Jersey City
Forestry Standards
2018

Department of Public Works
Division of Parks and Forestry
Division of City Planning

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This Jersey City Forestry Standards provides information on City Tree maintenance and tree plantings in the City Public Right-of-Way, which includes all public sidewalks.

Section I - General Street Tree Information - contains an overview of City Tree policies and procedures. Residents and business owners interested in planting or removing a City Tree or who want to report a tree-related issue to the City should review this section of the Forestry Standards.

Section II - Detailed Tree Planting Standards - contains detailed information on how to properly install, maintain, protect, and remove street trees within Jersey City. Information in this section includes required tree pit specifications, tree species standards, soil and mulching requirements, and surface treatments. Developers, contractors, and anyone undertaking street tree work should read this section of the Forestry Standards.

Residents and Business Owners

If you are interested in planting a tree in the sidewalk in front of your home or business:

You have the option of (1) requesting that a street tree be planted by the City as part of its biennial tree planting or (2) applying for a tree work permit to plant the tree yourself. See Section I.B. - Tree Plantings on page 5 for more information.

If you are interested in planting or removing a tree on your private property:

No City permits are required to plant or remove a tree on your property. All private landscaping, including tree plantings, should follow the landscaping requirements in Section 345-66 of the City Code. This document does not apply to planting or removing a tree on private property.

If you are concerned about the condition of a tree in your neighborhood:

Please see Section I.C. - City Tree Maintenance on page 6 for more information on Calling in a tree problem. See Section I.D. - City Tree Removals and Replacements on page 8 for more information on tree removals.

If the tree in front of your house is causing damage to your property:

Please see Section I.C. - City Tree Maintenance on page 6 for more information on Calling in a tree problem. See Section I.D. - City Tree Removals and Replacements on page 8 for more information on tree removals.

Developers

If you need to install street trees as part of your development:

New developments are required to provide street trees along the sidewalk adjacent to the property. All new street tree installations must follow the Forestry Standards. Please see Section II - Detailed Tree Planting Standards on page 10 for detailed information regarding design, installation, and maintenance of street trees.

If you are performing construction work near an existing street tree:

All construction work within 15 feet of an existing street tree must receive a tree work permit and all trees must be properly protected during the construction period. Please see Section II.G - Tree Protection on page 19 for more information.

If you need to remove a street tree as part of your construction project:

All street tree removals must be approved by the Division of Parks and Forestry. Please see Section I.D. - City Tree Removals and Replacements on page 8 and Section II.F - Tree Replacement for Private Plantings on page 18 for more information.

If you are installing a tree in a historic district:

Tree plantings in the historic districts of the City must take into consideration special requirements intended to preserve the character of the City’s historic neighborhoods. For more information see Section II.L. - Historic District Standards on page 20.
Overview

Street trees are important to our quality of life within the City; they are living elements of our street infrastructure. Located on the public right-of-way, they provide cooling shade, cleaner air, water filtration and more beautiful urban streetscapes. However, trees in the urban landscape face a variety of environmental and physical stresses including pedestrian and vehicular traffic, soil compaction, air and soil pollution, and drought. Some of the key factors to maximizing long-term tree survival are proper siting, careful handling, and immediate and continued aftercare.

All trees planted in the public right-of-way or within parks are under the jurisdiction of the City of Jersey City.

A valid tree work permit must be obtained in order to plant, prune, remove, or otherwise disturb a tree on any sidewalk or other location within the public right-of-way. Plantings must be done in accordance with the City’s current Forestry Standards. Any tree work improperly performed or otherwise not in accordance with these specifications may be subject to remedial work at the tree work entity’s expense, and/or additional penalties.

New developments within the City must provide the required number of street trees and landscaping as stipulated in the City’s zoning code. The Division of Parks and Forestry maintains a forestry crew of trained personnel for regular and emergency tree trimming and removal. Forestry crews are organized to answer directly to the Director of Parks and Forestry as well as the City Forester.

Residents who are interested in helping maintain Jersey City’s tree canopy are encouraged to attend workshops offered through the Jersey City Parks Coalition. Residents maintaining trees on their own without proper training may be penalized for vandalism.
I

General Street Tree Information

I.A. City Ordinances

Rules related to Jersey City trees can be found in Chapters 321-TREES and 345-66-LANDSCAPING of the Jersey City Municipal Code. These ordinances are included in the appendix.

I.B. Tree Plantings

City residents or business owners who would like to plant a tree on their property do not need permission from the city as long as the planting does not encroach on the city right-of-way or someone else’s private property and the plantings are in accordance with the City’s zoning code.

Please see I.B.1. City-Sponsored Tree Plantings below for more information on how to request a tree from the City. For residents and business owners requesting a permit to plant their own tree, please see Section II - Detailed Tree Planting Standards on page 10 and the tree planting standard details in Appendix B.

I.B.1 City-Sponsored Tree Plantings:

City residents who would like to have a tree planted by the City in the sidewalk near their house may submit an application to the Division of Parks and Forestry during their biennial tree planting or plant their own tree by requesting a permit from the Division of Parks and Forestry.

For steps on how the City implements city-sponsored tree plantings, refer below:

Step 1: Survey
Jersey City forester or forestry crew members survey every potential planting location to determine if it can accommodate the healthy growth of new trees. Jersey City surveys potential sites on blocks with few or no trees, where trees have been removed and upon request from residents in all wards. Not every potential location is suitable for a street tree. When siting trees, foresters take into account local environmental conditions as well as available space and clearances for tree growth.

Step 2: Marking
A forester and the planting contractor will then visit the planting site to mark out the future tree bed and tree location. A white “T” is painted on the curb where the tree will be planted. You may also see white marks on the sidewalk to indicate the corners of the future street tree bed.

Marking of the planting location will most likely take place between February and March for spring plantings, and between September and October for fall plantings.

Step 3: Utilities
The utility companies mark the underground gas (yellow), electric (red), and telecommunication (orange) lines at the proposed planting location to ensure that the tree planting will not conflict with any of these utilities. Though a site may have been approved during the survey process, it may later be declined after the utilities are marked on the sidewalk and street. (See Street Tree Spacing Guidelines in the Appendix for more information).

Step 4: Site Preparation
Jersey City’s planting contractors often prepare the sidewalk before the tree is planted. You may see saw cuts in the sidewalk along the edges of the tree bed, or the concrete may even be removed entirely leaving an open tree planting area. Preparing the site ahead of time makes it easier to plant the tree at a later date and allows the contractor to plant more trees during the short planting seasons. Don’t worry if you see sidewalk preparation and the tree was not planted. The contractor will be back to plant the tree, most likely within a few weeks depending on the weather. If inclement weather prevents contractors from fulfilling their planting obligations by the end of the season, the tree bed will be addressed the following season.

Step 5: Species Selection and Tree Planting
A tree species list for street tree plantings is included in Appendix C. Residents and business owners requesting a tree during the biennial tree planting may choose a tree species from this list. All selected tree species will be reviewed for each site by the Division of Parks and Forestry.
Forestry. Foresters consider many factors in matching a suitable tree species for each tree planting location. Some important criteria in choosing which species is most appropriate includes flood/drought conditions, soil compaction/pollution, sunlight, surrounding tree canopy, sidewalk width, and clearance distance from nearby infrastructure.

Each tree will have two wooden stakes on either side for support and the area around the tree will be covered in mulch to minimize weed growth and retain water.

The new tree will be planted between March and June for the spring season and between November and January for the fall season.

**Step 6: Guarantee and Maintenance**

All street trees are under a guarantee period of between one and two years after they are planted. During the guarantee period time, the planting contractor hired by the City is responsible for regular maintenance of the tree, including weed removal, replacing missing soil or mulch and minor pruning. The contractor is also required to water the tree at least once every two weeks from May through October. If a tree dies during the guarantee period it will be replaced in the next planting season.

**I.B.2 Tree Planting Requirements for Special Projects and Green Infrastructure**

Trees planted in parks, traffic triangles, and along streets as part of special projects or green infrastructure projects by community groups, individuals, organizations or government agencies will require approval from various City departments and provisions for maintenance in place. If you are interested in installing a special project or Green Infrastructure project on City-owned property, please contact the Jersey City Office of Sustainability at 201-547-4428.

All permitted plantings must conform to the same standards as those indicated in Section II of this document.

**I.C. City Tree Maintenance**

Trees within the City right-of-way and in City Parks are maintained by the Division of Parks and Forestry.

For issues regarding trees that are not in City Parks or the City right-of-way, the Division of Parks and Forestry will not be able to respond.

If the problem tree is on your own property, please call a private tree company. If the problem tree is on someone else’s property, please refer the issue to Housing Code Enforcement by calling 201-547-3824.

If a tree is lifting a sidewalk at a property other than yours, please contact DPW dispatch at 201-547-4400 and request an inspector see the site.

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Jersey City residents are strongly encouraged to help water street trees weekly during the warmer seasons, 20 gallons or more, for the first 3-5 years after planting. Residents who are interested in performing basic tree care to promote the healthy growth of the tree are advised to participate in the Jersey City Tree Lover’s Crew.
Reporting a Tree Problem:

1: Call the Division of Parks and Forestry at (201) 547-4449 to report a problem with trees on City roads. (For tree issues related to power lines or tree trimming around power lines, please call PSE&G’s Customer Service Center at 1-800-436-PSEG (7734) for assistance. To report a tree problem on County Roads such as John F. Kennedy Boulevard, please contact Hudson County at (201) 915-1388.

2: An inspection form is created and given to the Forester.

3: Inspections are routed and carried out a few days each week. Routes are usually created for each ward, though in times of high volume routes may be created by the date they are received. Inspections usually happen within two weeks of receiving the call, but may be delayed by as much as a month during the busy times of the year. Sites are rated on the severity of the problems identified upon inspection. Regular trim requests are considered low priority while large dead trees are considered the highest priority.

4: Inspection sheets are filled out and turned over to administrative staff to be entered into the forestry work log.

5: Sites on the work log are added to the daily logs for the forestry crew. It may take up to a month for sites to be completed from the time they are entered into the work log depending on the severity of the situation and the volume of calls received.

Refer to the Jersey City Service Level Agreement, below, if you have any questions about the City response system.

Jersey City’s Service Level Agreement:

Within 14 days of your report, the Forester or a forestry crew member will be out to the site to inspect the tree as per the report. Please be sure to provide as much information as possible regarding the location of the tree and any problems that have been noticed to ensure that the inspection is complete and accurate. Photos of the tree in question and the entire site are always helpful.

Within 21 days of your report, we will be able to respond to you regarding the status of the work needed. By this time, the Forester will have determined if work is required and if so, the extent of the work necessary to remedy the problem. Providing an email address with your report is the best way for us to remain in contact.

Currently, dead trees and hazard limbs eligible for removal are prioritized with minor pruning worked into the schedule when possible. Please be patient as we are working hard to keep the city safe as well as attend to our regular maintenance obligations. If minor pruning is scheduled and it does not take place within 90 days of your report, please contact our office.

If you notice that there is a problem with a City tree such as a large dead limb or the tree is in severe decline, you are encouraged to call the Division of Parks and Forestry at (201) 547-4449 to report it.

For tree issues related to power lines or tree trimming around power lines, please call PSE&G’s Customer Service Center at 1-800-436-PSEG (7734) for assistance.
**I.C.1 Pruning:**

Incorrect pruning of trees can lead to tree damage and death. Untrained residents should not attempt to prune street trees; it may be considered vandalism if they do so. If residents are interested in pruning and maintaining any street trees, the City encourages them to volunteer with the Park Coalition’s Tree Lover’s Crew.

When inspecting for a pruning request, the Division of Parks and Forestry is looking to identify deficiencies in structure or form (shape and growth of the tree), damaged or dead limbs, and low hanging limbs that may interfere with pedestrians or vehicles. Aesthetics are considered as well, but the City at this time does not prune trees solely for aesthetic purposes. For more details on the pruning techniques the City follows, please see Section II.D.1 on page 17.

Once any deficiencies or issues are corrected by pruning, the work is considered complete and the tree will most likely not be re-inspected until a year has passed from the date of completion. It should be noted that one of the goals of pruning is to accomplish the necessary corrections with the least amount of cuts and material removed as is possible.

### Removal of trees on private property is not the responsibility of the City.

If the problem tree is on your own property, please call a private tree company. If the problem tree is on someone else’s property, please refer the issue to Housing Code Enforcement by calling 201-547-3824.

Approved removals are scheduled within two weeks of the date they are entered into the work log. There may be a delay of up to one week from the time they are inspected to the time they are entered. The Division of Parks and Forestry will always try to adhere to the Service Level Agreement though there may be times during the year when high seasonal volume causes some delays. Residents can also request a tree removal if it meets the criteria listed in Section 1.D.1.a.

### I.D. City Tree Removals and Replacements

#### I.D.1. City Tree Removal

Eventually, every City tree will reach the end of its lifespan and need to be removed. Residents and business owners who are concerned that a tree is dead or dying should call it in to the Jersey City DPW for inspection. Once the tree inspection is completed, trees found to be dead or hazardous are prioritized for immediate removal while trees in need of pruning or minor work are placed in the queue for pruning. Residents may also apply for a street tree removal permit if they would like to do it themselves.
I.D.2. City Tree Replacement

Any tree planted that is dead or, in the opinion of Parks & Forestry, in an unhealthy or unsightly condition, and/or has lost its natural shape due to dead branches, excessive pruning, inadequate or improper maintenance, or other causes including vandalism, will need to eventually be replaced. Any tree planted by a private contractor that dies within its guarantee period shall be replaced in the next planting season.

As per the ordinances of Jersey City, the City is obligated to replant every tree removed for a public project on a one-for-one basis. This replanting will most likely take place within a year from the date of removal as planting during the current or upcoming planting season is usually not an option. Often the replacement tree cannot be replanted in the exact place of the original tree due to conflicts with infrastructure or previous poor placement. In these circumstances, the replacement tree will be placed in the next nearest available space.

Individuals and developers that have planted trees as part of a development obligation must replace all removed trees within one year of removal. Details regarding tree removal and replacement standards can be found in Section II.F - Tree Replacement for Private Plantings.

All other trees will be replaced by the City according to available resources. It is the goal of the Division of the Parks and Forestry to replace all removed trees, if site conditions permit.

I.E. Vandalism

Any act of vandalism to a City Tree will not be tolerated. Prohibited actions are identified in the Jersey City Code of Ordinances Chapter 321 – Trees. All violators will be subjected to a minimum penalty of a $100 fine.

Please report any vandalism to the Department of Parks and Forestry via telephone, at (201) 547-4449.

I.F. Plant Pest Control Requirements

Any planting on the public right-of-way is required to comply with all state and federal regulations for plant pest control. More information can be obtained from the appropriate state and federal pest control agencies.

Any application of pesticides or herbicides will require a permit from Parks & Forestry as well as a valid Pesticide applicator license from the State of New Jersey. Any unpermitted acts of pest control can be considered an act of vandalism (see above).

Residents should not apply their own store-bought pesticides or herbicides to City trees or other plants in City Parks or the right-of-way.
II Detailed Tree Planting Standards

All new buildings and all additions exceeding 20 percent of the floor area must provide one new or existing street tree for every 25 feet of building road frontage. If planting of new street trees is determined not to be practical at a given location by the Forester, then a monetary contribution equal to the cost of installing a new street tree must be paid to the City.

For 2018 this cost is $500 per tree.

II.A. Design Requirements

II.A.1. Spacing Requirements

The following requirements shall be followed when surveying for tree beds along sidewalks. These guidelines generally follow regulations of other agencies with jurisdiction or infrastructure on the right-of-way. These requirements are design and tree species dependent. The American with Disabilities Act (ADA) guidelines must also be followed. The Division of Parks & Forestry may waive some of the below spacing requirements for special circumstances (See Street Tree Spacing Guidelines, Appendix A, for more information).

a. Do not plant directly in front of building entrances in order to permit easy access by the Fire Department and other emergency services. A tree may be placed in front of an entrance if the sidewalk is at least 15’ wide at that point or the distance from the entrance to the tree is at least 12’.

b. The minimum width of sidewalks free of impediments is 5’. No tree pit will be placed that will impede upon the required 5’ passageway on sidewalks.

c. Do not plant along the street within bus stops. Trees may be offset from the curb ten feet along a bus stop.

e. Minimum horizontal distance from water main to tree trunk is 6 feet.

f. Minimum distance between trees (trunk to trunk) shall be 20 feet to 30 feet, depending upon the tree species and other local conditions.

g. Minimum distance from a streetlight or utility pole to the tree trunk is at least 15 feet.

h. Minimum distance from traffic signs to the tree trunk is 5 feet.

i. Suggested distance from a parking meter to tree trunk shall be no more than 5 feet, to allow for the swing of car doors.

j. Minimum distance from a gas or water valve to the edge of the tree pit is at least 1 foot.

k. Minimum distance from an oil fill pipe to the edge of the pit is 4 feet if active. If non-active, it may be located anywhere outside the pit.

l. Minimum distance from a fire hydrant to the trunk is at least 5’.

m. Minimum distance from a curb cut or driveway to the edge of the pit is 1 foot and to the tree trunk to flush curb is 5 feet.

n. Minimum distance from the corner of a street intersection to the tree trunk is 30 feet.

o. Minimum distance from the edge of the pit to any opposite obstruction (building wall, stoop, railing, property line etc.) is from 4 to 6 feet, depending upon local conditions and the amount of sidewalk traffic.

p. All tree pits must be contiguous to the street curb (except as noted below, or with the permission of the Forester).

q. Trees may be planted on either side of sidewalks in lawn areas (if any exist) where there is sufficient room between the property line and the street curb. Trees must still be within the city right of way.

Additional design or spacing requirements may be imposed at the discretion of the Forester reviewing your application depending on the location and site conditions. Exceptions to these guidelines may be made at the Forester’s discretion.
II.A.2.  Tree Pit Dimensions

Tree pits should be as large as possible to allow for adequate water infiltration, ample growing space for the tree's roots and to reduce the likelihood of future sidewalk lifting. The larger the soil volume the larger the tree size will be at maturity and the better chance it has for long-term survival. However, the width of a sidewalk can limit the size of a tree pit. Sidewalk use and location may also affect tree pit configuration.

The standard street tree pit for any sidewalk greater than 10 feet wide is 5 feet wide by 10 feet long and 2 feet deep. The standard tree pit will have a 5 foot by 5 foot exposed planting area* with the remainder of the tree pit surface area to be covered with pervious pavers or permeable pavement (See details in Appendix B). Tree pits in residential areas with low foot-traffic or on especially wide sidewalks may have the entire surface area open and mulched. Open tree pits in commercial areas and/or areas with heavy foot traffic must include tree guards. In areas with heavy foot traffic a surface treatment such as permeable pavement, porous pavement, or permeable pavers may be used on top of a portion of the exposed planting area of the tree pit, so long as said treatment is able to adjust with the growth of the tree. Narrower sidewalks, especially those in historic areas, may require narrower tree pits. Sidewalks narrower than nine (9) feet must follow the specs for a narrow tree pit, included on page viii of the appendix.

The absolute minimum surface area of a tree pit is 24 square feet and the minimum soil volume is 48 cubic feet.

Any installation of material within the exposed planting area of the tree pit must be approved by the Forester. More information on surface treatments can be found on page 16. The installation of continuous tree pits is encouraged whenever possible, and design proposals that call for continuous tree pits may be given more flexible spacing requirements by the Forester (see Appendix B, page ix).

The Exposed Planting Area* is the surface area of the tree pit that is left open to the elements. It is important that this area is adequately sized to allow water to permeate the soil and tree roots. In specific high-traffic areas, the Forester may approve a permeable surface, such as permeable pavers, over a portion of the Exposed Planting Area.

Preferred Tree Pit Dimensions

<table>
<thead>
<tr>
<th>Sidewalk Width</th>
<th>Tree Pit</th>
<th>*Exposed Planting Area</th>
<th>Detail Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width (ft)</td>
<td>Length (ft)</td>
<td>Depth (ft)</td>
</tr>
<tr>
<td>10’ and greater Standard</td>
<td>5</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>9’-10’</td>
<td>4</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>8’-9’ Narrow</td>
<td>5</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Less than 8’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Exposed Planting Area is the surface area of the tree pit that is left open to the elements.
II.A.3. Grouped Plantings

Grouped plantings are sites where trees are planted closer than 20 feet from each other (trunk to trunk). Grouped plantings provide a number of environmental benefits which include: increased shading, reduced evapotranspiration, reduced soil compaction, greater available soil volume, and reduced exposure to reflective heat for an individual tree. A grouped planting can be achieved in several types of sites: (1) a median or traffic triangle with opportunity for a large planting bed; (2) a continuous tree pit, where two or more trees are planted in a single trench in the sidewalk (at least 30 feet long); or (3) a raised planting bed within a plaza or alongside a pedestrian passageway. Grouped plantings are not often the preferred method of planting and are subject to approval at the discretion of the Forester reviewing your proposal. (Appendix B)

II.A.4. Structural Soils

Jersey City Parks & Forestry encourages the use of structural soils where appropriate, and may require its use where it is deemed necessary. Trees are not to be planted directly in structural soil, and structural soil is only to be used as a base material under hard surfaces such as concrete, permeable pavement, or permeable pavers. Exposed soil or grass-covered surfaces should be excavated and replaced with fresh topsoil meeting Jersey City Forestry Standards. The Division of Parks & Forestry has approved the use of CU and Swedish Structural Soils, and they must be installed in accordance with Parks' specifications (Appendix B). Structural soils can only be installed with the prior consent of the Parks Forester reviewing your application and the use of a licensed structural soil manufacturer is required.

II.A.5. Soil Cells (Silva Cells)

Soil cells such as Silva Cells, may be used where appropriate. They can only be installed with the prior consent of the Parks Forester reviewing your application, and must be installed in accordance with Parks' specification (Appendix B).

II.A.6. Species Selection

Growing conditions and microclimates can vary from location to location within a ward and across the City. Species selection should take into account site conditions, design goals, and diversity goals. In choosing a species, the mature height and spread shall be considered to ensure that it will not interfere with existing or proposed structures and overhead utilities. The final selection of the species for each site is made by the Forester. Parks will not allow large trees to be planted under primary wires and discourages small trees in large open spaces. Jersey City Parks & Forestry publishes a list of approved species for planting on the right-of-way. (Appendix C). Alternate species not found on the approved list may be considered on a case-by-case basis; however, Jersey City Parks & Forestry retains the right to determine what species is planted on the right-of-way. You may only plant the species indicated on the permit and must follow any terms and conditions described on the permit. Season, site conditions, and location will affect which species may be planted. If certain species are needed for specific design elements this should be brought to the attention of the Forester in the application. Landscape designs may require a longer period of review, so be sure to submit your application well in advance of the date of planting.

II.B. Planting Specifications

Planting shall consist of excavating all tree pits, planting, and maintaining new trees of the type and size designated on the approved list. All work shall be in accordance with the specifications within the Jersey City Forestry Standards and to the satisfaction of the Forester.

Applicants are liable for any damage to property caused by planting operations and related work. All disturbed areas shall be restored to their original condition.

II.B.1. Planting Seasons

Trees may be planted in the fall from October 15th through January 1st, and in the spring from March 15th through June 1st. No planting is permitted in the summer. Extensions to start early or plant late may be given at the Forester’s discretion based on current weather conditions.

II.B.2. Site Preparation

If any new tree pits have to be cut in concrete, a permit must first be obtained from the Jersey City Division of Engineering, Traffic and Transportation. A permit shall be required for each block where the pavement is broken for a new pit. It is the responsibility of the applicant to notify all owners/operators of underground facilities.
No pits shall be dug until proposed locations have been marked on the ground with a white ‘T’ by a Parks Forester. Once work begins, the applicant takes full responsibility for the tree pit locations until the end of the guarantee period. All excavated materials shall be removed from the site and disposed of properly. The area is to be made safe and secure at the end of the workday.

Site characteristics, such as overhead power lines, existing vegetation, and infrastructure items, such as curbs and sidewalks, shall be considered. Trees that grow taller than 25 feet should not be planted directly under power lines. When possible the tree shall be offset from power lines.

Where subsurface obstructions (vaults, utilities, sprinklers) are encountered during excavation and restrict the planting of a tree, the contractor shall restore the disturbed area to its original condition. If damage is done to an underground obstruction, it is the responsibility of the applicant to restore the site to its original condition. A new planting location will be designated if conditions permit.

Applicants are only permitted to occupy an 8-foot lane adjacent to the curb. Traffic shall not be blocked off at any time during planting operations without approval from the Division of Engineering, Traffic and Transportation. If the contractor needs to occupy any portion of the public right-of-way for construction, a Traffic Permit is required. There is no fee for the permit, but it is needed for the contractor to obtain temporary “No Parking” signs from the Parking Authority and, if necessary, to schedule police protection with the police department. The “No Parking” signs need to be picked up from the Parking Authority and posted for 48 hours in order for the Parking Authority to enforce them. If the contractor will be excavating in the public right-of-way, a Street/ Sidewalk Opening Permit is required from the Division of Engineering, Traffic and Transportation. This permit has fees based on the size of the excavation. All excavation projects will need to incorporate pavement restoration requirements, in accordance with the City Ordinance 15.00 Section 296-42 Regulations. Work shall not be performed on opposite sides of the street at the same time. Existing parking regulations shall be complied within so far as “No Standing” rules apply for the time limits specified.

II.B.3. Species Sizing and Grading

All trees shall be dug immediately before moving unless otherwise specified. Trees shall be transported and handled with utmost care to ensure adequate protection against injury and desiccation. When transported in closed vehicles, plants shall receive adequate ventilation to prevent sweating. When transported in open vehicles, plants shall be protected by tarpaulins or other suitable cover material. Balled and burlapped trees shall be set on the ground and balls covered with soil. Until planted, all materials shall be properly maintained and kept adequately watered.

All trees shall be dug to retain as many fibrous roots as possible. Balled and burlapped trees shall have a solid ball of earth of the minimum specified size (32 inches), securely held in place by untreated burlap and stout rope (nylon rope is NOT acceptable). Oversize or exceptionally heavy trees are acceptable if the size of the ball or spread of roots is proportionally increased. Loose, broken, or manufactured balls are unacceptable. Size and grading standards shall conform to those of the American Association of Nurserymen American Standard for Nursery Stock (ANSI Z60.1), 2014 Edition, unless otherwise specified.

Form and structure: All trees shall be typical of their species or cultivar. They shall have normal, well-developed branches and a fibrous root system. They shall be sound, healthy, vigorous trees, free from defects, disfiguring knots, sunscald, injuries, abrasions of the bark, plant diseases, insect eggs, borers and all forms of infestations. All trees shall have a single, straight trunk, with leader intact (not all species have a leader but one must be present in those that do) and be branched at least five feet from the ground unless otherwise specified or approved by the Forester.

Provenance and Tree Size: All trees shall be nursery grown in a USDA hardiness zone of 7B or lower (material collected from the wild is unacceptable), except with permission from Parks. Tree size shall be at least 2.5-inch caliper measured at 6 inches from the ground and no larger than 3.5 inches in caliper unless otherwise authorized by Jersey City Parks & Forestry.

Dimensions: Each tree shall be dimensioned as it stands in its natural position. Trees shall be calipered six (6) inches above ground. Trees furnished shall represent a fair average of the maximum and minimum caliper ranges. Trees furnished shall be delivered in the rootball size appropriate for the tree caliper based on species, trunk flares, or other tree-specific variables. The caliper of some
species may exceed 3” or 4” caliper based on species, trunk flares or other tree-specific variables, but no tree shall be furnished that exceeds a rootball diameter of 32” for 2.5-3” caliper trees and 42” for 3.0-4” trees. In the case of rootball size discrepancies the circumference of the top most ring of the rootball basket shall be taken and must be less than 103” for 2.0-2.5” trees, less than 110” or the tree shall be rejected for 2.5-3” trees while 3.0-4” trees must have a circumference of less than 140”.

All trees must be “limbed up” to a minimum of 5 feet for street tree plantings. Permission may be granted for low-limbed trees under certain circumstances.

II.B.4. Installation

Remove all materials from the tree pit for the full length and width of the tree pit to the depth of the tree’s root ball (Appendix B). For excavation of a lawn strip, excavate an area at least three times the diameter of the root ball in length by the width of the lawn strip (up to 3 times the diameter of the root ball), to the dimensions listed on the permit. Extreme care shall be taken to avoid excavation to a depth greater than required. The subgrade below the root ball shall be tamped slightly to prevent settlement. All ropes, stones, etc. shall be removed from the planting site before backfilling. All excavated materials shall be removed from the site and disposed of in an acceptable manner.

Place balled and burlapped material in the prepared planting pit by lifting and carrying it by the root ball so that the ball will not be loosened. Set the tree straight and in the center of the pit. All trees shall sit, after settlement, with the base of the trunk and the beginning of the roots, known as the “trunk flare”, level with the sidewalk grade. If the top of the root ball is not consistent with this area, the depth of the planting site should be adjusted by adding or removing soil below the root ball to make the trunk flare level with the sidewalk grade.

Cut and remove rope and wire from the root ball. Two thirds of the burlap shall be removed from the tree pit. The remaining burlap should be adjusted to prevent the formation of air pockets. Backfilling mixture shall be loose, friable and not frozen. Soil shall be firmed at 6 to 8 inch intervals. All tree pits are to be filled with topsoil and made level with existing conditions.

Cultivate and rake over finished planting areas leaving them in an orderly condition. At no time should topsoil be mounded to cover the trunk of the tree. The trunk flare shall always be visible. Final soil level shall be flush with the surrounding sidewalk grade to prevent potential tripping hazard.

Soil is often too high over the root flare as a result of digging at the nursery. This soil should be removed to expose the root flare (root collar) at the time of planting, before backfilling. The photos below show soil lines above the root flare as well as the possible issues from not correcting the problem or removing the wire basket.

![Figure 1. Maximum height of soil or mulch around the root collar.](Copperridge)

![Figure 2. Native tree showing the root collar at grade. A planted tree should also have the root collar visible at, or slightly higher than, the surrounding grade.](Christian Plunkett Consulting Arborist, LLC)
The root flare or root collar is the area of the tree where the trunk begins to flare out into the roots. The images on the previous page show where to find the root flare on a tree. Every tree planted should have the root flare even with the sidewalk outside the tree bed, with the root flare just visible as in the picture on the next page with the green line.

II.B.5. Tree Wrap
No tree trunks shall be wrapped after planting. Remove all nursery tags and protective wrapping once the tree has been planted.

II.B.6. Backfill
Material shall consist of natural loam topsoil. Topsoil must be free from subsoil, obtained from an area, which has never been stripped. It shall be removed to a depth of one foot or less if subsoil is encountered. Topsoil shall be of uniform quality, free from hard clods, stiff clay, hardpan, sods, particularly disintegrated stone, lime, cement, ashes, slag, concrete, tar residues, tared paper, boards, chips, sticks or any other undesirable material. Any fertilization must adhere to the New Jersey Fertilization Law.

Topsoil shall meet the following requirements:


b. pH. The pH shall be in the range of 6.0 to 7.0 inclusive, unless otherwise approved or specified by the Forester.

c. Soil Textural Analysis. Topsoil shall consist of the following percentages of sand, silt and clay. Any soil that does not meet the requirements below will be rejected and removed from the site.

<table>
<thead>
<tr>
<th>Material</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rocks, Stone and Gravel (&gt;2.0 mm)</td>
<td>&lt;5%</td>
</tr>
<tr>
<td>Sand (0.05-2 mm)</td>
<td>40%-60%</td>
</tr>
<tr>
<td>Silt (0.002-0.05 mm)</td>
<td>20%-50%</td>
</tr>
<tr>
<td>Clay (&lt;0.002 mm)</td>
<td>20% Max.</td>
</tr>
</tbody>
</table>

d. When the topsoil complies with the requirements of the specification but show a deficiency of not more than one percent in organic matter, it may be incorporated when and as permitted by the Forester.

e. Electrical conductivity shall be a maximum of 1.5 mmhos/cm. A higher level would indicate that the salt content is too high to be acceptable, and the soil must be removed from the site by the permit holder.

Jersey City Parks & Forestry may require that soil be changed at the expense of the applicant and/or the tree work entity if the soil does not appear to meet Parks specifications. It is the applicant’s responsibility to prove that the soil used meets Parks specifications. The applicant may provide a report from an approved lab showing a passing soil sample if they wish to show that their soil meets Parks specifications. The soil should be tested for the following: nutrients, pH, soluble salt level, organic matter content, percentages of sand/silt/clay, soil textural class, gravel content, + Extra Sieve ¼. The choice of lab must be approved in advance by the appropriate Parks Forester, and soil samples must be taken by a Parks Forester or their designate, and delivered to the lab by the Forester or their designate. Only a passing sample acceptable to the Parks Forester will exempt the applicant from having to replace the soil.

II.B.7. Staking
All staking shall be done during the planting operation and shall be maintained throughout the first year of the 2-year guarantee period. After the first year, the stakes must be removed.

Stakes shall be of white cedar or similar wood with or without bark attached and shall show no sign of cracking or decay. They shall have a maximum allowable deflection of ten percent (10%). Stakes shall be cut even so they are the same height. All trees shall be supported by 2 stakes, they shall be 8 feet long; the diameter at the middle shall be not less than 2 inches nor more than 2 ¾ inches and the diameter at the butt shall not exceed 3 inches. Stakes shall be placed outside of the rootball, driven 30 inches into the ground, and shall be fastened to the tree with a suitable length of ¾” wide, flat, woven polypropylene material such as Arbortie™ as manufactured by DeepRoot®, San Francisco, CA or approved equal that is knotted around the tree stakes (Appendix B).

Unless otherwise directed, trees shall be staked as shown on the plans and in accordance with these specifications. Stakes shall be set parallel to curbs. Trees shall stand plumb after staking. Stakes and Arbortie™ shall be removed at the end of the first year of the 2-year guarantee period,
unlless directed otherwise by the Forester. At the time the stakes are removed any holes left by the stake shall be filled with topsoil of the same quality as that specified in 2.B.6. Backfill.

II.B.8. Watering
At the time of planting, the soil around each tree shall be thoroughly saturated with at least 20 gallons (20 gal) of water. Soil shall be firmed at 6-8 inch intervals and thoroughly settled with water. Water shall be free from oil, have a pH not less than 6.0 nor greater than 8.0 and shall be free from impurities injurious to vegetation. Water may be drawn from mains owned by or supplying water to the City of Jersey City. Please contact DPW for an access permit.

Water shall not be applied in a manner which damages plants, stakes, or adjacent areas. Each tree bed shall be watered evenly in a manner which does not erode the soil or mulch. Watering shall not cause uprooting or exposure of plant roots to the air. Tree beds should be watered entirely, not just the area of the rootball. Washout of mulch or other damages resulting from these operations shall be immediately repaired at the expense of the applicant.

If conditions do not allow the use of Jersey City water sources, the applicant must obtain their own source of water. Twenty gallons of water shall be used on each new tree unless otherwise specified by the Forester. The water shall be placed throughout the entire tree bed and not just in the immediate area of the rootball.

II.B.9. Mulching
Mulch shall be applied as a ground cover to the surface of all planting beds at the time of planting and again after the tree stakes have been removed, one year after planting.

Mulch shall be applied to a uniform depth of 2 to 3 inches and shall be so distributed as to create a smooth, level cover over the exposed soil. A gap of approximately 2 inches should be left between the mulch and the trunk of the tree to avoid mounding above the trunk flare.

The applicant shall furnish and place Shredded Bark Mulch in accordance with the plans, specifications and directions of the Forester. All mulching shall be done during planting operation.

Shredded Bark Mulch shall be a natural forest product composed of shredded bark or wood not exceeding 3 inches in length and 1 inch width. Mulch shall be derived from tree material, not from wood waste or by-products like sawdust, shredded palettes, or other debris. Mulch shall be natural in color and not dyed. It shall be of a uniform grade with no additives or any other treatment. Mulch with leaves, twigs, and/or debris shall not be acceptable.

Shredded Bark Mulch shall be applied as a ground cover to the surface of all planting beds at the time of planting, one year after planting when the tree stakes are removed, at the start of each watering season during the 2-year guarantee period and when the tree is watered when directed by the Forester. Shredded Bark Mulch shall be applied to a uniform depth of 3 inches and shall be so distributed as to create a smooth, level cover over the exposed soil. A gap of approximately 2 inches should be left between the Shredded Bark Mulch and the trunk of the tree to avoid mounding above the trunk flare.

II.C. Finishing and Surface Treatments

II.C.1. Permeable or Porous Pavement
Jersey City Parks & Forestry encourages the use of permeable or porous pavement where appropriate to increase the amount of water available to trees and to assist in stormwater capture and management. All installations of permeable or porous pavement within exposed planting area around new and existing trees must be approved by the Division of Parks and Forestry. The proposed use of permeable or porous pavement must be noted in the permit application.

II.C.2. Tree Pit Guards
Tree pit guards may be required by the Division of Parks and Forestry. A tree pit guard is usually a cast-iron fence or wrought iron wickets, installed around a tree pit for protection. Parks and Forestry recommends a low cast-iron fence or wrought-iron wickets that is 18 inches high. Tree guard posts shall be solid steel or reinforced aluminum. Tree guards must be three sided leaving the street side open and should not be embedded into concrete. The guards will protect the tree from dogs and pedestrians and give it enough space to grow for many years to come.
Jersey City Parks & Forestry has standardized and approved designs which are encouraged for all tree guard installations (Appendix D). Alternative designs may be approved on a case-by-case basis and must be three-sided, approximately 18 inches tall, with no sharp points, installed on the outer perimeter of the tree bed, and positioned at least one foot short of the curb with the curbside open. Solid walls are not permissible. Water must be able to flow into the tree bed on all sides. The applicant takes full responsibility for maintaining the tree guard in a safe condition. If the condition of the tree guard is not maintained in a safe condition the tree guard will be removed by Jersey City Parks & Forestry. Interested parties should apply for a permit to 'Install Tree Guard' before installing a tree guard. The permit is to 'Install Tree Guard'.

**II.C.3. Tree Grates**

Sidewalk-level tree grates are not permitted. These restrict tree growth.

**II.C.4. Pavers**

Pavers or bricks are not to be used within exposed planting area without express written permission from Parks & Forestry.

**II.D. Maintenance**

All newly planted trees shall be maintained by the tree work entity and/or applicant until 2 years after the final inspection of permitted planting (sign-off date).

Maintenance shall include weeding, cultivating, edging, pruning, adjustment and timely removal of stakes, and Arbortie™ (these must be removed after one year), repair of minor soil washouts, mulching, soil replacement and other horticultural operations necessary for the proper growth of all trees, and for keeping the entire area within the planting area neat in appearance.

All planting areas shall be cultivated and weeded with hoes or other approved tools within the period from May 15 to October 31, and such cultivating and weeding shall be repeated at least every 3 weeks. Under no conditions shall weeds be allowed to attain more than 6 inches of growth.

Pit pavement shall be maintained flush with adjacent pavement during the 2 year guarantee period. At the expiration of the guarantee period, the area around the tree shall be cultivated and weed free.

**II.D.1. Pruning**

Pruning shall be done in accordance with ANSI A300 Part 1 Standard Practices for structural pruning. When directed by the Forester, trees shall be pruned so the resulting crown retains the growth habit of the tree species. Any and all branches interfering with or hindering the healthy growth of the tree shall be removed. All diseased branches and all dead branches shall be removed. Any branch which may be partly dead, yet has a healthy lateral branch at least one-third the diameter of the parent branch shall be removed beyond the healthy branch. All stubs or improper cuts resulting from former pruning shall be removed. All cuts shall be cleanly made with sharp tools as close to the parent trunk or limb as possible without disturbing the branch bark ridge or callus collar. Any existing nails, spikes, wire, plastic or other materials found driven into the tree shall be removed.
II.D.2. Watering
Watering must take place throughout the 2-year guarantee period, at least 20 gallons at approximately two-week intervals from May 15 to October 31. You may need to increase or reduce the frequency of watering based on weather conditions, resulting soil water content or other factors.

II.E. Guarantee Period
All trees must be guaranteed for 2 years. All applicants and tree work entities listed on a permit shall provide a guarantee for the trees planted. Applicants are advised to ensure that their tree work entity provides a guarantee otherwise the applicant will be held liable under the permit for replacing the tree.

II.F. Tree Replacement for Private Plantings
Any tree planted that is dead or, in the opinion of Parks & Forestry, in an unhealthy or unsightly condition, and/or has lost its natural shape due to dead branches, excessive pruning, inadequate or improper maintenance, or other causes including vandalism, within the two-year guarantee period shall be removed and replaced by the permittee in the next planting season. Where dead trees have been identified, whether due to natural causes or vandalism, the dead material shall be removed, including stakes, and Arborite™ within 30 days of notification. When necessary, topsoil, grass seed or appropriate paving material shall be added to the pit to eliminate potential tripping hazards at the time of removal. Documentation must be submitted to Parks showing the proper removal of trees. A renewed permit must be obtained to replant during the next planting season. The topsoil in the tree pit shall be changed when any replacement tree is planted.

II.F.1. Tree Valuation
Jersey City determines the value of street trees based on their caliper. A tree’s caliper is the diameter of its trunk. To measure a tree’s caliper, you must take the diameter 4.5 feet off of the root flare. This is commonly called “Diameter at Breast Height” or “DBH”. For reference, refer to Figure 3 and 4 below.

For every 2.5 inches of caliper of a removed, vandalized, or irreparably damaged City tree, one new tree must take its place. If when calculating the number of new trees you get a fraction, round up. Refer to the chart below for more information. In lieu of planting replacement trees, a monetary contribution equal to the cost of replacing the street tree may be made to the City. For 2018 this cost is $500 per new street tree.

Number of Trees Per Caliper Inch

<table>
<thead>
<tr>
<th>Caliper</th>
<th>Number of New Trees</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” to &lt; 5’</td>
<td>1</td>
</tr>
<tr>
<td>≥ 5” to &lt; 7.5’</td>
<td>2</td>
</tr>
<tr>
<td>≥ 7.5” to &lt; 9’</td>
<td>3</td>
</tr>
<tr>
<td>≥ 9” to &lt; 11.5’</td>
<td>4</td>
</tr>
<tr>
<td>≥ 11.5” to &lt; 14’</td>
<td>5</td>
</tr>
<tr>
<td>≥ 14”</td>
<td>6</td>
</tr>
</tbody>
</table>

Figure 3. How to measure a tree’s diameter if it is leaning. (University of Kentucky)

Figure 4. How to measure a tree’s diameter on level ground. (University of Minnesota)
II.G. Tree Protection

Any and all trees that fall within the jurisdiction of the City are protected by law from any and all damage thereto including but not limited to any incidental damages, damage to the canopy, or damage to the trunk or root zone during and in the course of any and all construction activities, and also the aftermath of any and all construction activities.

Any and all construction work performed within 25 feet or within the drip line, whichever is greater, of a city tree must possess a permit issued by the Division of Parks and Forestry to avoid unsafe, hazardous and other conditions which may be detrimental or potentially detrimental to any city tree. Contractor is responsible for obtaining all necessary permits to comply with regulations. This includes utility, sidewalk, pruning, or any other work within the drip line of a tree (within the city right of way) done by the general contractor or any subcontractors. Contractor must be familiar with, and follow Parks and Forestry planting and forestry specifications. Contractor will contact Parks and Forestry if any underground infrastructure (gas, water/electric etc.) affects any proposed/existing trees onsite. Applicant shall notify Parks and Forestry and submit required documentation for permit at least 10 business days prior to the commencement of any work requiring a permit.

Temporary wooden tree guards shall be installed immediately around each tree impacted by demolition and/or construction and maintained throughout the course of the entire demolition and construction process. Details for temporary wooden tree guards can be found in the Appendix B.

Preparatory pruning work shall be performed only when directed by a forestry inspector. This work shall be performed in accordance with ANSI a300 standards and by a qualified, licensed & insured arborist or tree service company. Contractor is to follow all Parks and Forestry permit & work order regulations. Contractor is responsible for scheduling the appointment with forestry inspector.

When a deficiency in tree protection is determined by a forestry inspector it must be remedied immediately. Any damage to existing trees during construction shall be the contractor’s responsibility. The contractor shall perform remedial work to damaged trees at the contractor’s expense; this work shall meet all Parks and Forestry regulations.

Any violation of any of the above may result in a stop work order and/or the issuance of additional violations. Work shall not re-commence until conditions are in compliance with City standards.

To best protect the critical root zone, contractors must adhere to the following guidelines:

1. The contractor shall take extreme care to protect the root systems of the existing trees. Bulk material, equipment, scaffold footings, or vehicles shall not be stockpiled or parked within the drip line of any tree. This is done to minimize surface and subsurface root and soil compaction. This applies to all tree drip lines within or outside the project limit line.

2. To best protect tree roots the contractor shall exercise extreme care in removing concrete or asphalt within the drip line of existing trees. Pavement should be lifted rather than dragged. Any work within the drip line of a street tree must get approval from the Division of Parks and Forestry. The excavation area within the drip line shall be backfilled immediately.

3. If roots are to be exposed for a period greater than forty-eight (48)-hours, the exposed area shall be covered with at least six (6)-inches of mulch and maintained moist during the course of construction until the area can be properly backfilled. No runoff or spillage of noxious materials while mixing, placing, or storing construction material shall occur within the tree pit or drip line. No ponding, eroding, or excessive wetting caused by dewatering operations shall occur within tree pit.

4. Unless otherwise noted it is best to keep existing concrete within tree protection zone as long as possible until removal and reinstallation of new sidewalk. Concrete should be left intact throughout the demolition and construction process to prevent further soil compaction on existing tree roots. Other work may be specified by forestry inspector to be done within a prescribed time frame. Metal grates are to be removed immediately. Cobblestones are to be removed immediately and the void created is to be amended with soil level to the sidewalk. Pit expansion may be required by forestry inspector.
II.H. Private Contractors

All contractors working in the City of Jersey City must adhere to all local and state laws regulating business and the tree care industry. Contractors working on public and private property with regard to trees are subject to the New Jersey “Tree Experts and Tree Care Operators Licensing Act.” P.L. 2009 C.45:15C-11. Contractors working on City trees will need to have an approved permit and permit work order from the Division of Parks and Forestry with them on the job site at all times.

Contractors performing work on or within 25 feet of a City tree will be required to go through the permitting process. Failure to do so may result in fines and/or restitution for any damages that may occur as a result of the work.

II.I. Bioswales / Green Infrastructure

Bioswales installed on the right-of-way help collect and manage stormwater runoff from streets and sidewalks by directing stormwater to engineered systems that typically feature soils, stones, and vegetation. At this time, Parks & Forestry does not issue permits for private installations of bioswales on the right-of-way without the consent of appropriate city agencies, and provisions for maintenance in place. If you are interested in installing a bioswale or other GI element, please contact the Jersey City Office of Sustainability at 201-547-4428.

II.J. Historic District Standards

Street trees contribute to the special integrity and character of historic districts, and great care should be used in their proper selection and placement in order to enhance the existing historic integrity of the streetscape.

Tree plantings in the City’s Historic Districts should respect the existing built environment, by considering a tree’s growth habits and compatibility with surrounding historic buildings and conditions. It is also important to consider that sometimes even the sidewalk materials fronting a property are themselves historic fabric which should be preserved.

The Jersey City Historic Preservation Commission requires that existing, historic, bluestone sidewalks be preserved and maintained; however, in order to enable the restoration of the historic tree canopy the Commission encourages the removal of broken bluestone slabs or the removal and storage of entire bluestone slabs for the installation of street trees. Large intact units of bluestone should never be removed and discarded but should be stored for possible re-use. The commission never recommends the cutting of bluestone into small pieces or modifying existing rectilinear pieces to accommodate a tree. Working with the existing sidewalk pattern, whether it be bluestone or concrete is the preferred and most appropriate recommendation for plotting out tree pits when possible and practical.

Nineteenth century historic districts typically have narrower sidewalk widths than more modern developments that may require alternative tree pit configurations than those established in the Forestry Standards (please see above Section II.A.2. Tree Pit Dimensions). Some creativity and on-site decision making may be necessary to ensure the proper placement of a tree to encourage its growth and to provide safe pedestrian access. If conditions allow, sidewalks 9 feet in width should install a 4 foot by 12 foot tree pit with a 4 foot by 6 foot exposed planting area and sidewalks 8 feet to 9 feet wide should follow the narrow tree pit specs. However, all tree plantings in historic districts must be approved by the Historic Preservation Commission. Please see Section II.A.2. and Section II.C.1. for more information. The recommended tree pit guard such as a hoop or double hoop design (See Appendix D) or an appropriate compatible custom design, based on historic evidence is permitted and encouraged in most situations.

The Zelkova tree is a recommended species of tree for use in the historic districts since it is reminiscent of the great elm canopies that historically arched over the city; however, other appropriate trees such as oaks, maples, gingko (male species only) are encouraged and listed in Appendix C. If you have any questions or concerns when planting a tree please feel free to contact staff of the Historic Commission at 201.547.5010. They will be happy to help you with the application process.
Street Tree Spacing Guidelines

**VAULTS** - no trees between vault & curb.

**HYDRANT** - at least 5' from trunk.

**CANOPY** - do not plant new trees under overhead branches of adjacent trees.

**CURB CUT** - at least 7' from trunk.

**ENTRY** - tree trunk not in front of entries to stairs.

**STREET SIGN** - at least 5' from trunk.

**UNDERGROUND UTILITIES** -
- Gas & Electric at least 2' from edge of tree pit
- Water Pipe or Valve at least 2' from trunk
- Oil Fill Pipe at least 4' from edge of tree pit.

**STREET LIGHT** - at least 15' from trunk.

**TREE SPACING** - 20' to 30' apart depending on species.

**SIDEWALK** - at least 4' wide from back of tree bed to wall or 5' wide from other obstruction preferred.

**CURB OF INTERSECTION** - at least 30' from trunk.
GENERAL PLANTING NOTES:

1. FOR THE DURATION OF THE TWO (2) YEAR GUARANTEE PERIOD, THE CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIAL, IN ACCORDANCE WITH THE LANDSCAPE SPECIFICATIONS AND TO THE SATISFACTION OF THE CITY REPRESENTATIVE. ANY PLANT MATERIAL DETERMINED TO BE DEAD OR DYING AT THE CLOSE OF THE GUARANTEE PERIOD SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.


3. FERTILIZE ALL TREES AND SHRUBS AT LEAST ONCE PER YEAR. MYCORRHIZAL FUNGI INNOCULANT SHALL BE APPLIED TO ALL TREES AND SHRUBS AT THE TIME OF PLANTING.

4. FERTILIZE ALL LAWN AREAS ONCE PER SEASON DURING THE SPRING, SUMMER, AND FALL. FERTILIZER SHALL BE A LOW PHOSPHORUS COMMERCIAL FERTILIZER, WITH A MINIMUM OF 7% NITROGEN BY WEIGHT, AS DESCRIBED IN THE LANDSCAPE SPECIFICATIONS.

5. PLANT MATERIAL SHALL BE INSPECTED FOR PEST DAMAGE AND INFESTATION AT REGULAR INTERVALS. APPLY PEST CONTROL MEASURES ACCORDING TO THE LIFE CYCLE OF THE PESTS. ALL PESTICIDES SHALL BE APPLIED BY A LICENSED PRACTITIONER.

6. SEASONAL MAINTENANCE NECESSARY TO ENSURE HEALTHY AND VIGOROUS GROWTH OF PLANT MATERIAL, AND TO MAINTAIN THE APPEARANCE OF THE LANDSCAPED AREAS SHALL BE PERFORMED AS NEEDED.

7. PLANT MATERIAL SHALL BE INSPECTED FOR PEST DAMAGE AND INFESTATION AT REGULAR INTERVALS. APPLY PEST CONTROL MEASURES ACCORDING TO THE LIFE CYCLE OF THE PESTS. ALL PESTICIDES SHALL BE APPLIED BY A LICENSED PRACTITIONER.

8. SEASONAL MAINTENANCE NECESSARY TO ENSURE HEALTHY AND VIGOROUS GROWTH OF PLANT MATERIAL, AND TO MAINTAIN THE APPEARANCE OF THE LANDSCAPED AREAS SHALL BE PERFORMED AS NEEDED.

9. PLANT MATERIAL SHALL BE INSPECTED FOR PEST DAMAGE AND INFESTATION AT REGULAR INTERVALS. APPLY PEST CONTROL MEASURES ACCORDING TO THE LIFE CYCLE OF THE PESTS. ALL PESTICIDES SHALL BE APPLIED BY A LICENSED PRACTITIONER.

10. DEBRIS AND DEAD LEAVES SHALL BE REMOVED FROM PLANTING BEDS IN THE FALL AND EARLY SPRING.

LANDSCAPE MAINTENANCE NOTES:

1. FOR THE DURATION OF THE TWO (2) YEAR GUARANTEE PERIOD, THE CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIAL IN ACCORDANCE WITH THE LANDSCAPE SPECIFICATIONS AND TO THE SATISFACTION OF THE CITY REPRESENTATIVE. ANY PLANT MATERIAL DETERMINED TO BE DEAD OR DYING AT THE CLOSE OF THE GUARANTEE PERIOD SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.

2. ALL PLANTS AND ENTIRE SHRUB BEDS TO RECEIVE 3 LAYERS OF SHREDDED BARK MULCH.

3. TOPSOIL SHALL BE SANDY LOAM, FREE FROM SUBSOIL, STONES LARGER THAN 1", OR ANY UNACCEPTABLE MATERIAL. CONTAIN 5% - 15% ORGANIC MATTER, ON 0.0 TO 7.0, SEE BACK FILL REQUIREMENTS. JERSEY CITY FORESTRY STANDARDS.

4. TOPSOIL SHALL COMPLY WITH ANY AND ALL ENVIRONMENTAL AND CLEAR FILL REQUIREMENTS, TO THE SATISFACTION OF THE ENVIRONMENTAL CONSULTANT.

5. CUT AND REMOVE BURLAP FROM TOP 2/3 OF BALL AND REMOVE WIRE BASKET COMPLETELY. NYLON ROPE AND/OR NYLON BALLING MATERIAL IS NOT ACCEPTABLE.

6. LOCATE GUY WIRES SO THAT THEY WILL NOT PULL CROTCH APART.

7. UPON COMPLETION OF THE FIRST YEAR OF THE TWO (2) YEAR PLANT GUARANTEE PERIOD, THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING OR REMOVING ALL STAKES. THIS SHALL BE DONE IN CONSULTATION WITH THE CITY REPRESENTATIVE. ALL STAKES REMAINING SHALL THEN BECOME THE RESPONSIBILITY OF THE OWNER.

8. IF THERE IS A DISPARITY BETWEEN THE PLANT COUNT SHOWN IN THE PLANT LIST AND THE PLANTING GRAPHIC, THE GRAPH SHALL TAKE PRECEDENCE.

9. IF THE CONTRACTOR DETERMINES THE SUB-SHELF SOIL CONDITIONS ARE DETERIOROUS TO PLANT GROWTH OR WILL INHIBIT DRAINAGE, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY AND PRIOR TO INSTALLATION OF PLANT MATERIAL.

10. PLANT PERENNIALS AND GROUNDCOVER IN 6" DEEP TOPSOIL BED CONSISTING OF 1/3 TOPSOIL AND 2/3 HUMUS. PLANT BULBS IN NATURALIZED DIRECTIONS.

11. TOPSOIL AND SEED ALL AREAS DISTURBED AS A RESULT OF ANY AND ALL DISTURBANCES, CONSTRUCTION, OR STORAGE OF EQUIPMENT WHERE SUCH AREAS ARE SHOWN ON THE PLANS OR NOT.

12. ALL EXISTING SOIL SHALL BE REMOVED AND BACK FILLED WITH NEW TOPSOIL MEETING PARKS AND FORESTRY SPECIFICATION.

13. ALL PLANT MATERIAL SHALL BE NURSERY GROWN AND SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN'S AMERICAN STANDARD FOR NURSERY STOCK.

14. ALL PLANT BEDS ARE TO BE SEPARATED FROM LAWN AREAS WITH A 3" DRIED W Y TRUNK.

15. KEEP MULCH 2" BELOW TOP OF PAVEMENTS AND CURBS.

16. ALL LANDSCAPING SHALL BE IN A HEALTHY AND VIGOROUS GROWING CONDITION AT THE TIME OF INSTALLATION. NO PLANT SHALL REMAIN AT THE SITE FOR MORE THAN THREE (3) DAYS AFTER DELIVERY WITHOUT BEING PROPERLY HEALED IN, NO TREE WITH A DAMAGED CENTRAL LEADER SHALL RECEIVE ACCEPTANCE.

17. ALL NEWLY INSTALLED LANDSCAPING SHALL BE SET PLUMB IN THE PLANTING PIT AND BACKFILLED IN UPPS NOT TO EXCEED 1/8" INCHES, IN PLANTING BEDS BACKFILL MUST CONSIST OF THREE PARTS NUTRTIVE TOPSOIL, THREE PARTS SCREENED TOPSOIL AND THREE PARTS PEAT, A MOISTURE ABSORBENT POLYMER SHALL BE INCLUDED IN THE AMENDED BACKFILL ON WELL AND EXCESSIVELY DRAINED SOILS AND ON EARTHEN BERMS TO ENSURE SOIL MOISTURE AVAILABILITY. ALL LANDSCAPE BEDS SHALL BE UNDERPLACED WITH A SUITABLE WATER PERMEABLE WEED BARFABRIC AND SHALL RECEIVE A MINIMUM THREE (3) INCH APPLICATION OF SHREDDED HARD WOOD MULCH OR OTHER ACCEPTABLE MATERIAL. UNTREATED WOOD CHIPS SHALL NOT BE USED. PLANT MATERIAL ARRANGED IN GROUNDSHOPS SHALL BE CONTAINED IN ONE (1) CONTINUOUS MULCHED BED TO REDUCE POSSIBLE PLANT DAMAGE CAUSED BY MAINTENANCE EQUIP. THE LANDSCAPE BED SHALL EXTEND TO THE BRANCH LIMITS OF THE NEWLY INSTALLED PLANTINGS.

18. PLANT MATERIAL CONSIDERED TO BE A FALL DIG HAZARD SHALL NOT BE DIG BETWEEN OCTOBER 1ST AND DECEMBER 1ST. FALL DIG HAZARD PLANTS MAY BE PLANTED DURING THIS TIME FRAME PROVIDED THEY HAVE BEEN DIG PRIOR TO OCTOBER 1ST, OR ARE CONTAINER GROWN.

STANDARD PLANTING DETAILS

CITY OF JERSEY CITY

STREET TREE PLANTING DETAIL - 5' X 10'
OPEN TREE PIT

- 18" HT., 3-SIDED TREE GUARD, SEE JERSEY CITY FORESTRY STANDARDS APPENDIX E
- ROOT FLARE TO BE EXPOSED AND FLUSH WITH FINISHED GRADE
- PERMEABLE PRECAST CONCRETE PAVERS OVER AGGREGATE BASE
- 5" X 0.25" STEEL EDGE
- GROUND COVER PLANTING WITH 3" SHREDDED BARK MULCH LAYER
- BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS
- PLACE BALL ON 95% COMPACTED TOPSOIL

- CUT AND REMOVE BURLAP FROM TOP 2/3 OF ROOT BALL, REMOVE WIRE BASKET COMPLETELY
- BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS
- PLACE BALL ON 95% COMPACTED TOPSOIL

- 8" LONG 2" DIA CEDAR STAKES SET OUTSIDE OF ROOT BALL
- 'ARBOR TIE' SHALL BE LOOPED AROUND TREE THROUGH EACH OTHER TWISTED AND SECURED TO THE STAKE

- STREET TREE
- PERMEABLE PRECAST CONCRETE PAVER BAND - 5" WIDE
- 10'-0"

- SECTION A
- SECTION B

- PLAN VIEW
- "ARBOR TIE" SHALL BE LOOPED AROUND TREE THROUGH EACH OTHER TWISTED AND SECURED TO THE STAKE
- CUT AND REMOVE BURLAP FROM TOP 2/3 OF ROOT BALL, REMOVE WIRE BASKET COMPLETELY
- BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS
- PLACE BALL ON 95% COMPACTED TOPSOIL

- STREET TREE
- PERMEABLE PRECAST CONCRETE PAVER BAND - 5" WIDE
- 10'-0"

- SECTION A
- SECTION B
- "ARBOR TIE" SHALL BE LOOPED AROUND TREE THROUGH EACH OTHER TWISTED AND SECURED TO THE STAKE
- CUT AND REMOVE BURLAP FROM TOP 2/3 OF ROOT BALL, REMOVE WIRE BASKET COMPLETELY
- BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS
- PLACE BALL ON 95% COMPACTED TOPSOIL

- STREET TREE
- PERMEABLE PRECAST CONCRETE PAVER BAND - 5" WIDE
- 10'-0"
1. Gas or electric lines shall be 2’ minimum from edge of tree pit. Oil-filled pipes shall be 4’ minimum from edge of tree pit. Water and sewer lines shall be 2’ from trunk.
2. Trees shall not be located in front of doorways.
3. Minimum recommended distance from tree trunk:
   3.1. To utility poles and/or lights shall be 15’.
   3.2. To water main over 20” dia. shall be 6’.
   3.3. To street signs and traffic signs shall be 5’.
   3.4. To curb shall be 7’.
   3.5. To fire hydrant shall be 5’.
   3.6. To curb of nearest intersection shall be 30’.
4. Minimum distance from edge of tree pit to nearest wall or fence shall be 5’.
5. No trees shall be installed between utility vaults and curb.
6. Do not plant new trees under overhead branches of adjacent trees.
7. Tree crown and trunk shall be free of defects and true to form.
8. Maintenance tracking tag shall be attached to sturdy scaffold branch.
9. No pavers, 4-sided tree guards, or other materials shall be placed within the tree bed.
10. Flood trees with water within the first 24 hours of planting.
11. Install PHC tree saver mycorrhizal fungal transplant inoculant for trees and shrubs. Install one 3 ounce packet per caliper inch or per 1 foot of rootball dia.
12. Contractor shall have a guarantee period of 2 years for each tree planted.
13. Topsoil shall comply with the following requirements:
   13.1. Natural loam with the addition of compost or humus.
   13.2. Organic matter content shall be between 5% - 12%.
   13.3. The pH shall be in the range of 6.0 to 7.0 inclusive, unless otherwise approved or specified by the Jersey City Forester.
   13.4. Soil textural analysis: topsoil shall consist of the following percentages of sand, silt, and clay. Any soil that does not meet the requirements below will be rejected and removed from the site.
      - Rocks, stone and gravel >2.0 mm <5%.
      - Sand (0.05-2.0 mm) 40 - 60%.
      - Silt (0.002 - 0.05mm) 20 - 50%.
      - Clay (<0.002 mm) 20% maximum.
   13.5. When topsoil otherwise complies with the requirements of the specification but shows a deficiency in organic matter, compost may be incorporated when and as permitted by the forester.
   13.6. Root ball size relative to tree height shall be within the ranges set by the American Nursery Standards.

Tree Planting Notes:
- Prune only dead and broken branches at time of planting, unless otherwise directed by the landscape architect or arborist. Never cut or prune leader.
- Arbor tie shall be looped around tree through each other twisted and secured to the stake.
- Mulch shall be in contact with trunk flare or trunk root flare to be exposed and flush with finished grade.
- Cut and remove burlap from top 2/3 of root ball, remove wire basket completely.
- Notch stake to hold wire in place.
- Backfill with new topsoil meeting Jersey City forestry standards.
- Undisturbed grade.
- Scarify edges of excavation.
- 3” thick layer of shredded bark mulch.
- 8’ long 2” dia. cedar stake, driven 30” into the ground, set outside root ball.
- Finished grade.
STREET TREE PLANTING DETAIL - 5' X 10' OPEN TREE PIT WITH 3'-0" WALKWAY

- STRUCTURAL SOIL MIX: COMPACT TO 95% DENSITY - SEE PLAN VIEW FOR LIMITS

- PERMEABLE PAVERS ON 1 1/2" LAYER OF ASTM #8 CRUSHED, ANGULAR CHIP STONE SETTING BED, OVER STRUCTURAL SOIL

- 8 LONG 2" DIA CEDAR STAKES SET OUTSIDE OF ROOT BALL

- 'ARBOR TIE': SHALL BE LOOPED AROUND TREE THROUGH EACH OTHER TWISTED AND SECURED TO THE STAKE

- TREE GUARD, SEE JERSEY CITY FORESTRY STANDARDS, APPENDIX E

- ROOT FLARE TO BE EXPOSED AND FLUSH WITH FINISHED GRADE

- GROUND COVER PLANTING WITH 3" SHREDDED BARK MULCH LAYER

- ADJACENT SIDEWALK

- CUT AND REMOVE BURLAP FROM TOP 2/3 OF ROOT BALL, REMOVE WIRE BASKET COMPLETELY

- BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS

- PLACE BALL ON 95% COMPACTED TOPSOIL

- PRUNE DEAD AND BROKEN BRANCHES ONLY AT TIME OF PLANTING, NEVER CUT OR PRUNE LEADER

- PERMEABLE PRECAST CONCRETE PAVER BAND - 7'-3" WIDE

- 5' X 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

- SHAD ED AREA IS LIMIT OF STRUCTURAL SOIL

- STREET TREE

- 5' X 10" PLANTED AND MULCHED OPENING, PLANT WITH PERENNIALS OR GROUND COVER

- 18" HT., 3-SIDED TREE GUARD, SEE JERSEY CITY FORESTRY STANDARDS APPENDIX E

- 5' X 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

- ADJACENT SIDEWALK

- PERMEABLE PRECAST CONCRETE PAVER BAND - 5" WIDE

- 9' X 20" CONCRETE CURB

- PERMEABLE PRECAST CONCRETE PAVER BAND - 5' X 10'

- 5" X 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

- SHAD ED AREA IS LIMIT OF STRUCTURAL SOIL
APPENDIX B

PERMEABLE PRECAST CONCRETE PAVER BAND - 5' WIDE

ADJACENT SIDEWALK

5' SQUARE PLANTED AND MULCHED OPENING, PLANT WITH PERENNIALS OR GROUNDCOVER

SHADIED AREA IS LIMIT OF STRUCTURAL SOIL

STREET TREE

5' x 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

SHADIED AREA IS LIMIT OF STRUCTURAL SOIL

5' SQUARE PLANTED AND MULCHED OPENING, PLANT WITH PERENNIALS OR GROUNDCOVER

STREET TREE

5' x 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

SHADIED AREA IS LIMIT OF STRUCTURAL SOIL

PERMEABLE PRECAST CONCRETE PAVER BAND - 5' WIDE

ADJACENT SIDEWALK

SECTION B

PERMEABLE PRECAST CONCRETE PAVERS ON 1 1/2" LAYER OF ASTM#8 CRUSHED, ANGULAR CHIP STONE SETTING BED

ADJACENT SIDEWALK

JOINT AGGREGATE - ASTM #8 CRUSHED ANGULAR CHIP STONE - FILLED TO THE LIP OF THE PAVER

STRUCTURAL SOIL MIX - COMPACT TO 95% DENSITY - SEE PLAN VIEW FOR LIMITS

COMPACTED SUBGRADE

INSTALL FILTER FABRIC UNDER SETTING BED- TURN UP AT SIDES

SECTION A

PERMEABLE PRECAST CONCRETE PAVER BAND - 5' WIDE

ADJACENT SIDEWALK

8' LONG 2" DA CEDAR STAKES SET OUTSIDE OF ROOT BALL

"ARBOR TIE" SHALL BE LOOPE AROUND TREE THROUGH EACH OTHER TWISTED AND SECURED TO THE STAKE

ROOT FLARE TO BE EXPOSED AND FLUSH WITH FINISHED GRADE

GROUNDCOVER PLANTING WITH 3" SHREDDED BARK MULCH LAYER

ADJACENT SIDEWALK

CUT AND REMOVE BURLAP FROM TOP 2/3 OF ROOT BALL, REMOVE WIRE BASKET COMPLETELY

BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS

PLACE BALL ON 95% COMPACTED TOPSOIL

SECTION C

PERMEABLE PRECAST CONCRETE PAVER BAND - 5' WIDE

ADJACENT SIDEWALK

5" x 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

5" x 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

STREET TREE

PERMEABLE PRECAST CONCRETE PAVER BAND - 5' WIDE

ADJACENT SIDEWALK

CUT AND REMOVE BURLAP FROM TOP 2/3 OF ROOT BALL, REMOVE WIRE BASKET COMPLETELY

BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS

PLACE BALL ON 95% COMPACTED TOPSOIL

SECTION A

PERMEABLE PRECAST CONCRETE PAVER BAND - 5' WIDE

ADJACENT SIDEWALK

5' SQUARE PLANTED AND MULCHED OPENING, PLANT WITH PERENNIALS OR GROUNDCOVER

SHADIED AREA IS LIMIT OF STRUCTURAL SOIL

5' SQUARE PLANTED AND MULCHED OPENING, PLANT WITH PERENNIALS OR GROUNDCOVER

STREET TREE

5' x 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

SHADIED AREA IS LIMIT OF STRUCTURAL SOIL

PERMEABLE PRECAST CONCRETE PAVER BAND - 5' WIDE

ADJACENT SIDEWALK

CUT AND REMOVE BURLAP FROM TOP 2/3 OF ROOT BALL, REMOVE WIRE BASKET COMPLETELY

BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS

PLACE BALL ON 95% COMPACTED TOPSOIL

SECTION C

8' LONG 2" DA CEDAR STAKES SET OUTSIDE OF ROOT BALL

"ARBOR TIE" SHALL BE LOOPE AROUND TREE THROUGH EACH OTHER TWISTED AND SECURED TO THE STAKE

ROOT FLARE TO BE EXPOSED AND FLUSH WITH FINISHED GRADE

GROUNDCOVER PLANTING WITH 3" SHREDDED BARK MULCH LAYER

ADJACENT SIDEWALK

S HADIED AREA IS LIMIT OF STRUCTURAL SOIL

5" x 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

STREET TREE

PERMEABLE PRECAST CONCRETE PAVER BAND - 5' WIDE

ADJACENT SIDEWALK

CUT AND REMOVE BURLAP FROM TOP 2/3 OF ROOT BALL, REMOVE WIRE BASKET COMPLETELY

BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS

PLACE BALL ON 95% COMPACTED TOPSOIL
STANDARD PLANTING DETAILS

CITY OF JERSEY CITY

APPENDIX B

SECTION A

ADJACENT SIDEWALK

PERMEABLE PRECAST CONCRETE PAVERS ON 1 1/2" LAYER OF ASTM#8 CRUSHED, ANGULAR CHIP STONE SETTING BED

ADJACENT SIDEWALK

JOINT AGGREGATE - ASTM #8 CRUSHED ANGULAR CHIP STONE - FILLED TO THE LIP OF THE PAVER.

STRUCTURAL SOIL MIX - COMPACT TO 95% DENSITY - SEE PLAN VIEW FOR LIMITS.

COMPACTED SUBGRADE

INSTALL FILTER FABRIC UNDER SETTING BED - TURN UP AT SIDES

SECTION B

ADJACENT SIDEWALK

ROOT FLARE TO BE EXPOSED AND FLUSH WITH FINISHED GRADE

GROUNDCOVER PLANTING WITH 3" SHREDDED BARK MULCH LAYER

5" x 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

5" x 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

STREET TREE

PERMEABLE PRECAST CONCRETE PAVER BAND - 4' WIDE

9" X 20" CONCRETE CURB

SHADDED AREA IS LIMIT OF STRUCTURAL SOIL

PERMEABLE PRECAST CONCRETE PAVER BAND - 4' WIDE

4" X 6" PLANTED AND MULCHED OPENING, PLANT WITH PERENNIALS OR GROUND COVER

5" X 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

SHADDED AREA IS LIMIT OF STRUCTURAL SOIL

ADJACENT SIDEWALK

PERMEABLE PRECAST CONCRETE PAVER BAND - 4' WIDE

3'-0" MIN.

SECTION C

GROUNDCOVER PLANTING WITH 3" SHREDDED BARK MULCH LAYER

ROOT FLARE TO BE EXPOSED AND FLUSH WITH FINISHED GRADE

JOINT AGGREGATE - ASTM #8 CRUSHED ANGULAR CHIP STONE - FILLED TO THE LIP OF THE PAVER.

STRUCTURAL SOIL MIX - COMPACT TO 95% DENSITY - SEE PLAN VIEW FOR LIMITS.

RESTORE CURB CROWN TO 4" HIGH.

BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS

PLACE BALL ON 95% COMPACTED TOPSOIL
5'-0"

9" x 20" CONCRETE CURB
ADJACENT SIDEWALK

SHADE AREA IS LIMIT
OF STRUCTURAL SOIL
BELOW SIDEWALK

PERMEABLE PRECAST
CONCRETE PAVER
BAND - 3 FT WIDE

6" x 0.25" STEEL
EDGING AT
PERMEABLE PAVERS

PERMEABLE PRECAST
CONCRETE PAVER
BAND - 3 FT WIDE

3' X 5' PLANTED AND
MULCHED TREE PIT,
PLANT WITH
PERENNIALS OR
GROUNDCOVER

6" x 0.25" STEEL
EDGING AT
PERMEABLE PAVERS

STREET TREE

'ARBOR TIE' SHALL BE LOOPED
AROUND TREE THROUGH EACH OTHER
TWISTED AND SECURED TO THE STAKE
8" LONG 2" DIA. CEDAR STAKES SET
OUTSIDE OF ROOTBALL
ROOT FLARE TO BE EXPOSED AND
FLUSH WITH FINISHED GRADE
GROUND COVER PLANTING WITH 3'
SHREDDED BARK MULCH LAYER
ADJACENT SIDEWALK
STRUCTURAL SOIL MIX -
COMPACT TO 95% DENSITY -
SEE PLAN VIEW FOR LIMITS.
BACKFILL WITH NEW TOPSOIL
MEETING JERSEY CITY
FORESTRY STANDARDS
SIT BALL ON 95%
COMPACTED TOPSOIL
COMPACTED SUBGRADE

3' X 5' PLANTED AND
MULCHED TREE PIT,
PLANT WITH
PERENNIALS OR
GROUNDCOVER

PERMEABLE PRECAST
CONCRETE PAVER
BAND - 3 FT WIDE

9" x 20" CONCRETE CURB

JOINT AGGREGATE - ASTM #8
CRUSHED ANGULAR CHIP STONE
- FILLED TO THE LIP OF THE PAVER.
INSTALL FILTER FABRIC UNDER
SETTING BED - TURN UP AT SIDES

SIT BALL ON 95%
COMPACTED TOPSOIL
COMPACTED SUBGRADE

'ARBOR TIE' SHALL BE LOOPED
AROUND TREE THROUGH EACH OTHER
TWISTED AND SECURED TO THE STAKE
8" LONG 2" DIA. CEDAR STAKES SET
OUTSIDE OF ROOTBALL
ROOT FLARE TO BE EXPOSED AND
FLUSH WITH FINISHED GRADE
GROUND COVER PLANTING WITH 3'
SHREDDED BARK MULCH LAYER
ADJACENT SIDEWALK
STRUCTURAL SOIL MIX -
COMPACT TO 95% DENSITY -
SEE PLAN VIEW FOR LIMITS.
BACKFILL WITH NEW TOPSOIL
MEETING JERSEY CITY
FORESTRY STANDARDS
SIT BALL ON 95%
COMPACTED TOPSOIL
COMPACTED SUBGRADE

3' X 5' PLANTED AND
MULCHED TREE PIT,
PLANT WITH
PERENNIALS OR
GROUNDCOVER

PERMEABLE PRECAST
CONCRETE PAVER
BAND - 3 FT WIDE

9" x 20" CONCRETE CURB

JOINT AGGREGATE - ASTM #8
CRUSHED ANGULAR CHIP STONE
- FILLED TO THE LIP OF THE PAVER.
INSTALL FILTER FABRIC UNDER
SETTING BED - TURN UP AT SIDES

SHADE AREA IS LIMIT
OF STRUCTURAL SOIL
BELOW SIDEWALK

PERMEABLE PRECAST
CONCRETE PAVER
BAND - 3 FT WIDE

6" x 0.25" STEEL
EDGING AT
PERMEABLE PAVERS

PERMEABLE PRECAST
CONCRETE PAVER
BAND - 3 FT WIDE

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STRUCTURAL SOIL MIX -
COMPACT TO 95% DENSITY -
SEE PLAN VIEW FOR LIMITS.
BACKFILL WITH NEW TOPSOIL
MEETING JERSEY CITY
FORESTRY STANDARDS
SIT BALL ON 95%
COMPACTED TOPSOIL
COMPACTED SUBGRADE

3' X 5' PLANTED AND
MULCHED TREE PIT,
PLANT WITH
PERENNIALS OR
GROUNDCOVER

PERMEABLE PRECAST
CONCRETE PAVER
BAND - 3 FT WIDE

9" x 20" CONCRETE CURB

JOINT AGGREGATE - ASTM #8
CRUSHED ANGULAR CHIP STONE
- FILLED TO THE LIP OF THE PAVER.
INSTALL FILTER FABRIC UNDER
SETTING BED - TURN UP AT SIDES
APPENDIX B

PRECAST PERMEABLE CONCRETE PAVERS

STRUCTURAL SOIL INSTALLED IN 6" LIFTS. EACH LIFT COMPACTED TO 95% ASPER SPECIFICATIONS

CUT AND REMOVE BURLAP FROM TOP 2/3 OF ROOT BALL, REMOVE WIRE BASKET COMPLETELY

COMPLETE ROOT FLARE TO BE EXPOSED AND FLUSH WITH FINISHED GRADE

TWO (2) 8' LONG 2" DIA CEDAR STAKES SET OUTSIDE OF ROOTBALL LEVEL AND WITH 5'-6" VISIBLE ABOVE GROUND

GROUNDCOVER PLANTING WITH 3" SHREDDED BARK MULCH LAYER

BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS

TREE CROWN AND TRUNK SHALL BE FREE OF DEFECTS AND TRUE TO FORM

GROUND COVER PLANTED WITH 3" SHREDDED BARK MULCH LAYER

5" x 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS (TYP)

‘ARBOR TIE’ SHALL BE LOOPED AROUND TREE THROUGH EACH OTHER TWISTED AND SECURED TO THE STAKE

PRECAST PERMEABLE CONCRETE PAVERS

1 1/2" LAYER OF ASTM #8 CRUSHED ANGULAR CHIP STONE SETTING BED

STRUCTURAL SOIL INSTALLED IN # LIFTS. EACH LIFT COMPACTED TO 95% AS PER SPECIFICATIONS

PLAN VIEW

PERMEABLE PRECAST CONCRETE PAVER BAND - 5" WIDE

5" x 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

STREET TREE

5" SQUARE PLANTED AND MULCHED OPENING. PLANT WITH PERENNIALS OR GROUNDCOVER

9" X 20" CONCRETE CURBS

SHADOWED AREA IS LIMIT OF STRUCTURAL SOIL

PERMEABLE PRECAST CONCRETE PAVER BAND - 5" WIDE

5" x 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

STREET TREE

ADJACENT SIDEWALK

5" SQUARE PLANTED AND MULCHED OPENING. PLANT WITH PERENNIALS OR GROUNDCOVER

5" x 0.25" STEEL EDGE, ALONG PERMEABLE PAVERS

SECTION "A"
APPENDIX B

PRECAST PERMEABLE CONCRETE PAVERS

SOIL CELL UNIT, 1"-3" GAP BETWEEN UNITS.
ANCHORED TO GROUND WITH 10" SPIKE 1" AIR SPACE BETWEEN SOIL CELL UNIT DECK AND PLANTING SOIL

CUT AND REMOVE BURLAP FROM TOP 2/3 OF ROOT BALL, REMOVE WIRE BASKET COMPLETELY

PRECAST PERMEABLE CONCRETE PAVERS

ROOT FLARE TO BE EXPOSED AND FLUSH WITH FINISHED GRADE

GROUND COVER PLANTING WITH 3" SHREDDED BARK MULCH LAYER

BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS

NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS BELOW ROOT BALL COMPACTED TO 95% PROCTOR

PLANTING SOIL INSTALLED IN 8" LIFTS (2 LIFTS PER SOIL CELL UNIT)
12" MIN. AGGREGATE BASE COURSE OVER CELLS
GEOTEXTILE FABRIC

GEOTEXTILE FABRIC

CITY OF JERSEY CITY
STANDARD PLANTING DETAILS

TREE PIT DETAIL WITH SOIL CELL UNIT - DOUBLE LAYER

DRAWING NAME: STANDARD PLANTING DETAILS
DRAWING NO.: 09
DATE: 12.18.2017
SCALE: NOT TO SCALE

REVISIONS

© DATEN
APPENDIX B

NOTCH TO HOLD WIRE IN PLACE

8' LONG 2” DIA CEDAR STAKES SET OUTSIDE OF ROOTBALL

BRANCHES AT TIME OF PLANTING, UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT OR ARBORIST. NEVER CUT OR PRUNE LEADER

'ARBOR TIE' (3 TIES, 120° APART) NO MULCH SHALL COME WITHIN 3' OF CONTACT WITH TRUNK FLARE OR TRUNK COLLAR. ROOT FLARE TO BE EXPOSED AND FLUSH WITH FINISHED GRADE

CUT AND REMOVE BURLAP FROM TOP 2/3 OF ROOT BALL, REMOVE WIRE BASKET COMPLETELY

3" THICK LAYER OF SHREDDED BARK MULCH

CUT AND REMOVE BURLAP FROM TOP 2/3 OF ROOT BALL, REMOVE WIRE BASKET COMPLETELY

3" THICK LAYER OF SHREDDED BARK MULCH

PRIJUE ONLY DEAD AND BROKEN BRANCHES AT TIME OF PLANTING, UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT OR ARBORIST. NEVER CUT OR PRUNE LEADER

'ARBOR TIE' SHALL BE LOOPED AROUND TREE THROUGH EACH OTHER TWISTED AND SECURED TO THE STAKE

PRUNE ONLY DEAD AND BROKEN BRANCHES AT TIME OF PLANTING, UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT OR ARBORIST. NEVER CUT OR PRUNE LEADER

'ARBOR TIE' SHALL BE LOOPED AROUND TREE THROUGH EACH OTHER TWISTED AND SECURED TO THE STAKE

STAKING AND PLANTING NOTES:

1. STAKES AND 'ARBOR TIES' TO BE USED ONLY IF CONDITIONS MERIT AND SHALL BE REMOVED BY THE CONTRACTOR AFTER ONE YEAR.

2. EVERGREENS 4'-6' HT. - 2'-3' OF STAKE ABOVE GROUND

3. EVERGREENS 6'-8' HT. - 3'-4' OF STAKE ABOVE GROUND

4. EVERGREENS 8'-10' HT. - 4'-6' OF STAKE ABOVE GROUND

5. WIRE BASKETS SHALL BE COMPLETELY REMOVED BEFORE PLANTING

6. INSTALL PHC TREE SAVER MYCORRHIZAL FUNGAL TRANSPLANT INOCULANT FOR TREES AND SHRUBS. INSTALL ONE 3 OUNCE PACKET PER CALIPER INCH OR PER 1 FOOT OF ROOTBALL DIAMETER.

7. SEE JERSEY CITY FORESTRY STANDARD PLANTING NOTES

BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS

STAKING AND PLANTING NOTES:

1. STAKES AND 'ARBOR TIES' TO BE USED ONLY IF CONDITIONS MERIT AND SHALL BE REMOVED BY THE CONTRACTOR AFTER ONE YEAR.

2. EVERGREENS 4'-6' HT. - 2'-3' OF STAKE ABOVE GROUND

3. EVERGREENS 6'-8' HT. - 3'-4' OF STAKE ABOVE GROUND

4. EVERGREENS 8'-10' HT. - 4'-6' OF STAKE ABOVE GROUND

5. WIRE BASKETS SHALL BE COMPLETELY REMOVED BEFORE PLANTING

6. INSTALL PHC TREE SAVER MYCORRHIZAL FUNGAL TRANSPLANT INOCULANT FOR TREES AND SHRUBS. INSTALL ONE 3 OUNCE PACKET PER CALIPER INCH OR PER 1 FOOT OF ROOTBALL DIAMETER.

7. SEE JERSEY CITY FORESTRY STANDARD PLANTING NOTES

BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS

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5. WIRE BASKETS SHALL BE COMPLETELY REMOVED BEFORE PLANTING

6. INSTALL PHC TREE SAVER MYCORRHIZAL FUNGAL TRANSPLANT INOCULANT FOR TREES AND SHRUBS. INSTALL ONE 3 OUNCE PACKET PER CALIPER INCH OR PER 1 FOOT OF ROOTBALL DIAMETER.

7. SEE JERSEY CITY FORESTRY STANDARD PLANTING NOTES

BACKFILL WITH NEW TOPSOIL MEETING JERSEY CITY FORESTRY STANDARDS
NOTES:

1. DO NOT PRUNE EVERGREEN SHRUBS EXCEPT TO REMOVE DEAD AND BROKEN BRANCHES. THIN BRANCHES AND FOLIAGE (NOT ALL BRANCH TIPS) BY 1/3, RETAINING NORMAL PLANT SHAPE.
2. SHRUBS SHALL BEAR THE SAME RELATIONSHIP TO GRADE AS IT BORE TO PREVIOUS GRADE IN NURSERY
3. INSTALL PHC TREE SAVER MYCORRHIZAL FUNGAL TRANSPLANT INOCULANT. INSTALL ONE 3 OUNCE PACKET PER CALIPER INCH OR PER 1 FOOT OF ROOTBALL DIA. FOR RHODODENDRONS, AZALEAS AND MOUNTAIN LAURELS USE ERICOID MYCORRHIZAL FUNGI.
4. WATER PLANTS THOROUGHLY AFTER PLANTING.
5. SEE JERSEY CITY FORESTRY STANDARD GENERAL PLANTING NOTES.
1. Snow fencing should be installed at drip line of tree branches.
2. No boards are to be nailed to trees.
3. Feeder roots should not be cut inside the tree branches drip line.
4. Tree limb removal, where necessary, will be done to trunk or main branch.
5. All trees inside the limit of disturbance to be preserved must be protected with orange tree protection fence.
6. Protect tree drip line root area. Any change must be forwarded (prior to work being completed) to the township forester for approval.
7. Fence must remain and be maintained through duration of construction.
<table>
<thead>
<tr>
<th>Common Name</th>
<th>Latin Name</th>
<th>Recommended on Narrow Streets</th>
<th>Recommended under Power Lines</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegheny Serviceberry</td>
<td>Amelanchier laevis</td>
<td>YES</td>
<td>YES</td>
<td>Wet/Dry Soil Preferred</td>
</tr>
<tr>
<td>American Holly</td>
<td>Ilex opaca</td>
<td>YES</td>
<td>YES</td>
<td>Prune when young</td>
</tr>
<tr>
<td>American Hornbeam</td>
<td>Carpinus carpinian</td>
<td>YES</td>
<td>YES</td>
<td>Wet/Dry Soil Preferred</td>
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<tr>
<td>Tilia americana</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple Serviceberry</td>
<td>Amelanchier x grandiflora</td>
<td>YES</td>
<td>YES</td>
<td>Wet/Dry Soil Preferred</td>
</tr>
<tr>
<td>Black Gum</td>
<td>Nyssa sylvatica</td>
<td>YES</td>
<td>YES</td>
<td>Wet/Dry Soil Preferred</td>
</tr>
<tr>
<td>Black Oak</td>
<td>Quercus velutina</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian Linden</td>
<td>Tilia euchlora</td>
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<td></td>
</tr>
<tr>
<td>Chinese Redbud</td>
<td>Quercus prinus</td>
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</tr>
<tr>
<td>Chinese Tree Lilac</td>
<td>Cercis chinensis</td>
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<tr>
<td>Coomon Hornbeam</td>
<td>Carpinus betulius</td>
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<tr>
<td>Crabapple</td>
<td>Malus</td>
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<tr>
<td>Eastern Hop</td>
<td>Ostrya virginia</td>
<td>YES</td>
<td>YES</td>
<td>Prefers shade</td>
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<tr>
<td>Eastern Redbud</td>
<td>Cercis canadensis</td>
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<tr>
<td>English Oak</td>
<td>Quercus robur</td>
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<tr>
<td>Hackberry</td>
<td>Celtis occidentalis</td>
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<tr>
<td>Hardy Rubber Tree</td>
<td>Eucamnia ulmoides</td>
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<td>Honey Locust</td>
<td>Gleditsia triacanthos</td>
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<td>Japanese Hornbeam</td>
<td>Carpinus japonica</td>
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<td>Japanese Scholar</td>
<td>Sophora japonica</td>
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<tr>
<td>Japanese Flowering Cherry</td>
<td>Prunus serrulata</td>
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<tr>
<td>Kwanza, Shiroda</td>
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<td></td>
</tr>
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<td>Common Name</td>
<td>Latin Name</td>
<td>Notes</td>
<td>Recommended under Power Lines</td>
<td>Recommended on Narrow Streets</td>
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<tr>
<td>----------------------</td>
<td>-----------------------------</td>
<td>---------------------------------</td>
<td>-------------------------------</td>
<td>-------------------------------</td>
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<tr>
<td>Juneberry</td>
<td>Amelanchier lamarckii</td>
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<td>YES</td>
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<tr>
<td>Kentucky Coffee Tree</td>
<td>Gymnocladus dioicus</td>
<td>Male Cultivars Only</td>
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<tr>
<td>Little Leaf Linden</td>
<td>Tilia cordata</td>
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<td>YES</td>
<td>YES</td>
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<tr>
<td>Maidenhair Tree</td>
<td>Ginkgo biloba</td>
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<td>YES</td>
<td></td>
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<tr>
<td>Northern Red Oak</td>
<td>Quercus rubra</td>
<td>Wet/Dry Soil Preferred</td>
<td>YES</td>
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<tr>
<td>Oklahoma Redbud</td>
<td>Cercis roniflora</td>
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<td></td>
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<tr>
<td>Purple-Leaf Sand Cherry</td>
<td>Prunus cistena</td>
<td>YES</td>
<td></td>
<td></td>
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<tr>
<td>Scarlet Oak</td>
<td>Quercus acutissima</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serviceberry</td>
<td>Amelanchier canadensis</td>
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</tr>
<tr>
<td>Silver Linden</td>
<td>Tilia tomentosa</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Swamp White Oak</td>
<td>Liquidambar styraciflua</td>
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<td></td>
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<tr>
<td>Sweet Gum</td>
<td>Syringa reticulata</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Tree Lilac</td>
<td>Cornus kousa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turkish Hazel Oak</td>
<td>Cornus phellos</td>
<td></td>
<td></td>
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<td>Willow Oak</td>
<td>Cladrastis kentukea</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Yoshino Cherry</td>
<td>Prunus x yedoensis</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Zelkova</td>
<td>Zelkova serrata</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prunus subhirtella</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Type A Tree Guard

Tree Pit Guard Type 'A'

Type 'A' Three-Sided Design

Note:
All components solid steel with three shop-applied coats of paint, per specifications.

1/2" solid steel square bar
1/2" x 1-1/2" horizontal solid steel bar
Beveled top corner, typ.
2" square solid steel post
1/2" solid square picket, typ.
1/2" x 1-1/2" bottom rail
2" x 1/4" plate
Finished grade

1-3" to edge of tree pit, typ.
3/4" sq. x 2' long steel spike welded to post, typ.

Front Elevation

End Elevation

2" square solid steel post
Back edge of street curb

Not to scale
Example of a Double Hoop Tree Guard Design

Example of a Double Hoop Tree Guard Design with Tapered Height
Appendix E:
City Permits
# CITY OF JERSEY CITY

Street/Sidewalk Opening and Occupancy Permit

<table>
<thead>
<tr>
<th>Work Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ) Sewer</td>
</tr>
<tr>
<td>( ) Water</td>
</tr>
<tr>
<td>( ) Fiber Optical</td>
</tr>
<tr>
<td>( ) Borings</td>
</tr>
<tr>
<td>( ) UST</td>
</tr>
<tr>
<td>( ) PS-Electric</td>
</tr>
<tr>
<td>( ) Remediation</td>
</tr>
<tr>
<td>( ) PS-Gas</td>
</tr>
<tr>
<td>( ) Partial Sidewalk Repair</td>
</tr>
<tr>
<td>( ) Complete Sidewalk Repair</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SITE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(House #)</td>
</tr>
<tr>
<td>Cross Streets:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Is excavation near signalized intersection?</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ) Yes, ( ) No.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPLICANT:</th>
<th>Sign:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Company Name)</td>
<td>(Company owner's name)</td>
</tr>
<tr>
<td>(Company Address)</td>
<td>(City, State, Zip)</td>
</tr>
<tr>
<td>Phone:</td>
<td>Email:</td>
</tr>
<tr>
<td>Jobsite contact:</td>
<td>Cell:</td>
</tr>
</tbody>
</table>

---

**OFFICIAL USE ONLY**

<table>
<thead>
<tr>
<th>MUA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water: ( ) under 2&quot; ( ) 3&quot; &amp; above (Approved Plan required)</td>
</tr>
<tr>
<td>Sewer: ( ) under 6&quot; ( ) 8&quot; &amp; above (Approved Plan required)</td>
</tr>
<tr>
<td>Disconnect: ( ) water / ( ) sewer</td>
</tr>
<tr>
<td>Water leak letter issued ( )</td>
</tr>
<tr>
<td>JCMUA Project No.</td>
</tr>
</tbody>
</table>

| Approved by: (Date) |

<table>
<thead>
<tr>
<th>STREET/SIDWALK OPENING:</th>
</tr>
</thead>
<tbody>
<tr>
<td>( ) Attached drawing</td>
</tr>
<tr>
<td>Fee: Up to 25 Sq Ft = $50. (additional $1.75 per sq. ft. increment), plus Administration fee $50.00 (ALL PERMITS) Borings/Pits amount $50.00 ea. + Adm. fee) Total $</td>
</tr>
</tbody>
</table>

| $ TOTAL FEE PAID BY: ( ) Check No. |

| Issued by: (Date) |

<table>
<thead>
<tr>
<th>BUILDING CONSTRUCTION OFFICIAL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review/Approved by: Date:</td>
</tr>
</tbody>
</table>
Application for Traffic Street/Lane/Sidewalk Occupancy Permit
Closed New Year's & Martin L King Days; Lincoln's & Washington's birthdays; Good Friday; Memorial, Independence, Labor, Columbus, Election & Veterans' Days; Thanksgiving; Black Friday; Christmas

Engineering, Traffic & Transportation
Phone 201.547.4470

13 East Linden Av, Jersey City NJ 07305
Email monte@jcni.org & mdoyle@jcni.org

Street: __________________________ Address(es) #(#s) __________________________

Cross streets: __________________________ to __________________________

Reason: __________________________

Begins: _______ ______ | ___

ends: _______ ______ | ___

time month date time month date

How far into the street are you going? _____ ft; how far along the curb are you going? _____ ft

Please check where appropriate:
[ ] PREVIOUS TRAFFIC PERMIT ISSUED.......WHAT # ____________ ?
[ ] ENGINEERING PERMIT ISSUED..........................WHAT # ____________ ?
[ ] OVERNIGHT WORK
[ ] ENTIRE BLOCK CLOSED WITH LOCAL TRAFFIC MAINTAINED
[ ] CURB LANE/PARKING TO BE PROHIBITED ON circle NORTH SOUTH EAST WEST SIDE(S)

EMERGENCY - NO PARKING SIGN posted by Parking Enforcement @ 394 Central Av must be filed three (3) City business days prior to start of job. Signs $10 each (minimum 2) for 5 day intervals; meter bags $20 per day per meter. Payment must be made in person with Discover/MC/Visa or debit cards, or money order - no cash or checks. If not removed upon job finish, removal fee is $5 per sign, charged to credit or debit card. I hereby acknowledge understanding of same.

_________________________________ | ______ date
Applicant signature

[ ] TRAVEL LANE WHERE NO PARKING circle NORTH, SOUTH, EAST, WEST SIDE(S)
[ ] PARTIAL SIDEWALK OCCUPANCY - 5 ft clearance maintained
[ ] COMPLETE SIDEWALK CLOSURE - get Zoning permit for driveway work if applicable
[ ] BULK MATERIAL WILL BE PLACED ON SIDEWALK
[ ] WITHIN 35 FT OF INTERSECTION - if signalized or stop sign blocked, hire off duty police
[ ] OFF DUTY POLICE WILL BE ONSITE
[ ] EXCAVATING NEAR SIGNALIZED INTERSECTION - obtain blueprints from Traffic

Applicant: ____________________________ | _______ | ______

Signature Month date

Print name ____________________________ Company ____________________________

Street address ____________________________ City ____________________________ State Zip ____________________________

Telephone # ( ) _______ - _______ Email ____________________________
Chapter 321 - TREES

§321-1. Definitions

For the purpose of this Chapter, the following terms shall have the meaning given herein:

CANOPY means the extent of the outer layer of leaves of an individual tree formed by the Leader together with the Scaffold and Lateral Branches (Fig. 1).

CITY TREE means (a) any living, self-supporting woody perennial plant that has a trunk diameter of at least two (2) inches or more when measured at a point six (6) inches above ground level and which normally attains an overall height of at least ten (10) feet at maturity, usually with one main stem or trunk and several branches; and (b) planted in a Public Right-of-Way, in a City Park or on property owned by the City. The term “City Tree” does not include trees on private property.

CROWN means the top part of the Canopy (Fig. 1).

DIVISION means the Division of Parks and Forestry.

DRIP LINE means the area defined by the outermost circumference of a tree canopy.

JERSEY CITY FORESTRY STANDARDS means the document promulgated by the Division of Parks and Forestry detailing the City’s standards for the planting, maintenance and removal of City Trees as defined herein.

LATERAL BRANCHES means the secondary branches that emerge from Scaffold Branches (Fig. 1).

LEADER means the vertical stem at the top of the Trunk (Fig. 1).

MUNICIPAL FORESTER means the employee of the Division of Parks and Forestry responsible for overseeing the planting, maintenance and removal of all City Trees and who is responsible for promulgating the Jersey City Forestry Standards as well as the list of City Tree valuations published annually.

PUBLIC RIGHTS-OF-WAY means all land in the City of Jersey City dedicated or expressly reserved for the use of vehicular or pedestrian traffic and/or utilities.

PRUNE means cutting or removing less than twenty percent (20%) percent of the branching structure of a tree in the crown, trunk, or root areas.

Figure 1
SCAFFOLD BRANCHES means the primary limbs that form a tree's Canopy (Fig. 1).

TOPPING means cutting or removing the Leader in such a way as to disfigure the Canopy resulting in stunted or abnormal growth.

TRUNK means the stem and main wooden axis of a tree (Fig. 1).

§321-2. Purpose

The Municipal Council finds that the preservation of existing City Trees and the planting of new City Trees promote the health and welfare of the public in the following ways:

1. Conserving energy by providing shade, lowering urban air temperatures, and acting as a windbreak in winter;
2. Protecting pedestrians from rain, wind, sun and heat;
3. Improving air quality by producing oxygen, absorbing carbon dioxide and particulate matter;
4. Reducing noise pollution;
5. Providing habitat for birds and other wildlife;
6. Reducing storm runoff and the potential for soil erosion;
7. Increasing real estate property values; and
8. Enhancing the City's aesthetic qualities and thus making it more attractive to residents, visitors and businesses.

§321-3. Prohibited Activities

No person shall do or cause to be done any of the following to a City Tree as defined herein:

1. Hitch or fasten any animal, bicycle or vehicle to any guard or support attached to the City Tree;
2. Permit any injurious substance, whether gaseous, liquid or solid, to come into contact with the stump or roots of any City Tree;
3. Cover or obstruct any open space provided around the base of a City Tree in such a way to prevent water or fertilizer from reaching the roots of the tree;
4. Pile any building material or make any mortar or cement within six (6) feet of a City Tree;
5. Affix a sign to a City Tree through use of nails, staples, ropes, cables, wires, or other material that may cause punctures or girdling;
6. Cut or remove more than twenty percent (20%) of a City Tree's Canopy.

§321-4. Acts Requiring a Permit

A. No person shall do or cause to be done any of the following without a permit from the Division of Parks and Forestry:
1. Plant a tree in the Public Rights-of-Way;
2. Remove a City Tree;
3. Prune, cut or saw a City Tree;
4. Spray a City Tree with chemicals;
5. Climb a City Tree with spikes;
6. Cut, trim, break or disturb the roots of any City Tree;
7. Change the size or depth of a City Tree bed or place any guard or structure around a City Tree bed;
8. Fasten any rope, guy wire, electric attachments, sign or any other device to a City Tree or to
any guard about the City Tree;
9. Remove any structure or device installed by the City to support or protect a City Tree;
10. Change the grade of the soil within the limits of the canopy of any City Tree;
11. Install an electrified wire above or through any City Tree;
12. Conduct any activity within fifteen (15) feet of a City Tree such as construction, demolition, replacement of a sidewalk or driveway, erecting scaffolding, repairing underground utilities or services, and installation of infrastructure such as a street light.
B. A separate permit shall be required for each tree affected by any of the foregoing acts.

§321-5. Planting Trees

A property owner may plant a tree in the Public Rights-of-Way abutting his or her property by obtaining a permit from the Division of Parks and Forestry subject to the following conditions:

1. The species shall be selected from the List of Recommended Trees in the Jersey City Forestry Standards and be planted according to the Forestry Standards;
2. The owner shall carry liability insurance for any damage to property or injury to person by the planting of such City Trees;
3. The owner shall maintain the sidewalk in accordance with Chapter 254 (Property Maintenance) and the tree-bed surrounding the tree in accordance with the Jersey City Forestry Standards;
4. A property owner to whom a permit is issued under this section may engage a private landscaper to plant a City Tree or request that the Division plant the tree on behalf of, and as an agent for, the owner.

§321-6. Removal of City Trees

A. An adjoining property owner may be granted a permit for the removal of a City Tree abutting his or her property under the following conditions:
   1. The City Tree poses a danger to persons or property which cannot be remedied except by removal; or
   2. The removal of the City Tree is required for the development of the property or the improvement of the sidewalk.
B. An owner granted a permit to remove a City Tree under Sub-Section A(2) shall make a payment to the City equivalent to the value of the tree, as determined annually by the Division of Parks and Forestry.
C. If the Municipal Forrester determines that a Tree requires removal, the Division of Parks and Forestry shall replace it with a tree from the List of Recommended Trees.
D. Nothing in this section shall be construed to limit the power of the Division to move or require the removal of any City Tree or part thereof for any purpose consistent with Section 321-2.

§321-7. Permit Application Fee

Application for the permit required under §321-4 shall be made in writing to the Division of Parks and Forestry, on forms to be supplied by the Division, accompanied by the fee provided in Chapter 160 (Fees and Charges).

§321-8. Protection from wires, cables and electrical current

Every person or entity having control over any wire for the transmission of an electric current along a Public Rights-of-Way shall at all times guard all City Trees through which or near which such wire
passes against any injury from the wire or cable or from the electric current carried by it. The device or means used shall in every case by subject to approval by the Division of Parks and Forestry.

§321-9. Violations and Penalties

The penalties provided under § 1-25 shall apply to violations of this Chapter; provided, however, that the minimum penalty for a violation of this Chapter shall be $100.

§ 345-65. - Buffers.

[As amended 12-13-17 by Ord. no. 17-170]

A. Zoning Standards.
   a. Any parking, loading, outside equipment and storage area that adjoins a street, open space or residential use shall have a landscaped buffer area along all applicable property lines, except in those instances where a building intervenes and where it impedes safe vehicular and pedestrian traffic.

B. Design Standards.
   1. No activity, storage of materials or parking of vehicles shall be permitted in the buffer area except access driveways, directional signs, and permitted signs.
   2. Any buffer area shall be at least three (3) feet in depth and planted and maintained with massed evergreens, deciduous trees and shrubs of such species and sizes which will produce within two growing seasons a living screen at least four feet in height and of such density so as to obscure throughout the full course of the year the glare of automobile headlights emanating from the premises. All plantings shall be in accordance with 345-66.B. The screen plantings shall be placed so that at maturity they will not protrude across any street or property line and so that a clear sight triangle shall be maintained at off street intersections and at all points where private accessways intersect public streets.
   3. Where spatial restrictions or traffic safety concerns do not provide sufficient width for screen planting, a four (4)-foot high decorative fence or brick wall or any combination of plantings and walls or decorative fences may be provided.


[As amended 12-13-17 by Ord. no. 17-170]

A. General Standards.

1. All areas not occupied by buildings or structures shall be appropriately landscaped in addition to required City Trees as defined in Chapter 321 and buffer areas. (See maximum lot coverage requirement in each zone).
   a. Street trees shall be required for all development in accordance with the standards found under Section 345-66(C) except where it can be demonstrated to the Municipal Forester that it is not possible to plant trees for one of the following reasons: 1) constraints such as utility lines; (2) danger to public health, safety or property; (3) the project location will not allow for the healthy growth of a street tree.
   b. If replacement of removed City Trees as defined in Chapter 321 or planting of new City Trees is determined not to be practical at a given location by the Municipal Forester, the applicant will be required to make a monetary contribution to the City for each tree equivalent to the...
APPENDIX F

replacement cost per tree, as determined annually by the Division of Parks and Forestry.

2. Front Yard Landscaping
   a. At least sixty percent (60%) of the area between the building line and street line on residential lots shall be landscaped, provided, however, that for new construction in the R-1 District, or for construction of three-family detached housing in the R-3 District, which includes either a front garage and driveway, or driveway access through the front yard to a side or rear yard parking area, or rear yard garage in lieu of a front yard garage access, a minimum of thirty percent (30%) of the area shall be landscaped.
   b. In the event of removal of front yard landscaping existing at the time of the adoption of this ordinance for rehabilitation, or required repair/replacement, or for any other purpose, restoration of the originally landscaped area is required in accordance with percentage requirements of subsection (A)(2)(a) of this section.

3. Surface parking lots, principal or accessory
   a. Surface parking lots must adhere to the requirements of Chapter 345-65-Buffers.
   b. Interior Landscaping
      (1) In outdoor parking lots with ten (10) or more spaces not less than five percent (5%) of the parking area shall be suitably landscaped and maintained with trees, shrubs and ground cover. At least one shade tree is required to be planted for every ten (10) parking spaces.
         i. Planting methods and materials for shade trees shall be according to current Jersey City Forestry Standards, published by the Division of Parks & Forestry.
         ii. The landscaping shall be disbursed throughout the parking area bounded by the limits of curbing or from the outside perimeter of the paved parking area.

B. Design Standards for On-Site Landscaping.

1. Landscaping for all uses shall define entrances to buildings and parking lots, define the edges of various land uses, provide transition between neighboring properties and provide screening for loading and equipment areas to the maximum extent feasible.
2. All plant materials shall be suitable for the site, free of disease and insects, and shall conform to the American Standard for Nursery Stock (ASNS) of the American Nursery and Landscape Association for the quality and installation of that plant.
3. Plants listed on any Jersey City or state government list of invasive or prohibited species shall not be installed and shall not be counted towards meeting any landscaping requirement.
4. In all areas where landscaping is required, a minimum of seventy-five percent (75%) of the surface area shall be covered by living plants, rather than mulch, bark, gravel, or other non-living material.
5. The use of synthetic vegetation (plastic plants, etc.) shall not be used to meet any of the required landscaping or buffering standards.
6. In the Highway Commercial and Community Automotive zones, at least one-half of the required landscaping shall be located along the street right-of-way.
7. Landscaping shall be in scale with adjacent structures and be of appropriate size at maturity to accomplish its intended purpose.
8. Foundation plantings are recommended to soften the edge between the parking lot and the structure.
9. The use of non-invasive vines and climbing plants on buildings and the perimeter of garden walls is encouraged.
10. Plants in containers shall be used for enhancement of sidewalk shops, plazas and courtyards.
11. Landscaping shall not obstruct visibility for vehicular and pedestrian traffic at all 90-degree angle intersections of public rights-of-way and private driveways.
12. All plantings shall be with species with proven resistance in an urban environment.
13. Use of shade trees is encouraged to minimize the temperature and purify the City’s air and water.
14. Rain gardens and/or other practices that mimic natural hydrology and increase effective perviousness are encouraged.
15. Green roofs and green walls are encouraged citywide. Such features shall be exempt from roof coverage and lot line setback requirements of §345-60(D) and §345-60(H).

C. Design Standards for Street Trees

1. Street trees shall be required for all development projects (including all new construction and all rehabilitation projects subject to site plan review. Project developers shall provide one street tree, either new or existing, for every twenty-five (25) feet of street frontage.
2. Tree removals and plantings for development projects shall follow the requirements of Chapter 321.
3. All new City Trees shall be selected from the most current Recommended Street Tree List of the Jersey City Forestry Standards, as published and updated by the Division of Parks and Forestry and shall receive site and species approval from the Division of Parks & Forestry.
4. Planting methods and materials and tree-pit specifications shall be according to current Jersey City Forestry Standards, as published by the Division of Parks & Forestry.
5. With regard to maintenance, the provisions of § 345-75 shall apply.