



City of Fort Wayne, Indiana  
Shading Our City  
Urban Forest Management Plan  
October 9, 2014

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## **Executive Summary**

Shading Our City, Urban Forest Management Plan is intended to provide a framework for ensuring that the trees and forests of our City are appropriately cared for according to our community goals. It is a guide for City staff, landowners, Utility companies, developers, and residents to follow when making decisions regarding trees, and the land they live on and are stewards of.

The plan is broken into four elements covering all aspects of managing an urban forest. These elements include Maintenance and Protection; Planting; Monitoring and Documentation; Sustainability and Management Goals.



The Maintenance and Protection element establishes the framework to provide healthy and productive conditions for the trees to prosper. The goals of maintenance are to promote health, provide safe and functioning public spaces, and maximize the environmental, social, and economic benefits of trees and understory. Maintenance of trees is the most cost effective means of having healthy, long lived trees. This section includes sub-sections that cover topics like Tree Protection, access, root removal and damage protection, pruning specifications for street and park trees based on size classifications, and removal specifications.

The planting of new trees is the only way will give our city an opportunity to grow in canopy. Planting of the right tree in the right location is crucial to making our community better but also looking at the future. A tree that is planted today will benefit our city and its citizens ten, twenty, thirty plus years in the future. The elements that make this possible are placement standards, species diversity, tree grate management, neighborhood/citizen match program, grants, donations, utility company partnerships, Great Tree Canopy Comeback program, Memorial Tree Planting program, watering, and fertilization.

The third element of the plan is monitoring and documentation. Our urban tree canopy is a diverse organism that is forever changing. To keep on track with these changes, we need to always be examining our canopy and record all observations. This will give us history and provide us the tools to manage all aspects of the urban forest. The elements in this section consist of data collection, tree canopy assessment, sample urban statewide street tree inventory (SUSI), inventory data, records, storm response and recovery plan, and i-tree storm damage assessment inventory.



The final element of this plan is sustainability and management goals. The sustainability portion is to provide for our urban canopy as it provides for our community both fiscally and environmentally. The plan must be in a form that will allow for it to benefit the community while providing for future generations. The second portion is to look to the future by setting goals for the next several years. The goals are separated for street trees as well as park trees. These include reduction of pruning cycle, increasing plantings, adoption of tree risk assessment program, and develop an invasive species management plan within the parks.

## Introduction

### Legal basis for Policy and Standards



In 1983, the City of Fort Wayne Common Council adopted Code 33.020, which in turn adopted Indiana Code 36-10-4-11. This act empowered the Board of Park Commissioners to have full authority for selecting, planting, maintaining and removing all trees planted on all City of Fort Wayne street rights of way and within park lands under their jurisdiction. City of Fort Wayne Code 99.14 further establishes to ability of the Board of Park Commissioners to establish rules, regulations and specifications for the trimming, removal, planting and protection of all trees on public streets and thoroughfares in the City. These trees shall be referred to as City trees, including both street trees and park trees in this document. Through adopted policies of the Board of Park Commissioners, the City Forester is assigned oversight duties of street tree placement, selection, installation, maintenance and removal, working within policies adopted by the Board of Park Commissioners and as authorized by the Director of Parks and Recreation and his superintendents. *\*Please see Appendix I for a portion of Code of Ordinances Chapter 99*

This plan discusses the benefits of trees and forests in urban areas, the current state of our urban forest, the people and programs that manage them, and proposed goals, policies, and actions to protect, enhance and expand the urban forest. This plan promotes awareness and stewardship of our urban forest.

The trees of our urban forest are in competition for resources within our Cities infrastructure such as buildings, sidewalks, and utilities. It is very important to put the right tree in the right place. If this does not happen then the future of the trees health is in danger which can create a host of problems that are detrimental to the infrastructure surrounding it and the residents who share the space. Under the Street Tree Management plan “Shading Our City “adopted in 1991, the program completed the first pruning cycle of the street trees during the years 1991 to 1995. The second pruning cycle was completed in 2003, and included newly annexed areas of the city not included in the first cycle. The third complete pruning cycle for the City was completed in 2009. The City planting goal was to have 70% of the available planting spaces planted by the year 2001. The goal was accomplished in the fall of 2001. Planting priority was based on homeowner participation, major streets, and low tree density neighborhoods based on annexation dates.



In 2006 the City of Fort Wayne was infested with the Emerald Ash Borer which devastated the urban canopy. The City of Fort Wayne lost 13,000 ash trees from 2006 to 2014. Not only did this have a negative effect on the overall planting achievements from the past but also negatively affected the pruning cycle.

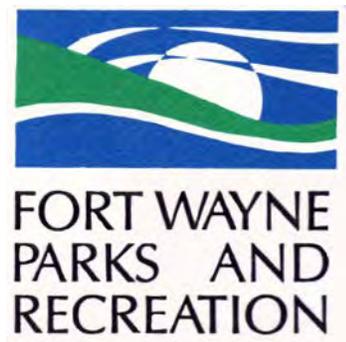
In 2009 a comprehensive urban canopy study was completed. The study revealed the City of Fort Wayne’s urban canopy coverage was 29%. Fort Wayne was ranked number two in the state for its canopy coverage and overall value of its urban forest. While these accolades were gladly accepted, the national standard recommends that cities have a canopy goal of 40%. There are two initial goals with this plan. The first will guide the efforts to regain the canopy coverage that was lost due to Emerald Ash Borer and continue to strive towards the goal of having canopy coverage of 40%. The second goal will strive to reduce the pruning cycle to 6 years.

## **Purpose of this Document**

The Urban Forest Management Plan has been developed to help improve and coordinate management of trees and forests in the City of Fort Wayne. This document is a compilation of policies and standards for management of trees owned by the City of Fort Wayne under the jurisdiction of the Board of Park Commissioners. It is intended as a statement of goals, policies and standards to be used to administer and guide placement, selection, installation, maintenance and removal of City trees by City employees and to regulate work on City trees by other parties. These policies should be consulted by any parties involved in the planning and design of public places, especially those intended to become the responsibility of the Board of Parks Commissioners, to ensure that trees are being incorporated in ways consistent with this document.

This plan aims to consolidate all of these efforts into one comprehensive and cohesive document that will help ensure our management program will move forward in a planned and organized fashion based on sound science and policies. This plan is not meant to be a static document, but rather a plan that is continually updated and refreshed over time.

In developing this plan it must be recognized that that less than half of the tree and forest land in the city are publicly owned, and therefore under direct public jurisdiction. The rest of the trees are on privately owned property. Management techniques, rules, timing and other factors are different depending on the ownership of the land on which the trees are growing.



The Fort Wayne Parks & Recreation Department (FWPRD) is responsible for maintaining trees throughout the City on publicly owned property. These locations can be but are not limited to parks, trails, street right of way, thoroughfares, medians, and other public properties. The FWPRD has internal forestry crews under the direction of the Superintendent of Urban Forestry & City Arborist that are responsible for the maintenance of street and parks trees. The FWPRD also employs tree care contractors to assist in the maintenance of publicly owned trees. In both cases our internal staff and outside contractors are supervised by arborists professionally certified through the International Society of Arboriculture (ISA).

Our goal is to provide a safe, healthy, sustainable urban forest canopy on public land through the latest industry standards supported by the ISA and by following the best management practices for urban forestry, and to provide excellence in customer service regarding tree care issues.

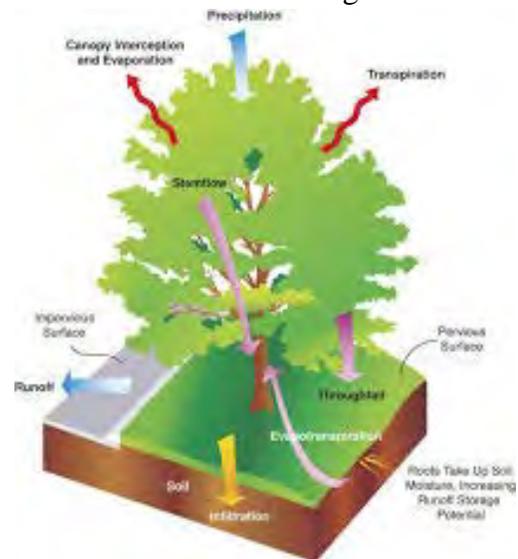
## **Background and Linkage to Comprehensive Plan**

The City of Fort Wayne has had a long history of commitment to the stewardship of its natural resources. The first Park was formed in 1863, following in later years the FWPRD was formed in 1894. The Board of Park Commissioners was created in 1905 which later hired the first City Forester in 1914. Throughout the years The Board of Park Commissioners has worked hand in hand with the Fort Wayne City Council to support many initiatives and ordinances for the support of environmental sustainability within the community. Shading Our City supports and ties directly to the goals of the Parks and Recreation Departments Comprehensive and Master Plans.

## **Urban Forest Dynamics**

The City of Fort Wayne’s urban canopy is one of the most important pieces of infrastructure in the City. The trees are one of the only pieces of infrastructure that doesn’t depreciate over time; they actually pay the City back over time. The urban canopy provides a plethora of benefits many of which are tied directly to the health of the community. Tree are used in many different way for many different reasons, listed below are just a few of those benefits:

- Use trees to collect, absorb and sequester greenhouse gasses and particulates from the atmosphere, to reduce air pollution levels for urban dwellers.
- Use trees to accumulate, retain and absorb storm water, thereby reducing peak flows into combined sewer systems. Such peak flows can exceed treatment plant capacity and result in contaminating local waterways with raw sewage with the overflow.
- Use trees to reduce heat gain to pavements and buildings with their shade, reducing specific cooling loads to buildings and overall providing cooler ambient temperatures for the urban area. The reduction of cooling loads lowers peak electrical demand, pollutant generation and electrical generation infrastructure costs.
- Use trees to provide direct relief from glare and heat to users of public spaces.
- Use trees to provide and enhance natural habitat for indigenous species of beneficial wildlife.
- Use trees to line streets and provide overhead canopies for them. Greater enclosure of street spaces can cause motorists to travel at appropriate speeds and reduce surrounding visual distractions.
- Use trees to reinforce positive and distinctive regional visual characteristics. Authenticity and regional expression are valued as traits of urban areas.
- Use trees to create memorable positive experiences for visitors and users of public urban spaces, including along streets and in parks. Positive civic image and character can foster attracting residents and visitors, with attendant increases in investment and economic activity.
- Use trees to retain and enhance property values through thoughtful selection, placement and maintenance.



## **Urban Forest Management Plan Elements**

The elements outlined below represent the strategic areas under which the City can accomplish the goal of comprehensive urban forest and natural resource management. This plan creates a system wide approach necessary to achieve the city’s resource stewardship vision over the long term.

- Plan Element 1- Maintenance and Protection
- Plan Element 2- Planting
- Plan Element 3- Monitoring and Documentation
- Plan Element 4- Sustainability and Management Goals



## **Maintenance and Protection**

Urban trees typically require maintenance. The goals of maintenance are to promote health, provide safe and functioning public spaces, and maximize the environmental, social, and economic benefits of trees and understory.

Providing proper maintenance of trees is the most cost effective means of having healthy, long lived trees. Life expectancies can be greatly lengthened if natural and human forces which deteriorate trees can be avoided or remedied to minimize damage.

Developing an environment where a tree will thrive and selecting a tree adapted to the given growing conditions is the most important maintenance requirement. Healthy, vigorously growing trees are naturally resistant to insects and diseases and normally develop into well-formed specimens.

### **Indemnification**

Any work on trees under the jurisdiction of the Board of Park Commissioners is subject to review and approval by The Superintendent of Urban Forestry & City Arborist. Most minor tasks will be approved without requirement for proof of ability to indemnify the City for any damages resulting from private work on public property. The Superintendent of Urban Forestry & City Arborist will determine if a performance bond or proof of liability insurance will be required of the applicant, based on the assessment of the potential for damages for the work proposed.

### **Protection**

Protection of existing trees and urban canopy is a critical component of a management plan. Ensuring that trees which already exist are protected physically and legally will help sustain canopy coverage and prevent further degradation of the urban forest. The City of Fort Wayne has taken steps to protect trees within the authority of the existing ordinances.

The City of Fort Wayne is committed to the preservation and protection of its publicly owned trees and urban canopy. Tree protection refers to active steps which can be taken to preserve trees from damage in construction areas. Recommendations on protection measures are made according to industry accepted standards. Damage to tree roots through inadequate tree protection measures accounts for most tree death on construction sites.



### **Tree Protection Plan**

- No party shall install nails, screws, staples, tacks, wire or other metal or synthetic fasteners or ties onto any structural member of a City tree, including trunks and scaffold branches. Any temporary attachments should be made with natural fiber jute or sisal twine and removed as soon as possible.
- Lighting and other electrical equipment shall not be permanently attached to trees. Strings of low wattage lights, remaining no more than 60 days at a time may be permitted with approval of The Superintendent of Urban Forestry & City Arborist, provided the installation means do no damage to the tree.
- No party shall perform any maintenance practice on a City tree not in accord with this section, except with permission of The Superintendent of Urban Forestry & City Arborist under justified circumstances.
- No party shall pile organic or stone mulch over the root system of a City tree in excess of 2” depth. No mulch shall contact the tree trunk and other aboveground flare roots.
- No party shall strike, cut, tear, abrade, break, remove or otherwise physically mutilate a City tree without authorization of the City Forester.
- No party shall damage the growing environment of a City tree, such as by poisoning the soil with salts, chemicals, herbicides or by exposing trees to excessive heat, cold or damaging fumes, outside of normal growing conditions.
- Soils within the root zone of the tree shall not be compacted, excavated or filled over without approval of The Superintendent of Urban Forestry & City Arborist to determine potential for damage and loss and how these may be prevented or remediated.
- Removal of live trees that pose no safety or liability hazard for the public is discouraged. Removal of trees or their parts requires approval of The Superintendent of Urban Forestry & City Arborist. Removal of live City owned trees and their parts to increase visibility to outdoor advertising requires approval of the Board of Park Commissioners.



### **Tree Access Plan**

- Provide traffic control devices in accord with City Right of Way standards for areas where work is performed on street trees. Provide protection and notice to park users in the area where work is being performed on park trees.
- Use means of accessing trees that do not damage the tree, adjacent property, persons or other desirable plants or wildlife in the immediate vicinity. Lifts, ladders, climbing harnesses and slings should be considered. Climbing spurs are prohibited for use on trees being retained, but may be used on trees being removed.
- Protect adjacent property and infrastructure from falling materials or any other actions of the tree workers. *\*Please see Appendix 2 for the complete Tree Protection policy for Construction Areas*

### **Root Removal and Damage Prevention**



- Work under tree canopies shall be done in ways that prevent or minimize damage to root systems.
- No excavation or filling shall take place within a zone equal to one foot of zone diameter for each one inch of trunk diameter. Necessary soil disturbance within this zone shall be accomplished with tunneling no less than 24” below grade or by boring no less than 18” below grade, and shall in no case be directly under the trunk of the tree.
- When approving an application to allow excavation under tree canopies, the City Forester shall consider the following in his evaluation of the proposed work and its effect on the health, stability and appearance of the tree affected:
  - Age, health and condition of the tree.
  - Value of the tree in its landscape context.
  - Percent of root system likely to be damaged and its resulting effect on the tree’s health, stability and appearance.
  - Size and function of roots affected. Structural flare roots shall be preserved. Directional boring, tunneling or other non-invasive excavation methods such as air or water blasting should be considered where excavation is necessary near structural roots.
- Where work is required near trees, methods of protection shall be employed to prevent damage to trees. A temporary fence should be provided at the perimeter of the tree’s canopy to preclude physical access to this area. No activities within this protection area shall be permitted that would result in compacting the soil, reducing air exchange with the soil or poisoning the soil. Such activities may occur within the protected area only with approval of the City Forester and a protection and damage remediation plan may be required.
- Damage to roots over 1” diameter shall be cut cleanly, leaving no ragged wood, so that root regeneration is fostered.
- City Forester shall grant approval for work near trees that will not substantially damage the tree’s health, structural integrity or its longevity. Where it is not feasible to relocate the work to outside the protected zone, where it is not feasible to avoid substantial tree damage or where substantial damage has occurred without approval of the City Forester, the City Forester may require remediation of damage to trees when it is possible to recover the tree, or may require removal and compensation of the damaged tree’s value.

### **Tree Pruning Plan**

- All pruning of City-owned trees shall be under the supervision of and with the approval of The Superintendent of Urban Forestry & City Arborist, using techniques outlined in this section.
- City owned trees should be periodically assessed for structural and health problems so that pruning and removal needs may be identified, funding identified and operations performed.
- Heavy removal of canopies (topping, pollarding) and pruning that discourages the natural growth patterns of the tree (shearing, pleaching) are not permitted except with written permission of The Superintendent of Urban Forestry & City Arborist.
- Removal of canopy or root systems that would lead to structural instability is not permitted.
- Removal of root systems is to be avoided. Structural base flare roots shall not be removed, if, in the opinion of The Superintendent of Urban Forestry & City Arborist, they would lead to structural instability in the tree. Use excavation methods that preserve structural roots, such as air excavation, when trenching or other temporary excavation is necessary. Actions that result in cutting of roots within the tree’s canopy spread shall be performed only with approval of The Superintendent of Urban Forestry & City Arborist.

### Street and Park Tree Pruning Standards

In addition to those provisions set forth in this specification, the contractor/operator shall preform all work in compliance with all applicable Federal, State and Local laws and regulations, including but not limited to the following:

- All equipment to be used and all work to be performed must be in full compliance with the most current version of the American National Safety Standards Institute Standard (ANSI) Z-133.1, and ANSI A-300 or as amended.
- Proper flag people, warning signs, barricades and/or other protective devices must be provided by the contractor.
- During operations, the contractor/operator shall have the responsibility to block the street at each intersection using the proper signage and barricades to prevent any motorized vehicle from entering. The contractor/operator shall have the responsibility of notifying the Superintendent of Urban Forestry prior to the closure of any street.
- During operations, sidewalks shall be properly barricaded and closed to the satisfaction of the Superintendent of Urban Forestry. More importantly, within school zone areas and other areas where many children are present- such as around day care and Day Camp facilities. Operations shall be scheduled to minimize and avoid contact with large numbers of children walking to and from school, summer camps or day care.
- All final cuts shall be made sufficiently close to the trunk or parent limb, with cutting into the branch collar or leaving a protruding stub. Excessively deep flush cuts that produce large wounds or weaken the tree at the cut shall not be made. Sharp pruning tools shall be used at all times to ensure clean cuts.
- It is necessary to use the three set cutting technique outlined in ANSI A300 on branches that are too heavy to be handled to prevent splitting and peeling of the bark. Where necessary, to prevent tree or property damage, branches shall be lowered to the ground by proper ropes and equipment.
- Climbing spurs shall not be used when climbing trees, except to climb a tree to be removed or perform an aerial rescue of an injured worker.
- Street Tree pruning operations may have to be conducted in areas where overhead electric, telephone, and cable facilities exist. The contractor shall protect all utilities from damage and follow all safety precautions and procedures required when working near such lines. The contractor shall immediately contact the appropriate utility if damage should occur, and shall be responsible for all claims for



- damage due to the contractors operations. When necessary the contractor shall make arrangements with the utility for removal of all necessary limbs and branches which may conflict with or create a hazard in conducting the street tree pruning.
- The sidewalks, curbs, streets and manhole structures shall always be protected from the impact of falling wood by use of tree or limb ground supports. All ruts, divots and depressions caused by the removal of the tree shall be filled to the adjacent grade level **before leaving** the work site.

### **Tree Pruning Specifications for Medium to Mature Trees**

- All dead limbs greater than 1” shall be removed from the crown.
- Limbs with decay, cavities, and/or splits shall be removed.
- **Clearance:** The contractor/operator shall remove lower branches to permit clearance of approximately eight feet on the sidewalk or pedestrian area and fourteen feet on the street side. In lifting the bottom branches of the tree for clearance, care should be given to the final appearance of the entire crown. The tree should have at least one-half of its foliage on the branches that originate in the lower two thirds of its crown to ensure a well formed, tapered structure to uniformly distribute stress within the tree. Excessive removal or bottoming of the tree is prohibited.
- **Crown Cleaning:** The contractor/operator shall remove the dead, dying, diseased, damaged, crowded, broken, weakly attached, and low vigor branches from the crown of the tree. Crown cleaning is not stripping out the interior canopy leaving only live foliage at the end of the branches. Excessive removal of the interior branches as to cause ‘lions’-tailing effect is prohibited. Crown Cleaning shall include the following:
  - If two limbs are crossing or touch each other, shorten or remove one of them so they no longer cross or touch.
  - If two limbs originate within twelve inches of each other on the trunk shorten or remove one of them.
  - Remove dead or broken limbs one inch diameter or larger.
  - Directional prune to establish a minimum 10 feet or as practical clearance from buildings, lights and other infrastructure.
- **Thinning:** The crown of a tree should be thinned to reduce the density of live branches. Thinning should result in an even distribution of branches on individual limbs and throughout the crown. Thinning shall not exceed more than 15% of the crown.
- **Site Clean-Up**
  - The contractor/operator shall clean-up each site where a street tree has been pruned on a daily basis. This shall include removal and disposal from the site of all debris at the end of each day’s operation. **No debris may be allowed to remain in the right-of-way over the weekend without prior consent from the Superintendent of Urban Forestry.** Site clean-up shall include removal of sawdust, small twigs, chips, leaves, trunks and limbs from the street, curb, right-of-way, sidewalk, private lawns and driveways with the appropriate tools for the job. The site shall be returned to the same state it existed in prior to the commencement of any work. The contractor will be responsible for any costs associated with repairs that may be needed after completion of the street tree pruning. In the event of snowfall, debris shall be cleaned-up immediately so it does not interfere with the City’s snow plowing operations.

### **Tree Pruning Specifications for Small Trees**

The primary purpose of pruning young trees is to improve the trunk and branch structure. Properly trained young trees will develop into structurally strong mature trees. The greatest structural concern in young trees is the establishment of a central leader and the reduction of co-dominant trunks or main leaders. Reducing one of the co-dominant branches is highly recommended if possible.

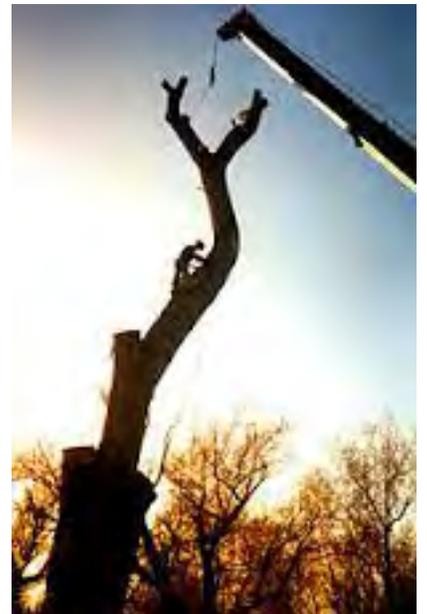


- All dead limbs greater than 1” shall be removed from the crown.
- Limbs with decay, cavities, and/or splits shall be removed
- **Co-dominance:** If a co-dominant stem exists the contractor shall reduce or remove one of the stems to achieve a strong single central leader.
- **Clearance:** The contractor/operator shall remove lower branches to permit clearance of approximately eight feet on the sidewalk or pedestrian area and on the street side when feasible. In lifting the bottom branches of the tree for clearance, care should be given to the final appearance of the entire crown. The tree should have at least one-half of its foliage on the branches that originate in the lower two thirds of its crown to ensure a well formed, tapered structure to uniformly distribute stress within the tree. Excessive removal or bottoming of the tree is prohibited.
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  - If two limbs are crossing or touch each other, shorten or remove one of them so they no longer cross or touch.
  - If two limbs originate within twelve inches of each other on the trunk shorten or remove one of them.
  - Remove dead or broken limbs one inch diameter or larger.
  - Directional prune to establish a minimum 8 feet or as practical clearance from buildings, lights and other infrastructure.
- **Site Clean-Up:** The contractor/operator shall clean-up each site where a street tree has been pruned on a daily basis. This shall include removal and disposal from the site all debris at the end of each day’s operation. **No debris may be allowed to remain in the right-of-way over the weekend without prior consent from the Superintendent of Urban Forestry.** Site clean-up shall include removal of sawdust, small twigs, chips, leaves, trunks and limbs from the street, curb, right-of-way, sidewalk, private lawns and driveways with the appropriate tools for the job. The site shall be returned to the same state it existed in prior to the commencement of any work. The contractor will be responsible for any costs associated with repairs that may be needed after completion of the street tree pruning. In the event of snowfall, debris shall be cleaned-up immediately so it does not interfere with the City’s snow plowing operations.

*\*Please see Appendix 3 for a complete Street and Park Tree Pruning Specifications*

## **Tree Removal Plan**

- The Superintendent of Urban Forestry & City Arborist shall evaluate professional opinions of, or provide his/her own professional opinion on the condition of trees suspected of being dead or damaged due to age, poor growing conditions, disease, weather, accidents, mishandling, vandalism and other injurious means.
- Trees shall be determined to be either salvageable or to require removal.
- The Superintendent of Urban Forestry & City Arborist and support staff drive every street and evaluate the street trees by windshield survey marking the dead and hazardous trees for removal. This begins after the trees are in full leaf. Factors that determine salvage ability shall include:
  - Value to the landscape context
  - Percent of tree still alive and providing landscape function
  - Age and vigor
  - Rarity, historical or other social merit
  - Potential for restoring structural stability and health balanced against cost and added longevity.
  - Other safety issues.
  - Interference with other infrastructure or community plans.
- Salvageable trees shall have a corrective course determined, with this course approved by The Superintendent of Urban Forestry & City Arborist. Corrective means may include:
  - Prevention of damage and tree protection
  - Fertilizing the tree at least six weeks prior to planned and necessary damage. Watering 48 hours prior to causing damage.
  - Application of anti-desiccants to foliage immediately prior to causing damage.
  - Control of any present pests or those that occur after damage.
  - Mulching and removal of competing vegetation.
  - Removal and replacement of contaminated soil, using non-damaging soil removal methods.
  - Reducing soil compaction levels through air fracturing or core aerating.
  - Pruning
  - Wound repair
  - Structural reinforcement such as cabling
- Trees may be approved for removal under the following conditions:
  - When trees are visibly dead, evidenced by lack of foliage during normal growing conditions and with desiccated and brittle branches.
  - Where trees are deemed unsalvageable
  - Where trees present sight obstructions to safe traffic movement as observed and requested by transportation officials.
  - Where trees have been planted in locations prohibited in these standards or are of types prohibited by these standards.
  - Where trees are sufficiently infested with pests that pose a threat of spread and significant loss to nearby trees.



## **Tree Removal Special Circumstances**

### **Roots and Sewers**

It is a common misconception that tree roots break sewer lines. Tree roots cannot enter an intact sewer pipe. Tree root growth is opportunistic; i.e., roots proliferate in areas suitable for growth. Roots thrive in the warm, moist, nutrient-rich conditions that exist within the sewer line. Tree roots grow toward an increasing water gradient and are attracted to moisture condensing around pipes that are cooler than the surrounding soil. Thus, tree roots tend to follow buried piping when encountered. The leading tip of the tree roots can detect minute differences in moisture and nutrient levels and tend to grow in the direction where these can be found. If the pipe is structurally sound and does not leak, roots will not pose a problem.

However, if the pipe is defective or there are cracks or leaks, roots will exploit the compromised joint or crack and grow into the pipe. On reaching a leaking crack or joint in the clay pipe, tree roots will penetrate the smallest of openings to reach the nutrients and moisture inside the pipe. A leaking sewer pipe creates an attractive point of entry for tree roots. Once a root enters a sewer pipe, it will encounter conditions of aeration, moisture and nutrients that are so favorable that the root inevitably grows until it clogs the sewer.

The removal of the tree without fixing the pipe will NOT solve the problem. This department will only allow the removal of trees that have roots in a sewer line if the tree is planted in such a location that the pipe cannot be safely repaired without the removal.

### **Roots and Sidewalks**

The property owner has the responsibility to maintain a safe and level sidewalk. If a tree root from a tree over which this department has jurisdiction causes the lifting of a sidewalk, the tree division will remove the roots; provided the property owner has removed all cement, so that the roots are totally accessible to the stump cutting machine. If the sidewalk cannot be repaired without causing the tree to be hazardous Forestry will remove the tree and the stump will be ground out, at no cost to the property owner. In cases where a root barrier will prevent the further upheaval of the sidewalk, the homeowner will be given this information, so that a barrier can be installed at the time the new concrete sidewalk is poured.

### **Moving of Houses**

In the event that a structure is to be moved along a city street, the property owner or contractor shall submit the moving route to the FWPRD for approval. The FWPRD shall approve or disapprove the suggested route, basing its decision on the preservation of existing trees. Any approved trimming or removal of trees that are under the jurisdiction of this department shall be completed by a private contractor, at the owner's expense, and under the supervision of this department. Trees that are removed will be replaced in the area designated by the FWPRD at the owner's expense.



### **New Construction**

This department shall reserve the right to approve or disapprove requests for removal of trees and stumps for driveways, new sidewalks, parking lots, or other construction; providing the tree is under the jurisdiction of this department. The property owner or contractor shall remove such trees or stumps at his own expense. Plans for replacement planting and scheduling shall be submitted before any removals are approved. *\*Please see Appendix 4 for a complete Street & Park Tree Removal Specifications*

### **Stump Removal Plan**

The City of Fort Wayne has an average mortality rate of 500 trees per year. This means that an average of 500 stumps will need to be removed on an annual basis. The contract for stumps is bid on an annual basis.

### **Detailed Requirements**

This contract for stump removal is based on the entire City of Fort Wayne. It is the intent of the City of Fort Wayne to obtain the lowest bid for the removal of the stumps and restoring the Right of Way to the appropriate grade, backfilling, and replanting grass.



### **Stump Removal Lists**

A list of stumps by diameter will be provided by the Superintendent of Urban Forestry for the purpose of this bid. The City of Fort Wayne reserves the right to add or delete stumps from the lists.

### **Posting of No Parking Signs**

The contractor shall examine the area surrounding the stumps to be removed and determine in sufficient time prior to initiating work on each removal list, whether “No Parking” signs are necessary to allow access to the stumps. Contractor shall contact the Superintendent of Urban Forestry to obtain the appropriate signage. No parking signs must be displayed for 24 hours prior to enforcement.

### **Safety Standards**

In addition to those provisions set forth in this contract, contractor shall preform all work in compliance with all applicable Federal, State and Local laws and regulations, including but not limited to the following:

- All equipment to be used and all work to be performed must be in full compliance with the most current version of the American National Safety Standards Institute Standard (ANSI) Z-133.1, and ANSI A-300 or as amended.

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- Proper flag people, warning signs, barricades and/or other protective devices must be provided by the contractor.
- During street tree removal operations, the contractor shall have the responsibility to block the street at each intersection using the proper signage and barricades to prevent any motorized vehicle from entering. The contractor shall have the responsibility of notifying the Superintendent of Urban Forestry prior to the closure of any street.
- During the street tree removal operations, sidewalks shall be properly barricaded and closed to the satisfaction of the Superintendent of Urban Forestry. More importantly, within school zone areas and other areas where many children are present- such as around day care and Day Camp facilities. Tree removals shall be scheduled to minimize and avoid contact with large numbers of children walking to and from school, summer camps or day care.

### **Tree Stump Removal Street Tree Right-of-Way**

The contractor shall remove all stumps unless otherwise specified by the Superintendent of Urban Forestry.

All stumps and buttress roots shall be ground to a depth of at least 8” (inches) below a line between the back of the curb and the top of the sidewalk or an existing grade as determined by the Superintendent of Urban Forestry and, generally, will be consistent with the plane of the right-of-way outside any mounds or depressions caused by or adjacent to the tree. Buttress roots shall consist of all roots, having a minimum diameter of 2” (inches), extending up to the ground surface or above located within a 5’ (foot) radius from the center of the removed tree.

Within forty-eight (48) hours after removal of the stump and buttress roots, the contractor shall remove all stump grindings and associated debris from the site. Disposal of the grinding debris generated by the work described in this contract shall be the responsibility of the contractor.

### **Tree Stump Removal within the Parks**

The contractor shall remove all stumps unless otherwise specified by the Superintendent of Urban Forestry.

All stumps and buttress roots shall be ground to a depth of at least 8” (inches) below an existing grade as determined by the Superintendent of Urban Forestry and, generally, will be consistent with the plane of the right-of-way outside any mounds or depressions caused by or adjacent to the tree. Buttress roots shall consist of all roots, having a minimum diameter of 2” (inches), extending up to the ground surface or above located within a 5’ (foot) radius from the center of the removed tree.

Within forty-eight (48) hours after removal of the stump and buttress roots, the contractor shall remove all stump grindings and associated debris from the site. Disposal of the grinding debris generated by the work described in this contract shall be the responsibility of the contractor.

### **Site Clean-Up**

The contractor shall clean-up each site where a stump has been removed. This shall include removal and disposal from the site all within forty-eight (48) hours. **No debris may be allowed to remain in the right-of-way more than 48 hours or over the weekend without prior consent from the Superintendent of Urban Forestry.** Site clean-up shall include removal of sawdust, and grinding debris from the street, curb right-of-way, sidewalk, private lawns and driveways with the appropriate tools for the job. The site shall be returned to the same state it existed in prior to the commencement of any work.

The contractor will be responsible for any costs associated with repairs that may be needed after completion of the stump removal. In the event of snowfall, debris shall be cleaned-up immediately so it does not interfere with the City's snow plowing operations.

### **Backfilling with Soil and Re-Seeding**

The contractor shall backfill each right-of-way ash tree removal site unless otherwise notified by the Superintendent of Urban Forestry. The contractor shall complete the backfilling and re-seeding operation within forty-eight (48) hours of the stump grinding, coinciding with the removal of the grinding debris. All areas where stumps have been removed, and areas disturbed by the removal operations, shall be backfilled with top soil, free of debris, clods and stones, and excavated to the level of the existing grade as determined by the Superintendent of Urban Forestry. In the street right of way the level of grade shall be recognized as a line between the back of the curb and the top of the sidewalk or an existing grade as determined by the Superintendent of Urban Forestry and, generally, will be consistent with the plane of the right-of-way outside any mounds or depressions caused by or adjacent to the tree. In the parks existing grade shall be defined as the surrounding turf area and will be consistent with the plane of the right-of-way outside any mounds or depressions caused by or adjacent to the tree. The contractor shall supply his/her own topsoil. The topsoil shall be properly leveled and compacted to insure a minimum amount of settlement of the back-fill material. In the event that the top soil cannot be placed when the stump grinding debris is removed, the disturbed area(s) shall be barricaded to ensure public safety and the Superintendent of Urban Forestry shall be notified. Grinding (woodchips) shall not be used as back fill. After the back filling, compacting and grading is completed the contractor shall re-plant a general purpose grass seed consisting of 30% Creeping Red Fescue, 30% Perennial Rye, and 30% Kentucky Bluegrass and cover with straw. *\*Please see Appendix 5 for the complete Street and Park Stump Removal Specification*

### **Pest Control Standards**

Healthy, vigorous trees are naturally pest resistant and, although natural fluctuations in prey and, predator occur, there are times when the balance of nature is upset. Trees planted in urban areas are frequently subjected to hostile growing conditions; they are not always in the best of health. Trees under stress are much more susceptible to attack by harmful insects and diseases and are more likely to exhibit symptoms of the adverse environment. The type, severity and duration of a particular insect, disease or environmental problem will vary greatly, depending upon the tree's location, climate and other environmental factors.

- Application of pesticides or fungicides shall be performed by licensed pesticide applicators, and only with the authorization of The Superintendent of Urban Forestry & City Arborist. Strict adherence to OSHA and EPA regulations is required. All applicators shall follow manufacturer label recommendations.
- All pesticide applicators shall protect all non-target trees, persons, property and wildlife from injury resulting from pest control methods and materials.

### **Emerald Ash Borer**

The City of Fort Wayne was officially infested with Emerald Ash Borer in 2006. In 2006 there were 14,000 ash trees in the street tree inventory. In 2008 The City of Fort Wayne decided to treat 10% of the ash population and remove the rest of the infested trees. The City lost 13,000 ash trees from 2006 – 2014. The remaining 1000 ash are being treated every 2 years. We are re-evaluating the treatment program on an annual basis and making adjustments where needed.

### **Urban Wood Utilization**

The onslaught of the Emerald Ash Borer created an enormous volume of urban wood and debris. One of the positive things that came from the Emerald Ash Borer was the organization of our urban wood utilization program. The Parks and Recreation Department has been very fortunate to enter into an agreement with a local logging company. The department stages all of the logs and wood debris in a holding yard. Once the yard is full the company purchases the logs that are viable for timber use and repurposes the rest of the debris into mulch which is then sold. The department does not incur any fees related to this program, only a profit from the log sales. The profit is distributed into a trust fund that is used to replant trees throughout the city.



## Planting

### Selection and Placement of Street Trees

The City of Fort Wayne is steward for tens of thousands of trees planted along City streets and in City parks. Each tree contributes to the quality of life in Fort Wayne.

The vast majority of tree planting locations along public streets are parallel to the right of way, on the outside edges of the roadway, and many times between a sidewalk and the road edge in a “park strip” or “tree lawn”. This space is also sometimes called a “utility strip”, but its function, based on early City plans and long before utility use emerged, was to be a place to plant trees. Miscellaneous additional spaces on public street rights of way include medians, roundabouts, remnant lots and other specialty parcels.

This space also presents design opportunities to use trees to characterize this public space. Trees in tree lawns are typically intended to be canopies over the street space. Occasionally, they may be used to create buffer walls between the street and adjacent properties. They may also function to create or enhance a desired environmental effect. Native tree varieties can be used to blend with existing native tree stands on nearby properties. Trees with distinctive form or displays of flowers or leaf color can be used to draw attention to specific places with importance to the community. The selection of species should reflect the intended functional effect. The typical street tree planting pattern for Fort Wayne consists of tree uniformly spaced along and centered within the tree lawn. Trees should not be planted in spaces which are less than five feet in any dimension in order to reduce likelihood of roots heaving curbs and pavements.

### Street Tree Selection and Placement Plan

- The placement and selection of trees along street rights of way shall support their purposes as established earlier in this document.
- Tree placement and selection shall be made in accord with other established City plans, policies and standards.
- Provide adequate overhead and lateral space to support the potential natural size and form of the tree selected for the planting location. Place and select trees so they are likely to develop balanced crown form to reduce uprooting from storms.
- Use species that will grow to the largest size and greatest age that available space and other resources will allow.
- Provide sufficient soil volume and aboveground space to allow the selected tree to reach the greatest possible mature size and age allowable for the situation.
- Diversify species so that the loss of a single species will not fully destroy the visual character of a place.
- Give preference to use of locally native species as street trees where conditions will successfully support them.
- Avoid selecting species with chronic and fatal susceptibility to diseases and insects.



### **Plan Exceptions**

- Under special conditions, such as business districts, where trees are grown in highly constrained conditions like grated tree wells, it is recognized that full mature tree size and age are unlikely to be achieved, due to less than optimal cultural conditions. Available space, soil volumes and spacing may be reduced with the approval of the Superintendent of Forestry to accommodate such special conditions.
- Efforts should be made to limit the length of use of any one species by using changes in visual fields, gaps in tree continuity or changes in physical conditions or space as opportunities to make species changes.
- Under special conditions, such as places requiring the visual strength brought by a single species planted repetitively, planting of single species or limitedly diverse species may be made where greater visual diversity would result in a significant loss of necessary visual characteristics for the place. Such places should be the exception rather than the majority of conditions. Development of such plans shall be made in partnership with the Park Department Landscape Architect and the Superintendent of Urban Forestry. Plans of this nature shall require the approval of both parties.
- Authority to approve plan exceptions are granted by the Superintendent of Forestry

### **Street Tree Selection and Placement Standards**

- Most large growing street trees should be spaced on approximately 40 foot centers for most applications along streets. This spacing may vary from 35' to 45' as needed to accommodate other constraints. Trees likely to achieve smaller canopy spreads may be considered for closer spacing with Superintendent of Urban Forestry and City Arborist approval.
- Trees should be planted in either the fall planting season, October to December or the spring planting season March to May.



- Trees should not be planted where the trunk would be placed:
  - less than 40' from the intersecting curb line of a street, alley or commercial drive or less than 15' from the intersecting edge of a residential driveway.
  - less than 2.5' from an adjacent pavement or curb defining a planting area.
  - less than 10' from a traffic control device, street light pole or fire hydrant.
  - less than 20' from the trunk of another tree when that tree's growth rate and patterns could outcompete the street tree and force it into asymmetrical growth patterns that would create greater susceptibility to overturning.
  - within the clear safety zone determined by traffic engineering standards of an uncurbed roadway.
  - on top of water and sewer service branch lines to private properties. Avoid placing trees above sewer and water main lines when other options are available.
  - where they would interfere with surface drainage ways.
- Make species selections that will permit branches overhanging a pavement to be removed to 14' above arterial and collector street roadways and in commercial areas, 12' above residential street roadways and 8' above sidewalks.
- A minimum of 50 cubic feet of growing soil volume at a minimum depth of 12 inches and a maximum depth of three feet should exist or be provided for each inch of trunk diameter intended for the mature tree at each tree location.

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- Tree canopies, branches and trunks should not come to within 15’ of overhead electric transmission lines at expected maturity.
- Provide growing conditions that promote vigorous tree growth, health and longevity. Make tree selections based on cultural conditions available at the planting site. Light and wind exposure, soil porosity and percolation, pH, texture and fertility should support the growth requirements of the selected species. Make species selections tolerant of drying winds, salt spray and soil salt, soil compaction, poor drainage and high pH where such conditions are evident or will likely occur during the tree’s lifecycle. Existing trees growing well in similar conditions nearby may be good cues for making successful new selections.
- Where existing conditions will not support cultural requirements of desired trees, provide changes in existing conditions to support healthy growth of trees by loosening, amending or replacing soils and improving or providing supplemental sub-surface drainage as necessary to create supportive growing conditions, using soil volumes necessary to support the intended mature tree size. Avoid permanent use of irrigation systems to artificially support tree growth.
- Group trees with similar visual characteristics such as size, growth rate and patterns, leaf color and texture and bark appearance where uniformity in appearance is a design goal.
- Group trees with similar cultural requirements and growth rates and patterns to aid in providing maintenance. Similar maintenance procedures may then be provided with less travel between trees.
- Species selections should be sufficiently diverse at varying levels within the community landscape so as to avoid loss of large groups of trees within a given visual field at any one time from a single pathogen or level of maturity.
  - At the citywide level, the inventory of tree species should strive to have:
    - no more than 10% of trees from any single species
    - no more than 20% of trees from any single genus
    - no more than 30% of trees from any single family
- Within the goal of diversity, give preference to use of native species and their cultivars over non-native species, in order to promote a regional character in the local urban forest, when conditions will support their growth.
- Avoid planting exotic and /or invasive species where they could invade and supplant native plant communities.
- Consider planting street sections with species groups that have similar leaf drop times to reduce length of fall cleanup time.
- Avoid planting species with significant seed heads or nuts where this litter could create hazards for motorists and pedestrians if it falls on pavements.
- The inventory of trees should strive to avoid uniform ages at the neighborhood and larger levels so as to avoid synchronous maturity of the urban forest and significant loss in any one time period. Strive for age diversity on a neighborhood and citywide level, recognizing that some streets will have all their trees planted at the same time as they are initially constructed. Replanting older areas as trees are lost will ensure overall age diversity. Recognize that varying growing conditions, accidental losses and species type will influence longevity of trees. Over time, this variability assists in achieving age diversity.
- Select species that create visual harmony along streets and create beauty with their form, color, texture, and other visual qualities of their branches, bark and leaves. Flowers on trees last a very short period of the year and should be a secondary consideration in their selection.

*\*Please see Appendix 6 for the complete Street and Park Tree Planting Specifications*

### **Tree Grate Management**



- Use of tree grates surrounding the soil of the base of trees is discouraged where other means of protecting the root zone soil from compaction are available.
- Tree grates shall be of cast iron, with the ability to have the central opening periodically enlarged to accommodate the growth of buttress roots and the trunk. Use of standardized grate designs is preferred, with additional preference given to grates with surfaces accessible to the disabled.
- Tree grate trunk openings should be enlarged when less than 1” clearance exists between tree parts and the grate. Grates should provide approximately 3” of clearance to the trunk after enlargement to allow for future trunk and root flare expansion.
- Existing gravel mulch should be cleaned of fines and replenished over weed barrier fabric at the time tree grates are enlarged.
- At the point when less than 25% of the tree grate would remain after enlargement, the grate may be permanently removed and the remaining surface mulched.

### **Special Street Tree Planting Programs**

#### **Neighborhood/Citizen Match Street Tree Program**

The Neighborhood street tree program is administered through the Fort Wayne Parks and Recreation Department. This is an opportunity for individual citizens or entire neighborhoods to request a street tree to be planted in front of their home. An online Application is available at [www.fortwayneparks.org](http://www.fortwayneparks.org) or [www.cityoffortwayne.org](http://www.cityoffortwayne.org). The applications for trees are received and reviewed by the Superintendent of Urban Forestry & City Arborist City. Planting spaces are listed in the street tree inventory, and final approval of the location of planting and species to be planted, remain with The Superintendent of Urban Forestry & City Arborist.

*\*Please see Appendix 7 for the complete Citizen Match Tree Planting Application*

#### **Grants and Donations**

The Parks and Recreation Department is continually searching and applying for grants that will assist the department in the expansion of its urban canopy. The department is glad to assist developers, private owners, and neighborhood associations who are interested in a tree planting program along the streets in their neighborhoods. The department will assist in arranging the purchase of the trees and arranging the planting through a contractor if required.

#### **Indiana Michigan/AEP Swap-a-tree Program**

Trees growing under power lines that require repeated topping by the utility are scheduled for removal. The utility contractor removes the tree. The utility company supplies the funding for the replacement trees, and the FWPRD pays for their planting.



### **Construction Activities**

Trees removed due to various construction activities will be replaced by the contractors in accordance with standard planting specifications.

### **Park Tree Planting**



Trees in City parks vary in characteristics more widely than those along streets. They range from low, shrubby trees through enormous, centuries old native specimens. They occur in settings ranging from highly managed landscapes to fully naturalized forests, with many variations of landscape types among these conditions. Data on park trees is not nearly as complete as for street trees. Species diversity (and habitat diversity), total quantities, available planting locations, age range, and condition range all exceed that of street trees. Aerial photography and some park plan drawings record locations and some species types.

Park and Plaza places vary widely in their function, conditions and use levels. They require a level of evaluation and creative process that is best customized to each location, with careful consideration of the roles of trees in the landscape and their biological needs. Diverse opportunities to incorporate trees into these places allow greater varieties of trees with a wider range of functions than in street applications. No one design standard can be successfully applied to such varying conditions. However, some core selection and placement policies should guide the designer into making choices that provide good value to citizens in these long-lived landscapes.

### **Park Tree Selection and Placement Plan**

- The placement and selection of trees in parks and plazas shall support the purpose of park trees as established earlier in this document.
- In order to support these functions, tree placement and selection shall be made in accord with other established City and Park plans, policies and standards.
- Provide adequate overhead and lateral space to support the growth of the tree selected for the planting location. Place and select trees so they are likely to develop balanced crown form to reduce damage from storms.
- Provide adequate soil volume and other cultural resources to allow the selected tree to reach the greatest possible mature size and age allowable for the situation.
- Use species that will grow to the largest size and greatest age that available space and other resources will allow.
- Diversify species within visual fields so that the loss of a single species will not fully destroy the visual character of a place.
- Give preference to the use of locally native species as primary landscape trees.
- Use horticultural specimens as accents and features, not mainstays, of park landscapes.
- Avoid species with chronic and fatal susceptibility to diseases and insects.



### **Plan Exceptions**

- Under special conditions, such as in urban and highly paved plazas, where trees are grown in highly constrained conditions like grated tree wells, it is recognized that full mature tree size and age are unlikely. Available space, soil volumes and spacing may be reduced up to 50% from standards to accommodate such special conditions, with approval of the FWPRD Landscape Architect. It is preferable to avoid creating conditions where trees will be growing under conditions less than optimal for their growth.
- Under special conditions, such as places requiring the visual strength brought by a single species planted repetitively, planting of single species or less diverse species may be made where greater visual diversity would result in a significant loss of necessary visual characteristics for the place. Such places should be the exception rather than the majority of park conditions. Development of such plans should be made in partnership with the Park Department Landscape Architect and the Superintendent of Urban Forestry. Plans of this nature shall require the approval of both parties.
- Authority to approve plan exceptions are granted by the Superintendent of Forestry

### **Park Tree Selection and Placement Standards**

- Trees should not be planted where the trunk would be placed:
  - Less than 40' from the intersecting edges of roadways with those of other streets, alleys or driveways
  - Less than 2.5' from an adjacent pavement or curb. 3' of minimum clearance is preferred and should be incorporated into newly designed places
  - Less than 10' from a traffic sign, street light pole or fire hydrant.
  - Less than 20' from the trunk of another tree that could overtake the proposed tree and force it into unsound asymmetrical growth patterns. With the exception of smaller, ornamental trees and conifers reaching less than 20' in canopy spread.
  - Where they would interfere with overhead or underground utility function or with surface drainage ways.
- Make species selections that will permit branches overhanging a pavement to be removed to 12' above park drives and 8' above sidewalks.
- A minimum of 50 cubic feet of growing soil volume at a minimum depth of 12 inches and a maximum depth of three feet should exist or be provided for each inch of trunk diameter intended for the mature tree at each tree location.
- Canopies of trees should not come to within 15' of overhead electric transmission lines at expected maturity.
- Provide growing conditions that promote vigorous tree growth and longevity. Make tree selections based on cultural conditions available at the planting site. Light and wind exposure, soil porosity and percolation, pH, texture and fertility should support the growth requirements of the selected species. Make species selections tolerant of drying winds, salt spray and soil salt, soil compaction, poor drainage and high pH where such conditions are evident or will occur during the tree's lifecycle. Existing trees growing well in similar conditions nearby may be good cues for making successful new selections.
- Where existing conditions will not support cultural requirements of desired trees, provide changes in existing conditions to support healthy growth of trees by loosening, amending or replacing soils and improving or providing supplemental sub-surface drainage as necessary to create supportive growing conditions, using soil volumes necessary to support the intended mature tree size. Avoid permanent use of irrigation to artificially support tree growth.

- Group trees with similar visual characteristics such as size, growth rate and patterns, leaf color and texture and bark appearance where uniformity in appearance is a design goal.
- Consider individual trees as part of larger landscape compositions and as parts of integrated plant communities. Avoid single specimen planting as the primary composition technique.
- Species selections should be sufficiently diverse at varying levels within park landscapes so as to avoid loss of large groups of trees within a given visual field at any one time from a single pathogen or age.
- Within the goal of diversity, give preference to use of native species and their cultivars over non-native species, in order to promote a regional character in the local urban forest.
- Avoid planting exotic species where they could invade and supplant native plant communities.
- Avoid planting species with significant seed heads or nuts where this litter could create hazards for motorists and pedestrians if it falls on pavements or other travel surfaces.
- The inventory of trees in a given park or plaza overall should strive to avoid uniform ages so as to avoid synchronous maturity and severe loss in any one time period. Normal attrition in older areas will promote overall age diversity, so long as trees are replaced as they are lost. Recognize that varying growing conditions, accidental losses and species type will influence longevity of trees. Over time, this variability assists in achieving age diversity.

*\*Please see Appendix 8 for the complete Approved Street Tree List*

### **Special Park Planting Programs**

The FWPRD works in conjunction with many different organizations to offer several different tree planting programs. Many of these programs give residents the opportunity to plant trees in front of their home or volunteer their time to help plant trees in the Parks.

#### **The Great Tree Canopy Comeback (GTCC)**

The Great Tree Canopy Comeback (GTCC) program, first launched in 2002, has been a catalyst in helping to restore and perpetuate the urban forest in Fort Wayne. Several organizations, including Friends of the Parks, Fort Wayne Parks and Recreation, Allen County Parks, and New Haven Parks and Recreation organize this annual event, pulling together groups and individual volunteers for a day of tree planting in an effort to combat the loss of trees due to the emerald ash borer. Sites for planting are chosen



early each year based on necessity of trees and relative geography. Quantities and species of trees are defined per site, with an overall goal of approximately 200 trees per year. Funding, donations, volunteer and event planning are organized by Friends of the Parks. Each of the various parks organizations take part in determining location and preparation for tree planting. Volunteers meet at each of the designated parks and are guided by ‘tree captains’ in the proper methods of planting and mulching. Taking place on the first Saturday of each November, the GTCC has resulted in the planting of over 2,500 trees in the area’s parks and streets.

#### **The Memorial Tree Planting Program**

The Memorial Tree Planting Program offers the patrons of our parks a way in which they may commemorate a loved one by purchasing a tree and memorial stone or deed. Those purchasing memorial

trees are able to give a preference for tree location, type (shade, flowering, or evergreen), and species should they so desire. The FWPRD Supervisor of Landscape determines specific location and tree species following communication with the donating patron. The actual planting and mulching is contracted work, while Parks employees complete necessary staking and placing of the granite memorial stone. In some cases, patrons may wish to forego the option to place a memorial stone, and may receive a deed to commemorate the donation. Another donation option that is available is the purchase of a memorial bench. This option is managed similarly, with the placement of a 6' steel bench as substitute for a tree. The benches are surface mounted to concrete slabs, with memorial stones set flush into the concrete. These programs are a great way to not only offer a means of commemoration, but a way to promote investment and ownership in the parks. *\*Please see Appendix 9 for the Memorial Tree Order Form*

### **Irrigation and Watering Plan**

Appropriate mating of trees with their setting should allow normal growth of trees without permanent supplemental watering. Permanent irrigation is not recommended except where trees are growing in highly unnatural conditions, such as in roof gardens. Temporary irrigation may be provided during the first two growing seasons after installation, when natural precipitation is incapable of supporting new trees during this establishment period.

### **Irrigation and Watering Standards**

- Newly planted trees should be provided with a low earth dike surrounding the perimeter of the root ball to serve as a reservoir for supplemental applied water during the reestablishment period. This dike and the area within it should be covered in mulch designed to retain soil moisture, yet not inhibit gas exchange with the soil. Mulches shall not be applied in direct contact with bark located on or above the root flare.
- Alternately, with approval of The Superintendent of Urban Forestry & City Arborist for street trees or Parks Landscape Architect for other park lands, temporary water reservoirs that slowly meter out water to the root zones or temporary irrigation systems may be used during the establishment period of newly planted trees.
- When applied, water should be applied in a manner that thoroughly wets the root zone of the tree, typically about 15 gallons of water, slowly applied, per watering for 2" caliper trees.

### **Fertilization Plan**

- Trees that have been properly mated to their sites should be able to grow vigorously without supplemental nutrients. Supplemental nutrients will be provided only to trees of significant value and age undergoing temporary stress or those where growing conditions have been compromised and require remediation.
- Application of supplemental nutrients will not be used for permanent life support of trees except under extraordinary circumstances. Improvement of growing conditions should be considered as a preferred long-term solution to impaired tree health.
- Diagnoses of supplemental nutrient needs and remedies shall be determined in consultation with The Superintendent of Urban Forestry & City Arborist on a case by case basis.
- Nutrient supplements involving spraying tree canopies, injections into tree parts and injections or borings into the earth require prior approval by The Superintendent of Urban Forestry & City Arborist. Such applications shall be made by certified arborists trained in these application methods.

### **Fertilization Standards**

- Organic supplements, such as compost tea and other biologically active materials are encouraged over chemical supplements as they enhance the soil biota with its resulting improvement of growing conditions for trees and other plants.
- Use application methods that minimize physical damage to trees.
- Application of nutrient supplements shall be under conditions that do not pose a threat to persons, property or desirable plants or wildlife.
- A fertilizer, injected with a commercial injection lance into the root zone using 12-24-24, or injected with an approved bark injector, of 10-10-10 is suitable, provided it is given in late September through late November, when roots are active but top growth is hardened off for the year. Specific deficiencies such as for iron and manganese should be diagnosed by inspection and soil tests. if necessary, and treated using methods previously described and under the supervision of The Superintendent of Urban Forestry & City Arborist.



## Monitoring and Documentation

### Urban Forest Analysis and Data Collection

The management of a large urban canopy such as the one existing in Fort Wayne is a very large and complex task. The urban canopy is a complex biotic organism that is ever changing. In order to be able to manage the system appropriately and make projections for the future an urban forest inventory and analysis is a necessity.

Tracking the trees that are planted or removed on public properties will ensure the forest assessment and urban canopy calculation stays up to date, and can help analyze expected changes to the overall forest age, diversity, and health. Records of tree work and updated GIS information can alert staff how the forest management efforts are paying off over time, and if any adjustments to the management plan are needed to keep on track with the goals. Discovering the presence of a disease or pest with early detection can be critical in containing threats to the overall forest. It is vital to monitor both the forest and the management plan over time to ensure the goals are being met.

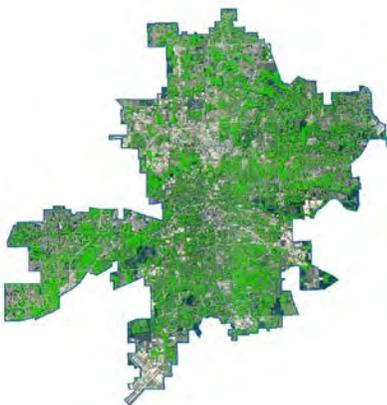
### 2008 Urban Forest Tree Canopy Assessment

The street trees of the urban forest in the City of Fort Wayne work hard to provide economic and environmental benefits. This urban forest is part of the infrastructure, and, as with any of the infrastructure, if it is not properly managed, the failures resulting from lack of care will cost the community economically and environmentally.

In 2008, the IDNR, CUF Program contracted a 23 city/town sample urban statewide street tree inventory (SUSI). The City of Fort Wayne was selected as one of the 23 Cities. The SUSI project utilized the U.S. Forest Service i-Tree Suite of Tools Street Tree Resource Analysis Tool for Urban Forest Managers (STRATUM). The project data enabled resource personnel to produce an analysis on forest resource structure, function, and value for the 23 SUSI communities and for the entire state.

#### **The 2008 Fort Wayne SUSI project data found:**

- Of the trees inventoried, 37,534 were in the large tree size class (over 45 ft. tall at maturity); 14,221 were in the medium tree size class (between 25-45 ft tall at maturity); 2,780 were in the small tree size class (between 15-25 ft. tall at maturity); and 280 are in the conifer/ evergreen categories.
- The age structure (balanced) is skewed from young to established trees 56.73%; maturing 36.85%, and mature at 6.41%.
  - The community has 9.63% canopy cover over streets and sidewalks with 1.14% canopy cover of total land area. This canopy cover generates the benefits the trees provide.
  - Based on the 2008 population, calculating street tree canopy cover, and deducting maintenance costs from benefit costs, each resident gets \$8.71 of benefits. Replacement value for this urban forest is: \$49,741,444.57
  - The City of Fort Wayne's Urban canopy is providing an annual ecosystem service values of \$5,872,011. *\*Please see Appendix 10 for the Urban Canopy Fact Sheet*



**SUSI Recommendations:**

- **Increase biodiversity:** The concern is obviously *Fraxinus* (ash) population and Allen County being in the NE region of the state which is considered totally infested with Emerald Ash Borer. The DNR urban forestry program recommends that the city begin a street tree reforestation program to replace the Ash that have been infested. Replant with a diverse palette of genus and species of large maturing size and similar canopy density to replace the benefits of the ash that will be lost. Plan to remove the unhealthy ash, the young ash which are not currently generating benefits and ones that have utility conflicts. Maintain the un-infested existing large ash that offer significant benefits such as storm water interception and energy conservation. Do this by maintenance pruning, regular pest and disease checks. Identify these and other un-infested significant, historical, cultural Ash trees and considers putting them into a EAB treatment management program. Vary genus and species, limiting the planting of *Acer* (Maples). Make this requirement city wide for all who plant on public property and a recommendation to private land owners. The USFS recommendation is to vary genus and species so that there is no more than 20% in any genus and 10% of any species.
- **Manage existing trees:** The main service provider is Silver maple. It is important to manage and maintain the healthy maturing species so that they may continue to offer the city the current multitude of environmental benefits.
- **Plant more trees:** To increase canopy cover and to reach recommended stocking levels in all zones of the city, it is important to develop a planting plan for, at least, the next five years. Looking at the inventory, seek out the available large vacant tree planting spaces and plan to plant accordingly following recommended standards. This will ensure the continuation of the service benefits. Utilize low growing trees under or near utility lines. Only plant small species trees as accent plantings and avoid large scale plantings of these species when possible. For the many small vacant planting sites, choose from the native species listed in the *Indiana Community Tree Selection Guide*.
- **Improve the urban forestry program :** The Superintendent of Urban Forestry & City Arborist should have an a positive working relationship with city departments to ensure that departments dealing with infrastructure (gray and green), parks, and those working within neighborhoods, understand the need to diversify the tree palette and how to manage EAB issues.
- **Seek funding:** Apply for local, state, corporate, and federal grant dollars for urban forestry street tree planting projects and enlist and engage the help of the citizens in green groups (TREES Indiana) to assist with plantings and awareness.



### **Actions taken on recommendations:**

- As of June 2014 the City of Fort Wayne has completed all of the Ash tree removals. There are 1000 ash trees that are currently being treated throughout the city. The city lost 13,000 ash trees and 4000 non-ash trees from 2006-2014. The FWPRD has replaced 10,000 trees keeping within the guidelines of no more than 20% in any genus and 10% of any species.
- The FWPRD currently maintains the existing urban canopy through a cyclic pruning program utilizing internal staff as well as contractors.
- The Forestry division has been working closely with internal departments to improve communication with engineering and utilities' where gray and green infrastructure coexists.
- The FWPRD has been awarded several grants from INDNR as well as private foundations for replanting the large amount of trees lost due to Emerald Ash Borer.

### **Street Tree Inventory**

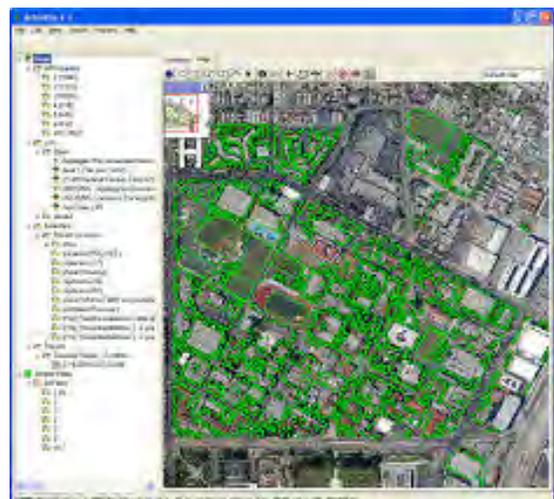


In 1991 the first formal street tree inventory was completed by the Forestry Division. The data collected from the inventory would prove crucial in the development of the pruning cycle for Fort Wayne. The inventory broke the city into four quadrants. The four quadrants were then broken up into 53 smaller geographic regions called pruning sections. These sections would allow the staff to systematically prune every tree on a cyclic basis. The inventory was kept in a computer data base that had the ability to be updated and create reports to aid in management decisions. *\*Please see Appendix 11 for the Pruning Section Map*

In 2008 the Forestry Division began to use an internet based inventory system which enabled the staff to become more efficient in the updating and use of the data. The new inventory system uses GPS location technology. The improved technology also enables a better delineation between public and private trees. Once the GPS data collection is complete the data will be integrated into other City mapping and planning efforts. The internet based inventory coupled with GPS technology creates a very powerful and accurate management tool.

There are several different attributes collected to get a snapshot of the health, needs and value of each tree in the inventory. The following attributes are collected for each tree:

- Address & Street
- Species
- GPS coordinate
- Site number
- DBH
- Height
- Branch & Trunk Condition
- Overall condition
- Work Needed
- Map Number ( Refers to pruning Section)
- Risk Rating



### **Park Tree Records Plan**

- Aerial photography and park plan drawings should be maintained as record locations of park trees.
- Park plans should record locations and species/variety of trees grown in managed park landscapes.
- There are 12 parks that have been inventoried to date. The remaining parks are being inventoried by internal staff as tree work is completed in each park.

### **Urban Forest Storm Response and Recovery Plan**

The City of Fort Wayne, Indiana lies in a climate zone that creates four distinct seasons. This creates the potential for rapid changes in temperature, humidity, and barometric pressure and sets the stage for severe weather events such as tornadoes, thunderstorms, hail, high winds, ice, and snow.



Historically, this has come true. In 1978, Fort Wayne received 24 inches of snow and 55 mile-per-hour winds that created 20-foot-high drifts and paralyzed the City for days. A May, 2001 tornado caused severe damage in portions of northern Fort Wayne. In December, 2008, a devastating ice storm caused lengthy power outages and severely damaged trees throughout the City, requiring a massive and costly cleanup and replanting effort. In June of 2012 a devastating Derecho hit the City with 91mph winds causing massive damage throughout the city.

Fort Wayne's *Urban Forestry Storm Response and Recovery Plan* details improved policies and procedures to increase the efficiency and productivity of tree risk reduction and storm response and recovery operations. The Plan addresses many facets of the urban forestry program, the City's emergency storm response system, and the role of the local, county, state, and federal government, ranging from overall management objectives to specific details. Topics range from long-term management objectives to short-term program priorities.

Traditionally, emergency management plans and professionals deal with serious public safety and health issues, but commonly overlook trees and woody debris in the mitigation efforts. When catastrophic disasters, such as tornadoes, ice storms, and severe straight-line winds, strike a major metropolitan center, millions of cubic yards of debris are produced. Trees and vegetation can account for approximately 30% of this debris volume.

Beyond the task of collecting and disposing of this debris are additional urban forest management considerations, including increased threat to life, hindrance to life-saving efforts, power outages, and personal and public property damage. The impacts of these additional tree-related considerations are not always quantifiable, but can overwhelm city services and slow down the recovery process.



### **i-Tree Storm Damage Assessment Inventory**

Fort Wayne is now prepared to assess damage and debris in the critical first hours after any storm by accessing and using the U.S. Forest Service’s software application, i-Tree’s Storm. The i-Tree Storm program has been installed on computers in the Parks and Recreation Department and the database is complete. Using this software application and its components will improve the City’s response to an emergency, accurately assess total urban forest damage and potential debris, and provide vital information to emergency officials in a concise and approved format.



Following i-Tree Storm protocols, FWPRD generated a random, statistically significant sample of approximately 2% of the public streets before collecting the required data. FWPRD then visited each sample street segment and recorded the number and size of each tree within the right-of-way. Data were also gathered on each tree larger than 6” DBH growing within 50 feet of either side of the right-of-way (ROW). The combination of ROW and off-ROW tree data is meant to account for the potential amount of debris that would be placed along streets during a cleanup project after a storm. Data from the sample segments can be used to calculate the total amount of debris citywide that would be generated in a catastrophic storm. Sample plots were utilized to provide statistically significant calculations for each of the City’s four quadrants.

Collected data and information are stored in an i-Tree Storm spreadsheet for future use, modification, updating, and comparison. The spreadsheet allows the input of cost figures related to cleanup and repairs so that an approximation of total potential costs related to a storm event can be calculated. These steps are part of a “pre-storm” assessment process that creates the ability to plan for future events.

Training was provided in March, 2011, to municipal personnel on the data collection techniques and equipment. When a disaster strikes, the municipality’s trained assessors will revisit the sample streets that are within the affected City quadrant (a “post-storm assessment”) and record how much of the tree crowns has been lost and how much maintenance work is necessary, such as pruning or removal for risk reduction. These observations are uploaded back into the i-Tree Storm spreadsheet, and a detailed estimate of storm damage for the specific event is automatically generated for quick and accurate submittal to emergency officials. The “post-storm assessment” also provides excellent information for making decisions about needed resources such as staffing and equipment.

*\*Please see Appendix 12 for the Storm Response Protocol*



## **Sustainability and Management Goals**

The City of Fort Wayne has had a long rich history of sustainable management of its natural resources. The creation of a sustainable urban canopy is dependent on a strong maintenance program that stresses diversity and productivity. The urban canopy affects every facet of the City from its water resources to the air we breathe with many other things in between.

City of Fort Wayne Code of Ordinances 99.146 states that written permission is required for a resident or citizen to do work on trees and vegetation that is located in the right-of-way. Pursuant to this ordinance, the Superintendent of Urban Forestry & City Arborist has developed a tree work permit that residents will need to apply for to do any work in the right-of-way. This permit will be required to be completed and approved by the FWPRD prior to any work being performed. *\*Please see Appendix 13 for the Tree Work Permit*

As it has been stated before in this plan the urban canopy is one of the few if not the only piece of infrastructure that actually pays the city back over time. What is so unique about the urban canopy is that it is a biological system that is not only fiscally sustainable but also environmentally sustainable in providing the city with environmental services. All of these services provide an improved quality of life for the residents of our city.

This plan will support the urban canopy and protect the diversity and productivity that are so crucial in providing the extensive benefits to our city. The key to having an efficient, productive management plan is setting achievable goals. The goals below will ensure that our management plan continues to achieve a sustainable system.

## **Management Goals**

### **Street Trees Goals to be attained by 2020**

- Reduce pruning cycle to 6 years. Prune 7,700 to 9,100 trees annually to achieve goal by 2020
- Plant 10,200 trees by 2020 to return the street tree inventory to 55,000 trees.
- Update our current Urban Canopy Analysis
- Adopt the ISA Tree Risk Assessment (TRAQ) program
- GPS locate 3000 street and park trees annually

### **Park Tree Goals to be attained by 2020**

- Reduce pruning cycle to 6 years
- Enforce Parks Tree Protection Plan for projects affecting park trees.
- Develop an invasive species management plan within the parks by 2020.
- Plant a minimum of 250 trees annually to increase overall park tree canopy at a rate that exceeds natural mortality rates.

## **Implementation**

The goals and recommendations of this plan are designed to be achieved in 5 years. It is important to push forward on those goals that can be acted on in the next 5 years.

Tree maintenance, removal of invasive trees and plants, and expansion of the urban canopy are ongoing efforts that will never be complete due to the nature of trees and forests. Annual work plans for staff and volunteers will help guide these efforts. Actions that are policy oriented may be reasonably low cost in monetary terms, but can take many hours, weeks, or even years of staff time to accomplish and become general practice.

This plan should be re-evaluated every five years to compare progress with stated goals and determine if new actions are needed to continue a positive movement towards goals. Parks master plans should be consulted when determining forest management actions specific to each park.

The plan will be the most successful when it becomes a normal part of operations. Ensuring the goals and policies of this plan are shared with all city departments and the general public is the best way to keep urban forest management a priority in the long term.

Urban forest management is a long term task. The City has major challenges to accomplish to preserve, protect, enhance and sustain its urban canopy, but with continued dedication by staff, leaders, local businesses, and the general public, the goal of a healthy urban canopy for Fort Wayne can be achieved.



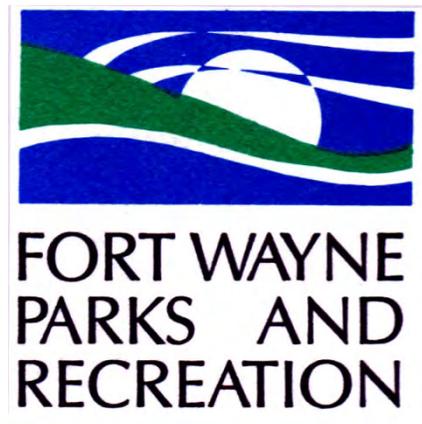
## Summary

The City of Fort Wayne has always valued its urban canopy. This plan has been created to guide the future of our urban canopy, and to assist members of the community in realizing the future in which we envision. This plan, like our canopy, should be treated as a biotic entity, which will be in need of periodic evaluation, occasional adjustments, and a healthy environment in which to grow.

The protection of the City’s biodiversity and its natural resources through the management of the urban canopy allows the canopy to perform its natural functions of recharging ground water, protecting our waterways, reducing heat islands, providing shade, wildlife habitat, and sequestering carbon and other pollutants. The urban canopy is an integral part of our urban green infrastructure, and this plan ensures it remains a priority.



# Appendix #1



**City of Fort Wayne Indiana Code of Ordinances  
CHAPTER 99: Streets and Sidewalks; Tree and Shrubs  
Sections 99.140 thru 99.148**

City of Fort Wayne Indiana Code of Ordinances  
CHAPTER 99: STREETS AND SIDEWALKS; TREES AND  
SHRUBS

Sections 99.140 thru 99.148

TREES, SHRUBS AND FLOWERING PLANTS

§ 99.140 VARIETY OF TREES PERMITTED TO BE PLANTED ALONG STREETS.

(A) The following varieties of trees may be planted along specified streets, namely: Norway maple, crimson king maple, summer shade maple, sugar maple, red maple, freeman maple, hackberry, American linden, little leaf linden, tulip poplar, paul scarlet thorn, red oak, pin oak, white oak, scarlet oak, swamp white oak, shingle oak, English oak, Heritage oak, Regal Prince oak, Chinquapin oak, European hornbeam, American hop hornbeam, Espresso Kentucky coffee tree, sweet gum, sunburst or imperial locust, ginkgo (male), Bloodgood London plane tree, Princeton American elm, Valley Forge American elm, New Harmony American elm, Japanese Zelkova, sycamore and other trees as permitted by the Board of Park Commissioners.

('74 Code, § 30-5)

(B) The planting of trees other than those listed in § 99.140(A) is prohibited along any street except by permission of the Board of Park Commissioners.

('74 Code, § 30-6)

(Ord. G-85-66, passed - -66; Am. Ord. G-32-11, passed 8-23-11) Penalty, see § 99.999

§ 99.141 PROTECTION OF NEWLY PLANTED TREES.

All newly planted trees must be provided with a tree protecting device; the tree being securely fastened to a stake. A wire or rope must be passed through a piece of garden hose and placed around the tree; the ends of this rope should be securely tied to the stake to keep the tree in line.

('74 Code, § 30-7) (Ord. G-85-66, passed - -66) Penalty, see § 99.999

§ 99.142 LOCATION AND SPACING.

The grass plot between the sidewalk and street must be measured and depending on the width of the strip the tree planted, in the center of the strip or as recommended by the Board of Park Commissioners. No tree shall be planted in the corner grass plots of intersecting streets. Where the parkway space of the street intersecting a street along which trees are to be planted is three feet or more in width, then no tree shall be planted closer than 20 feet from the inside edge of such intersecting street sidewalk. No tree shall be planted closer than 15 feet from inside the intersecting street sidewalk. Departure from this spacing may, in extreme cases, be authorized by the Board of Park Commissioners. In all cases trees shall be planted at least 40 feet apart irrespective of the size of the abutting lots along any street.

('74 Code, § 30-8) (Ord. G-85-66, passed - -66) Penalty, see § 99.999

§ 99.143 REMOVAL OF UNAUTHORIZED TREES; EXCEPTION.

Any owner of real estate planting any trees other than those mentioned in § 99.140(A) along any street shall remove or cause to be removed the same within 10 days after receiving a notice from the Board of Park Commissioners. Nothing in this section shall authorize the Board of Park

Commissioners to order the removal of any tree in good condition which has been planted prior to the enactment of this section.

('74 Code, § 30-9) (Ord. G-85-66, passed - -66) Penalty, see § 99.999

📖 § 99.144 COSTS OF REMOVAL RESPONSIBILITY OF PROPERTY OWNER.

(A) Upon failure of any owner of real estate to comply with §§ 99.141, 99.143 and 99.145 after being served with notice by the Board of Park Commissioners, it shall be the duty of the board to proceed to do the work so ordered at any time after the expiration of 10 days, and the cost of such work shall be charged to the person owning such real estate, and the Board of Park Commissioners shall recover or cause to be recovered from such owner the cost to the city of doing such work by some appropriate proceeding and that money so collected shall become a part of the general park fund to reimburse such fund for money expended for doing such work and making such collection.

(B) The cost of such work shall become and remain a lien upon the real estate and the improvements thereon.

('74 Code, § 30-10) (Ord. G-85-66, passed - -66) Penalty, see § 99.999

📖 § 99.145 TRIMMING OF TREES AND SHRUBS DUTY OF PROPERTY OWNER.

The owner or occupant of any property abutting any street shall remove or trim any tree, shrub, vine, flower or plant or part thereof on the property of any such owner or occupant which may be unsightly or in a dangerous condition or which may project over the street beyond the property line of such owner or occupant in such a manner that the limbs or branches thereof will not permit free and unobstructed passage of pedestrians and vehicles and an unobstructed view of street lights.

('74 Code, § 30-4) (Ord. G-85-66, passed - -66) Penalty, see § 99.999

📖 § 99.146 PERMIT REQUIRED TO TRIM, REMOVE OR PLANT TREES, SHRUBS AND THE LIKE.

It shall be unlawful for any person to trim, remove or plant, injure or destroy any tree, vine, shrub, flower or plant within the limits of any public street, thoroughfare, lawn, park, parkway or boulevard without first obtaining written permission from the Board of Park Commissioners of the city.

('74 Code, § 30-2) Penalty, see § 99.999

📖 § 99.147 POWERS OF BOARD OF PARK COMMISSIONERS.

The Board of Park Commissioners shall have power from time to time to adopt and enforce rules, regulations and specifications for the trimming, removal and planting, and protection of all trees, shrubs, vines, flowers, hedges and plants within the limits of any public street, thoroughfare or lawn in the city, and shall have the power to regulate and prescribe terms and conditions upon which permits to trim, remove or plant any such tree, shrub, vine, flowers or plants within the city shall be planted.

('74 Code, § 30-1) Penalty, see § 99.999

📖 § 99.148 INTERFERENCE WITH PARK COMMISSIONERS OR AGENTS PROHIBITED.

It shall be unlawful for any owner of real estate to interfere or cause or authorize or procure any interference with the Board of Park Commissioners or its agents while engaged in doing any work under the provisions of this chapter.

('74 Code, § 30-11) Penalty, see § 99.999

📖 § 99.999 PENALTY.

(A) Whoever violates any of the provisions of this chapter, for which no specific penalty is otherwise provided, shall, upon conviction thereof, pay a fine of not more than \$2,500. Each day any violation of this code or of any ordinance shall continue shall constitute a separate offense. In all cases where the same offense may be made punishable, or may be created by different clauses or sections of the ordinances of the city, the City Attorney may elect under which to proceed, but not more than one recovery shall be had against the same person for the same offense.

(B) Any person violating any of the provisions of § 99.021 or failing to comply with any of the same, shall be fined in any sum not less than \$10 and not to exceed \$300. ('74 Code, § 25-2)

(C) Whoever violates any of the provisions of § 99.114 shall be fined in the sum of not less than \$1 nor more than \$5. ('74 Code, § 25-69)

(D) (1) Any person who violates any provision of § 99.025 shall be fined as follows:

(a) First violation: \$50.day/violation.

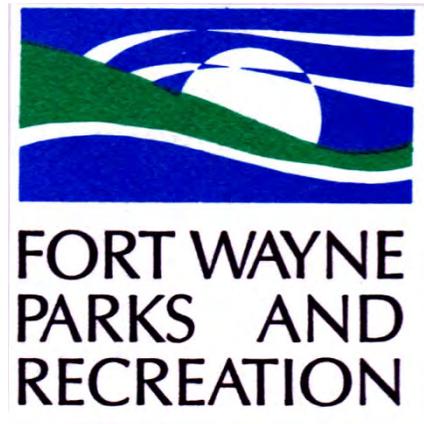
(b) Second violation: \$100/day/ violation.

(c) Third and subsequent violations: \$250/day/violation.

(2) Fines for violations under this section shall be paid to the City of Fort Wayne Ordinance Violations Bureau who shall deposit the funds in the General Fund.

(Ord. G-20-07, 9-11-07)

# Appendix #2



## Tree Protection Plan for Construction Areas

## TREE PROTECTION STANDARDS

**Background:** Trees are a valuable asset in the city landscape. Their shade makes summer living more pleasant and can significantly reduce air conditioning costs. Their leaves act as air cleaners, filtering dust and removing airborne pollutants. Trees shelter wildlife, slow rainfall runoff, muffles noise and provides privacy. The City of Fort Wayne Parks & Recreation Department has the responsibility for and authority over, trees planted in the right of way and the trees in the parks.

**Purpose:** The City of Fort Wayne recognizes the substantial economic, environmental and aesthetic importance of trees and plantings within the community. Trees are an invaluable part of the fabric that makes Fort Wayne unique and attractive. Trees are a fragile public resource and may be damaged or destroyed through malicious, careless, or even well-intentioned actions. It will be the City of Fort Wayne's policy to utilize applicable methods, techniques and procedures to preserve trees and canopy cover when feasible. Other city departments will be required to include tree protection notes and details, provided by Parks Department landscape architect, on construction documents for all projects on Parks Department owned property.

**How Trees are Damaged During Construction:** Construction equipment can injure the above ground portion of a tree by breaking branches, tearing the bark, and wounding the trunk. These injuries are permanent and, if extensive, can be fatal.

Digging and trenching will likely sever a portion of roots of many trees in the area. It is easy to appreciate the potential for damage if you understand where roots grow. The roots of a tree are found mostly in the upper 12-18 inches of the soil. Severing one major root can cause the loss of 5 to 20 percent of the root system. Another problem that may result from root loss caused by digging and trenching is that the potential for the trees to fall over is increased. The roots play a critical role in anchoring a tree. If the major support roots are cut on one side of a tree, the tree may fall or blow over.

Heavy equipment used in construction compacts the soil and can dramatically reduce the amount of pore space. This compaction not only inhibits root growths and penetration but also decreases oxygen in the soil that is essential to the growth and function of the roots. Piling soil over the root system or increasing the grade smothers the roots. It takes only a few inches of added soil to kill a sensitive mature tree.

## **TREE PROTECTION PLAN**

1. Tree protection should be done before any land clearing, construction, or grading practices are done.
2. A construction fence must be installed around trees to be protected to keep vehicles and equipment away from trees. Permitted fence material would include snow fence, chain link or wooden fence. Extend fence or barrier as far out as the branch spread of the trees (drip line). This area will be termed **TREE PROTECTION ZONE**.
3. In the event that trees are close to proposed buildings, erect the fence no closer to than 6 feet to the building (see modified tree protection detail). When there are severe space constraints due to tract size, or other special requirements, contact the Parks Department landscape architect to discuss alternatives.
4. Place **TREE PROTECTION** signs on fence/barriers.
5. DO NOT pile or leave fill in or near the **TREE PROTECTION ZONE**.
6. No equipment fueling, chemical mixing, or disposal of construction debris such as paints, plasters, cement, or chemical solutions should be done within the **TREE PROTECTION ZONE**.
7. Any required trenching which has options as to the trench path should be routed in such a manner as to minimize root damage, such as, trenching around **TREE PROTECTION ZONES** or combining utilities.
8. No excavating or trenching is permitted within the **TREE PROTECTION ZONE**. Only directional tunneling or boring is permitted within the **TREE PROTECTION ZONE**.
9. An inspection of tree protection measures by the Parks Department Landscape Architect or City Arborist must be performed before construction may begin.
10. All exposed roots must be pruned with a sharp saw or pruning tool to provide a clean cut.
11. All exposed roots must be backfill as soon as possible to existing grade.

12. No parking of vehicles or equipment will be permitted in the drip line of **any** trees unless on pavement.
13. If construction activity necessitates tree removal, the contractor or the utility company will be required to remove such trees at their own expense, but only with the approval, and under the supervision of the City Arborist or Park Forester. Notification of adjacent property owners concerning the removal of any trees will be done by the project engineer.
14. Every effort to avoid damage to limbs, branches, tree trunks and roots should be taken. Any work necessary to correct damage or make the tree safe will be done in a manner that conforms to standards as set by the International Society of Arboriculture. Such work will be paid for by the contractor.
15. After construction, fertilize trees using Mauget Micro-Injection tree capsules according to manufacturer's specifications. When the fertilizer capsules have been installed, the Park Department's Arborist or Park Forester should be notified for his inspection and approval. After the capsules are empty, they shall be removed and disposed of properly.
16. The preceding notes apply specifically to trees within City Parks. Street trees, while owned and maintained by the Parks Department, by the nature of their placement adjacent to sidewalks, driveways, roads, etc., require some flexibility in their protection. Coordinate projects impacting street trees directly with the City Arborist, Parks Forester, and Landscape Architect.
17. **Street Tree Guidelines:** Where curbs or walks are being replaced within the **TREE PROTECTION ZONE:**
  - \*Remove masonry work carefully and replace with as little disturbance as possible to existing roots.
  - \*Where necessary, route construction around existing major tree roots to avoid root damage.
  - \*Roots within six inches of masonry to be replaced may be removed with a saw or pruning tool, however major scaffold roots may be cut only with approval of the City Arborist.
  - \*Use the narrowest possible trenching tool or hand form to stay as far away from the trunk as possible.
  - \*Any branches broken in the course of construction must be cleanly cut and wounds trimmed. Where necessary to operate near tree canopies, tie branches back to prevent damage.

**Prohibited practices:**

- \*Nailing, bolting, using trees as anchorage for ropes, power lines, cables, etc.
- \*Cutting/breaking, skinning and abrasion of roots, branches and bark.
- \*Damage or removal of the tree protection fencing.
- \*Unauthorized filling, excavating, trenching or auguring within “**TREE PROTECTION ZONE**”.
- \*Compaction, driving, parking over the “**TREE PROTECTION ZONE**”.
- \*Storage of any materials or vehicles within the “**TREE PROTECTION ZONE**”.
- \*Dumping of construction waste or material (including liquids) within the “**TREE PROTECTION ZONE**”.
- \*Unauthorized removal or relocation of trees.
- \*Trees protected by the city may not be removed, injured or destroyed in any way without written authorization from the city.

**REPLACEMENTS OF TREES**

When a city tree(s) is removed for construction projects, they will be replaced with new trees. The number of tree replacements will be determined by a formula based on five to one replacement. For example, if two trees are removed to facilitate construction, they will be replaced with ten two inch diameter trees. An exception to this formula is street trees. Street trees shall be replaced one to one. One three inch caliper tree replaces each street tree removed. The location and species of trees to be replaced will be determined by the Fort Wayne Parks Department Landscape Architect, City Arborist, or Landscape Supervisor. The utility or contractor shall purchase and plant the trees in accordance with department standards and specifications, and under the supervision of this department. All plants shall be guaranteed to remain alive and healthy for one full year.

<b>DAMAGE ASSESSMENT</b>
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A Parks Department representative will make periodic site visits. Damage to city trees will be assessed using the latest appraisal formula by the International Society of Arboriculture and the amount of damage will be charged.

Damage to city trees will also include any of the prohibited practices listed above and will be determined by the city's arborist.

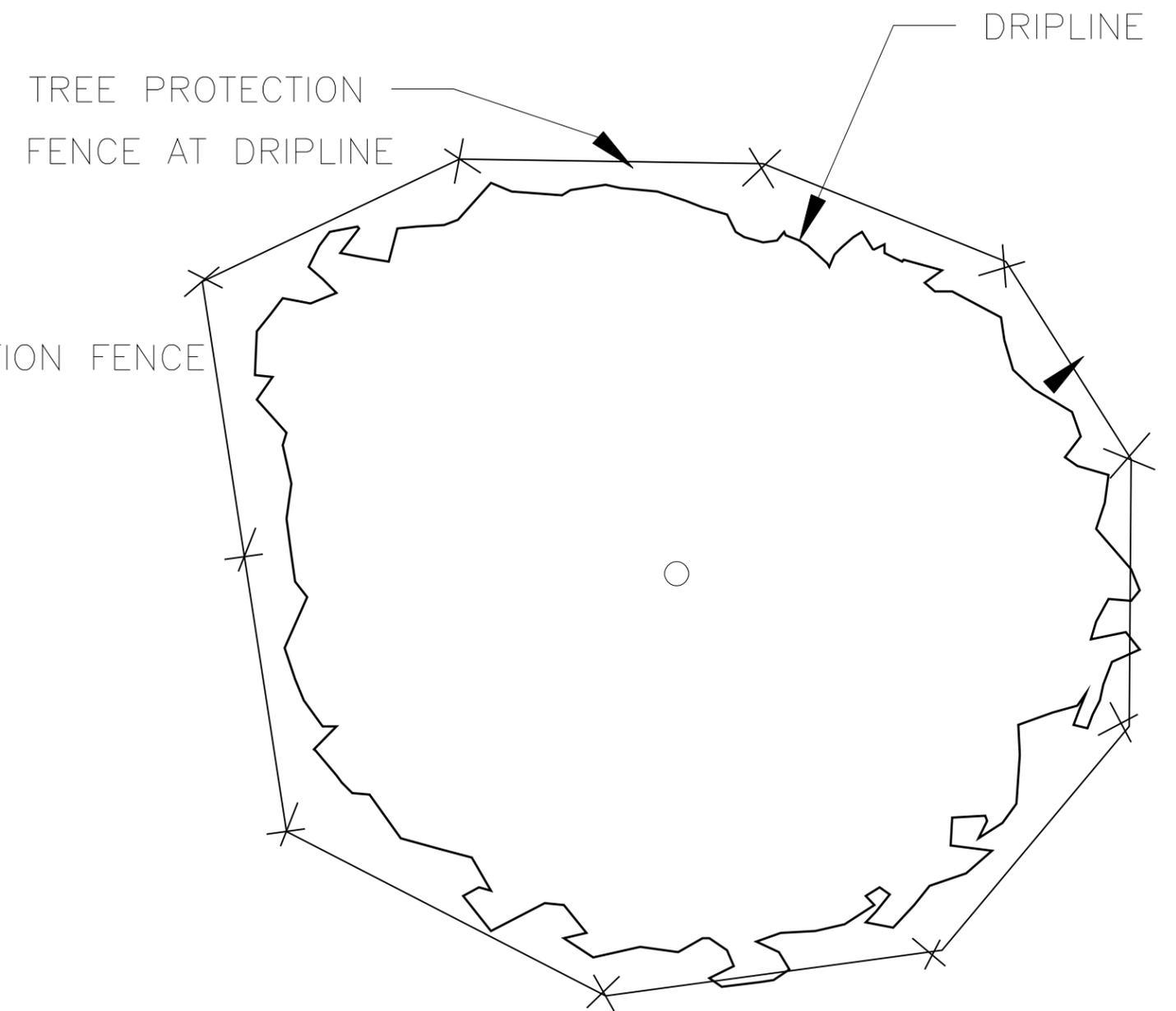
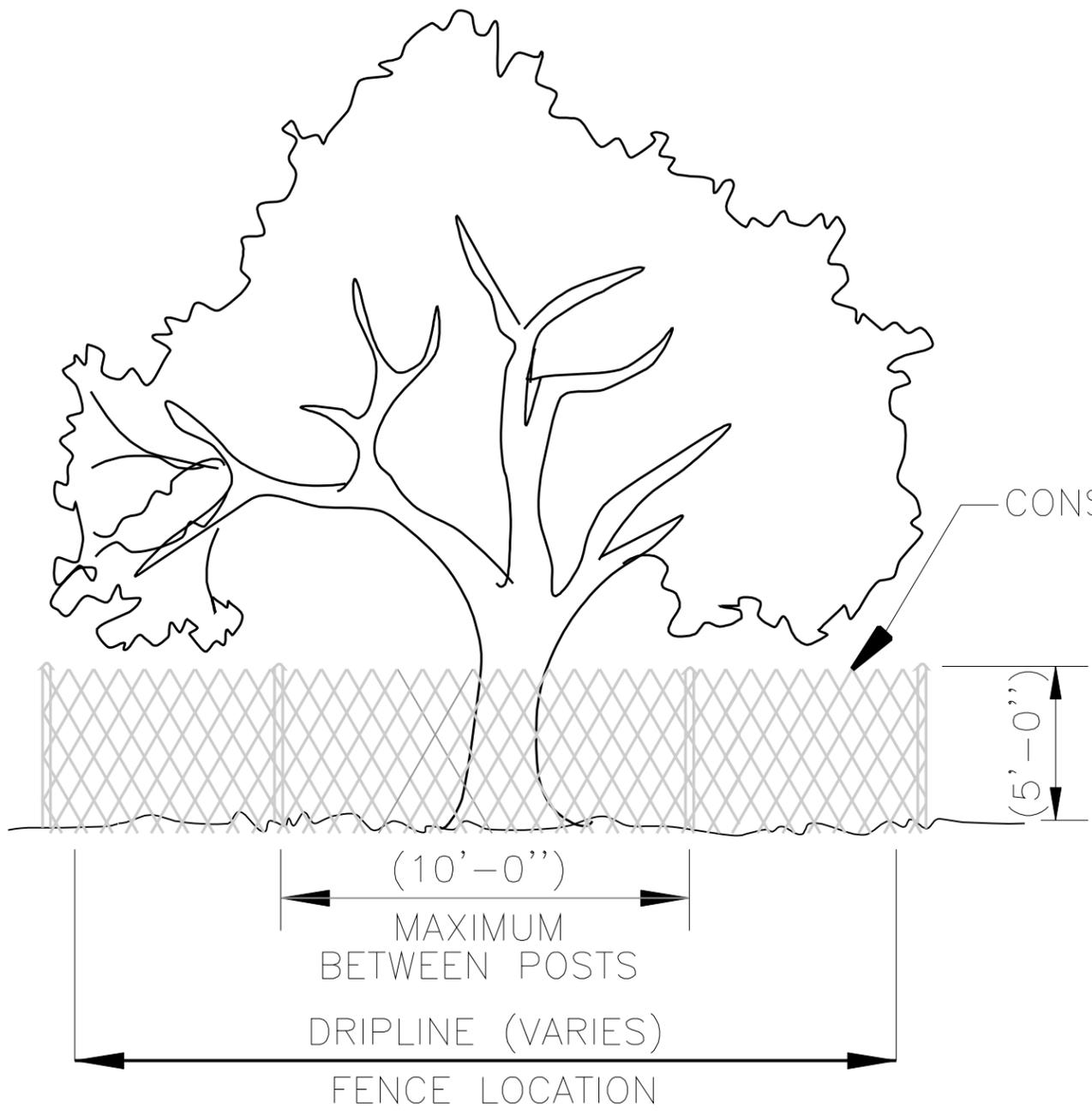
**Committee:**

Steve Goodwin

Bill Diedrichs

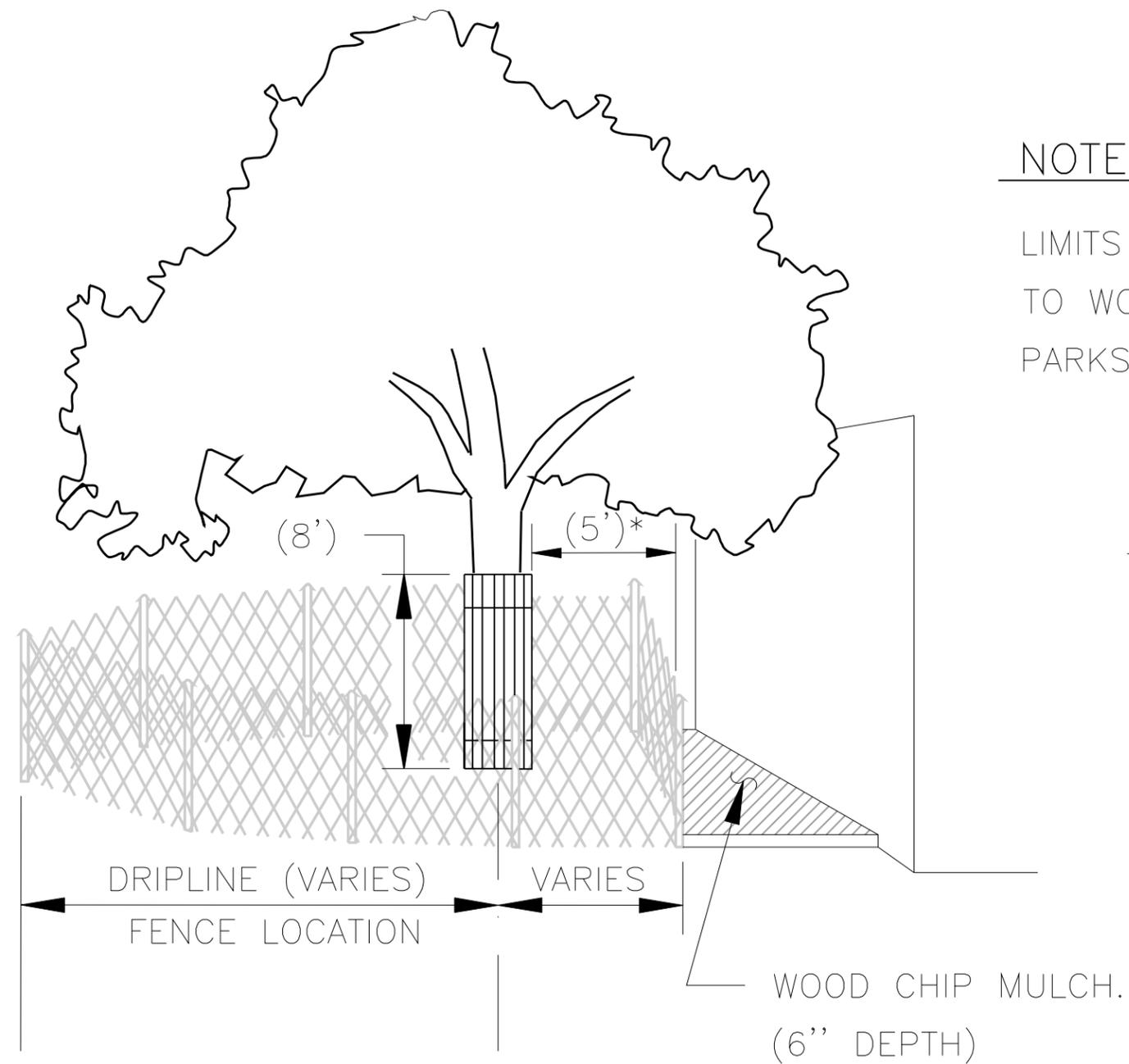
Lynda Heavrin

Alec Johnson



TREE PROTECTION FENCE

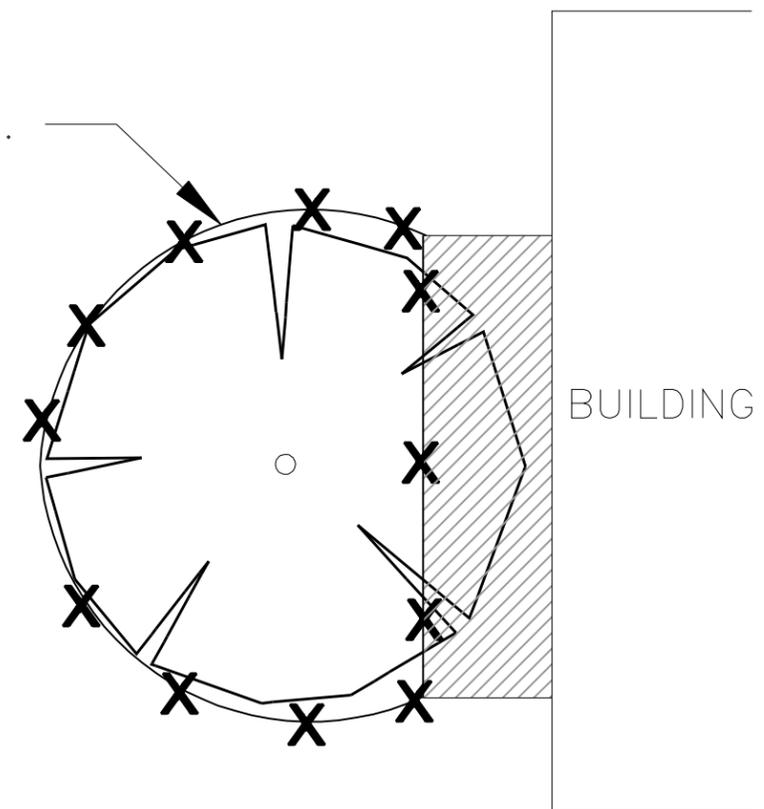




NOTE:

LIMITS OF WOOD CHIP MULCH AREA AND DISTANCE FROM TRUNK TO WORK AREA SHALL BE SUBJECT TO THE APPROVAL OF THE PARKS DEPARTMENT LANDSCAPE ARCHITECT.

TREE PROTECTION FENCE.

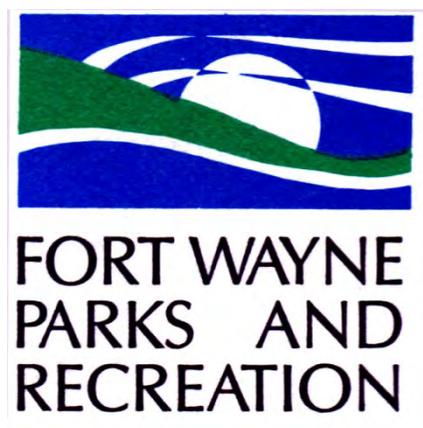


\*AS NEEDED TO PROVIDE NECESSARY WORK SPACE.  
IF LESS THAN 5', THEN ADD BOARDS STRAPPED TO TRUNK.

WOOD CHIP MULCH AREA.  
(4"-6" DEPTH)

TREE PROTECTION FENCE (MODIFIED)

# Appendix #3



## Street & Park Tree Pruning Specification

# **The City of Fort Wayne Street Tree Pruning Specification**

## **Intent**

The City of Fort Wayne Park and Recreation Department maintains several thousand street trees within the right-of-way. The goal of the street tree pruning program is to have all of the city street trees within the managed areas pruned on a six-year cycle. The Parks and Recreation Department is asking for bids to prune 5331 street trees in designated management areas.

## **Pricing Description**

Contract prices shall include all applicable charges that shall be incurred during the specified period of this contract. Prices are all inclusive and there shall be no additional charges during the term of this contract. It is the responsibility of the contractor to properly dispose of all debris from pruning operations. The City of Fort Wayne **will not** provide dumping sites for wood chips.

## **Contract Period**

The negotiated agreement will be effective for (3) three years measured from the date of the contract and issuance of a purchase order. An option for (2) two additional years of service may be approved if the City is satisfied with the contractors work, and the proposers desire to participate for the additional (2) years.

Years 2, 3, 4, and 5 are contingent upon City Council's approval of the pruning budget for each respective year.

Trees shall be trimmed to specification within a 365 day time period commencing with the successful completion of a negotiated contract with the City and the issuance of a Purchase order.

## **Contract Renewal**

Upon satisfactorily completion of the work during any term of the negotiated contract, the City may notify the contractor that the contract will be extended for a one-year renewal term pursuant to costs established according to the specifications. Such notice shall be given at least 60 days prior to the expiration of the then current term, and the contractor shall notify the City of the proposed revised costs within 15 days after such notice is given. If the City approves the revised cost, the parties will renew the contract by written addendum to the contract.

## **Payments**

The contractor will invoice monthly based on percentage of completion.

## **Liquidated Damages**

The contractor acknowledges that damages will be incurred by the City in the amount of \$200 per working day past the scheduled completion date. The contractor agrees that the

contractor's invoices, in the amount equal to the damages incurred, through deduction from the invoice of the contractor.

### **Unit Pricing**

The DBH pricing given by the vendor for the purposes of this contract will also be used as unit pricing. The Parks and Recreation Department reserves the right to add and or delete trees from the list due to budget.

### **Estimated Quantities/**

It is estimated that a total of 5331 street trees will need to be pruned in this contract. However the actual number of trees to be pruned may increase or decrease based on funding. The quantities stated are to be construed as estimates for the purpose of the bidding process unless otherwise indicated. Accordingly, the City of Fort Wayne does not guarantee that, nor does the contractor demand that, the work under this contract will in fact include the estimates herein.

### **Emergency Work**

Contractors shall also bid combined hourly crew and equipment rates for emergency after hours, weekend and holiday work. Upon request by the City, the contractor shall agree to reassign to respond to emergency work during normal work hours. If this occurs, an equal and automatic time extension will apply to the contract. Contractors will not be penalized for assisting in times of emergency.

### **Monthly Crew Activity Reports**

The contractor must provide monthly reports as to the progress of the contract. The monthly report will be sent to the Superintendent of Urban Forestry. The contractor can e-mail, fax or hand deliver monthly reports.

### **Damage and Protection**

The contractor is responsible for any damage to public or private property caused by the contractors operation. Due to the nature of the work, and the likelihood that claims may arise, the contractor is responsible for documenting conditions of the work site, including public and private property, prior to commencing work. The contractor shall notify the Superintendent of Urban Forestry or representative of any damage prior to commencing work.

The contractor shall take all necessary precautions to eliminate damage to adjacent trees and shrubs, lawns, curbs, walks, and other public and private property. The contractor's vehicles shall be located on the paved surface of the street and will not use private drives or block any public sidewalks. The contractor will be responsible for repair or to replace any pavement or sidewalk broken or damaged as a result of their work operations. Holes made in lawns will be filled and re-seeded. Equipment shall not enter private property unless the property owner consents or the City of Fort Wayne has obtained a right-of-entry release for the required work.

The contractor shall resolve any claims for damage with the property owner within (10) days after damage occurs. Should the damage not be rectified within the time frame agreed upon or to the satisfaction of the property owner, and/or Superintendent of Urban Forestry the City of Fort Wayne reserves the right to repair and/or replace any pavement or sidewalk damage caused by the contractor and deduct those costs from any payment due to the contractor.

**Equipment**

All equipment, parts or components not specifically mentioned in these specifications which are necessary to provide a complete ash tree removal service shall be furnished by the contractor.

**Note:** Parking for contractors' equipment **is not** available at or on City property.

## **ITB#3617**

### **Detailed Requirements**

This contract for street tree pruning is based on the entire City of Fort Wayne. It is the intent of the City of Fort Wayne to obtain the lowest bid for the pruning of approximately 5331 street trees.

### **Work Crew Supervision**

The contractor shall provide at least one supervisor for this project. The supervisor shall be a Certified Arborist licensed by the (ISA-International Society of Arboriculture). The supervisor shall be a person in the employment as a regular employee of the contractor and be a part of the daily crew who is familiar with, and regularly updated on all activities pertaining to the work on this contract. Please provide the ISA certification number and classification type for all supervisory employees that may be associated with this contract. Individuals found not to be following the specifications of this contract will be immediately removed from the work site at the request of the Superintendent of Urban Forestry. Such individuals will not be allowed to return to work on this contract.

### **Maps & Tree Lists**

Maps of each pruning section will be provided for the purpose of this bid. A list of trees by address and DBH classes will be provided by the Superintendent of Urban Forestry to the contractor who is awarded the contract(s). The City of Fort Wayne reserves the right to add or delete trees from the lists.

### **Posting of No Parking Signs**

The contractor shall examine the area surrounding the trees to be pruned and determine in sufficient time prior to initiating work on each removal list, whether "No Parking" signs are necessary to allow access to the trees. Contractor shall contact the Superintendent of Urban Forestry to obtain the appropriate signage. No Parking signs must be displayed for 24 hours prior to enforcement.

### **Explanation of Bid**

It is the intent of the City of Fort Wayne to award the contract to the lowest bidder. The City of Fort Wayne reserved the right to choose base bid "A" or Base bid "B" whichever is the lowest bid and in the best interest of the City.

### **Base Bid "A"**

There are 6 pruning sections that comprise a total of 5331 street trees. Each section is to be bid individually. The contract for each section will be awarded to the lowest most responsive bidder per section.

### **Base Bid "B"**

In this base bid all 6 sections are combined into one single bid for all 5331 street trees. The bid shall be awarded to the lowest most responsive bidder for the entire contract.

**City of Fort Wayne 2013 Street Tree Pruning  
ITB#3617**

# Street Tree Pruning Specifications

## 1) Specifications and Standards

In addition to those provisions set forth in this contract, contractor shall preform all work in compliance with all applicable Federal, State and Local laws and regulations, including but not limited to the following:

- a) All equipment to be used and all work to be performed must be in full compliance with the most current version of the American National Safety Standards Institute Standard (ANSI) Z-133.1, and ANSI A-300 or as amended.
  - b) Proper flag people, Warning signs, Barricades and/or other protective devices must be provided by the contractor.
  - c) During street tree removal operations, the contractor shall have the responsibility to block the street at each intersection using the proper signage and barricades to prevent any motorized vehicle from entering. The contractor shall have the responsibility of notifying the Superintendent of Urban Forestry prior to the closure of any street.
  - d) During the street tree removal operations, sidewalks shall be properly barricaded and closed to the satisfaction of the Superintendent of Urban Forestry. More importantly, within school zone areas and other areas where many children are present- such as around day care and day Camp facilities. Tree removals shall be scheduled to minimize and avoid contact with large numbers of children walking to and from school, summer camps or day care.
- 
- 2) All final cuts shall be made sufficiently close to the trunk or parent limb, with cutting into the branch collar or leaving a protruding stub. Excessively deep flush cuts that produce large wounds or weaken the tree at the cut shall not be made. Sharp pruning tools shall be used at all times to ensure clean cuts.
  - 3) It is necessary to use the three set cutting technique outlined in ANSI A300 on branches that are too heavy to be handled to prevent splitting and peeling of the bark. Where necessary, to prevent tree or property damage branches shall be lowered to the ground by proper ropes and equipment.
  - 4) Climbing spurs shall not be used when climbing trees, except to climb a tree to be removed or perform an aerial rescue of an injured worker.

## 5) Protection of Overhead Power lines

Street Tree pruning operations may have to be conducted in areas where overhead electric, telephone, and cable facilities exist. The contractor shall protect all utilities from damage and follow all safety precautions and procedures required when working near such lines. The contractor shall immediately contact the appropriate utility if damage should occur, and shall be responsible for all claims for damage due to the contractors operations. When necessary the contractor shall make arrangements with the utility for removal of all necessary limbs and branches which may conflict with or create a hazard in conducting the street tree pruning.

- 6) The sidewalks, curbs, streets and manhole structures shall always be protected from the impact of falling wood by use of tree or limb ground supports. All ruts, divots and depressions caused by the removal of the tree shall be filled to the adjacent grade level **before leaving** the work site.

- 1) All dead limbs greater than 1” shall be removed from the crown.
- 2) Limbs with decay, cavities, and/or splits shall be removed
- 3) Clearance: The contractor shall remove lower branches to permit clearance of approximately eight feet on the sidewalk or pedestrian area and fourteen feet on the street side. In lifting the bottom branches of tree for clearance, care should be given to the final appearance of the entire crown. The tree should have at least one-half of its foliage on the branches that originate in the lower two thirds of its crown to ensure a well formed, tapered structure to uniformly distribute stress within the tree. Excessive removal or bottoming of the tree is prohibited.
- 4) Crown Cleaning: The contractor shall remove the dead, dying, diseased, damaged, crowded, broken, weakly attached, and low vigor branches from the crown of the tree. Crown cleaning is not stripping out the interior canopy leaving only live foliage at the end of the branches. Excessive removal of the interior branches as to cause ‘lions’-tailing effect is prohibited. Crown Cleaning shall include the following:
  - a) If two limbs are crossing or touch each other, shorten or remove one of them so they no longer cross or touch.
  - b) If two limbs originate within twelve inches of each other on the trunk shorten or remove one of them.
  - c) Remove dead or broken limbs one inch diameter or larger.
  - d) Directional prune to establish a minimum 10 feet or as practical clearance from buildings, lights and other infrastructure.
- 5) Thinning: The crown of a tree should be thinned to reduce the density of live branches. Thinning should result in an even distribution of branches on individual limbs and throughout the crown. Thinning shall not exceed more than 15% of the crown.
- 6) Site Clean-Up

The contractor shall clean-up each site where a street tree has been pruned on a daily basis. This shall include removal and disposal from the site all debris at the end of each day’s operation. **No debris may be allowed to remain in the right-of-way over the weekend without prior consent from the Superintendent of Urban Forestry.** Site clean-up shall include removal of sawdust, small twigs, chips, leaves, trunks and limbs from the street, curb, right-of-way, sidewalk, private lawns and driveways with the appropriate tools for the job. The site shall be returned to the same state it existed in prior to the commencement of any work. The contractor will be responsible for any costs associated with repairs that may be needed after completion of the street tree pruning. In the event of snowfall, debris shall be cleaned-up immediately so it does not interfere with the City’s snow plowing operations.

### **Tree Pruning Specifications for Small Trees**

The primary purpose of pruning young trees is to improve the trunk and branch structure. Properly trained young trees will develop into structurally strong mature trees. The greatest structural concern in young trees is the establishment of a central leader and the reduction of co-dominant trunks or main leaders. Reducing one of the co-dominant branches is highly recommended is possible.

- 1) All dead limbs greater than 1” shall be removed from the crown.
- 2) Limbs with decay, cavities, and/or splits shall be removed
- 3) Co-dominance: If a co-dominant stem exists the contractor shall reduce or remove one of the stems to achieve a strong single central leader.
- 4) Clearance: The contractor shall remove lower branches to permit clearance of approximately eight feet on the sidewalk or pedestrian area and on the street side when feasible. In lifting the bottom branches of tree for clearance, care should be given to the final appearance of the entire crown. The tree should have at least one-half of its foliage on the branches that originate in the lower two thirds of its crown to ensure a well formed, tapered structure to uniformly distribute stress within the tree. Excessive removal or bottoming of the tree is prohibited.
- 5) Crown Cleaning: The contractor shall remove the dead, dying, diseased, damaged, crowded, broken, weakly attached, and low vigor branches from the crown of the tree. Crown cleaning is not stripping out the interior canopy leaving only live foliage at the end of the branches. Excessive removal of the interior branches as to cause ‘lions’-tailing effect is prohibited. Crown Cleaning shall include the following:
  - a) If two limbs are crossing or touch each other, shorten or remove one of them so they no longer cross or touch.
  - b) If two limbs originate within twelve inches of each other on the trunk shorten or remove one of them.
  - c) Remove dead or broken limbs one inch diameter or larger.
  - d) Directional prune to establish a minimum 8 feet or as practical clearance from buildings, lights and other infrastructure.
- 6) **Site Clean-Up**

The contractor shall clean-up each site where a street tree has been pruned on a daily basis. This shall include removal and disposal from the site all debris at the end of each day's operation. **No debris may be allowed to remain in the right-of-way over the weekend without prior consent from the Superintendent of Urban Forestry.** Site clean-up shall include removal of sawdust, small twigs, chips, leaves, trunks and limbs from the street, curb, right-of-way, sidewalk, private lawns and driveways with the appropriate tools for the job. The site shall be returned to the same state it existed in prior to the commencement of any work. The contractor will be responsible for any costs associated with repairs that may be needed after completion of the street tree pruning. In the event of snowfall, debris shall be cleaned-up immediately so it does not interfere with the City's snow plowing operations.

**ITB#3617  
Bid Form**

It is the intent of the Fort Wayne Parks and Recreation Department to ask for a base bid for ash tree removal for the entire City of Fort Wayne based on DBH classes of the tree and the stump.

Company Information	
Company Name	
Street Address	
City, State, Zip Code	
Telephone Number	
Fax Number	
Contact Person	
Email Address	

**Certified Arborist Signature:** \_\_\_\_\_

**Printed Name:** \_\_\_\_\_

**ISA Certification Number:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_

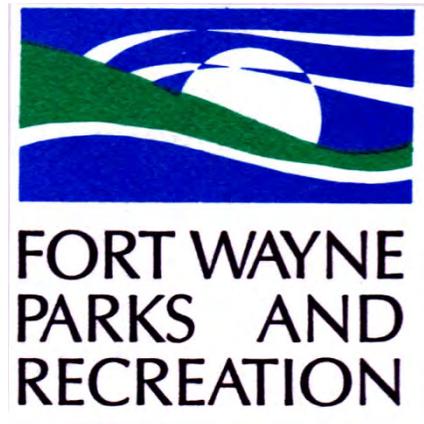
**Base Bid A**

<b>Pruning Section 211</b>			<b>Pruning Section 212</b>		
DBH Class	Number of Trees	Price Per Tree	DBH Class	Number of Trees	Price Per Tree
2"- 10"	284		2"- 10"	235	
11"-37" and over	310		11"-37" and over	341	
Total	594		Total	576	
<b>Pruning Section 213</b>			<b>Pruning Section 214</b>		
DBH Class	Number of Trees	Price Per Tree	DBH Class	Number of Trees	Price Per Tree
2"- 10"	468		2"- 10"	894	
11"-37" and over	361		11"-37" and over	153	
Total	829		Total	1047	
<b>Pruning Section 215</b>			<b>Pruning Section 217</b>		
DBH Class	Number of Trees	Price Per Tree	DBH Class	Number of Trees	Price Per Tree
2"- 10"	672		2"- 10"	893	
11"-37" and over	385		11"-37" and over	335	
Total	1057		Total	1228	

# Base Bid B

<b>Entire City-All Sections Combined</b>		
DBH Class	Number of Trees	Price Per Tree
2"- 10"	3446	
11"-37" and over	1885	
Total	5331	

# Appendix #4



## Street & Park Tree Removal Specifications

# The City of Fort Wayne

## Street Tree Removal Specifications

### **Intent**

The City of Fort Wayne has street trees within the right-of-way that are in need of removal. The City of Fort Wayne is asking for bids for the removal of the trees and the stumps.

### **Pricing Description**

Contract prices shall include all applicable charges that shall be incurred during the specified period of this contract. Prices are all inclusive and there shall be no additional charges during the term of this contract. It is the responsibility of the contractor to properly dispose of all debris from the removal operation. The City of Fort Wayne **will not** provide dumping sites for wood chips. Pricing is based on DBH class for tree removal, stump grinding and transportation of logs to Tillman Park Log Yard.

### **Unit Pricing**

The DBH pricing given by the vendor for the purposes of this contract will also be used as unit pricing. The Parks and Recreation Department reserves the right to add and or delete trees from the list due to budget.

### **Awarding of Contract**

It is the intent of the Fort Wayne Parks and Recreation Department to ask for a base bid for ash tree removal based on the DBH classes of the tree and the stump. The vendor with the lowest combined bid of the cost of tree removal and stump removal for the entire City will be awarded the contract.

### **Estimated Quantities/**

It is estimated that a total of 500 to 600 trees will need to be removed in this contract. However the actual number of trees to be removed may increase or decrease based on the extent of the infestation. The quantities stated are to be construed as estimates for the purpose of the bidding process unless otherwise indicated. Accordingly, the City of Fort Wayne does not guarantee that, nor does the contractor demand that, the work under this contract will in fact include the estimates herein.

### **Monthly Crew Activity Reports**

The contractor must provide monthly reports as to the progress of the contract. The monthly report will be sent to the Manager of Forestry Operations. The contractor can e-mail, fax or hand deliver monthly reports.

### **Damage and Protection**

The contractor is responsible for any damage to public or private property caused by the contractors operation. Due to the nature of the work, and the likelihood that claims may arise, the contractor is responsible for documenting conditions of the work site, including public and private property, prior to commencing work. The contractor shall notify the

Manager of Forestry Operations or representative of any damage prior to commencing work.

The contractor shall take all necessary precautions to eliminate damage to adjacent trees and shrubs, lawns, curbs, walks, and other public and private property. The contractor's vehicles shall be located on the paved surface of the street and will not use private drives or block any public sidewalks. The contractor will be responsible for to repair or replace any pavement or sidewalk broken or damaged as a results of their work operations. Holes made in lawns will be filled and re-seeded. Equipment shall not enter private property unless the property owner consents or the City of Fort Wayne has obtained a right-of-entry release for the required removal.

The contractor shall resolve any claims for damage with the property owner within (10) days after damage occurs. Should the damage not be rectified within the time frame agreed upon or to the satisfaction of the property owner, and/or Manager of Forestry Operations the City of Fort Wayne reserves the right to repair and/or replace any pavement or sidewalk damage caused by the contractor and deduct those costs from any payment due to the contractor.

#### **Equipment**

All equipment, parts or components not specifically mentioned in these specifications which are necessary to provide a complete ash tree removal service shall be furnished by the contractor.

**Note:** Parking for contractors' equipment **is not** available at or on City property.

# **City of Fort Wayne**

## **Specifications for Street Tree removal**

### **Detailed Requirements**

This contract for removal ash street tree removal is based on the entire City of Fort Wayne. It is the intent of the City of Fort Wayne to obtain the lowest bid for the removal of the ash trees, removal of the stump and restoring the row to the appropriate grade, backfilling, replanting grass and transportation of the log to Franke Park, 3411 Sherman Blvd, Fort Wayne, IN 46808.

### **Tags**

Trees designated for removal shall be marked with a white dot at the base of the tree on the street side. The trees marked with a white dot should correlate with an address on the removal list given to the contractor. No tree shall be removed unless it is on the removal list given to the contractor by the Manager of Forestry or representative. The contractor shall notify the Manager of Forestry Operations of any discrepancies' before removing the tree in question.

### **Work Crew Supervision**

The contractor shall provide at least one supervisor for this project. The supervisor shall be a Certified Arborist licensed by the (ISA-International Society of Arboriculture). The supervisor shall be a person in the employment as a regular employee of the contractor and be a part of the daily crew who is familiar with, and regularly updated on all activities pertaining to the work on this contract. Please provide the ISA certification number and classification type for all supervisory employees that may be associated with this contract. Individuals found not to be following the specifications of this contract will be immediately removed from the work site at the request of the Manager of Forestry. Such individuals will not be allowed to return to work on this contract.

### **Tree Removal Lists**

A list of trees by DBH class will be provided by the Manager of Forestry for the purpose of this bid. The City of Fort Wayne reserves the right to add or delete trees from the lists.

### **Posting of No Parking Signs**

The contractor shall examine the area surrounding the trees to be removed and determine in sufficient time prior to initiating work on each removal list, whether "No Parking" signs are necessary to allow access to the trees. Contractor shall contact the Manager of Forestry Operations to obtain the appropriate signage. No Parking signs must be displayed for 24 hours prior to enforcement.

### **Safety Standards**

In addition to those provisions set forth in this contract, contractor shall preform all work in compliance with all applicable Federal, State and Local laws and regulations, including but not limited to the following:

- a) All equipment to be used and all work to be performed must be in full compliance with the most current version of the American National Safety Standards Institute Standard (ANSI) Z-133.1, and ANSI A-300 or as amended.
- b) Proper flag people, Warning signs, Barricades and/or other protective devices must be provided by the contractor.
- c) During street tree removal operations, the contractor shall have the responsibility to block the street at each intersection using the proper signage and barricades to prevent any motorized vehicle from entering. The contractor shall have the responsibility of notifying the Manager of Forestry Operations prior to the closure of any street.
- d) During the street tree removal operations, sidewalks shall be properly barricaded and closed to the satisfaction of the Manager of Forestry Operations. More importantly, within school zone areas and other areas where many children are present- such as around day care and day Camp facilities. Tree removals shall be scheduled to minimize and avoid contact with large numbers of children walking to and from school, summer camps or day care.

### **Protection of Overhead Power lines**

Street Tree removal operations may have to be conducted in areas where overhead electric, telephone, and cable facilities exist. The contractor shall protect all utilities from damage and follow all safety precautions and procedures required when working near such lines. The contractor shall immediately contact the appropriate utility if damage should occur, and shall be responsible for all claims for damage due to the contractors operations. When necessary the contractor shall make arrangements with the utility for removal of all necessary limbs and branches which may conflict with or create a hazard in conducting the street tree removal.

### **Tree Removal**

The contractor shall remove all street trees designated by the Manager of Forestry or representative. Removals shall consist of cutting down each tree in a safe manner. The contractor shall remove all trees in a manner that leaves the trunk of the tree intact in one piece no shorter than 6 Feet in length.

The Contractor shall make severance cuts as close to the ground as possible, removing the Maximum length of the trunk.

The sidewalks, curbs, streets and manhole structures shall always be protected from the impact of falling wood by use of tree or limb ground supports. All ruts, divots and depressions caused by the removal of the tree shall be filled to the adjacent grade level **before leaving** the work site.

### **Site Clean-Up**

The contractor shall clean-up each site where a street tree has been removed. This shall include removal and disposal from the site all debris at the end of each day's operation. **No debris may be allowed to remain in the right-of-way more than 24 hours or over the weekend without prior consent from the Manager of Forestry.** Site clean-up shall include removal of sawdust, small twigs, chips, leaves, trunks and limbs from the street, curb, right-of-way, sidewalk, private lawns and driveways with the appropriate tools for the job. The site shall be returned to the same state it existed in prior to the commencement of any work. The contractor will be responsible for any costs associated with repairs that may be needed after completion of the ash tree removal. In the event of snowfall, debris shall be cleaned-up immediately so it does not interfere with the City's snow plowing operations.

### **Tree Stump Removal**

The contractor shall remove all stumps of all tree removals unless otherwise specified by the Manager of Forestry.

All stumps and buttress roots shall be ground to a depth of at least 8" (inches) below a line between the back of the curb and the top of the sidewalk or an existing grade as determined by the Manager of Forestry and, generally, will be consistent with the plane of the right-of-way outside any mounds or depressions caused by or adjacent to the tree. Buttress roots shall consist of all roots, having a minimum diameter of 2" (inches), extending up to the ground surface or above located within a 5' (foot) radius from the center of the removed tree.

Within forty-eight (48) hours after removal of the stump and buttress roots, the contractor shall remove all stump grindings and associated debris from the site. Disposal of the grinding debris generated by the work described in this contract shall be the responsibility of the contractor.

### **Site Clean-Up**

The contractor shall clean-up each site where a stump has been removed. This shall include removal and disposal from the site all within forty-eight (48) hours. **No debris may be allowed to remain in the right-of-way more than 48 hours or over the weekend without prior consent from the Manager of Forestry.** Site clean-up shall include removal of sawdust, and grinding debris from the street, curb right-of-way, sidewalk, private lawns and driveways with the appropriate tools for the job. The site shall be returned to the same state it existed in prior to the commencement of any work. The contractor will be responsible for any costs associated with repairs that may be needed after completion of the ash tree removal. In the event of snowfall, debris shall be cleaned-up immediately so it does not interfere with the City's snow plowing operations.

### **Backfilling with Soil and Re-Seeding**

The contractor shall backfill each right-of-way ash tree removal site unless otherwise notified by the Manager of Forestry. The contract shall complete the backfilling and re-seeding operation within forty-eight (48) hours of the stump grinding, coinciding with the removal of the grinding debris. All areas where stumps have been removed, and areas disturbed by the removal operations, shall be backfilled with top soil, free of debris, clods and stones, and excavated to the level of the existing grade as determined by the Manager of Forestry. The level of grade shall be recognized as a line between the back of the curb and the top of the sidewalk or an existing grade as determined by the Manager of Forestry and, generally, will be consistent with the plane of the right-of-way outside any mounds or depressions caused by or adjacent to the tree. The contractor shall supply his/her own topsoil. The topsoil shall be properly leveled and compacted to insure a minimum amount of settlement of the back-fill material. In the event that the top soil cannot be placed when the stump grinding debris is removed, the disturbed area(s) shall be barricaded to ensure public safety and the Manager of Forestry shall be notified. Grinding (woodchips) shall not be used as back fill. After the back filling, compacting and grading is completed the contractor shall re-plant a general purpose grass seed consisting of 30% Creeping Red Fescue, 30% Perennial Rye, and 30% Kentucky Bluegrass and cover with straw.

### **Wood Utilization**

The contractor shall save the tree trunks from the ash tree removals and deliver them to a log yard located in Franke Park, 3411 Sherman Blvd, Fort Wayne, IN 46808.

The logs must be cut into lengths no shorter than six (6) feet long.

### **Contracted Supervision**

The selection and marking of ash trees for this project as well as work site inspections of the work detailed in this contract will be supervised by a contracted Forester from Davey Resource Group.

## **Explanation of Bid**

### **Base Bid #1**

Base bid #1 is the complete removal package **for the entire City** and shall include the removal of the tree, stump, returning the right-of-way to grade, re-seeding the turf and transporting the logs to the designated log yard. The bid shall consist of the following components':

1. Removal of the ash tree, disposal of wood chips and other debris generated from the removal of the tree as indicated in the contract.
2. Removal of the stump and debris generated from the removal of the stump as indicated in this contract.
3. Backfilling and re-seeding the area back to grade designated in this contract
4. Transportation of logs to designated log yard.

## **City of Fort Wayne Tree Removal Contract Bid Form**

It is the intent of the Fort Wayne Parks and Recreation Department to ask for a base bid for ash tree removal for the entire City of Fort Wayne based on DBH classes of the tree and the stump.

Company Information	
Company Name	
Street Address	
City, State, Zip Code	
Telephone Number	
Fax Number	
Contact Person	
Email Address	

**Contractor's Resource Commitments**

Total # of Employees	
Total # of Employees dedicated to this project	
Total # of Crews dedicated to this project	
Total # of Chippers	
Total # of Chippers dedicated to this project	
Total # of Bucket Trucks	
Total # of Bucket Trucks dedicated to this project	
Total # of Cranes/Grapple Trucks	
Total # of Cranes/Grapple Trucks dedicated to this project	
Total # of Stump Grinders	
Total # of Stump Grinders dedicated to this project	
Total # of Dump Trucks	
Total # of Dump Trucks dedicated to this project	
Other	

**Certified Arborist Signature:** \_\_\_\_\_

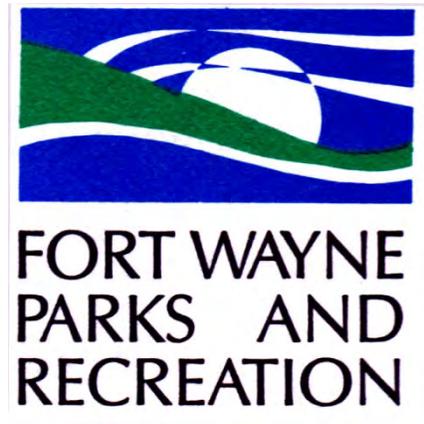
**Printed Name:** \_\_\_\_\_

**ISA Certification Number:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_

# Appendix #5



## Street & Park Stump Removal Specifications

# The City of Fort Wayne Stump Removal Specification

## Intent

On an annual basis The City of Fort Wayne has several hundred stumps within the right-of-way and throughout the parks that are in need of removal. The City of Fort Wayne is asking for bids for the removal of the stumps.

## Pricing Description

Contract prices shall include all applicable charges that shall be incurred during the specified period of this contract. Prices are all inclusive and there shall be no additional charges during the term of this contract. It is the responsibility of the contractor to properly dispose of all debris from the removal operation. The City of Fort Wayne **will not** provide dumping sites for wood chips. Pricing is based per diameter inch for stump removal and shall be valid for the 2014 calendar year.

## Unit Pricing

The unit price given by the vendor should be *per diameter inch*. The diameter inch pricing for the purposes of this contract will also be used as unit pricing. The Parks and Recreation Department reserves the right to add and or delete stumps from the list due to budget.

## Awarding of Contract

It is the intent of the Fort Wayne Parks and Recreation Department to ask for *price per diameter inch for stump removal*. There shall be 2 base bids one base bid for stumps in the street Right-of-way and one for stumps located in the parks. Pricing will be per diameter inch of the stumps. The vendor with the lowest bid per diameter inch for each base bid respectively will be awarded the contract.

## Estimated Quantities

It is estimated that on an annual basis the City of Fort Wayne has a total of 600 stumps will need to be removed. However the actual number of stumps to be removed may increase or decrease based on funding level. The quantities stated are to be construed as estimates for the purpose of the bidding process unless otherwise indicated. Accordingly, the City of Fort Wayne does not guarantee that, nor does the contractor demand that, the work under this contract will in fact include the estimates herein.

### **Damage and Protection**

The contractor is responsible for any damage to public or private property caused by the contractor's operation. Due to the nature of the work, and the likelihood that claims may arise, the contractor is responsible for documenting conditions of the work site, including public and private property, prior to commencing work. The contractor shall notify the Superintendent of Urban Forestry or representative of any damage prior to commencing work.

The contractor shall take all necessary precautions to eliminate damage to adjacent trees and shrubs, lawns, curbs, walks, and other public and private property. The contractor's vehicles shall be located on the paved surface of the street and will not use private drives or block any public sidewalks. The contractor will be responsible for to repair or replace any pavement or sidewalk broken or damaged as a result of their work operations. Holes made in lawns will be filled and re-seeded. Equipment shall not enter private property unless the property owner consents or the City of Fort Wayne has obtained a right-of-entry release for the required removal.

The contractor shall resolve any claims for damage with the property owner within (10) days after damage occurs. Should the damage not be rectified within the time frame agreed upon or to the satisfaction of the property owner, and/or Superintendent of Urban Forestry the City of Fort Wayne reserves the right to repair and/or replace any pavement or sidewalk damage caused by the contractor and deduct those costs from any payment due to the contractor.

### **Equipment**

All equipment, parts or components not specifically mentioned in these specifications which are necessary to provide a complete stump removal service shall be furnished by the contractor.

**Note:** Parking for contractors' equipment **is not** available at or on City property.

# **January 13th, 2014**

## **Specifications for Stump Removal**

### **Detailed Requirements**

This contract for stump removal is based on the entire City of Fort Wayne. It is the intent of the City of Fort Wayne to obtain the lowest bid for the removal of the stumps and restoring the row to the appropriate grade, backfilling, and replanting grass.

### **Stump Removal Lists**

A list of stumps by diameter will be provided by the Superintendent of Urban Forestry for the purpose of this bid. The City of Fort Wayne reserves the right to add or delete stumps from the lists.

### **Posting of No Parking Signs**

The contractor shall examine the area surrounding the stumps to be removed and determine in sufficient time prior to initiating work on each removal list, whether “No Parking” signs are necessary to allow access to the stumps. Contractor shall contact the Superintendent of Urban Forestry to obtain the appropriate signage. No Parking signs must be displayed for 24 hours prior to enforcement.

### **Safety Standards**

In addition to those provisions set forth in this contract, contractor shall preform all work in compliance with all applicable Federal, State and Local laws and regulations, including but not limited to the following:

- a) All equipment to be used and all work to be performed must be in full compliance with the most current version of the American National Safety Standards Institute Standard (ANSI) Z-133.1, and ANSI A-300 or as amended.
- b) Proper flag people, Warning signs, Barricades and/or other protective devices must be provided by the contractor.
- c) During street tree removal operations, the contractor shall have the responsibility to block the street at each intersection using the proper signage and barricades to prevent any motorized vehicle from entering. The contractor shall have the responsibility of notifying the Superintendent of Urban Forestry prior to the closure of any street.
- d) During the street tree removal operations, sidewalks shall be properly barricaded and closed to the satisfaction of the Superintendent of Urban Forestry. More importantly, within school zone areas and other areas where many children are present- such as around day care and day Camp facilities. Tree removals shall be scheduled to minimize and avoid contact with large numbers of children walking to and from school, summer camps or day care.

### **Tree Stump Removal street Tree right-of-way**

The contractor shall remove all stumps unless otherwise specified by the Superintendent of Urban Forestry.

All stumps and buttress roots shall be ground to a depth of at least 8" (inches) below a line between the back of the curb and the top of the sidewalk or an existing grade as determined by the Superintendent of Urban Forestry and, generally, will be consistent with the plane of the right-of-way outside any mounds or depressions caused by or adjacent to the tree. Buttress roots shall consist of all roots, having a minimum diameter of 2" (inches), extending up to the ground surface or above located within a 5' (foot) radius from the center of the removed tree.

Within forty-eight (48) hours after removal of the stump and buttress roots, the contractor shall remove all stump grindings and associated debris from the site. Disposal of the grinding debris generated by the work described in this contract shall be the responsibility of the contractor.

### **Tree Stump Removal within the Parks**

The contractor shall remove all stumps unless otherwise specified by the Superintendent of Urban Forestry.

All stumps and buttress roots shall be ground to a depth of at least 8" (inches) below an existing grade as determined by the Superintendent of Urban Forestry and, generally, will be consistent with the plane of the right-of-way outside any mounds or depressions caused by or adjacent to the tree. Buttress roots shall consist of all roots, having a minimum diameter of 2" (inches), extending up to the ground surface or above located within a 5' (foot) radius from the center of the removed tree.

Within forty-eight (48) hours after removal of the stump and buttress roots, the contractor shall remove all stump grindings and associated debris from the site. Disposal of the grinding debris generated by the work described in this contract shall be the responsibility of the contractor.

### **Site Clean-Up**

The contractor shall clean-up each site where a stump has been removed. This shall include removal and disposal from the site all within forty-eight (48) hours. **No debris may be allowed to remain in the right-of-way more than 48 hours or over the weekend without prior consent from the Superintendent of Urban Forestry.** Site clean-up shall include removal of sawdust, and grinding debris from the street, curb right-of-way, sidewalk, private lawns and driveways with the appropriate tools for the job. The site shall be returned to the same state it existed in prior to the commencement of any work. The contractor will be responsible for any costs associated with repairs that may be needed after completion of the stump removal. In the event of snowfall, debris shall be cleaned-up immediately so it does not interfere with the City's snow plowing operations.

### **Backfilling with Soil and Re-Seeding**

The contractor shall backfill each right-of-way ash tree removal site unless otherwise notified by the Superintendent of Urban Forestry. The contract shall complete the backfilling and re-seeding operation within forty-eight (48) hours of the stump grinding, coinciding with the removal of the grinding debris. All areas where stumps have been removed, and areas disturbed by the removal operations, shall be backfilled with top soil, free of debris, clods and stones, and excavated to the level of the existing grade as determined by the Superintendent of Urban Forestry. In the street right of way the level of grade shall be recognized as a line between the back of the curb and the top of the sidewalk or an existing grade as determined by the Superintendent of Urban Forestry and, generally, will be consistent with the plane of the right-of-way outside any mounds or depressions caused by or adjacent to the tree. In the parks existing grade shall be defined as the surrounding turf area and will be consistent with the plane of the right-of-way outside any mounds or depressions caused by or adjacent to the tree. The contractor shall supply his/her own topsoil. The topsoil shall be properly leveled and compacted to insure a minimum amount of settlement of the back-fill material. In the event that the top soil cannot be placed when the stump grinding debris is removed, the disturbed area(s) shall be barricaded to ensure public safety and the Superintendent of Urban Forestry shall be notified. Grinding (woodchips) shall not be used as back fill. After the back filling, compacting and grading is completed the contractor shall re-plant a general purpose grass seed consisting of 30% Creeping Red Fescue, 30% Perennial Rye, and 30% Kentucky Bluegrass and cover with straw.

## **Explanation of Bid**

### **Base Bid #1**

Base bid #1 is the complete stump removal package **for the stumps in the street right-of-way** and shall include the removal of the stump, returning the right-of-way to grade, and re-seeding the turf. The bid shall consist of the following components':

1. Removal of the stump and debris generated from the removal of the stump as indicated in this contract.
2. Backfilling and re-seeding the area back to grade designated in this contract

### **Base Bid #2**

Base bid #2 is the complete stump removal package **for the stumps in the parks** and shall include the removal of the stump, returning the site to original grade, and re-seeding the turf. The bid shall consist of the following components':

1. Removal of the stump and debris generated from the removal of the stump as indicated in this contract.
2. Backfilling and re-seeding the area back to grade designated in this contract

## **City of Fort Wayne 2014 Stump Removal Contract January 14<sup>th</sup>, 2014 Bid Form**

It is the intent of the Fort Wayne Parks and Recreation Department to ask for a base bid for Stump removal for the entire calendar year of 2014 for The City of Fort Wayne based on per diameter inch of the stump.

Company Information	
Company Name	
Street Address	
City, State, Zip Code	
Telephone Number	
Fax Number	
Contact Person	
Email Address	

**Signature:** \_\_\_\_\_

**Printed Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

# **Bid Sheet**

## **City of Fort Wayne 2014 Stump Removal Contract**

### **Base Bid #1**

Street Right of Way Stumps	
Price per inch	\$

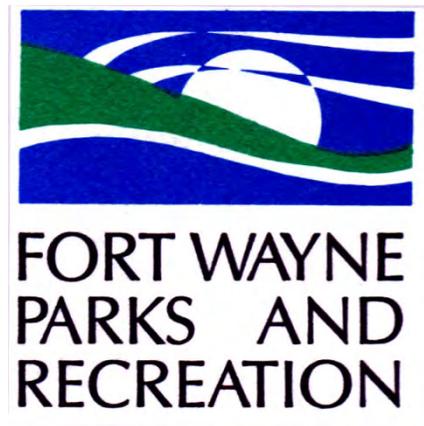
### **Base Bid#2**

Park Stumps	
Price per inch	\$

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

# Appendix #6



## Street & Park Tree Planting Specifications



## **City of Fort Wayne** **Street / Park Tree Supply Specifications**

### 1.1 DESCRIPTION OF PURCHASE

A. The supply and delivery of trees of the quantities and varieties described in the Plant List and meeting the following specifications.

### 1.2 QUALITY ASSURANCE

A. Qualification: Trees shall be supplied by a nursery or plant broker knowledgeable in judging plant quality and knowledgeable of the "American Standard for Nursery Stock", published by the American Association of Nurserymen.

B. Trees shall be grown under the supervision of trained horticulturists, nurserymen and/or arboriculturists, using growing techniques which will ensure production of top quality nursery stock.

C. All plants shall be nursery grown under climatic conditions similar to those in the locality of the project for a minimum of 2 years. If plant material is unavailable from local sources, proposed source shall originate from states immediately adjacent to Indiana on the Eastern or Western border or further north. Plant materials from sources further south are unacceptable. All tree stock grown from seed (i.e., not vegetatively propagated) shall derive from seed of trees native to latitude of the state of Indiana or further north. No trees grown of seed of trees native to latitudes south of Indiana are acceptable and will be rejected.

#### D. Source Quality Control:

1. Provide certificates of inspection of plant materials as required by governmental authorities. Certificates shall accompany each shipment of plants.

2. Trees may be required to be inspected at place of growth by Owner's agent either at place of growth or prior to delivery, at Owner's option.

3. Upon submission of proof that a specified plant is not obtainable, provide recommendation for other plants with nearly the same characteristics that are available. Owner shall evaluate and determine acceptability of the substitution. No substitution shall be made without the consent of Owner.

#### 4. Tree Quality:

a. Required trees are those in the Plant List

b. Nomenclature: Names of plants conform to those given in "Manual of Woody Landscape Plants", fifth edition, Michael A. Dirr, Stipes Publishing Co. Names of varieties not included therein conform generally with names accepted in the nursery trade.

c. Quantities: Final quantities of individual species or total trees purchased are not determined. These determinations will vary by project and available funding for purchases. However, it may be assumed that most of the trees required will be of varieties commonly available in the trade. A final quantity list will be provided prior to the appropriate dig season, with the vendor given opportunity to report on availability. Owner will have the option to change the order or use alternate vendors for materials determined to be unavailable.

d. Quality and Size: Nursery grown, specimen quality, habit of growth normal for the species, sound bark, healthy, vigorous, and free from insects, disease, and injuries. Size shall be measured before pruning, with branches in normal condition. Sizes and method of sizing root ball shall be in accord with the "American Standard for Nursery Stock", ANSI Z60.1, current edition, published by the American Nursery and Landscape Association. Trees shall have single, straight trunks and leaders, with well spaced branches with wide angled crotches. Crown shall be dense, symmetrical, well formed and typical of the species. Heeled-in or cold-stored trees are not acceptable. Trees shall show evidence of highly developed feeding root masses within the root ball, as produced by trees having been root pruned (although not within the previous 12 months) or grown under trickle irrigation. Certain intermediate and ornamental species on the plant list may be exceptions to the single leader requirement due to unique habit of growth. Trees that have been staked during the growing season preceding digging shall not be accepted.

e. Root Ball: All trees provided shall be provided with solid, firm, freshly dug natural balls of clay based earth sufficient to encompass the fibrous feeding root system necessary for full recovery of the tree. Balls shall be secured only with biodegradable natural burlap and sisal twines. Wire baskets may be used to secure **only the lower 1/3 of sides and bottom of root ball (Low Boy Basket or functional equivalent)**. Where necessary to prevent root ball damage, secure root balls to a platform. Balls which have been cracked, frozen, broken, or softened will not be accepted. Trunk flare/root collar shall be visible at the top of the root ball.

A. Handle in such a manner as to protect against any freezing, softening, cracking, breaking, or other damage to root balls.

B. Carefully tie branches with natural sisal or jute twine and avoid scraping bark and cracking or breaking branches.

C. Provide trunk protection during handling and delivery to prevent bark abrasions.

D. During shipment, protect plants from drying by covering with tarpaulin or other suitable covering to prevent wind and sun from drying out plants.

E. Plants with root balls subjected to severe temperatures, drying, cracking or breaking, bark damage, branch damage, or other conditions detrimental to plant recovery and growth are subject to rejection.

F. Label at least one tree of each variety with a securely attached waterproof tag bearing legible designation of botanical and common name.

G. Delivery shall be to installation contractor's work yard in the Fort Wayne vicinity, or other Fort Wayne metropolitan location designated prior to delivery. Deliveries shall be accepted upon 24 hours notice of shipment and must be coordinated with installer's schedule. Notice of tree deliveries shall be

made to City Forester at (260) 427-6480 or his designated agent. Delivery notification of trees ordered specifically for park use shall be made to the Landscape Supervisor (260) 427-6402 or his designated agent.

#### 1.4 GUARANTEE

Trees to be of specified varieties, in healthy, growing condition, and in otherwise specified condition at time of delivery and acceptance.

##### **B. Guarantee Language for Base bid #2 Only:**

Trees to be of specified varieties, in healthy, growing condition, and in otherwise specified condition at time of delivery and acceptance **The Contractor shall guarantee all plants to be healthy and in flourishing condition for one year(s) from the date of acceptance.**

- a. Furnish and plant replacements which comply with requirements specified where warranted by Contractor's default. Also, replace trees that are in doubtful condition at end of guarantee period, extending guarantee period for a full growing season. City Arborist will make another inspection at end of extended guarantee period to determine acceptance or rejection of questionable material. Only one replacement will be required at end of guarantee period, except for losses or replacements required due to additional failure to comply with specified requirements. Costs shall be borne by Installer.
- b. The guarantee does not include vandalism, storm damage, animal damage or mechanical damage unrelated to contractor activities.
- c. The Contractor shall remove and replace, without cost, and as soon as weather conditions permit, and within a specified planting period, all plants not in a healthy and flourishing condition as determined by the City Arborist any time during the guarantee period. Replacements shall be subject to all requirements stated in this specification.
- d. The Contractor shall be responsible for all maintenance of the trees during the guarantee period.

#### 1.5 PAYMENT

A. Payment may be applied for by returning an invoice for the delivered materials to the City agency identified on the Purchase Order as the party to be billed, upon acceptance of materials by City's authorized agent. Application for partial payment may be made for significant portions of the order delivered and accepted. Payment shall be made at the unit prices quoted. Unit prices shall be complete, including all preparation, handling, and delivery costs in addition to the cost of the tree itself.

End of Section



## **City of Fort Wayne** **Street / Park Tree Installation**

### GENERAL PROVISIONS

#### 1. OWNER/OWNER'S REPRESENTATIVE

Owner shall be defined as the City of Fort Wayne and its designated agents for each planting project. Owner's Representative shall be considered designated agent of Owner for purposes of managing this contract.

#### 2. TIME AND PROGRESS

Because of the perishability of landscape materials, timing of the installation is crucial to the success of the project. Installer shall begin work promptly upon receipt of written notice to proceed, and in no case later than 10 days after receipt of such notice. Work shall proceed steadily until all work is completed, and within the allowed planting season.

#### 3. PAYMENT

Installer shall submit invoices for work completed no more than every 30 days except at the completion of the project. Work will then be inspected for compliance with the contract requirements. Owner's Representative will then determine the portions of the work complete and authorize payment. Work not in conformance with the specifications shall be remedied at Installer's expense to make it conform to the specifications.

#### 4. INSPECTION

Owner's Representative shall have access to work sites and contractor's records at all reasonable times to determine compliance with the contract and specifications.

#### 5. GUARANTEE

Installer warrants work to be in accord with attached planting details and to be free of defects and agrees to correct defects which occur within 12 months of completion of work. Acting as limited agent of the City of Fort Wayne, responsible for ensuring supplier compliance with plant material specifications, Installer is presumed to have accepted delivery of plants in live, undamaged, healthy, growing condition. Installer warrants that they will take all required steps to maintain and foster growth from time of acceptance from supplier to time of acceptance, by the City, of installer's work. Installer is not required to warrant plants to be alive at time of receipt for installation but must alert owner to any trees received which do not meet specifications for tree quality and condition.

#### **Guarantee Language for Base bid #2 only:**

The Contractor shall guarantee all plants to be healthy and in flourishing condition for one year(s) from the date of acceptance. See also section 1.4 of the specifications for tree supply.

1. Trees to be of specified varieties, in healthy, growing condition, and in otherwise specified condition at time of delivery and acceptance
  - a. Furnish and plant replacements which comply with requirements specified where warranted by Contractor's default. Also, replace trees that are in doubtful condition at end of guarantee period, extending guarantee period for a full growing season. City Arborist will make another inspection at end of extended guarantee period to determine acceptance or rejection of questionable material. Only one replacement will be required at end of guarantee period, except for losses or replacements required due to additional failure to comply with specified requirements. Costs shall be borne by Installer.
  - b. The guarantee does not include vandalism, storm damage, animal damage or mechanical damage unrelated to contractor activities.
  - c. The Contractor shall remove and replace, without cost, and as soon as weather conditions permit, and within a specified planting period, all plants not in a healthy and flourishing condition as determined by the City Arborist any time during the guarantee period. Replacements shall be subject to all requirements stated in this specification.
  - d. The Contractor shall be responsible for all maintenance of the trees during the guarantee period.

## 2. TERMINATION FOR CONVIENIENCE

The Owner may choose to terminate this contract at any time it deems necessary and will pay contractor for work performed to that date which meets the specifications. Such notice shall be in writing.

## 3. TERMINATION FOR DEFAULT

If Installer fails to perform the work in a timely manner or fails to fulfill any of its other contractual obligations, the Owner shall have the right to terminate this contract by written notice, and advance no further payments to the contractor. In such event, all work performed to that date shall become the property of the Owner, and the Owner shall claim any remaining unplanted or uninstalled materials at the Installer's expense. Such termination shall not prejudice the right of the Owner to take further legal action against the contractor.

## 4. CHANGES

The Owner may, at any time make changes it deems necessary to the general scope of the work. Changes which involve greater or lesser work than specified shall be covered by written notice and pricing adjustments shall be negotiated where not covered in the bid unit prices. Change in the quantity of plants installed at previously bid unit prices shall not be basis for renegotiating unit prices.

## 5. ASSIGNABILITY

Contractor shall not assign or subcontract any part of this contract without written consent of the Owner.

## 6. NEW MATERIALS

All materials specified shall be new, of merchantable quality, and as otherwise specified. Testing of materials may be required to determine compliance with the specifications.

**7. PERMITS AND LICENSES**

Installer shall be responsible for obtaining one Right of Way Cut Permit to cover all planting locations located on any Street Right of Way. Permit shall be obtained from the City of Fort Wayne Right of Way Department prior to commencement of work. Installer shall also be responsible for maintenance of traffic barricades and protection of work sites as required by the Right of Way Department. Fees for such permits shall be waived by the City, per City policy.

**8. INSURANCE**

Installer shall provide certificate of insurance coverage for General Liability/Auto Liability in the amount of \$1,000,000.00 and Workers Compensation/Employers Liability in the amount required by Indiana State Statute for coverage. The Owner shall be shown as Additional Insured on the certificate. 30 days notice must be provided for cancellation of the policy.

**STREET TREE PLANTING LABOR**

## **PART 1 GENERAL**

### 1.1 RELATED DOCUMENTS

- A. The general provisions of the Contract, including Conditions of the Contract and Division 1 of the Specification, and supplemental plans and detail drawings of planting methods apply to this section.

### 1.2 DESCRIPTION OF WORK

- A. Tree planting labor work includes the following:
  1. Accepting delivery of, maintaining and temporarily heeling in trees purchased by the City of Fort Wayne until installation, and maintaining vertical alignment during heeling in.
  2. Verifying locations of underground utilities and other potential installation obstructions prior to excavations.
  3. Removal of trees and stumps in planting locations under 4" caliper.
  4. Excavating and backfilling plant pits per the specifications and detail drawings.
  5. Setting plant material provided by owner, per the specifications and detail drawings, including removal of any ties or other securing devices as required.
  6. Furnishing and installing mulch at base of trees per the specifications and detail drawings.
  7. Protection of new and existing plants, grass, earth and hard surfaces.
  8. Protection and maintenance of existing plants and grass to be saved.
  9. Protection of existing public and private facilities such as walks, curbs, and utility lines.
  10. Disposal of waste materials.

### 1.3 QUALITY ASSURANCE

- A. Qualification: Street tree planting work shall be performed by a single firm specializing in landscape installation work.

Contractors to whom an award may be contemplated shall submit, upon request, a full statement of their experience in construction work similar to that covered in this contract and the equipment available to expeditiously carry out the work. Before the proposal is accepted, the Owner may require financial documentation that the Bidder is capable of commencing work promptly and in accordance with the contract and the specifications.

- B. Source Quality Control:
  1. Inspection of Plant Materials:

- a. Installer shall be provided specifications used for the Owner's purchase of plant material being provided under separate contract. Inspect plants upon delivery for conformance with those specifications. Inspect certificates of inspection of plant materials as required by governmental authorities that will accompany shipments of plants from the supplier nursery. Notify Owner of any plants failing to meet specifications for provided plant materials or of any irregularities between delivered nursery stock and specifications/purchased goods.
2. Standard and Industry Specifications: Any materials or operations specified of a manufacturer, supplier, American Society of Testing Materials (ASTM), American Nursery and Landscape Association (ANLA), or other published standards shall comply with the requirements of the standard listed.
  3. Plant Materials:
    - a. Trees will be ordered by Owner and delivered by the nursery stock supplier or their shipper to Installer's work yard or other location approved by Owner's Representative, in the Fort Wayne metropolitan area.
    - b. Nomenclature: Names of plants provided to the installer shall conform to those given in "Manual of Woody Landscape Plants, fifth edition, Michael A. Dirr, Stipes Publishing Co. Names of varieties not included therein conform generally with names accepted in the nursery trade.
    - c. Quality and Size: Trees provided to the installer by the Owner's supplier shall be nursery grown, habit of growth that is normal for the species, sound healthy, vigorous and free from insects, disease and injuries, equal to or exceeding measurements indicated in Plant List. Plants are sized and graded before pruning with branches in normal position. Necessary pruning shall be performed at time of planting by installer. Sizes and methods of handling shall be in accord with American Standard for Nursery Stock, ANSI Z60.1, latest edition. Root balls will be solid, firm, secured with natural jute burlap and twine. Wire baskets covering only the lower 1/3 of the root ball may also have been used to enclose root balls.

Shade trees provided to the installer will have single, straight leaders and well spaced branches with wide angled crotches. Crown will be dense, symmetrical, well formed and typical of the species. Evergreen trees will be of single leaders, dense, full, but unshaped. Otherwise, plants shall conform to American Standard for Nursery Stock ANSI Z60.1, latest edition.

- A. Planting Schedules: Provide proposed schedule for installations, staying within the time period established for planting. Such schedule shall include scheduled dates for each type of planting in each project area. This schedule will assist Owner in notifying citizens and other interested parties when work is to commence in their area.

## 1.5 PRODUCT HANDLING

- A. Plant materials:

- 1. Trees:

- a. Fresh dug trees are specified of the nursery stock supplier. Do not accept delivery on trees or shrubs which have been in cold storage or heeled-in.

Trees have been specified to be balled in natural jute burlap secured with natural jute twine. At the supplier's option, they may further secure root balls with wire baskets covering only the lower 1/3 of the root ball. Do not accept plants with root balls that are smaller than ANSI Z-60 standards require, nor balls that exceed that standard by 20% or more.

Trees that are damaged or that otherwise do not meet specifications should be noted on delivery acknowledgements and Owner's representative immediately notified.

- b. Protection During Transport: Do not accept trees that appear desiccated, physically damaged, including bark, branch, twig abrasions or breakage, or which have soft or loose root balls. During delivery to worksite, protect plants with tarpaulin or other suitable covering against excessive drying from sun and wind and other physical injury.
- c. Protection After Delivery: Cover balls of B & B plants which cannot be planted immediately upon delivery with moist soil or mulch or other protection from drying. Water plants as necessary until planted. If planting is delayed more than six (6) hours, set plants in shaded area, protected from wind. Neither supplier nor installer shall subject plants to severe temperatures, drying, cracking or breaking, or other handling detrimental to the recovery and proper growth of the plant. This includes vibration, impact, dropping, lifting or dragging by branches or trunks, Such damage, caused by the supplier, shall be cause for rejecting the delivered plants. Such damage to plants caused by the installer is subject to reimbursement to Owner for the cost of replacement trees.

- 2. Labeling: Trees will be labeled with at least one tree of each variety bearing a waterproof legible attached designation of botanical and common name. Labels may be left on trees only if located on a low, secondary branch. No labels, ropes, wires or other ties shall be left on any main trunk or branch.

## 1.6 JOB CONDITIONS

- A. Site Observation: Installer must observe the conditions under which work is to be performed, and notify the Owner' Representative (City arborist for street planting or landscape supervisor for park planting) of unsatisfactory conditions, including but not limited to saturated soils, physical obstructions, lack of suitable soil or other unforeseen conditions, both prior to planting and during planting operations. Do not proceed with the work at a given planting location until a solution for the unsatisfactory conditions has been developed in a manner acceptable to Owner and Installer.
- B. Utilities: Determine locations of underground utilities and perform work in a manner which will avoid damage. Hand excavate, as required, to minimize possibility of damage to underground utilities. For Park trees, Installer shall coordinate location of underground utilities with Owner (City arborist or landscape supervisor) prior to excavation.
- C. Scheduling: Complete tree installations according to the submitted installation schedule, or if unfeasible, provide updated planting schedules to Owner as necessary.
- D. Planting Time: Planting season for deciduous trees is from the time the ground is workable until May 15, and from October 1 until December 1. Evergreen trees shall be planted from the time the ground is workable until May 15, and from September 1 until November 15. Plants installed outside these time periods that are dead or damaged at the start of the following growing season shall be replaced by Installer, at his expense, unless planting out of season is authorized by Owner.

#### 1.7 GUARANTEE:

- A. Installer guarantees he has followed all requirements of the contract.
- B. Installer guarantees that plants are installed in accord with the plans and specifications, that the specified plants are installed in the correct locations, and that any excessive settling or other defects will be repaired by the following June 1.
- C. Damage due to removal by others, vandalism, damage by animals, weather or acts of neglect on the part of others, will not be the responsibility of the contractor.

### **PART 2 PRODUCTS**

#### 2.1

- A. Planting Soil: Shall be that which is excavated from the planting pits. Under conditions where supplemental planting soil is required, it shall consist of 80% sandy loam, 20% composted leaves or hardwood bark with pH of 6.5 to 7.2.
- B. Water: Suitable for irrigation and free from ingredients harmful to plant life. Water shall be supplied by contractor for use at each installation site.

#### 2.2 MISCELLANEOUS LANDSCAPE MATERIALS

- A. Mulch: Shredded wood chips supplied by the Parks Department Forestry Division. Parks will load materials at Franke Park onto Installer's vehicle at a mutually available time during staff working hours. Delivery of mulch by City staff to Installer's location

within the City limits of Fort Wayne is also available. Installer may also provide comparable shredded wood chip mulch with Owner's approval.

- B. Tree guying materials, if necessary at option of Installer and approved by Owner's Representative:
1. Stakes: For trees 3 1/2" caliper and under: 2" nominal square hardwood stakes, 5' above and 2' below grade, placed 180 degrees opposite, and parallel to curb line of adjacent street, if any, per details.
  2. Wire for guys or for fastening trees to stakes: No. 12 gauge (2.68 mm) pliable galvanized iron.
  3. Hose to encase guy wires; two-ply reinforced rubber garden hose, not less than 1/2" (13mm) diameter, new or used.
  4. Synthetic securing tape: Polypropylene woven fabric ribbon, 2" wide, or elasticized or webbed strapping.

### **PART 3 EXECUTION**

#### **3.1 INSPECTION**

- A. Site Observation: Installer must observe the conditions under which work is to be performed, and notify the Owner (City arborist for street planting or landscape supervisor for park planting) of unsatisfactory conditions, including but not limited to saturated soils, physical obstructions, lack of suitable soil or other unforeseen conditions, both prior to planting and during planting operations. Do not proceed with the work at a given planting location until a solution for the unsatisfactory conditions has been developed in a manner acceptable to Owner and Installer. Increase in costs due to a need to relocate a tree shall be addressed by a cost proposal from the Installer with agreement from Owner.
- B. Utilities: Determine locations of underground utilities, using utility locate services and other available methods and perform work in a manner which will avoid damage. Hand excavate, as required, to minimize possibility of damage to underground utilities. Installer bears responsibility for damage to utilities caused by his failure to comply with this requirement. For Park trees, Installer shall coordinate location of underground utilities with Owner (City arborist or landscape supervisor) prior to excavation.

#### **3.2 PREPARATION**

- A. Locations for street trees will usually be marked with orange "V" on the curb or pavement adjacent to the planting location. Unless otherwise directed by markings or other instructions, center the tree between the curb and sidewalk.
- B. Locations for park trees will usually be marked with a wooden stake marked with orange paint and an orange "X" on the ground at the base of the stake. Stakes must be returned to the Parks Department.
- C. Excavation For Trees

1. For balled and burlapped (B & B) trees and for container grown trees, make excavations 3 feet (915 mm) greater in diameter than the ball diameter and equal to the ball depth, with rough, outwardly sloping sides. Use of an auger to initiate pits is permitted, but excavations must not have vertical or smooth sides when installation is complete. If an auger is used, sides of planting hole must be manually scored to eliminate glazing of the soil
2. No excavation shall be left unattended or uncovered so as to pose a safety risk to the public. Any excavation left unattended must be covered and protected with appropriate safety warning devices adequate to prevent hazard to vehicles and pedestrians.

### 3.3 PLANTING

- A. Set balled and burlapped (B & B) stock on undisturbed soil, plumb, and in center of pit or trench with the root flare collar at the top of ball at the same elevation as adjacent finished landscape grades. Where poor drainage exists, plant with root ball 1/3 above surrounding grades and gently slope soil away from root ball at a 4:1 or less slope. In no case shall the top of the root ball be lower than the adjacent grade. Installations with root balls set too deep shall be rejected. Set plants upright and face to give the best appearance or relationship to adjacent structures and trees. When set, place 1/3 of backfill around base and sides of ball, and work to settle backfill and eliminate voids and air pockets. Remove wires and synthetic ropes or twines, and from the top 2/3 of ball, except that wire baskets that come only 1/3 up the side of the root ball may be left intact along with any natural fiber ropes or ball coverings that will quickly decompose. Continue with backfilling for second third of backfill. When excavation is approximately 2/3 full, water thoroughly before placing remainder of backfill. Repeat watering until no more is absorbed. Water again after placing final layer of backfill. No burlap or twine should be left uncovered by soil after planting. Where soil drainage is adequate, provide 4" high and wide dike at edge of root ball to facilitate watering
- B. Mulching: Provide plants as necessary with specified layer of mulch within two days after planting. No mulch should be in contact with bark of trunks.
- C. Pruning and Repair: Upon completion of work under this contract, prune and repair injuries to all plants. Limit amount of pruning to minimum necessary to remove dead or injured twigs and branches. Prune in such a manner as not to change natural habit or shape of plant unless otherwise directed by Owner. Make cuts flush to top of branch collar, leaving no stubs. Shorten or completely remove competing leaders, low hanging branches and correct other substandard conditions where non-conforming nursery stock has been accepted and used.
  1. Remove and replace excessively pruned or misformed stock resulting from improper pruning by Installer, at Installer's expense.
- D. Guying: Where directed by Owner and at separate cost from planting, support trees immediately after planting. No stakes shall be driven into the root ball. Guys should allow slight tree movement. Where directed by Owner, all trees shall be supported as shown in details. Any other method preferred must first be approved by Owner.

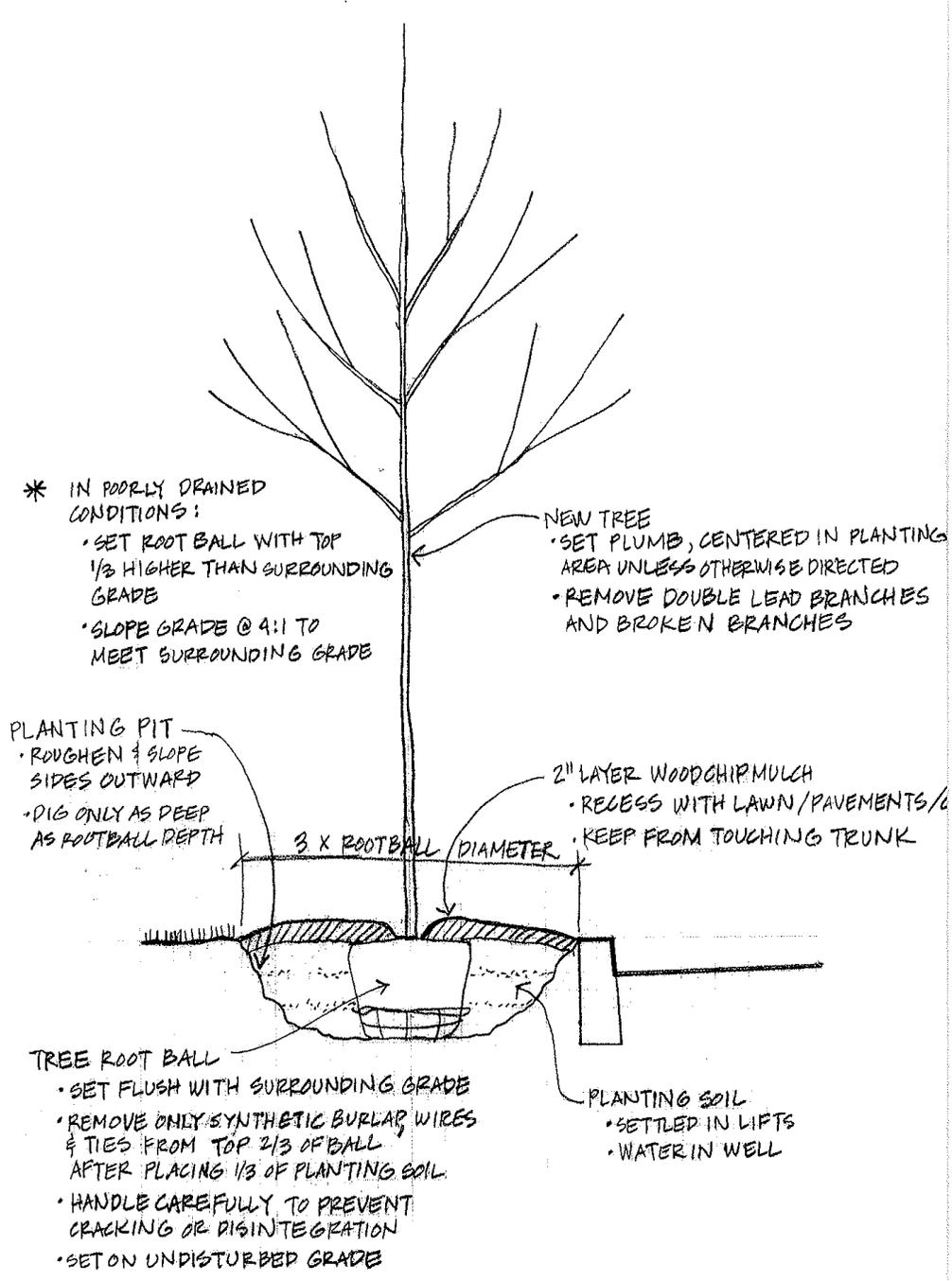
### 3.4 CLEANING-UP AND PROTECTION

- A. During landscape work, store materials and equipment where directed. Keep pavements clean and work area in an orderly condition. Remove waste materials from work areas and dispose of in legally acceptable manner.
- B. Protect landscape work and materials and adjacent properties and facilities from damage due to landscape operations. Maintain protection during installation. Treat, repair or replace damaged landscape work as directed.

### 3.5 INSPECTION AND ACCEPTANCE

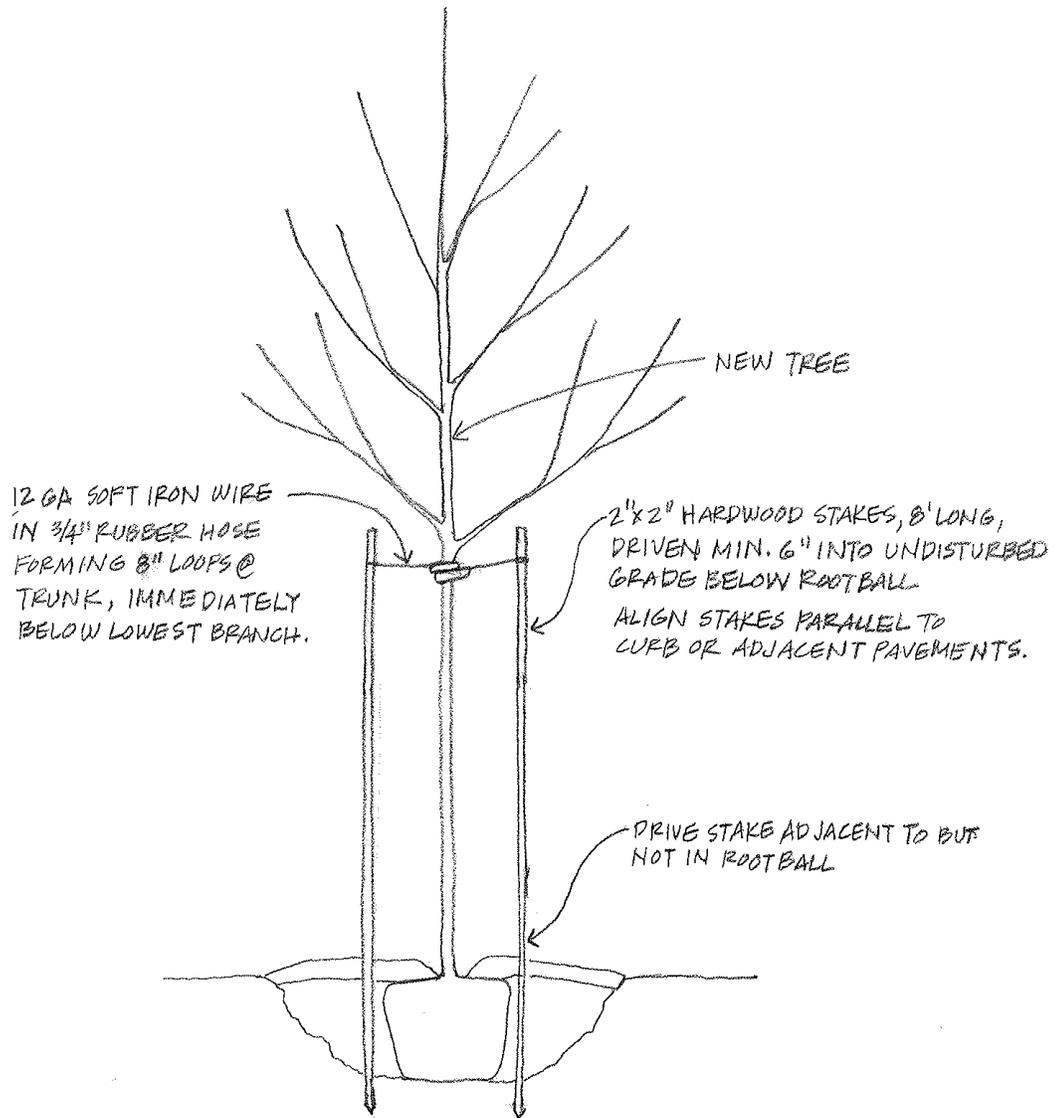
- A. When the landscape work is completed, Owner or Owner's Representative will, upon request, make an inspection to determine acceptability of the work based on its compliance with the contract documents, including any drawings, work orders and specifications and any issued change orders. Payment will be approved for work accepted.
- B. The landscape work may be inspected for acceptance by Owner's Representative in parts agreeable to Owner, provided the work offered for inspection is complete and that the area comprises one complete unit or area of substantial size.
- C. Any portion of the contract not completed at this time will be noted and the contractor will be notified which items of the contract must be completed prior to final acceptance.
- D. Invoices

- \* \* END OF SECTION \* \* \*



# TREE INSTALLATION

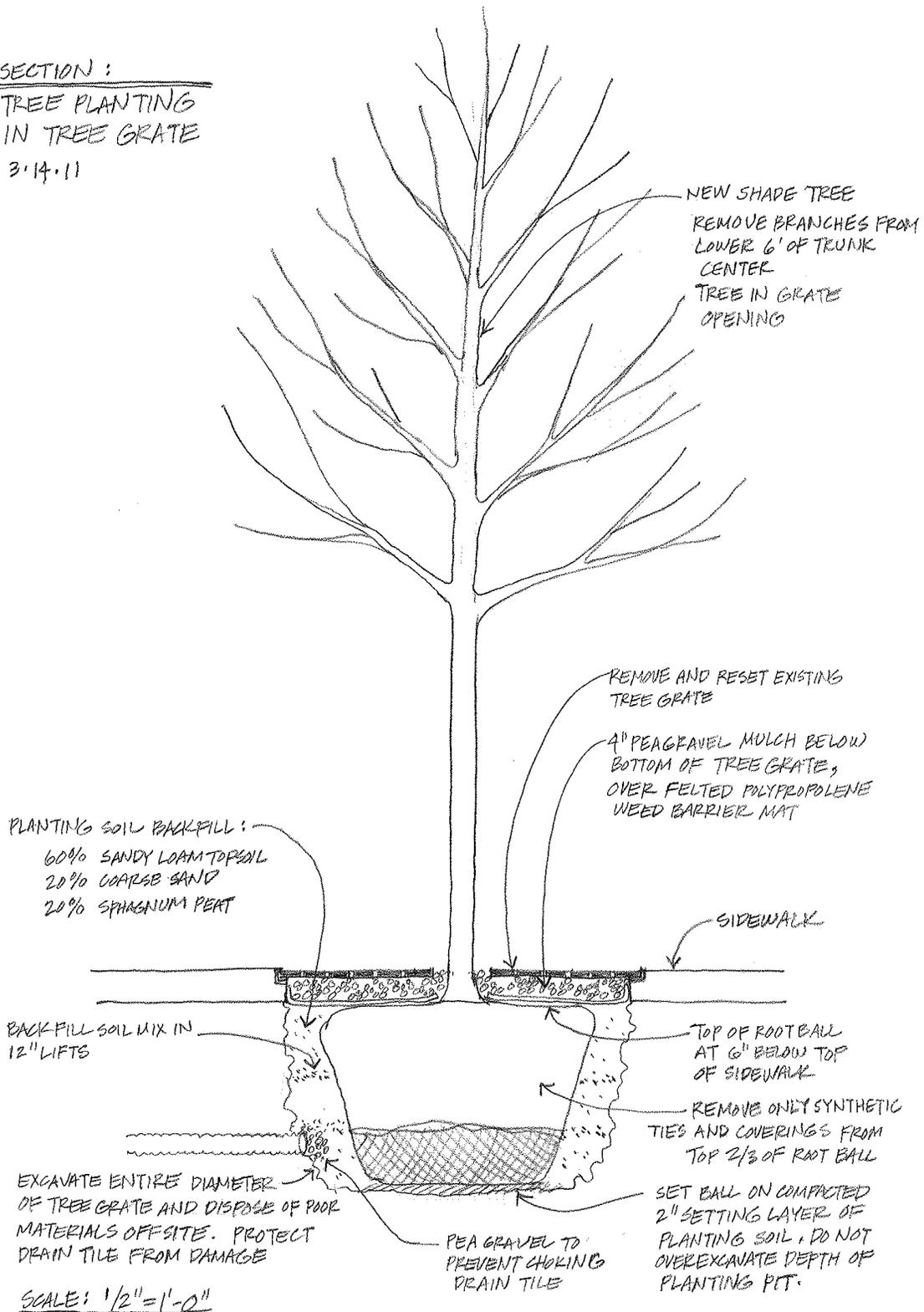
1/2" = 1'-0"



STAKING SINGLE STEM TREES 4" CAL. & UNDER 1/2" = 1'-0"

CITY OF FORT WAYNE 3/14/11

SECTION :  
TREE PLANTING  
IN TREE GRATE  
 3.14.11



NEW SHADE TREE  
 REMOVE BRANCHES FROM  
 LOWER 6' OF TRUNK  
 CENTER  
 TREE IN GRATE  
 OPENING

REMOVE AND RESET EXISTING  
 TREE GRATE

4" PEAGRAVEL MULCH BELOW  
 BOTTOM OF TREE GRATE,  
 OVER FELTED POLYPROPYLENE  
 WEED BARRIER MAT

SIDEWALK

PLANTING SOIL BACKFILL:  
 60% SANDY LOAM TOPSOIL  
 20% COARSE SAND  
 20% SPHAGNUM PEAT

BACK-FILL SOIL MIX IN  
 12" LIFTS

TOP OF ROOT BALL  
 AT 6" BELOW TOP  
 OF SIDEWALK

REMOVE ONLY SYNTHETIC  
 TIES AND COVERINGS FROM  
 TOP 2/3 OF ROOT BALL

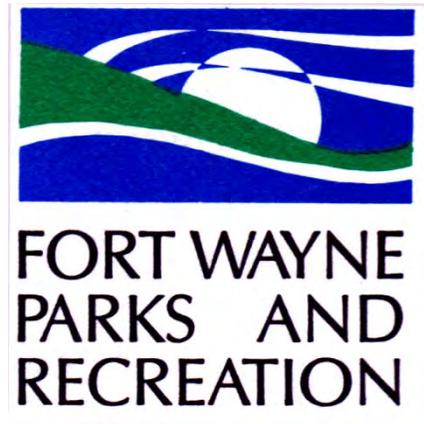
EXCAVATE ENTIRE DIAMETER  
 OF TREE GRATE AND DISPOSE OF POOR  
 MATERIALS OFFSITE. PROTECT  
 DRAIN TILE FROM DAMAGE

PEA GRAVEL TO  
 PREVENT CHOKING  
 DRAIN TILE

SET BALL ON COMPACTED  
 2" SETTING LAYER OF  
 PLANTING SOIL. DO NOT  
 OVEREXCAVATE DEPTH OF  
 PLANTING PIT.

SCALE: 1/2" = 1'-0"

# **Appendix #7**



## **Citizen Match Tree Planting Application**

# PLANT TREES...MAKE FORT WAYNE COOL



Yes! I want to help make a **greener** Fort Wayne!

## Street Trees 2014 Application Form

City of Fort Wayne, Thomas C. Henry, Mayor



My name \_\_\_\_\_  
please print

My address \_\_\_\_\_  
street city state zip code

My phone number \_\_\_\_\_  
daytime (8 am to 5 pm) evenings

Email Address \_\_\_\_\_

Tell us the address of the property where you would like the tree(s) planted if different from the address above. **We can plant trees only within the city limits of Fort Wayne.**

Tell us where in the park strip (between the street and the property line) you think the tree(s) should be planted. Attach a plan or map if you think that will help us understand your request.

Your new shade tree(s) will have a 2-inch diameter trunk and be from 8 to 14 feet tall, depending on the variety. Tell us what varieties you think would grow best, look best, and coordinate best with other trees on the rest of your street. The attached list names trees we can plant which are sturdy, long lived, disease resistant, and beautiful. You should make your request from that list. The City Arborist will consider your request on the species you choose and make the final decision on what species will be planted. The City reserves the right to deviate from your request if the City Arborist finds it to be inappropriate based on survivability or appearance, but we will let you know if this is necessary.

### **Tree Placement No-No's**

We want to make sure your new tree(s) are placed so it/they will not become a nuisance in the future. Please check your request against the following list to see if there might be a potential problem. We **cannot** plant trees under this program in the following situations:

- On private property. We can plant only public property.
- Under utility wires.
- In a park strip with less than 5 feet of grass or planting area.
- Within 40 feet of an intersecting street, alley or commercial driveway, or within 15 feet of a residential driveway.
- Within 40 feet of the trunk of another nearby tree on the street or in an adjacent yard (this is somewhat flexible).
- Within 10 feet of a street light, fire hydrant or traffic signal pole.
- Within 3 feet of curbs and/or sidewalks in poor condition.

**Application due not later than July 1st, 2014:**

**Mailing Address:** Street Trees 2014  
Arbor Division, City of Fort Wayne  
1900 N. Clinton Street  
Fort Wayne, IN 46805

Please be sure you have checked to make sure your planting request meets the conditions listed above. Also, please make sure there is a phone number on your application. The Fort Wayne Parks and Recreation Department tracks your application by your phone number.

**Please note that City funding shortfalls may not allow approval of all applications.**

**After we receive your application...**

City experts will evaluate your application and see if your request may be accommodated. If planting space is available, planting locations will be marked with an orange V on the adjacent curb or street and you will be notified of the variety which can be planted.

**Application Fee**

There will be a \$50.00 application fee per tree. The fee will be due after you receive an approval letter.

**Please do not send any money with this application.  
You will be billed \$50.00 after your request is approved.**

Planting will occur this fall, between the first frost (usually late October) and early December, under the supervision of the Arbor Division of the City of Fort Wayne Parks and Recreation Department. You will receive instructions on how to care for your new arrival after planting. If the tree dies for a reason other than abuse or vandalism before September 1, 2014, please call to 427-6480 and we will investigate.

**Think you can't afford to pay for a tree?  
Check out this deal...**

If your household size or income doesn't exceed the limits below, we can waive the fee per tree. Just circle the household size and sign below to certify your income doesn't exceed the adjacent income limit.

Number in household	Maximum income	Number in household	Maximum income
1	\$34,650	5	\$53,500
2	\$39,600	6	\$57,450
3	\$44,550	7	\$61,400
4	\$49,500	8	\$65,350

I, the undersigned, certify that my household size, circled above, does not exceed the adjacent listed maximum income and that I will provide supporting documentation of this information if requested by City officials.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Want to plant the whole neighborhood?**

If you are a neighborhood leader and would like to apply for a multiple property planting project, please contact the City Arborist, Chad Tinkel at 427-6480 to learn about procedures. We want to ensure trees are planted where they are wanted, so adjacent property owner involvement is really important to the success of neighborhood planting projects.

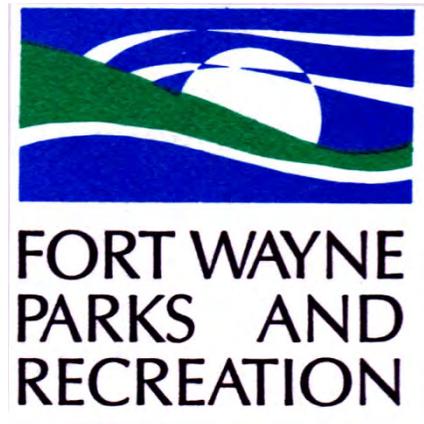
***“I speak for the trees, for the trees have no tongues. And I’m asking you sir, at the top of my lungs, unless someone like you cares a whole awful lot, nothing is going to get better. It’s not.”*** From The Lorax by Dr. Seuss

## **Suitable Trees for Fort Wayne Streets**

Trees planted along Fort Wayne’s City streets must be “good neighbor” trees. Some trees are better neighbor trees than others. “Good neighbor” trees have root systems that reach deep but do not invade sewer systems. They grow quickly, but have good, strong branch structures that are resistant to storm damage and that are capable of having their lower branches removed so people can walk and drive under them. “Good neighbor” trees do not drop large quantities of messy seeds, fruit, bark, twigs, and leaves through the growing season. To ensure the trees have a long, healthy life, the best trees are naturally disease and insect resistant, and are tolerant of salt laden snowmelt, compacted soils, air pollution, and other urban stresses. If that is not enough, “good neighbor” trees must be beautiful in their form, autumn color, and other ornamental aspects. The City’s experts are trained to identify potential problems for each planting location and will offer the best recommendation possible for the most appropriate tree for your situation. The following list includes of some of the best varieties of the hardiest trees for planting along our city streets. The trees list below is a list of trees that we approve to be planted in the city right of way. The availability of each species differs from one season to the next

<b>Approved Street Tree Species</b>	
<b>Common Name</b>	<b>Botanical Name</b>
Honeylocust	(Gledistia triacanthos)
American Linden	(Tilia americana )
Littleleaf Linden	(Tilia cordata )
Sugar Maple	(Acer Saccharum)
Freeman Maple	(Acer x freemanii )
Red Maple (very limited)	(Acer rubrum)
Bloodgood London Plane	(Platanusxacerifolia 'Bloodgood')
Hybrid Elms	(Ulmus spp)
Common Hackberry	(Celtis occidentalis)
Red Oak	(Quercus rubra)
Whit Oak	(Quercus alba)
Bur Oak	(Quercus macrocarpa)
English Oak	(Quercus robur)
Swamp White Oak	(Quercus bicolor)
Northern Pin Oak	(Quercus ellipsoidalis)
Shingle Oak	(Quercus imbricaria)
Heritage Oak	(Quercus Macdanielli 'Clemons' PPAF)
Regal Prince Oak	Quercus X Warei 'Long' PPAF
Tulip Tree	(Liriodendron tulipifera)
Sweetgum (limited quantity)	(Liquidambar styraciflua 'Rotundiloba')
Japanese Zelkova	(Zelkova serrata)
Espresso Kentucky Coffee Tree	(Gymnocladus dioicus 'Espresso')
Chinquapin Oak	(Quercus muehlenbergii)
Northern Black Oak	(Quercus velutina)
European Hornbeam	(Carpinus betulus)
American Hop Hornbeam	(Ostrya virginiana)

# Appendix #8



## Approved Street Tree List

# City of Fort Wayne

## Trees Approved for Planting along Streets

### Large Growing Trees

These species should be selected where adequate overhead and lateral space will permit a tree that grows to more than 25' tall and can have its lower branches successfully removed to maintain 8' clearance for sidewalks and 12-14' clearance for streets. Large growing trees should be the default choice for general street tree planting. Specific formal and visual characteristics vary by species and variety and should be selected to create maximum functional and visual value for specific planting conditions.

Some tree species have numerous cultivated varieties and clones that usually have traits that are more desirable for urban cultivation, but the individual characteristics should be understood prior to making selections, as they can vary widely.

#### Acer (Maple)

Freeman Maple Hybrids *Acer x freemanii*  
State Street Miyabei Maple *Acer miyabei* 'Morton'  
Black Maple *Acer nigrum*  
Planetree Maple *Acer pseudoplatanus*  
Red Maple *Acer rubrum*  
Sugar Maple *Acer saccharum*

#### Alnus (Alder)

Common Alder *Alnus glutinosa*  
Italian Alder *Alnus cordata*

#### Betula (Birch)

River Birch *Betula nigra*

#### Celtis (Hackberry)

Common Hackberry *Celtis occidentalis*  
Sugar Hackberry *Celtis laevigata*

#### Cercidiphyllum (Katsuratree)

Katsuratree *Cercidiphyllum japonicum*

#### Cladrastis (Yellowwood)

American Yellowwood *Cladrastis kentukea*

#### Corylus (Filbert)

Turkish Filbert *Corylus colurna*

#### Ginkgo (Maidenhair Tree)

Maidenhair Tree *Ginkgo biloba* (male/seedless clones only)

Gleditsia (Honeylocust)

Thornless Common Honeylocust *Gleditsia triacanthos inermis* (seedless and thornless clones only)

Gymnocladus (Kentucky Coffeetree)

Kentucky Coffeetree *Gymnocladus dioica* (seedless clones only)

Liquidambar (Sweet Gum)

Sweet Gum *Liquidambar styraciflua* (especially seedless clones)

Liriodendron (Tulip)

Tulip Poplar *Liriodendron tulipifera*

Magnolia (Magnolia)

Cucumbertree *Magnolia acuminata*

Metasequoia (Dawn Redwood)

Dawn Redwood *Metasequoia glyptostroboides*

Platanus (Planetree, Sycamore)

London Planetree *Platanus x acerifolia* (disease resistant clones only)

Prunus (Cherry)

Mazzard Cherry *Prunus avium*

Quercus (Oak)

White Oak *Quercus alba*

Swamp White Oak *Quercus bicolor*

Shingle Oak *Quercus imbricaria*

Bur Oak *Quercus macrocarpa*

Chinkapin Oak *Quercus muehlenbergii*

Pin Oak *Quercus palustris*

Scarlet Oak *Quercus coccinea*

Northern Pin Oak *Quercus ellipsoidalis*

Chestnut Oak *Quercus prinus*

English Oak *Quercus robur*

Heritage Oak *Quercus robur x macrocarpa*

Red Oak *Quercus rubra*

Black Oak *Quercus velutina*

Sorbus (Mountain Ash)

Korean Mountain Ash *Sorbus alnifolia*

Taxodium (Bald Cypress)

Bald Cypress *Taxodium distichum*

Tilia (Linden, Basswood)

American Linden, Basswood *Tilia Americana*

Littleleaf Linden *Tilia cordata*

Crimean Linden *Tilia x euchlora*

Bigleaf Linden *Tilia platyphyllos*

Silver Linden *Tilia tomentosa*

Ulmus (Elm)

American Elm Hybrids *Ulmus Americana* 'Princeton', 'Valley Forge',

Accolade Elm *Ulmus japonica x wilsoniana* 'Morton'

Danada Charm Elm *Ulmus japonica x wilsoniana* 'Danada'

Homestead Elm *Ulmus x Homestead*

Morton Glossy Elm *Ulmus x 'Morton Glossy'*

Patriot Elm *Ulmus urban x wilsoniana*

Pioneer Elm *Ulmus glabra x carpinifolia*

Princeton Elm *Ulmus americana* 'Princeton'

Lacebark Elm *Ulmus parvifolia*

Zelkova (Zelkova)

Japanese Zelkova *Zelkova serrata*

### **Small Scale Trees**

These species should be used where large growing trees are not possible, especially due to overhead utility lines or for other special effects in the streetscape. These species typically reach mature sizes of less than 30'. Their use should be tempered with the need to maintain 8' clearances to sidewalks and 12-14' for streets. Form and cultural requirements vary by species and variety, and selections should be made with full understanding of these variations.

#### Acer (Maple)

Hedge Maple *Acer campestre*

Amur Maple *Acer ginnala*

Paperbark Maple *Acer griseum*

Tatarian Maple *Acer tataricum*

Amelanchier (Serviceberry, Juneberry) Autumn Brilliance Serviceberry *Amelanchier x grandiflora* 'Autumn Brilliance'

Cumulus Serviceberry *Amelanchier laevis* 'Cumulus'

#### Carpinus (Hornbeam)

European Hornbeam *Carpinus betulus*

American Hornbeam *Carpinus caroliniana*

#### Cercis (Redbud)

Eastern Redbud *Cercis Canadensis*

#### Cornus (Dogwood)

Flowering Dogwood *Cornus florida*

Chinese Dogwood *Cornus kousa*

#### Crataegus (Hawthorn)

Thornless Cockspur Hawthorn *Crataegus crusgalli inermis*

Ohio Pioneer Hawthorn *Crataegus punctata* 'Ohio Pioneer'

Winter King Hawthorn *Crataegus viridis* 'Winter King'

#### Koelreuteria (Goldenrain Tree)

Goldenrain Tree *Koelreuteria paniculata*

#### Magnolia (Japanese Magnolia)

Merrill Magnolia *Magnolia x loebneri* 'Merrill'

Saucer Magnolia *Magnolia x soulangeana*

#### Malus (Crabapple)

Disease resistant varieties only

#### Ostrya (Hophornbeam)

American Hophornbeam *Ostrya virginiana*

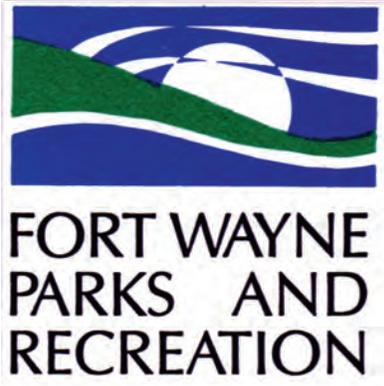
Prunus (Cherry)

Sargent Cherry *Prunus sargentii*

Syringa (Tree Lilac)

Ivory Silk Lilac *Syringa reticulata* 'Ivory Silk'

# The City of Fort Wayne Street Tree Selection Guide



## Table of Contents

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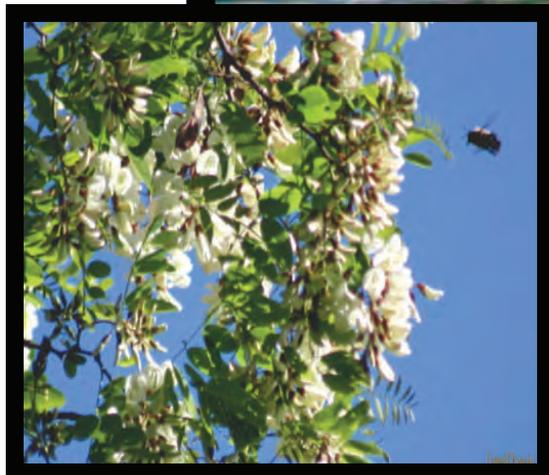
**2" B & B Tree**



# Honey locust



Heuser, Jr. 2001



*Gledistia tricanthos*  
**HoneyLocust**

# American Linden



***Tilia americana***  
**American Linden**



# Littleleaf Linden



*Tilia cordata*  
Littleleaf Linden



*Tilia cordata*  
Littleleaf Linden

*Tilia cordata*  
Littleleaf Linden

# Sugar Maple



© Dan Lineberger



© Dan Lineberger

*Acer saccharum*  
Sugar Maple

*Acer saccharum*  
Sugar Maple



© Richard Lyons

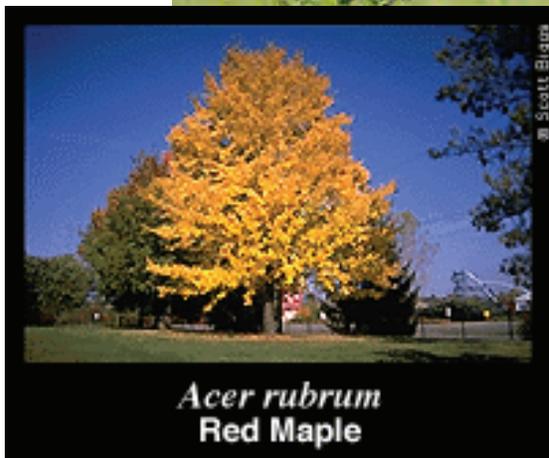
*Acer saccharum* -  
Sugar Maple

# Freeman Maple



*Acer x fremanni*  
**Freeman Maple**

# Red Maple



*Acer rubrum*  
Red Maple



## London Plane Tree



*Platanus x acerifolia*  
London plane Tree

## Patriot Elm



*Ulmus x wilsoniana* 'Patriot'  
**Patriot Elm**

**Common Hackberry**



©Elaine Eberlin

*Celtis occidentalis*  
**Common Hackberry**



*Celtis occidentalis*  
**Common Hackberry**

# Red Oak



***Quercus rubrum***  
**Red Oak**

# White Oak



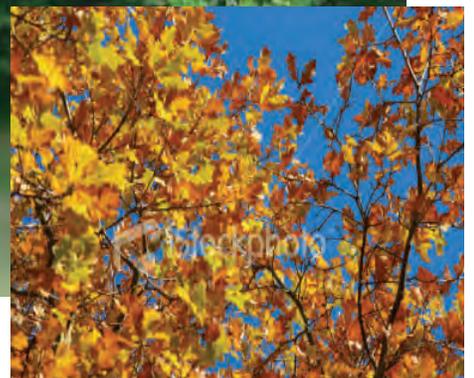
*Quercus alba*  
White Oak

# Bur Oak



*Quercus macrocarpa*  
Bur Oak

# English Oak



*Quercus robur*

# Swamp White Oak



*Quercus imbricaria*  
Swamp White Oak



# Northern Pin oak



© Charles W. Heuser, Jr. 2001

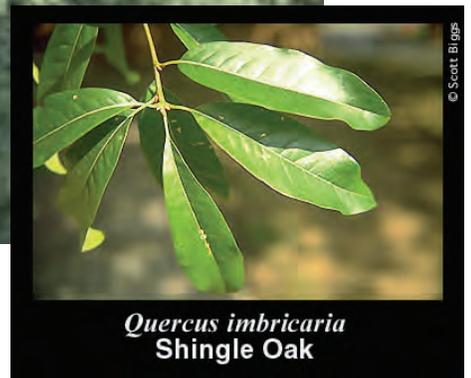


*Quercus palustris*  
Northern Pin oak

# Shingle Oak



*Quercus imbricaria*  
**Shingle Oak**



*Quercus imbricaria*  
**Shingle Oak**

# Heritage Oak



**Quercus x Macdanielli**  
**Heritage Oak**

# Regal Prince Oak



**Quercus x warei**  
**Regal Prince Oak**



# Tulip Tree



© Scott Biggs

*Liriodendron tulipifera*  
Tulip Tree



*Liriodendron tulipifera*  
Tulip Tree

# Sweet Gum



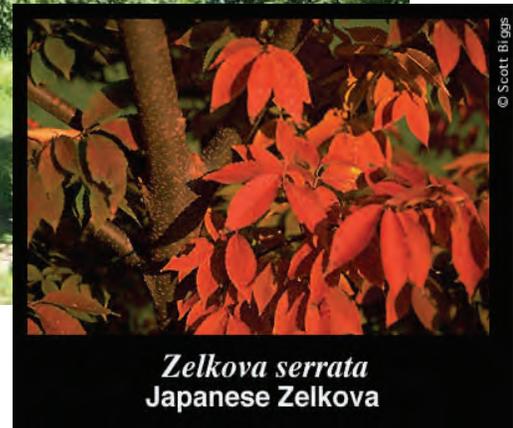
**Liquidambar styraciflua**  
**Sweet Gum**



# Japanese Zelkova



*Zelkova serrata*  
Japanese Zelkova



# Kentucky Coffee Tree

Marlin



***Gymnocladus dioica***  
**Kentucky Coffee Tree**



# Chinquapin Oak



***Quercus muehlenbergii***

# European Hornbeam



***Carpinus betulus***  
**European Hornbeam**



# American Hophornbeam



©Scott Biggs

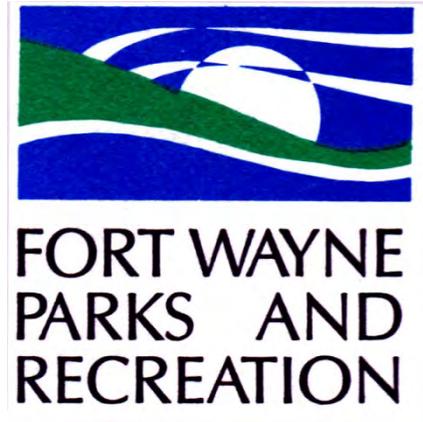


American Hophornbeam  
*Ostrya virginiana*



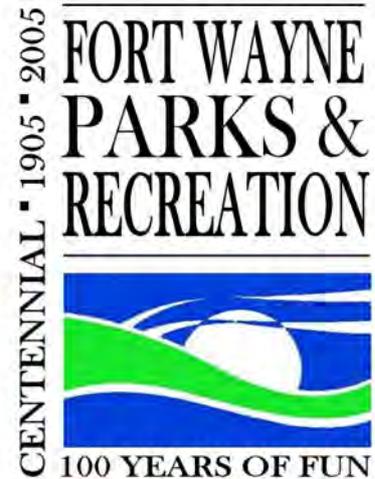
*Carpinus betulus*  
European Hornbeam

# Appendix #9



## Memorial Tree Order Form

# Memorial Tree with Marker Order Form



Date: \_\_\_\_\_  
Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Daytime Phone: \_\_\_\_\_ Alternate Phone: \_\_\_\_\_  
E-mail Address: \_\_\_\_\_

Trees ordered between April 1st and October 15th will be planted between October and December of that year, weather permitting. Trees ordered after that time will be planted the following spring. Memorial trees have a five year replacement guarantee. If a tree should die within five years of its planting, please notify the Landscape Supervisor, and it will be replaced during the next planting season.

**Please indicate the type of tree you are requesting and the location:**

**Tree Preference**

(Shade Tree, Flowering Tree, Evergreen) \_\_\_\_\_

**Location Preference**

(Specific Park) \_\_\_\_\_

**Marker Information**

The inscription may be up to three lines with 16 spaces per line. Punctuation marks and spaces between words count as spaces. Please fill in the blanks below with the inscription you would like.

_____
_____
_____

**Cost: \$500.00** (*Check or Money Order only, please. Checks should be made payable to Board of Park Commissioners.*)

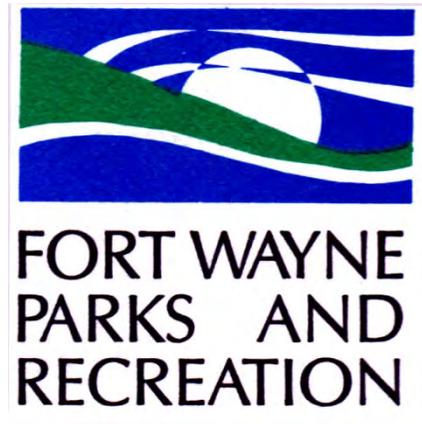
**Mail this form and check to:**

**Fort Wayne Parks & Recreation  
Attn: Memorial Tree Program  
705 East State Blvd.  
Fort Wayne, IN 46805**

**For more information call or email:**

**Chad Shaw, Landscape Supervisor  
260-427-6402  
chad.shaw@cityoffortwayne.org**

# Appendix #10



## Urban Canopy Fact Sheet

# Assessing and Addressing Indiana Urban Tree Canopy Fort Wayne, Indiana

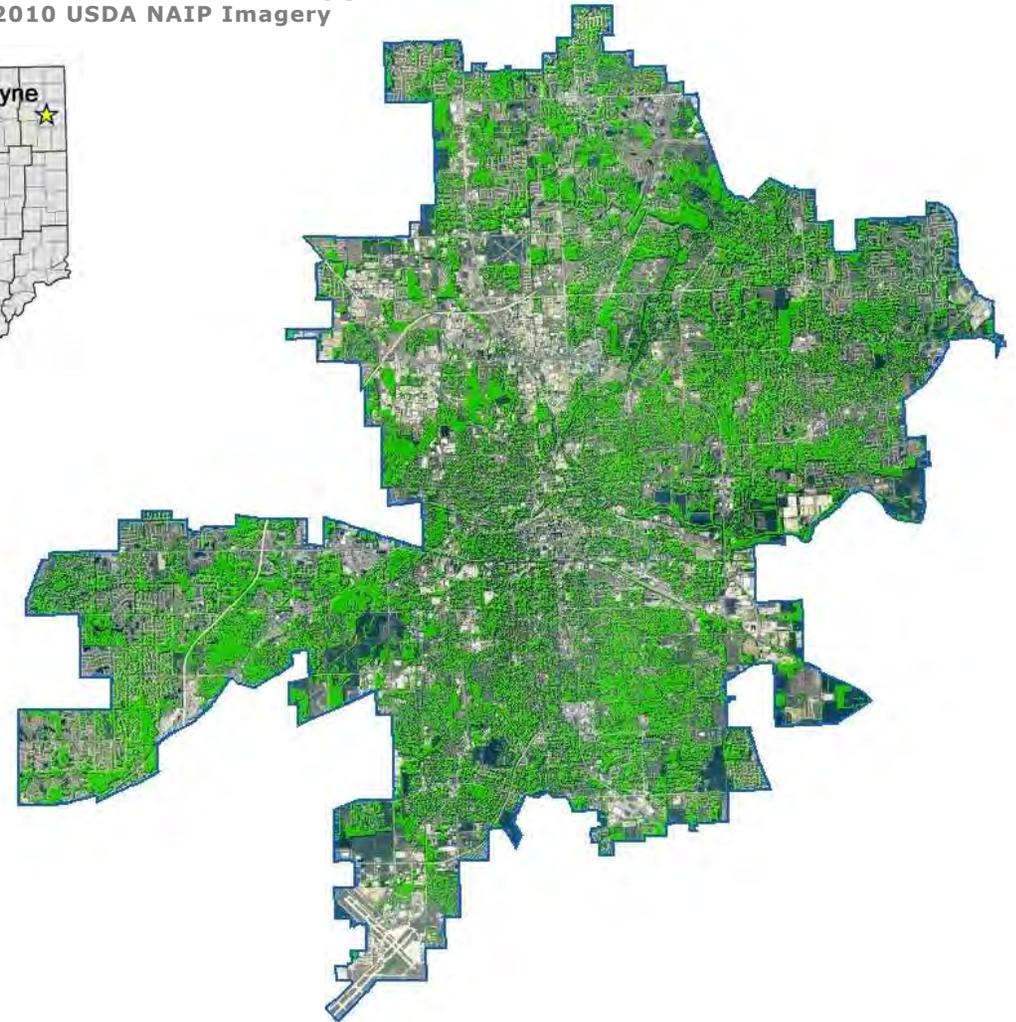
Fort Wayne's urban tree canopy (UTC) is composed of the leaves, stems, and branches of all public and private trees as viewed from above. Using remote sensing equipment and geographic information system (GIS) land cover data, the tree canopy and other types of land cover are layered over satellite images or aerial photographs to create a representation of canopy distribution and land cover within the municipal boundaries.

Mapping and quantifying UTC allows Fort Wayne to establish baseline conditions for current use and future monitoring, benchmark against similar communities, set goals for improving the tree canopy, and create plans for planting and protecting trees. Communities like Fort Wayne that maintain GIS data for land use or public and private parcel data have the additional ability to determine the existing canopy for each of these classifications.

One of the most widespread uses of UTC technology is to set community canopy coverage goals. American Forests, a recognized leader in conservation and urban forestry, has established an average canopy goal of 40 percent for metropolitan areas. The State encourages this standard as a general guideline or target for Indiana communities to achieve.

This factsheet is part of a larger project that included an urban tree canopy analysis of 108 communities throughout the State and identified statewide threats and environmental pressures that affect Indiana's urban tree canopy. For more information, please contact Pamela Louks, Indiana DNR-Community and Urban Forestry, at 317-591-1170.

**Fort Wayne Urban Tree Canopy Cover**  
2010 USDA NAIP Imagery





# Fort Wayne, Indiana Land Cover

## Results

Trees provide a host of benefits to the City of Fort Wayne. They conserve energy, reduce carbon dioxide levels, improve air quality, and mitigate stormwater runoff. In addition, trees provide numerous economic, psychological, and social benefits.

**Canopy** covers 20,510.90 acres or 29.0 percent of the City of Fort Wayne. The City's canopy cover is above average when compared to similar class communities within the northeast region of Indiana.

**Pervious** areas cover 21,414.20 acres or 30.3 percent of the City. These areas include parks, open areas, agriculture, bare soils, or golf courses and are places with the most potential for increasing the City's overall canopy. If only half of these areas were planted with trees, Fort Wayne's UTC would be 44 percent and over the recommended average of 40 percent.

**Impervious** areas cover 27,266.23 acres or 38.5 percent of the City. These areas are roads, buildings, parking lots, and other paved surfaces that would benefit the most from additional trees and canopy cover. If designed or retrofitted, some impervious areas could support more trees and add to the overall tree canopy.

**Open Water** areas cover 1,569.22 acres or 2.2 percent of the City. Trees planted in the riparian areas help to increase water quality by partially protecting streams, wetlands, rivers, and lakes from the impact of adjacent land uses.

## Urban Tree Canopy Goal Setting

Fort Wayne has an overall canopy of 29.0 percent which is below the 40 percent urban tree canopy recommended by American Forests for cities east of the Mississippi River.

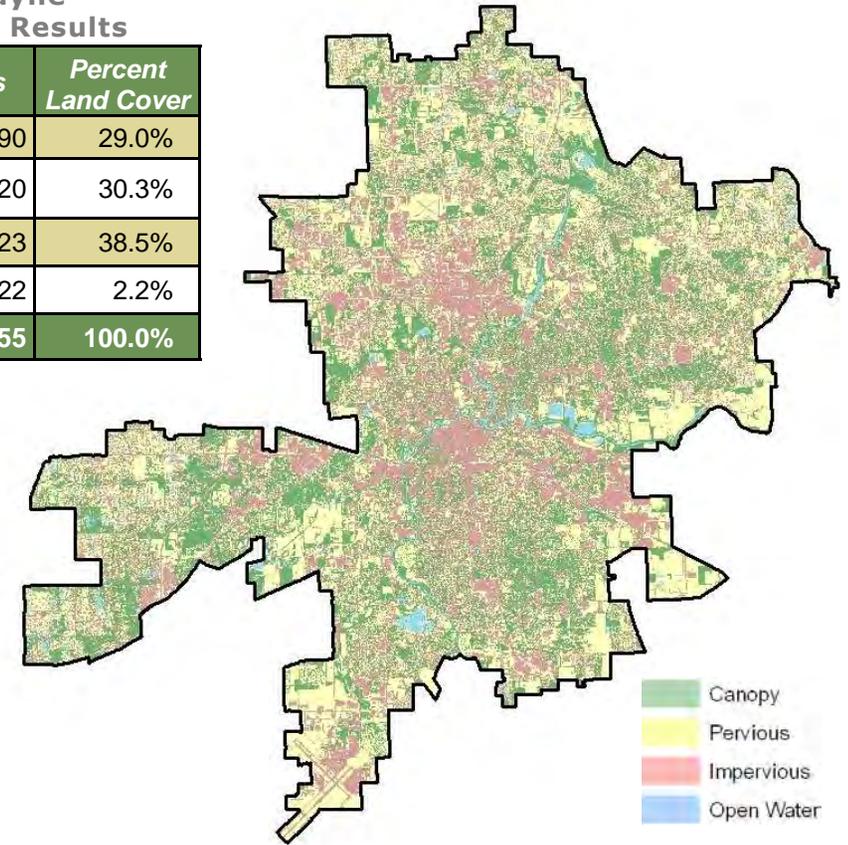
Potential tree canopy for any community can be measured by the total UTC and all other viable areas. The UTC analysis revealed that Fort Wayne's potential canopy cover is 59.3 percent (canopy plus pervious land cover).

It is recommended that the City increase their canopy by reviewing the pervious areas closely for possible planting sites. Potential sites can be impacted by land use constraints, social and cultural preferences, and by whether or not the land is physically conducive to planting sites. Some impervious areas can also become part of the tree canopy if redesigned or retrofitted. Priority should also be placed on preserving and maintaining Fort Wayne's existing canopy.

Canopy includes both public and private trees; therefore, emphasis should be placed on educating residents, developers, and other public groups on the benefits that trees provide Fort Wayne.

Fort Wayne Land Cover Results

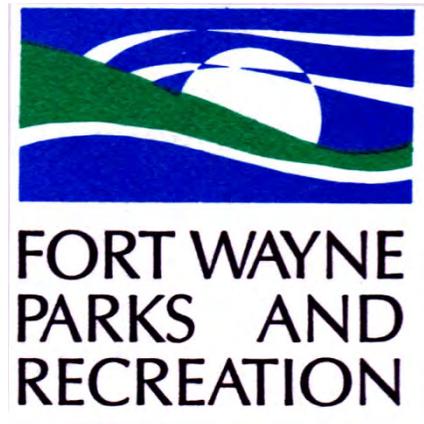
Land Cover	Acres	Percent Land Cover
Canopy	20,510.90	29.0%
Pervious	21,414.20	30.3%
Impervious	27,266.23	38.5%
Open Water	1,569.22	2.2%
<b>Total</b>	<b>70,760.55</b>	<b>100.0%</b>



UTC Comparisons	Percent UTC
Fort Wayne's Maximum Potential UTC (includes pervious land cover)	59.30
American Forests Recommended Goal	40.00
<b>Fort Wayne's Existing Average</b>	<b>29.00</b>
Second Class Community Average within the Northeast Region	26.80
Statewide Average	24.58
Allen County Average	18.09
Northeast Regional Average	18.06



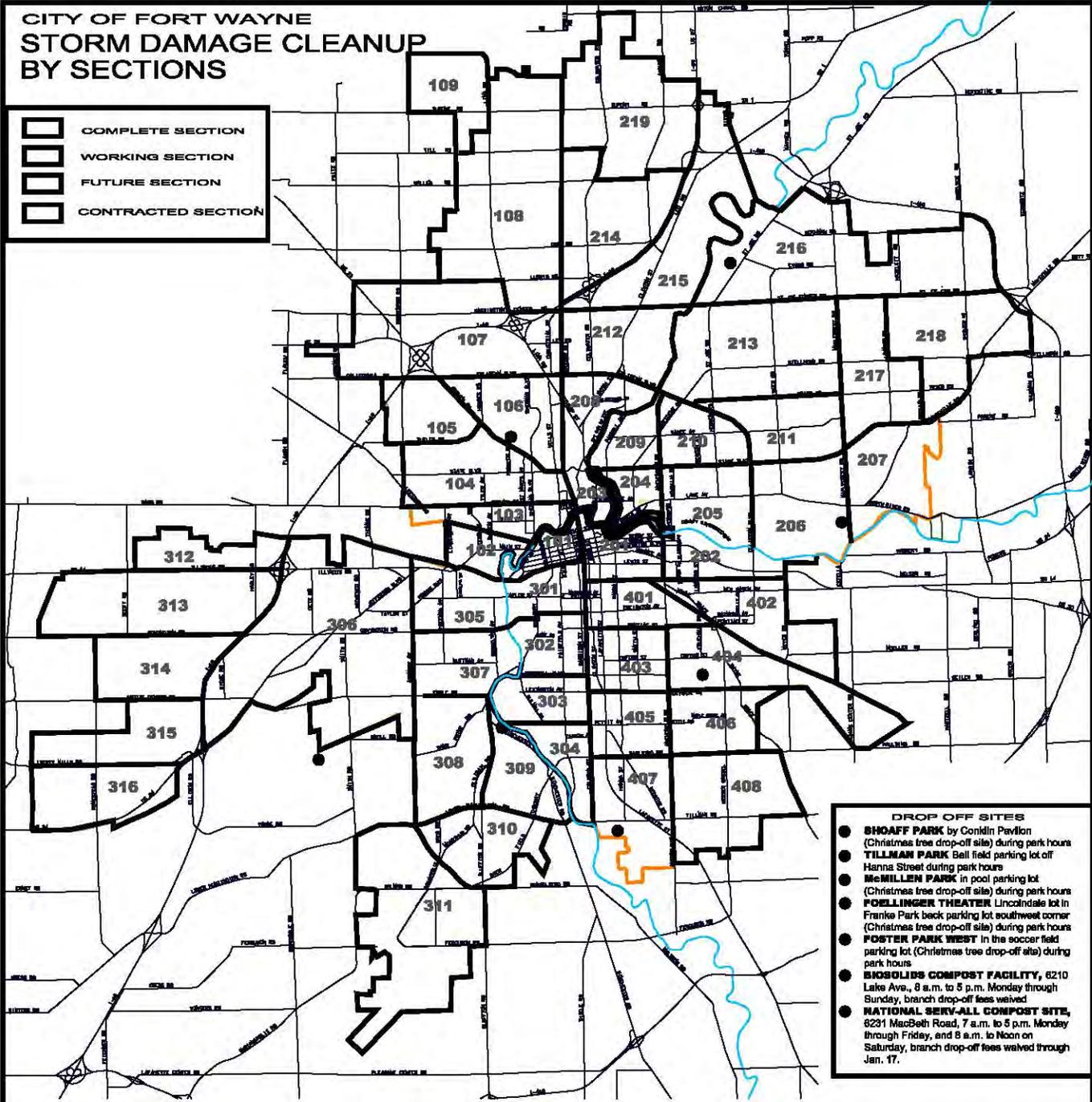
# Appendix #11



## Pruning Section Map

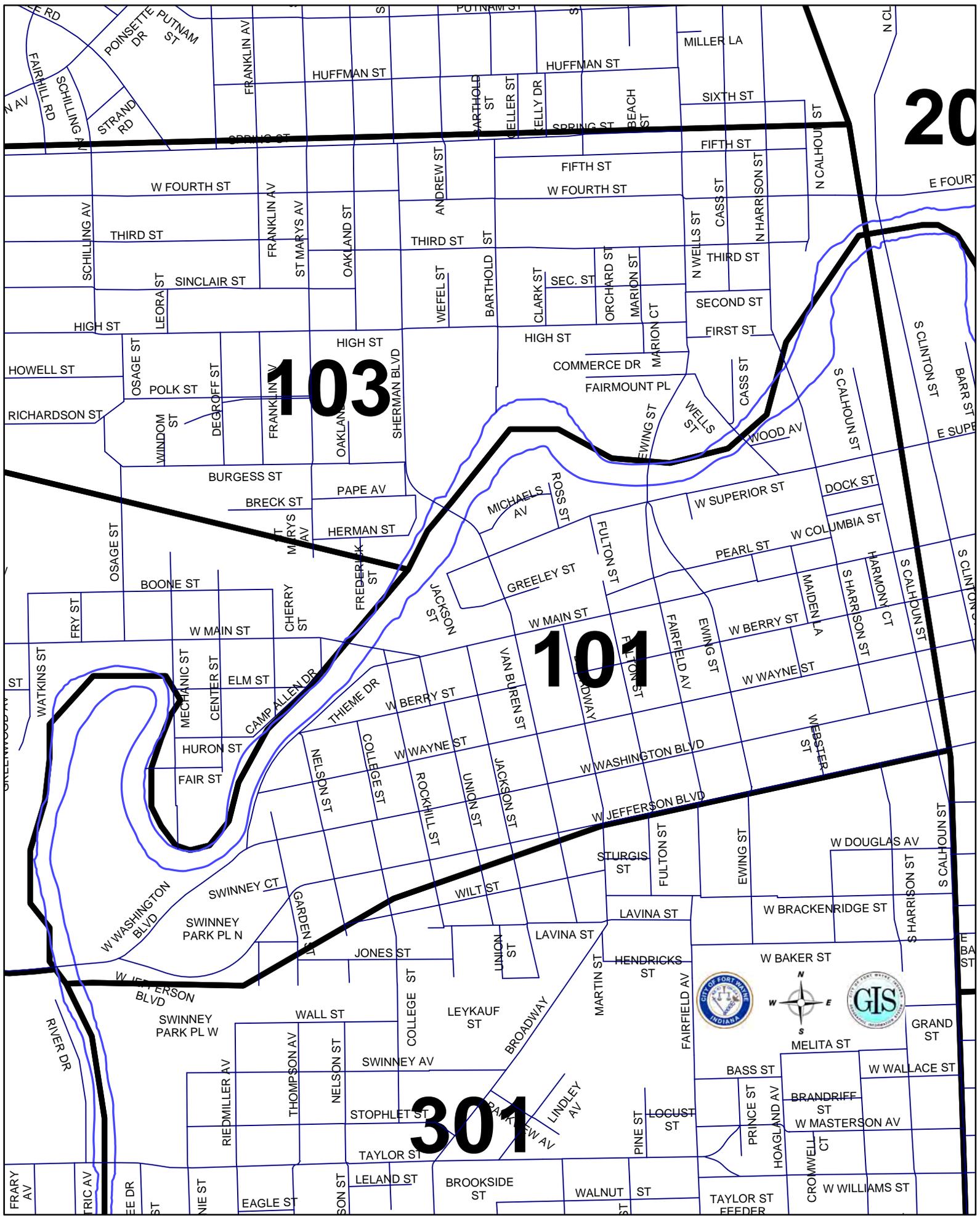
**CITY OF FORT WAYNE  
STORM DAMAGE CLEANUP  
BY SECTIONS**

-  COMPLETE SECTION
-  WORKING SECTION
-  FUTURE SECTION
-  CONTRACTED SECTION



- DROP OFF SITES**
- **SHOAFF PARK** by Conklin Pavilion (Christmas tree drop-off site) during park hours
  - **TILLMAN PARK** Bell field parking lot off Hanna Street during park hours
  - **McMILLEN PARK** in pool parking lot (Christmas tree drop-off site) during park hours
  - **POELLINGER THEATER** Lincolndale lot in Franke Park back parking lot southwest corner (Christmas tree drop-off site) during park hours
  - **FOSTER PARK WEST** in the soccer field parking lot (Christmas tree drop-off site) during park hours
  - **SKOSOLDS COMPOST FACILITY**, 6210 Lake Ave., 8 a.m. to 5 p.m. Monday through Sunday, branch drop-off fees waived
  - **NATIONAL SERV-ALL COMPOST SITE**, 6231 MacBeth Road, 7 a.m. to 5 p.m. Monday through Friday, and 8 a.m. to Noon on Saturday, branch drop-off fees waived through Jan. 17.

**CITY OF FORT WAYNE**



103

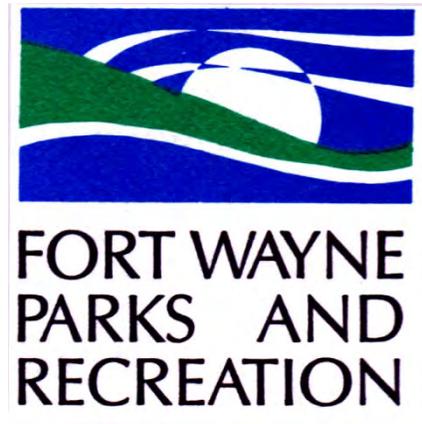
101

301

20



# Appendix #12



## Storm Response Protocol

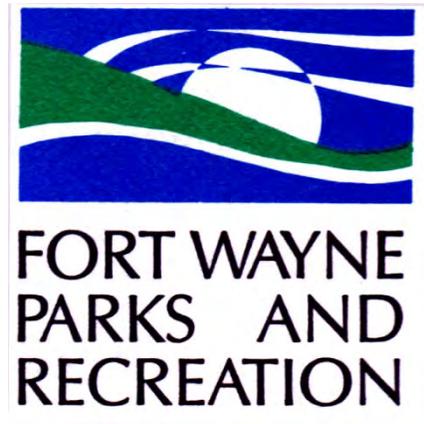
## Storm Response Duty Assignments

<b>Storm Response Duty Assignments</b>				
Office Coordinators'				
Office coordinator/Interdepartmental Liaison		Storm call coordinator		
Deputy Director of Park Maintenance		Support Specialist		
i-Tree Data	Superintendent of Urban Forestry & City Arborist		Supervisor of Forestry	
Quadrant coordinators	<b>Northwest</b>	<b>Northeast</b>	<b>Southwest</b>	<b>Southeast</b>
	Supervisor of Facility Maintenance	Superintendent of Park Grounds & Capital Improvements	Supervisor of Grounds Maintenance	Manager of Safety & Operations Support
	Superintendent of Park Planning, Landscape & Horticulture	Supervisor of Landscape	Supervisor of Facility Management	Manager of Landscape & Horticulture

### ~Protocol~

- In the event of a storm involving forestry the above personnel are assigned to the indicated quadrants.
- The individuals assigned will be in charge of evaluating the storm damage and directing crews to high priority locations.
- The following is a list of priorities the manager/supervisor of the respective quadrant must follow with regard to evaluating a forestry related storm events.
  1. Main arteries and emergency routes
  2. Fire Stations, Police Stations, Hospitals, Nursing Homes and treatment facilities.
  3. Trees that are on houses and/or commercial buildings
  4. Utility company-Exits and Entrance
  5. Park Facilities and Structures
  6. Playgrounds
  7. Parks
  8. Golf Courses
  9. River Greenway

# Appendix #13



**Tree Work Permit**



**City of Fort Wayne Parks and Recreation Department  
Street Tree Work Permit**

1900 North Clinton, Fort Wayne, IN 46805  
260-427-6400-Office 260-427-6422-Fax

Permission is requested by the contractor and/or Owner to perform the work described

<b>Property</b>	Address:	
	Site Location:	
<b>Property Owner</b>	Name:	Phone:
	Address:	
	Email Address:	
<b>Contractor</b>	Business:	Phone:
	Address:	

Work will begin on: \_\_\_\_\_ Work Will End on: \_\_\_\_\_

Type of Work:  Trim  Tree Removal  Apply Chemical  Stump Removal  
 Sidewalk/Driveway  Tree planting  Other \_\_\_\_\_

Description of Work: \_\_\_\_\_  
 \_\_\_\_\_

It is understood that the expense and risk of the tree work is the responsibility of the property owner:  Yes  No

**Office Use Only**

Pre-Work Inspection Date: \_\_\_\_\_ Approved by City Staff:  Yes  No

Comments: \_\_\_\_\_

City Staff Signature & Title: \_\_\_\_\_ Date Issued: \_\_\_\_\_

Post Work Inspection Date: \_\_\_\_\_ Approved by City Staff:  Yes  No

Comments: \_\_\_\_\_

City Staff Signature & Title: \_\_\_\_\_ Date Issued: \_\_\_\_\_

Permit Valid For:  1 Month  3 Months  6 Months  1 Year