

10.4.1 Plant Species

Any proposed new plant material used to satisfy the requirements of this development code shall be of a species other than those listed in the current version of the Louisville and Jefferson County Prohibited Plant List adopted by the Planning Commission. To the greatest extent possible, new plant material should be selected from species included in the current version of the Louisville and Jefferson County Preferred Plant List adopted by the Planning Commission. This list consists of species that are either native to Jefferson County or that perform particularly well in the area, or both.

Over-dependence on a single genus may result in extensive loss due to disease, insects or other pests. To ensure a diversity of species within Louisville and Jefferson County's forests the mix of required trees and shrubs for all development proposals shall conform to the following diversification formula:

50% maximum of any single species (e.g., *Quercus rubrum*)

Exceptions to the diversification formula shall be allowed for:

- A. Sites of less than two acres, if required plantings are chosen from the Preferred Plant List
- B. Sites located within a Neighborhood Study or Corridor Study approved by the Planning Commission with street tree or landscape guidelines or sites containing a streetscape master plan approved by the Planning Commission;
- C. A Planned Development or General Development Plan containing a planting plan approved prior to the effective date of this code

10.4.2 Plant Quality

All plant materials shall be living plants (artificial plants are prohibited.) Plant materials shall conform to the standards of the American Association of Nurserymen and shall have passed any inspections required under state regulations. Bare root plants, with the exception of vines and groundcovers shall be prohibited.

10.4.3 Plant Sizes

All required plant material shall meet the following size criteria at time of installation:

Evergreen Trees	6 feet high
Shrubs (when required for 6-8 feet screening)	36 inches high
Shrubs (when required for 3 feet screening)	18 inches high
Grasses or Ground Cover	N/A

Size criteria for deciduous tree species shall be determined based on its Size Type as described in Chapter 1 Part 2 (Definitions) of the Land Development Code. Installation criteria for each Size Type is as follows:

Small Tree (under 25 feet in height at maturity)	6 feet high
Medium Tree (25 feet-50 feet in height at maturity)	1 ¾ inch caliper
Large Tree (over 50 feet in height at maturity)	1 ¾ inch caliper

When planting Medium or Large Trees, Small Sites (as defined in 10.2.2(C) and Single Family Residential sites shall be required to install such trees at a minimum size of 1 inch caliper.

All minimum size requirements shall conform to the characteristics set forth in the American Standard for Nursery Stock, latest addition.

Any existing trees on a site or street trees planted on an adjacent right-of-way that are used to meet the Tree Canopy Regulations (Chapter 10 Part 1) may be credited towards fulfillment of any landscaping, screening, or buffering provisions of this Chapter. The following chart indicates the credit applied for each existing preserved tree. The credit for the existing tree can be used toward landscape buffer area planting requirements.

Table 10.4.1 Credit for Existing Trees being Preserved

Diameter Size of Existing Tree	Minimum Square Footage of Greenspace	New Tree Equivalent
6" or less	150	1 medium tree (Type B)
>6" – 9"	150	2 medium tree (Type B)
>9"	250	Each additional 3" diameter increment above 9" counts as an additional medium tree (Type B)

10.4.4 Spacing

No newly planted trees may be planted closer together than 10 feet for small trees, 25 feet for medium trees, and 30 feet for large trees. When planting new trees near existing mature trees, leave a minimum distance of half of the new tree's mature spread between the new tree and the existing trees. Planning Commission staff can authorize a closer spacing of trees in special circumstances.

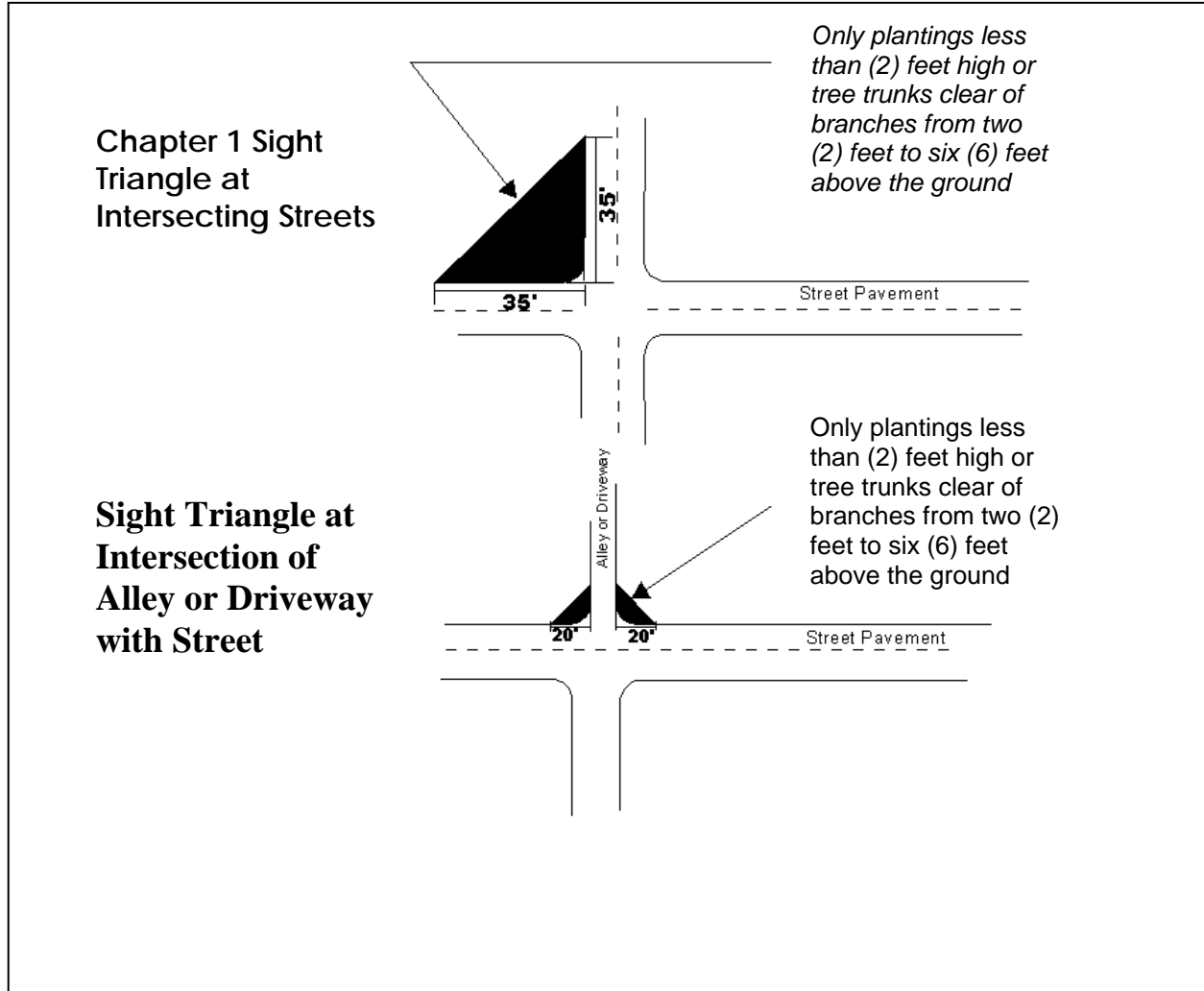
Table 10.4.12

TREE SPACING GUIDE AGAINST BUILDINGS	
Tree Height	Minimum Spacing from Building Edge
Up to 25 feet (small tree)	10 feet
25 feet-50 feet (medium tree)	15 feet
50 feet+ (large tree)	15 feet

No tree shall be planted in a space less than 3 feet in width. Only small trees shall be planted in spaces less than 4 feet in width.

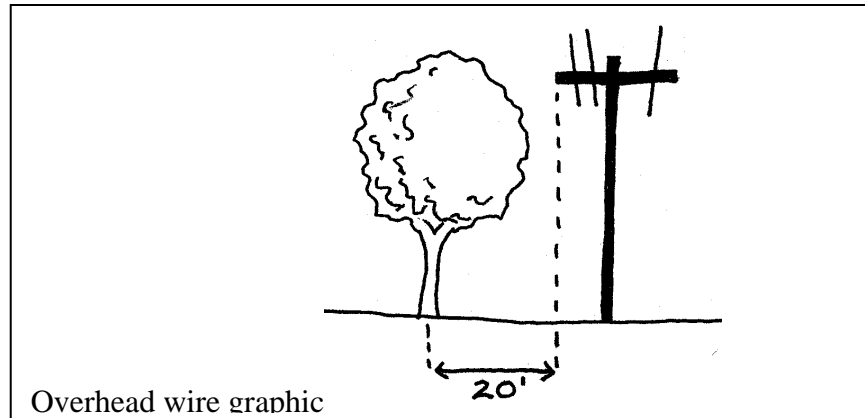
Trees shall be located to provide shade over impervious surfaces to the maximum extent possible.

Figure 10.4.1



No tree shall be planted closer than 5 feet to any fireplug, utility pole, or similar utility structure. Large or medium trees shall not be located beneath overhead wires, and shall be planted at least 20 feet from any easement or right-of-way in which overhead wires are located. With approval from the appropriate utility company Type C trees planted 30 feet on center may be planted beneath overhead utility lines to meet perimeter tree planting requirement.

No landscape material shall be planted closer than 5 feet from the sides of any electric transformer box and all landscape material shall be planted a minimum of 10 feet from the door of such boxes.



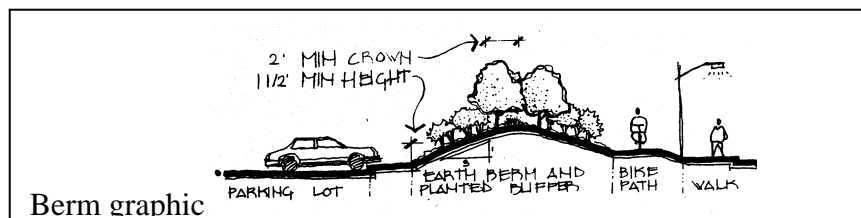
To assure that landscape materials do not constitute a driving hazard, a “sight triangle” will be observed at all street intersections including street intersections and intersections of alleys or driveways as illustrated below. The sight triangle shall be measured from edge of pavement to edge of pavement.

10.4.5 Planting Details

Any plant material introduced to meet the requirements of this Development Code shall be installed in accordance with sound planting guidelines adequate to sustain vigorous and healthy growth.

10.4.6 Berms

Any *berm* built to satisfy the requirements contained in this regulation shall be constructed as follows: a minimum height of 1 1/2 feet, and a minimum crown of 2 feet measured on a horizontal plane. Berms with side slopes greater than 3:1 shall be planted with ground cover that does not require mowing. Berms over 3 feet in height planted with woody plant material shall be permitted if the applicant demonstrates to satisfaction of Planning Commission staff that adequate measures will be taken to allow the proposed plants to thrive. Landscape plans shall indicate, by a detail drawing, or by specification in a note on the plan, the type and location of irrigation system to be used. Plans should be specific enough to show that adequate irrigation will be provided to all required plant materials.



10.4.7 Transplanting

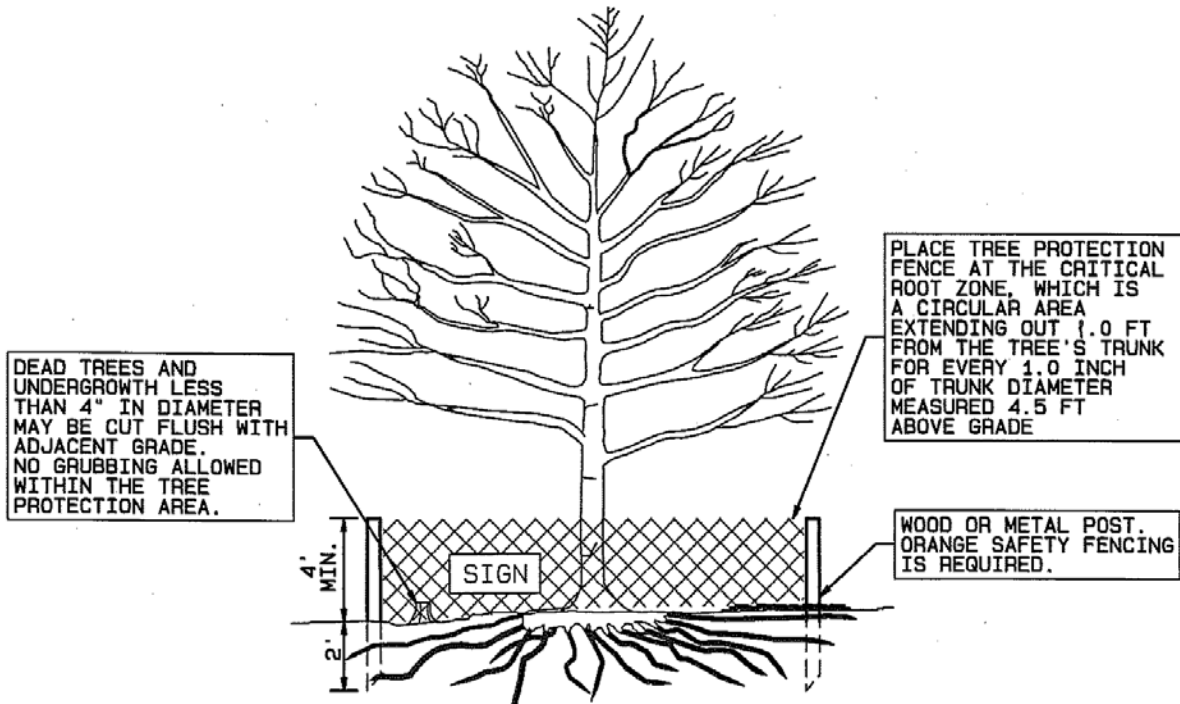
Any tree that is not nursery stock and is to be moved in order to meet requirements of this regulation shall be transplanted in accordance with sound planting guidelines adequate to sustain vigorous and healthy growth.

10.4.8 Protection During Construction

All tree preservation, tree canopy protection and woodland protection areas shall be identified, protected and preserved in accordance with Tree Preservation Policies of Louisville Metro Planning and Design Services.

Tree Protection Fencing – Protection fencing is designated as the materials used to protect the critical root zone of trees as illustrated below. Three basic types of protective fencing materials are allowed by the LDC. Type A and Type B are typical applications to be installed on sites two acres or less. Type C shall be installed on sites greater than two acres. Where type C is used signs shall be posted every 50 linear feet. The specific type of protective fencing shall be indicated on the tree preservation plan. Type C fencing shall be replaced by Type A or Type B fencing if it is deemed necessary by PDS staff upon site inspection and tree preservation plan review.

- Type A: Chain link fence (Typical Application – sites two acres or less). Type A protective fencing shall be installed in accordance with the approved construction detail and shall consist of a minimum five foot high chain link fencing with tubular steel support poles or “T” posts.
- Type B: Wood Fence (Typical Application – sites two acres or less). Type B protective fencing shall be installed in accordance with approved construction detail and shall consist of any vertical planking attached to 2x4 inch horizontal stringers which are supported by 2x4 inch intermediate vertical supports and a 4x4 inch at every fourth vertical support.
- Type C Other Materials (Typical Application – sites over two acres). Type C protective fencing shall be installed in accordance with approved construction detail. Signs shall be posted every 50 lineal feet. The material of the fencing may include high visibility plastic construction fencing or other approved equivalent restraining material. The fencing materials identified above shall be supported by steel pipe, tee posts, U posts or 2” x 4” timber posts that are a minimum of 5 ½ feet in height and spaced no more than eight feet (2.44 meters) on center.



NOTES:

1. SEE PLANS FOR LOCATION OF ALL TREE PROTECTION FENCES.
2. ALL TREE PROTECTION DEVICES MUST BE INSTALLED PRIOR TO LAND DISTURBANCE, INCLUDING THE CUTTING OF ANY TREES, AND MUST BE INSPECTED BY THE *Landscaper* Architect OR HIS DESIGNEE.
3. NO GRADING, TRENCHING, FILLING OR STORING OF MATERIALS IS TO OCCUR IN THE TREE PROTECTION AREA.
4. TREE PROTECTION FENCE MAY NOT BE REMOVED WITHOUT THE APPROVAL OF THE *Planning Commission* OR HIS DESIGNEE.
5. THE TREE *Preservation* PROTECTION AREA SHOULD BE DESIGNATED WITH "TREE PROTECTION AREA" SIGNS POSTED VISIBLY ON THE OUTSIDE OF THE FENCED-IN AREA. SIGNS MAY NOT BE POSTED ON THE TREES.

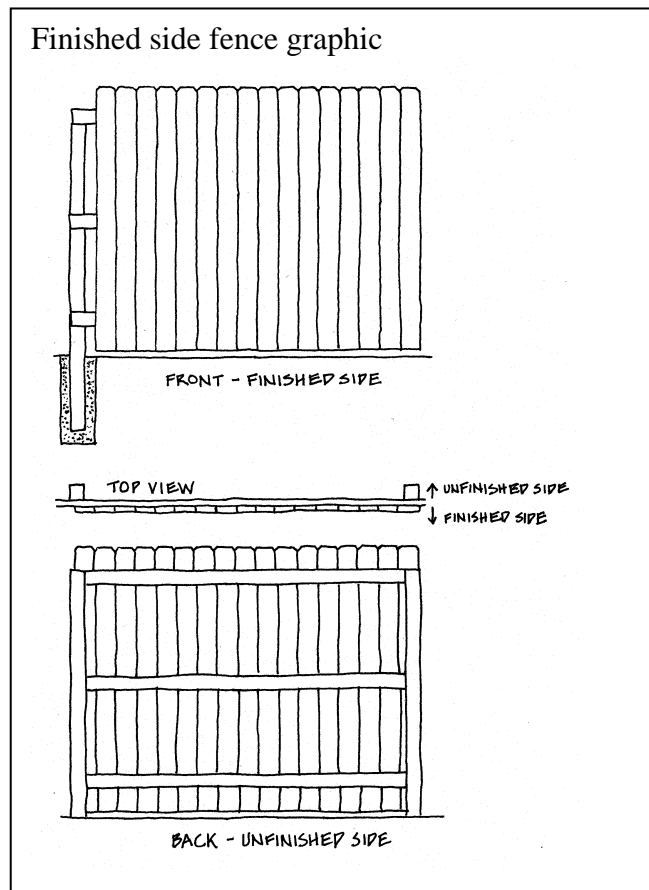
Tree Preservation/Protection Signage – All tree protection fences must be accompanied by "Stay Out" and "Tree Protection Area" signage. Size and text of sign will be standardized.

No clearing, grading or other land disturbing activities shall be allowed within the area enclosed by the tree protection barrier. No equipment, materials, or vehicles shall be stored or placed within the area enclosed by the tree protection fence.

To prevent compaction of the soil or root system, no parking, material storage, or construction activities are permitted within the boundaries of the constructed barrier or vegetative buffers, beyond that allowed for preliminary site investigation work,

10.4.9 Walls And Fences

Walls and fences built to satisfy the requirements of the Land Development Code shall meet the following standards. Walls shall be constructed of natural stone, brick, or other weatherproof materials approved by the Commission Director or designee. Fences shall be constructed of wood or other weatherproof, durable materials intended for exterior use and approved by the Commission Director or designee. Walls or fences used to satisfy screening requirements shall be at least 80% opaque. Fences shall provide a finished side facing the lower intensity use. Chain link fencing may not, under any circumstances be used to meet any screening requirements of this regulation, nor shall slats installed as part of a chain link fence be allowed to satisfy screening requirements. However, chain link fencing may be installed for other purposes within the required buffer area if it is used in addition to plants, berms or other allowable screening material and is not otherwise restricted by the form district regulation or other applicable parts of this Code. Walls and fences allowed to meet the requirements of this regulation shall not be used to display or support any sign or other advertising device.



10.4.10 Lighting

Any lights used to illuminate landscaping must be shown on the landscape plan.

10.4.11 Land Clearing

Selective Clearing - Selective clearing of trees, shrubs and underbrush may be necessary or desirable in certain instances. Trees along the edge of a preservation area may be susceptible to off site impact and non-construction impacts (such as when a newly created woodland edge is formed increasing exposure to higher winds and temperatures). Selective clearing may be an appropriate management technique within Woodland Preservation Areas after development to encourage new growth or longevity. Selective clearing may also be necessary for individual trees that may be in danger of falling on structures, roadways or other vehicular use areas, or into open sections of yard where outdoor activities are likely to take place.

Selective clearing will be limited to areas identified to allow such clearing on an approved Development Plan, Tree Canopy Plan or Landscape Plan and may only take place after the development is complete.

10.4.12 Implementation

On sites two (2) acres or less in size, all new trees proposed to meet the requirements of Chapter 10, parts 1, 2, 3 and 6 shall be planted within six months of the completion of the development or next planting season per PDS staff. The following further clarifies "completion of the development":

A. Subdivisions

1. Perimeter Landscaping – Landscaping shall be installed prior to recording of the record plat of the particular subdivision section.
2. Street Trees – The time line of installation shall be established by condition of approval for the subdivision at time of preliminary plan approval.

B. All Development Plans

1. Installation of landscaping shall be established and a note placed on the approved landscape plan indicating installation time line.

10.4.13 Maintenance

A. For any tree located on public or private property as a requirement of an approved Landscape or Tree Preservation Plan, the following activities are prohibited:

1. Attachment of rope, wire, nails, advertising posters, or other contrivances.
2. Deposition, placement, or storage of stone, brick, sand, concrete, or other materials which may impede the free passage of water, air, fertilizer to the root system.

- B. It will be the responsibility of the property owner to perpetually maintain all landscape areas and associated plant material required under these regulations. The property owner shall also be responsible for maintaining the verge and associated trees within the verge unless the agency having jurisdiction over that verge assumes that responsibility.
- C. All unhealthy or dead plant material shall be replaced within one year, or by the next planting period, whichever comes first, while other defective plant material shall be replaced or repaired within three (3) months.
- D. An authorized inspector shall have the right to enter onto any property to inspect the health and general condition of plant material that is:
 - 1. Located within the ROW
 - 2. Part of an approved development/landscape plan or
 - 3. Reported as a public hazard

10.4.14 Protection of Public Property

No person shall plant or intentionally damage, transplant, or remove any tree within any street right-of-way or on any municipal-owned property without approval by the agency having jurisdiction for that right-of-way. Any person or property owner acting without prior approval can be subject to the cost associated with any remedial measures necessary to correct an improper action. ***(Rationale: Ensure landscaping is installed on-site, survives on-site and that it is replaced when needed on-site.)***

10.4.15 Tree Service Contractors *(Reserved)*

10.4.16 Enforcement

- A. If a site is found in violation of the tree preservation policies and Code requirements mitigation measures will be enforced by the appropriate code enforcement agency. (Additional penalties for violations shall be determined by the Planning Commission or its designee.)
- B. Removal of trees shown to be preserved shall constitute a violation of binding elements and/or conditions of approval as applicable. Penalties and mitigation measures for removal of existing trees shown to be otherwise permanently preserved and removal of landscaping required by the LDC shall be determined by the Planning Commission or its designee.
- C. The replacement requirement is inches per inch. 3" caliper minimum trees from the preferred tree list may be used to add up to the number of inches removed. For example, if a 9" caliper tree is removed, 9" must be replaced. This can be accomplished by using three (3) 3" caliper replacement trees. Trees that are larger than 3" caliper also may be used.

*Editor's Note:
Inventory of outer
edge of TCPA: The
first 10 feet will serve
as the inventory of
area of disturbance.*

- D. The Tree Replacement Chart below will apply when Tree Canopy Preservation Areas have been removed, which were intended to remain. The tree inventory shall be used to determine the number and sizes of replacement trees required.
- E. Replacement trees shall be planted within six (6) months or next planting season after action taken by Planning Commission or designee.

Table 10.4.3 Tree Replacement Chart

Size of Removed Tree	Number of Replacement Trees Required	
4" - 6"	2	(3" minimum caliper for replacement deciduous trees and 12' height minimum for evergreen trees)
>6" - 9"	3	
> 9" - 12"	4	
>12" - 16"	5	
>16" - 20"	6	
>20" - 24"	7	
>24" - 28"	8	
>28" - 32"	9	
>32" - 36"	10	
>36"	The equivalent of 3" caliper trees or greater needed to equal the DBH of the removed tree	