil Moisture - average to medium moisture, Soil Type - Prefers rich, moist loams

Tree & Shrub Planting Detail

Prune and root prune as directed

Scarify each planting hole after digging to remove “glaze” from digging.

Water in each tree after planting

Tree placed with trunk flare at or slightly above surrounding finished grade. No soil shall be placed on top of rootball after planting.

All marking tapes/tags/ropes to be removed

2 ½” hardwood posts, 8ft tall (2 per tree) placed 2ft. below ground outside of root ball

Ties at 1/3 height of tree: use Arbor tie or similar ¾” wide flat woven polypropylene material to allow some movement without excessive rubbing.

Deer protection installed on each tree – will be supplied by Borough.

2” mulch depth 3” from trunk of tree making a saucer around tree.

Compacted topsoil

Remove burlap and wire basket from root ball at the discretion of the shade tree commission

Backfill mix with 12-7-1 briquetted fertilizer (8 per tree) and Mycor™ Tree Saver® Transplant or similar

Compacted topsoil 6” minimum depth.

1 ft. clear all sides

