
PLANTING MANUAL AND LANDSCAPE REGULATION GUIDELINES

I. INTRODUCTION

The following charts, graphic details, specifications and guidelines are provided to assist persons in conforming to the Landscape Ordinance, of the Zoning Regulations. The plant lists that are provided are suggested plant materials for the various use groups and are plants that have been successful in this region for urban landscaping. The plant list is not limited to the plant materials indicated in this manual. The graphic details and planting specifications are not mandatory but are the guidelines that are helpful in completing a landscape project in a proper manner. The plan submission guidelines should be helpful to the Zoning/Building Inspection personnel in reviewing and approving plans.

II. PLAN SUBMISSION REQUIREMENTS

Plans must be submitted to indicate new project conformity to the Landscape Ordinance. The plan must be a scaled drawing preferably no smaller than 1" = 100'.

A. **LANDSCAPE PLAN:** The following is information that should be contained on each landscape plan submitted for review:

1. All property lines with metes and bounds should be shown for the project parcel.
2. All adjacent property owners, land uses/zones, rights-of-way and easements should be identified on the plan.
3. Location of all existing and proposed buildings and structures.
4. Location of all driveways, parking areas, loading areas and adjacent off-site roads and streets.
5. Location of dumpster and trash facilities, including dumpster screening details.
6. Location of existing trees and vegetation that are to be retained as part of the required landscaping.
7. Location of underground and overhead utility lines in addition to location of utility easements.
8. Proposed grading/excavation information - contour lines would be preferable.
9. Location of all proposed plant material keyed to a plant schedule.
10. Plant schedule that should contain information as follows: Plant common and botanical name, plant size (height, spread, caliper or container size), quantity of each specie to be planted and any specific planting notes.
11. Indication of areas for sodding and seeding.

- 12. Statistics that contain total square footage of parking/drive areas and interior parking lot landscaping.
- 13. Plan certification that should read as follows:

I/We do hereby certify that this landscape plan has been reviewed by me/us and do adopt this plan and all information contained herein as the plan for minimum landscape development for this project. I do further certify that all plant material will be maintained to meet the requirements of the Landscape Ordinance unless an approval to amend the landscape is granted by _____.

_____ Owner(s)
 Date Witness

B. A Tree Protection/Planting Plan requires the applicant to locate all trees planned for preservation and to describe protection methods to be used during construction. This plan may be a part of the landscape plan and should include the following information:

- 1. Location of trees to be preserved
- 2. Dbh of all trees to be protected
- 3. Contour lines
- 4. Limits of clearing, trenching, access routes for heavy equipment, etc. that may be dangerous to the tree(s).
- 5. Methods of tree protection should be noted
 - a. tree fencing
 - b. erosion control - if needed
 - c. retaining walls/tree wells - if needed
 - d. tunneling for utilities - if needed
 - e. aeration systems - if needed
 - f. transplanting - if needed
 - g. staking
 - h. Tree signing, etc.
- 6. Building locations and concrete features
- 7. Indicate material storage, concrete washout, and debris burn and burial holes where these area might affect tree protection.

III. TREE PRESERVATION GUIDELINES

Trees provide many benefits to people and they help to maintain the quality of life in our city. Although people receive many benefits from trees, they seldom

realize that their activities may injure or kill a tree. Healthy trees contribute to man's enjoyment but an unhealthy tree is both unsightly and dangerous. Since trees are easily disturbed by changes in their environment, one is encouraged to consider the following before disrupting the tree surroundings.

Evaluation

Decide which of your trees to save by evaluating each one of them carefully. Analyze the location, species, size, age, and vigor of each tree and then consider the costs and benefits involved in protecting the tree. If additional information on tree preservation is needed, consult the Urban Forestry Resource Evaluation Study (Bibliography Page).

Location of Trees

The location of each tree should be analyzed with respect to its relative location in the landscape. Before building a structure near trees ask yourself these questions.

- Will the tree provide shade where it is wanted or will it block out desired sunlight?
- Will the tree protect the structure from winter winds or will it block out the summer breezes?
- Will the tree screen an unpleasant view or will it block out a desirable view?

Species

The tree species is considered to determine if its characteristics are desirable for the proposed situation. Shallow rooted trees hinder the growth of lawns and gardens while deep rooted trees are notorious for blocking storm and sanitary sewer lines. Some trees are susceptible to diseases and insects, which may make saving them uncertain. So consult the tables in this manual or ask a specialist before deciding which trees to retain.

Size, Age, and Vigor

When considering the size, age, and vigor of a tree, keep these points in mind.

- Large and old trees do not adapt well to changes in their environment, hence should have minimal changes.
- A small tree can be replaced easily and replacing it may be cheaper than preserving it.

- Annual twig growth, amount of dead material, and the size and color of leaves are indications of health and vigor. Compare the tree with other trees of the same species.

After deciding which trees to keep, remove the undesirable trees before construction begins. Use a professional with experience in tree removal so that the remaining trees will not be damaged. The trees chosen to be saved will have to be protected from one or more of the following:

- Construction equipment
- Grade changes
- Excavation for utilities
- Paving
- Footers for the house or wall

Protection From Machinery

Most of the damage caused by machinery occurs to the root system from compaction. Some damage by machinery may also occur to the trunk and low hanging branches. Construct a simple fence or barrier which encloses the entire area beneath the tree canopy. Be sure that all exposed roots are enclosed in this area. As an added note of caution roots can go out much wider than the tree canopy in many cases.

Protection From Grade Changes

Grade changes, either raising or lowering the grade greatly affects the amount of air, water and minerals available to the tree. Air, water and minerals are necessary for the trees survival, so any alterations in the trees grade should be planned properly. If a tree is valuable enough to justify saving, get professional help from a landscape architect, arborist or the County Extension Agent.

Raising the Grade

Fill added around a tree prevents normal air and water circulation in the original soil and will damage the roots. Minor fills - less than 4" will not harm most species, if the fill is high in organic matter. Be sure that a particular species can survive this change before fill is added. Major fill around a tree requires that air be supplied to the roots and that excess water be removed. This is usually done by installing a tile drain system. This system has to be designed for each tree individually so an expert should be consulted.

Lowering the Grade

While protecting a tree from a lowered grade is less complicated than protecting it from a raised grade, it can be equally harmful unless proper attention is given to root pruning, pruning branches and stimulating root growth. Generally, protection is achieved by terracing the grade, if the space is available. Another way to protect a tree from a lowered grade is to build a retaining wall. This is an effective way of achieving a grade difference to save a tree, if it is less than 2' (see Figure 1).

Excavating

Trees need to be protected from excavations for utilities because the soil moisture content is altered and the number of roots are decreased. If the route of the utilities can't be kept from underneath the tree, then tunneling should be done to reduce damage to the roots. Tunneling should be done from both sides. Start tunneling below the main lateral roots as soon as a 1" diameter root is encountered (see Figure 2).

Protection From Paving

When paving is installed over the roots of the tree, it is necessary to insure the proper aeration of the root zone. This can be accomplished with a tree well as described in the grade changes section. If paving is laid directly over the roots, soil should be removed to the bottom of the lateral roots. Gravel should be filled in around the roots and 4" layer of Styrofoam should be laid over the roots to allow for root expansion.

Protection From Foundations

When constructing foundations, tree roots can be dealt with in two ways; by cutting the roots or by bridging over them. When a basement is to be installed, roots have to be cut and a 3' deep trench should be dug between the roots and the foundation. After the roots are properly pruned, the trench should be filled with decomposed organic matter. Treatment of the roots should be done prior to the installation of the forms.

The second method, bridging, should be used when a foundation is placed over the roots. Roots should be exposed and the desired depth of the footers should be dug between the roots. 4" of Styrofoam should be wrapped around the roots where the concrete is placed over them.

Procedures

Whenever a tree's environment is disturbed, the following procedures should be observed.

Root Pruning

When it becomes necessary to cut roots, it should be done by the following procedure. Uncover the shattered end of the roots so that the root can be cut off squarely. Do not allow roots to remain exposed for an extended period of time. The ends of the cut roots should be covered with decomposed organic matter and the tree should be fertilized. The amount and frequency of fertilization will be determined by the extent of the root cutting. If possible the affected tree should be fertilized a year in advance.

Compensatory Trimming

After root trimming is completed, trimming of the tree should be done to reduce the physiological demands on the remaining roots, and to reduce the possibility of the tree being uprooted by wind. Refer to the pruning section of this manual for further details.

Limb Pruning

If a tree has been construction damaged, pruning should be delayed 1 - 3 years or until the deadwood near and at the tree crown becomes evident. Removing these limbs before this time could endanger the health of the tree and possibly kill it.

Topping trees or cutting of limbs to stubs is not considered proper for the maintenance of trees as required by these Regulations. Tree pruning cuts shall be made sufficiently close to the trunk or parent limb without cutting into the branch collar or leaving a protruding stub so that closure can readily start under normal conditions. All branches should be precut so as to avoid bark splitting or peeling.

Watering

If drainage patterns are altered, be sure that the tree is not damaged. If a trees' normal moisture level is changed some form of mitigation will be required. Trees will also have to be watered when their roots are cut. This should be done by setting a sprinkler on at low pressure and allowing it to operate until run-off occurs. Allow 4 - 8 hours to pass and reapply the water in the same manner.

IV. PLANT LISTS

The following lists of trees and plants are to be used for reference when preparing landscape plans for compliance with the (city/county) zoning ordinance. Please note that with the exception of Plant List G, Unacceptable Plants, the Plant Lists are only suggestions of use groups that have been

successful in this region for urban landscaping. The choice of plant materials is not limited to those of the lists, but all plants and trees specified on landscape plans that are not included must have proven acceptable in this region.

PLANT LIST A: SHADE TREES (Mature height greater than 30 ft.)

PLANT LIST B: FLOWERING AND NON - FLOWERING TREES
(Mature height less than 30 ft. for use under power lines.)

PLANT LIST C: EVERGREEN/BROADLEAF TREES

PLANT LIST D: DECIDUOUS SHRUBS

PLANT LIST E: EVERGREEN/BROADLEAF SHRUBS

PLANT LIST F: STREET TREES

PLANT LIST G: UNACCEPTABLE PLANTS AND TREES

EXAMPLE LEGEND OF PLANT LIST:

Common Plant Name	Anglojap Yew
Plant Botanical Name	Taxus media
Specie Cultivars	x brownii
	x hicksii
	x wardii

PLANT LIST A
SHADE TREES

Trees that are hardy in zones 5 - 6 are deciduous and reach a mature height of greater than 30 feet.

Common Plant Name	Littleleaf Linden	
Plant Botanical Name	Tilia cordata	
Specie Cultivars	x chancellor x greenspire x june bride	
Common Plant Name	European Beech	Norway Maple
Plant Botanical Name	Fagus sylvatica	Acer platanoides
Specie Cultivars		x columnaire x crimson king x summershade
Common Plant Name	Ginkgo	Pin Oak
Plant Botanical Name	Ginkgo biloba (male only)	Quercus palustris
Specie Cultivars	x autumn gold x fastigiata x sentry	x sovereign x crown rite
Common Plant Name	Green Ash	Red Maple
Plant Botanical Name	Fraxinus pennsylvanica lanceolata	Acer rubrum
Specie Cultivars	x marshall seedless	x autumn flame x october glory x red sunset
Common Plant Name	Japanese Pagoda Tree	Red Oak
Plant Botanical Name	Sophora japonica	Quercus rubra
Specie Cultivars	x regent	
Common Plant Name	Japanese Zelkova	Scarlet Oak
Plant Botanical Name	Zelkova serrata	
Specie Cultivars	Quercus coccinea	
Common Plant Name	London Plane Tree	
Plant Botanical Name	Platanus acerifolia	
Specie Cultivars		
Common Plant Name	Sugar Maple	Sweetgum
Plant Botanical Name	Acer saccharum	Liquidambar styraciflua
Specie Cultivars		

PLANT LIST A (continued)
SHADE TREES

Common Plant Name	Thornless Honey Locust	Tulip Poplar
Plant Botanical Name	Gleditsia triacanthos	Liriodendron tulipifera
Specie Cultivars	x moraine x shademaster x skyline x imperial	
Common Plant Name	Willow Oak	Yellowwood
Plant Botanical Name	Quercus phellos	Cladrastis lutea
Specie Cultivars		
Common Plant Name	Black Maple	
Plant Botanical Name	Acer saccharum	
Specie Cultivars	x nigrum	
Common Plant Name	Katsura Tree	
Plant Botanical Name	Cercidiphyllum japonicum	
Specie Cultivars		
Common Plant Name	Hardy Rubber Tree	
Plant Botanical Name	Eucommia ulmoides	
Specie Cultivars		
Common Plant Name	American Beech	
Plant Botanical Name	Fagus grandifolia	
Specie Cultivars		

PLANT LIST B
FLOWERING TREES

Trees that are hardy in zones 5 - 6 are deciduous and reach a mature height not exceeding 30 feet.

Common Plant Name	Callery Pear
Plant Botanical Name	Pyrus calleryana
Specie Cultivars	x aristocrat x chancellor
Common Plant Name	Crabapple
Plant Botanical Name	Malus varieties
Specie Cultivars	x bob white x sargeant x snowdrift x white angel
Common Plant Name	Eastern Redbud
Plant Botanical Name	Cercis canadensis
Specie Cultivars	x flame x forest pansy x royal
Common Plant Name	Flowering Dogwood*
Plant Botanical Name	Cornus florida
Specie Cultivars	x cherokee chief x cherokee princess x rubra x white cloud
Common Plant Name	Kousa Dogwood*
Plant Botanical Name	Cornus kousa
Specie Cultivars	x milky way
Common Plant Name	Pagoda Dogwood*
Plant Botanical Name	Cornus alternifolia
Specie Cultivars	
Common Plant Name	Golden Raintree
Plant Botanical Name	Koelreutaria paniculata
Specie Cultivars	
Common Plant Name	Green Hawthorne
Plant Botanical Name	Crataegus viridis
Specie Cultivars	x winter king

PLANT LIST B (continued)
FLOWERING TREES

Common Plant Name	Sargent Cherry
Plant Botanical Name	Prunus sargentii
Specie Cultivars	x columnaris x kwanzan
Common Plant Name	Saucer Magnolia*
Plant Botanical Name	Magnolia soulangiana
Specie Cultivars	
Common Plant Name	Star Magnolia*
Plant Botanical Name	Magnolia stellata
Specie Cultivars	
Common Plant Name	Fringe Tree
Plant Botanical Name	Chionanthus virginicus
Specie Cultivars	
Common Plant Name	Higan Cherry
Plant Botanical Name	Prunus subhirtella
Specie Cultivars	
Common Plant Name	Downy Serviceberry
Plant Botanical Name	Amelanchier arborea
Specie Cultivars	
Common Plant Name	Sweet Bay*
Plant Botanical Name	Magnolia virginiana
Specie Cultivars	
Common Plant Name	Sourwood
Plant Botanical Name	Oxydendron arboreum
Specie Cultivars	
Common Plant Name	Eastern Redbud
Plant Botanical Name	Cercis canadensis
Specie Cultivars	
Common Plant Name	Washington Hawthorn
Plant Botanical Name	Crataegus phaenopyrum
Specie Cultivars	
Common Plant Name	Green Hawthorn
Plant Botanical Name	Crataegus virides
Specie Cultivars	x winter king

PLANT LIST B (continued)
FLOWERING TREES

Common Plant Name	Japanese Flowering Crabapple
Plant Botanical Name	Malus floribunda
Specie Cultivars	

Common Plant Name	Japanese Flowering Cherry
Plant Botanical Name	Prunus serrulata
Specie Cultivars	

- These trees survive better in shady, sheltered conditions and would not be acceptable unless planted on the north or east of buildings.

•

PLANT LIST B (continued)
NON-FLOWERING ORNAMENTAL TREES
AND OTHER TREES SUITABLE FOR USE UNDER POWER LINES

Common Plant Name	Japanese Maple
Plant Botanical Name	Acer palmatum
Specie Cultivars	
Common Plant Name	Camperdown Elm
Plant Botanical Name	Ulmus galbra camperdownii
Specie Cultivars	
Common Plant Name	Paperbark Maple
Plant Botanical Name	Acer griseum
Specie Cultivars	
Common Plant Name	River Birch
Plant Botanical Name	Betula nigra
Specie Cultivars	
Common Plant Name	Trident Maple
Plant Botanical Name	Acer buereranum
Specie Cultivars	
Common Plant Name	Hedge Maple
Plant Botanical Name	Acer campestre
Specie Cultivars	
Common Plant Name	Amur Maple
Plant Botanical Name	Acer ginnala
Specie Cultivars	

PLANT LIST C
EVERGREEN/BROADLEAF TREES

Trees that are hardy in zones 5 - 6 are evergreen, can reach a mature height over 30 feet and if not limbed - up can create a screen from the ground level up.

Common Plant Name	American Holly
Plant Botanical Name	Ilex opaca
Specie Cultivars	x xanthocarpa
Common Plant Name	Austrian Pine
Plant Botanical Name	Pinus nigra
Specie Cultivars	
Common Plant Name	Canadian Hemlock
Plant Botanical Name	Tsuga canadensis
Specie Cultivars	
Common Plant Name	Carolina Hemlock
Plant Botanical Name	Tsuga caroliniana
Specie Cultivars	
Common Plant Name	Eastern Red Cedar
Plant Botanical Name	Juniperus virginiana
Specie Cultivars	
Common Plant Name	Colorado Blue Spruce
Plant Botanical Name	Picea pungens
Specie Cultivars	x glauca
Common Plant Name	Norway Spruce
Plant Botanical Name	Picea abies
Specie Cultivars	
Common Plant Name	Scotch Pine
Plant Botanical Name	Pinus sylvestris
Specie Cultivars	
Common Plant Name	White Fir
Plant Botanical Name	Abies concolor
Specie Cultivars	
Common Plant Name	White Pine
Plant Botanical Name	Pinus strobus
Specie Cultivars	

PLANT LIST C (continued)
EVERGREEN/BROADLEAF TREES

Common Plant Name	Japanese Red Pine
Plant Botanical Name	Pinus densiflora
Specie Cultivars	

Common Plant Name	Lacebark Pine
Plant Botanical Name	Pinus bungeana
Specie Cultivars	

PLANT LIST D
DECIDUOUS SHRUBS

Perennial woody plants that grow at least 3 feet in height, are tolerant in zones 5 - 6 and are deciduous.

Common Plant Name	Burning Bush
Plant Botanical Name	Euonymus alata
Specie Cultivars	x compacta
Common Plant Name	Doublefile Viburnum
Plant Botanical Name	Viburnum plicatum tomentosum
Specie Cultivars	
Common Plant Name	Forsythia Species
Plant Botanical Name	
Specie Cultivars	
Common Plant Name	Glossy Abelia
Plant Botanical Name	Abelia grandiflora
Specie Cultivars	
Common Plant Name	Quince
Plant Botanical Name	Chaenomeles specina
Specie Cultivars	
Common Plant Name	Shrub Cinquefoul
Plant Botanical Name	Potentilla fruticosa
Specie Cultivars	
Common Plant Name	Spiria Species
Plant Botanical Name	
Specie Cultivars	
Common Plant Name	Spreading Cotoneaster
Plant Botanical Name	Cotoneaster divaricata
Specie Cultivars	
Common Plant Name	Wintergreen Barberry
Plant Botanical Name	Berberis julianne
Specie Cultivars	
Common Plant Name	Cornelian Cherry Dogwood
Plant Botanical Name	Cornus mas
Specie Cultivars	

PLANT LIST D (continued)
DECIDUOUS SHRUBS

Common Plant Name	Large Fothergilla*
Plant Botanical Name	Fothergilla major
Specie Cultivars	
Common Plant Name	Arnold Promise Witchhazel*
Plant Botanical Name	Hamamelis intermedia
Specie Cultivars	x arnold promise
Common Plant Name	Vernal Witchhazel
Plant Botanical Name	Hamamelis vernalis
Specie Cultivars	
Common Plant Name	Snowball Hydrangea
Plant Botanical Name	Hydrangea paniculata
Specie Cultivars	x grandiflora
Common Plant Name	Winterberry
Plant Botanical Name	Ilex verticullata
Specie Cultivars	
Common Plant Name	Panicle Hydrangea
Plant Botanical Name	Hydranga paniculata
Specie Cultivars	
Common Plant Name	Beauty Bush
Plant Botanical Name	Kolkwitzia amabilis
Specie Cultivars	
Common Plant Name	Spicebush
Plant Botanical Name	Lindera benzoin
Specie Cultivars	
Common Plant Name	Cutleaf Buckthorn
Plant Botanical Name	Rhamnus frangula
Specie Cultivars	x asplenifolia
Common Plant Name	Burkwood Viburnum
Plant Botanical Name	Viburnum burkwoodii
Specie Cultivars	
Common Plant Name	Fragrant Viburnum
Plant Botanical Name	Viburnum carlcephalum
Specie Cultivars	

PLANT LIST D (continued)
DECIDUOUS SHRUBS

Common Plant Name Arrowwood Viburnum
Plant Botanical Name Viburnum dentatum
Specie Cultivars

Common Plant Name Chinese Snowball Viburnum
Plant Botanical Name Viburnum macrocephalum
Specie Cultivars

Common Plant Name Black Haw
Plant Botanical Name Viburnum prunifolium
Specie Cultivars

PLANT LIST E
EVERGREEN /BROADLEAF SHRUBS

Perennial, woody plants that grow at least 3 feet in height are tolerant in zones 5 - 6 and are evergreen.

Common Plant Name	Anglojap Yew
Plant Botanical Name	Taxus media
Specie Cultivars	x brownii x densiformis x hicksii x wardii
Common Plant Name	Blue Holly
Plant Botanical Name	Ilex meserveae
Specie Cultivars	x blue angel x blue prince x blue princess
Common Plant Name	Chinese Juniper
Plant Botanical Name	Juniperis chinensis
Specie Cultivars	x hetzii x keteleeri x mint julip x robusta green x mount batten x pfitzeriana
Common Plant Name	Japanese Holly
Plant Botanical Name	Ilex crenata
Specie Cultivars	x microphylla x rotundifolia
Common Plant Name	Japanese Yew
Plant Botanical Name	Taxus cuspidata
Specie Cultivars	x capitata x intermedia x nana
Common Plant Name	Korean Boxwood
Plant Botanical Name	Buxus microphylla koreana
Specie Cultivars	x koreana
Common Plant Name	Leatherleaf Viburnum
Plant Botanical Name	Viburnum rhytidophyllum
Specie Cultivars	

PLANT LIST E (cont.)
EVERGREEN /BROADLEAF SHRUBS

Common Plant Name	Mugho Pine
Plant Botanical Name	Pinus mugho
Specie Cultivars	
Common Plant Name	Spreading Yew
Plant Botanical Name	Taxus baccata
Specie Cultivars	
Common Plant Name	Mountain Laurel
Plant Botanical Name	Kalmia latiolia
Specie Cultivars	
Common Plant Name	Dwarf Alberta Spruce
Plant Botanical Name	Picea glauco
Specie Cultivars	x conica
Common Plant Name	Catawba Rhododendron
Plant Botanical Name	Rhododendron catawbiense
Specie Cultivars	
Common Plant Name	Azalea (Evergreen)
Plant Botanical Name	Rhododendron
Specie Cultivars	

PLANT LIST F STREET TREES

Small trees

Recommended street trees that are hardy in zones 5 and 6. Some of these trees may also be suitable for shade trees. See Plant List A.

Common Plant Name	Trident Maple
Plant Botanical Name	Acer ginnela
Specie Cultivars	
Common Plant Name	Cockspur Hawthorn
Plant Botanical Name	Crataegus crus-galli
Specie Cultivars	x lavallai
Common Plant Name	English Hawthorn
Plant Botanical Name	Crataegus monogyna
Specie Cultivars	x laevigata

Medium Trees

Common Plant Name	American Hornbeam	Hop Hornbeam
Plant Botanical Name	Carpinus caroliniana	Ostrya virginia
Specie Cultivars		
Common Plant Name	* Callery Pear	Japanese Hornbeam
Plant Botanical Name	Pyrus calleryana	Carpinus carolina
Specie Cultivars		x japonica
Common Plant Name	European Hornbeam	Nikko Maple
Plant Botanical Name	Carpinus betulas	Acer maximowicziana
Specie Cultivars		
Common Plant Name	Green Hawthorn	Mulberry spp.
Plant Botanical Name	Crataegus viridis	Morus spp.
Specie Cultivars	x winter king	
Common Plant Name	Hedge maple	
Plant Botanical Name	Acer camestres	
Specie Cultivars		

PLANT LIST F (continued)
STREET TREES

Large Trees

Common Plant Name	Amur Corktree	
Botanical Plant Name	Phellodendron amurense	
Specie Cultivars		
Common Plant Name	Blue Ash	* Linden spp.
Plant Botanical Name	Fraxinus quadrangulata	Tilia spp.
Specie Cultivars		
Common Plant Name	Bur Oak	*Northern Red Oak
Plant Botanical Name	Quercus macrocarpa	Quercus rubra
Specie Cultivars		
Common Plant Name	Chestnut Oak	*Norway Maple
Plant Botanical Name	Quercus prinus	Acer platanoides
Specie Cultivars		
Common Plant Name	Common Hackberry	* Pin Oak
Plant Botanical Name	Celtis occidentalis	Quercus palustris
Specie Cultivars		
Common Plant Name	* Ginkgo (male variety only)	* Red Maple
Plant Botanical Name	Ginkgo biloba	Acer rubrum
Specie Cultivars		
Common Plant Name	* Green Ash	Shingle Oak
Plant Botanical Name	Fraxinus pennsylvanica	Quercus imbricaria
Specie Cultivars	x marshall's seedless	
Common Plant Name	* Honey locust	* Sweet Gum
Plant Botanical Name	Gleditsia triacanthos	Liquidamber styraciflua
Specie Cultivars	x sunburst	
	x skyline	
	x moraine	
Common Plant Name	* Japanese Pagoda Tree	* Tulip Poplar
Plant Botanical Name	Sophora japonica	Liriodendron tulipifera
Specie Cultivars		

- These trees are also be acceptable for shade trees.

**PLANT LIST G
UNACCEPTABLE PLANTS**

Trees and shrubs that are not hardy in zones 5 - 6 may have excessive fruit, leaf or limb drop, may interfere with underground utilities, attract excessive insects, are weak wooded, disease prone, pollution intolerant, noxious or require excessive maintenance.

Common Plant Name Plant Botanical Name Specie Cultivars	Apple (common) Malus pummila	Mountain Ash Sorbus species
Common Plant Name Plant Botanical Name Specie Cultivars	Black Locust Robinia pseudoacacia	Osage Orange Maclura promifera
Common Plant Name Plant Botanical Name Specie Cultivars	Box Elder Acer negundo	Mulberries Morus species
Common Plant Name Plant Botanical Name Specie Cultivars	Chinese Holly Ilex cornuta	Privet Ligustrum species
Common Plant Name Plant Botanical Name Specie Cultivars	Devil's Walking Stick Aralia spinosa	Poplars Populus species
Common Plant Name Plant Botanical Name Specie Cultivars	Elms (except Chinese & American) Ulmus species	
Common Plant Name Plant Botanical Name Specie Cultivars	Ginkgo (female) Ginkgo biloba	Silver Maple Acer saccharinium
Common Plant Name Plant Botanical Name Specie Cultivars	Hickories Carya species	Sycamore Platarius occidentalis
Common Plant Name Plant Botanical Name Specie Cultivars	Honey locust (common) Gleditsia triacanthos	Tartarian Honeysuckle Lonicera tartarica
Common Plant Name Plant Botanical Name Specie Cultivars	Horse Chestnut Aesculus species	Tree of Heaven Ailanthus altissima

PLANT LIST G (continued)
UNACCEPTABLE PLANTS

Common Plant Name	Kentucky Coffee Tree (female)	Walnut
Plant Botanical Name	Gymnocledus dioica	Juglans species
Specie Cultivars		

Common Plant Name	Mimosa	Weigela
Plant Botanical Name	Albizza julibrisson	Weigela florida
Specie Cultivars		

Common Plant Name	Weeping Willow
Plant Botanical Name	Salix babylonica
Specie Cultivars	

Note: If mature trees exist on site prior to development, they may be accepted by the legislative body.

V. RECOMMENDED GUIDELINES FOR FIELD INSPECTION AND VERIFICATION OF CONFORMANCE TO LANDSCAPE ORDINANCE

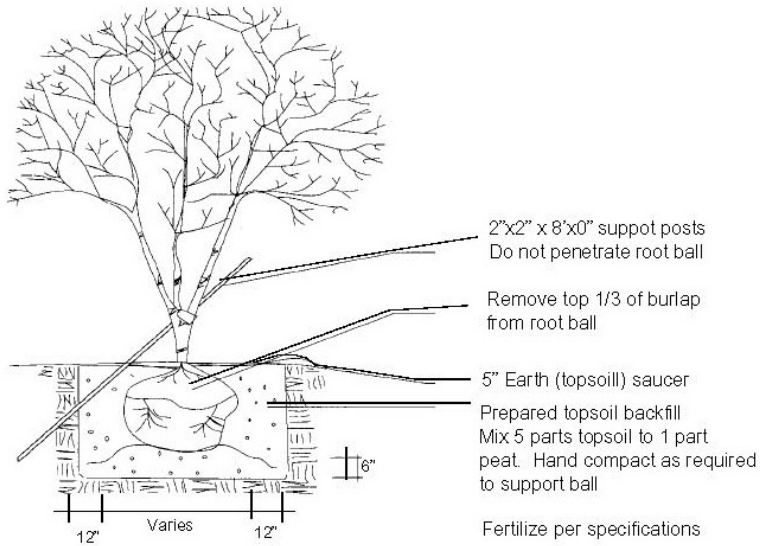
Prior to final approval of a new development project, the requirements of the Landscape Ordinance must have been met. The following guidelines are for the benefit of the Inspector to aid in checking the requirements of the approved landscape plan. In addition to these guidelines, the Inspector shall use the "Inspection Guide for Landscape Planting", published by the American Association of State Highway Officials. A copy of this publication shall be on file at the Northern Kentucky Area Planning Commission, 2332 Royal Drive, Ft. Mitchell. "The American Standard for Nursery Stock", published by the American Association of Nurserymen shall be used in checking plant material quality. This publication will also be on file at the Northern Kentucky Area Planning Commission.

- A. Verify the location and area requirements for all interior landscaping so that conformance to Vehicular Use Area requirements will be met.
- B. Check dumpster screening requirements and determine if screening materials meet the minimum construction requirements as specified on the approved landscape plan.
- C. Check plant material quantities, species, sizes and locations to determine conformance to approved landscape plan.
- D. Verify that perimeter landscape requirements have been met and determine if there are any encroachments into landscape easements.
- E. Use the various check lists that are provided in the "Inspection Guide for Landscaping Planting".
- F. Upon completion of inspection, file a report with the project Owner. If a reinspection is necessary, schedule after adequate time has been given for corrections to be made.
- G. Place a one - year inspection into inspection schedule.

VI. EXAMPLE DRAWINGS

The following drawings are intended to provide further explanation for the requirements found in the Landscape Requirements Table and for typical planting of large and small trees, evergreen trees, and shrubs.

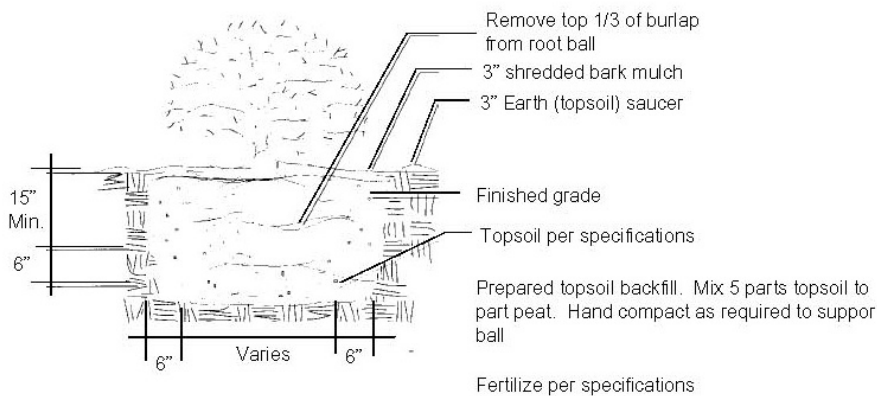
TYPICAL SMALL TREE PLANTING



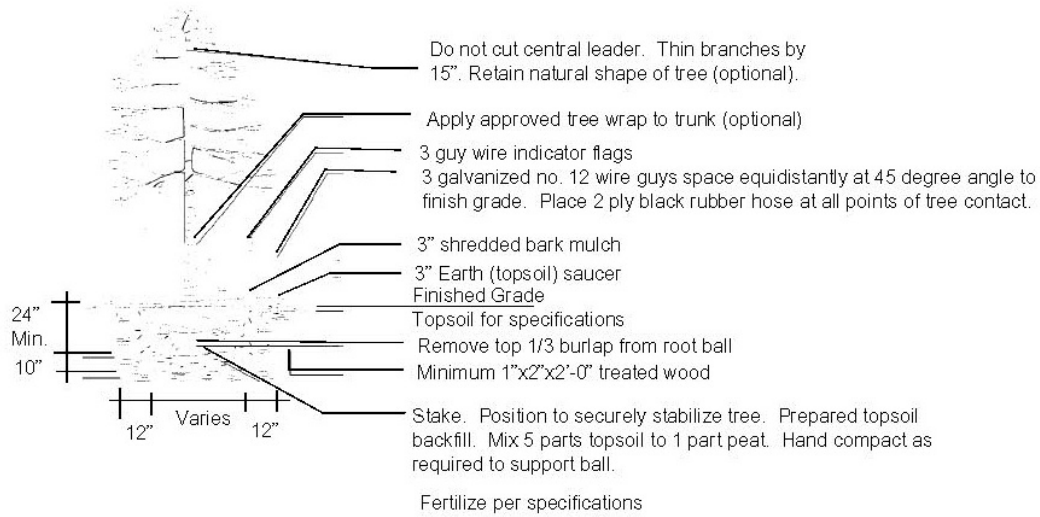
Note:
Container grown plant material may be substituted for burlap material

Plant material shall not be pruned prior to installation; after plants have been installed, each plant may be pruned for uniformity

TYPICAL SHRUB PLANTING



TYPICAL LARGE TREE PLANTING



Note:
Any series of trees placed in a particular arrangement will be field checked for accuracy. Any trees misplaced will be subject to rejection.

TYPICAL EVERGREEN TREE PLANTING

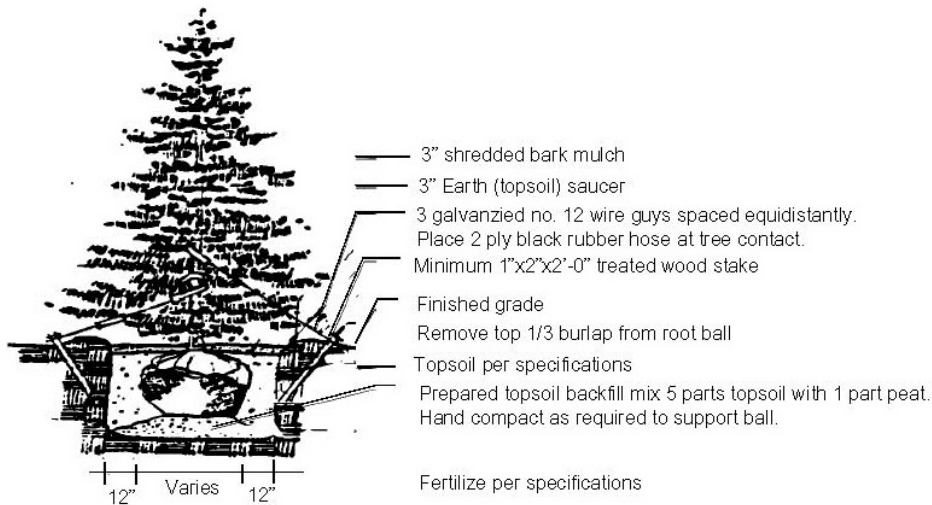


FIGURE 1

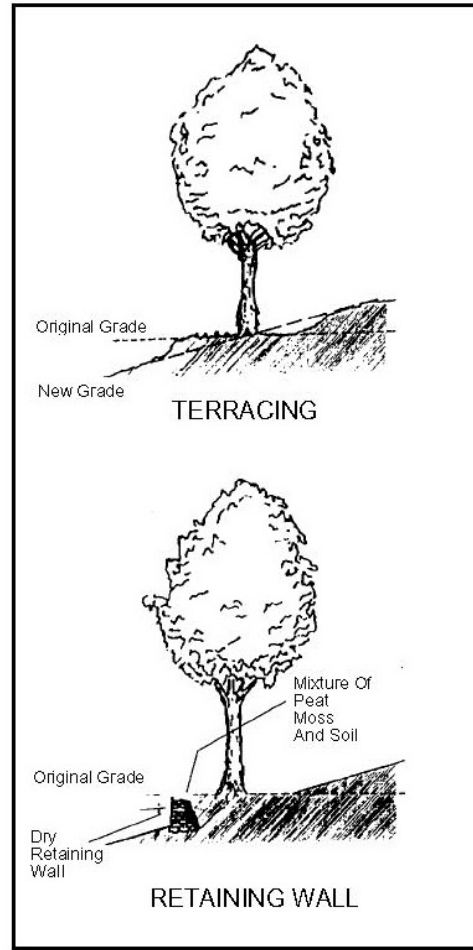
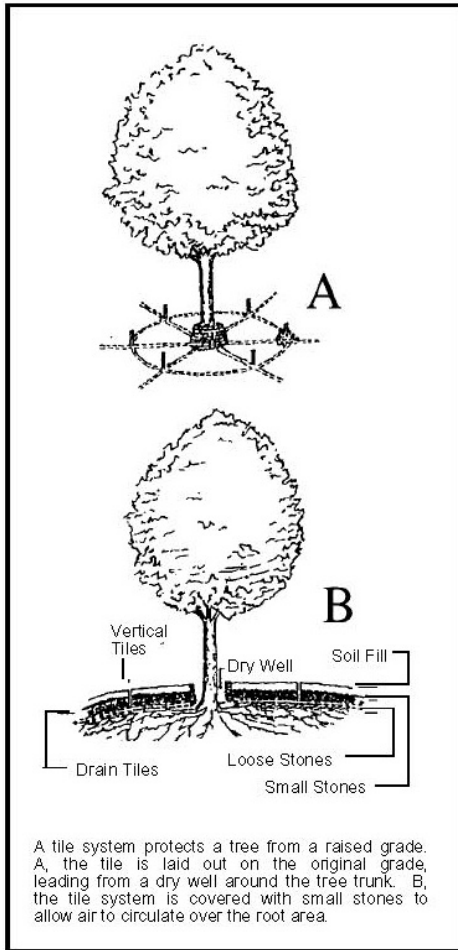
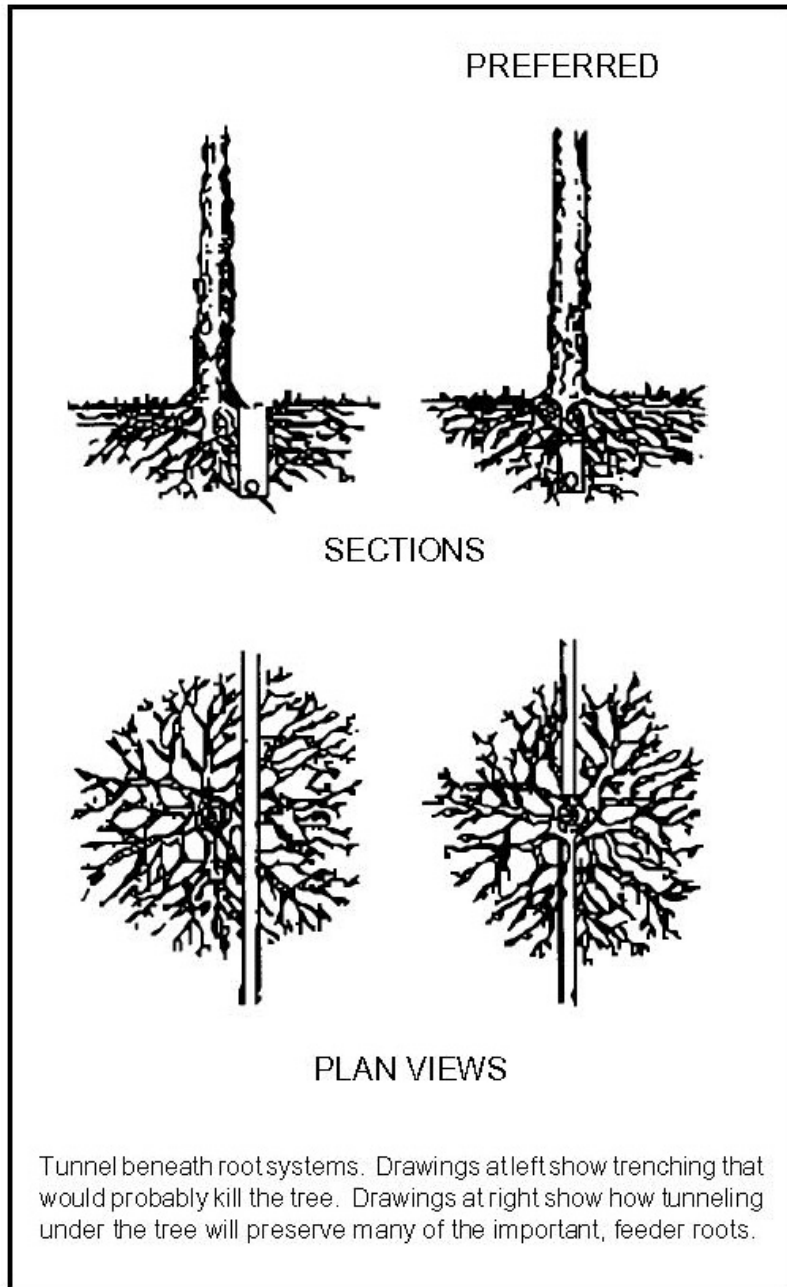
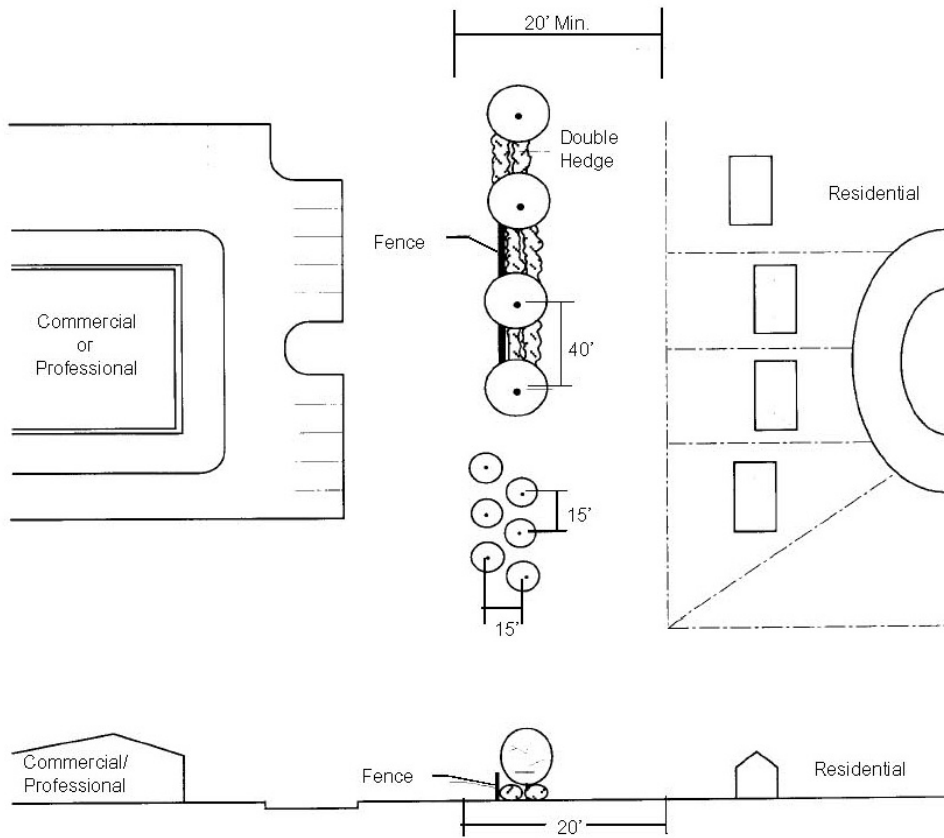


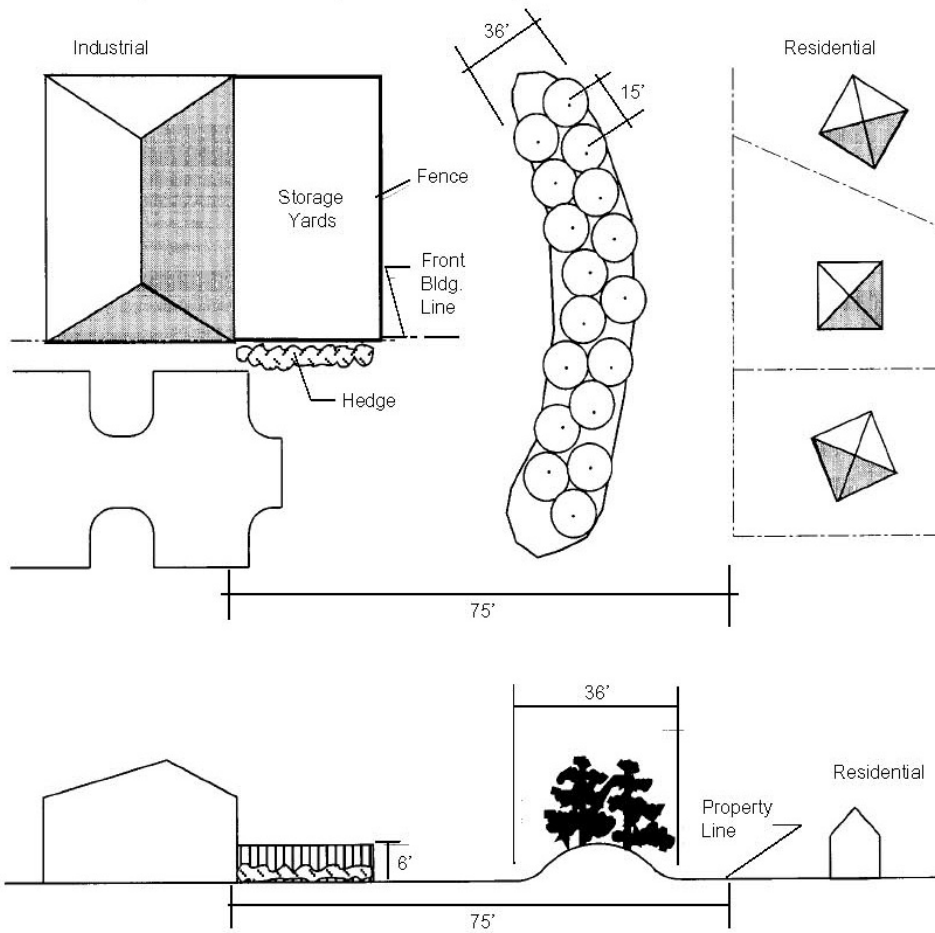
FIGURE 2



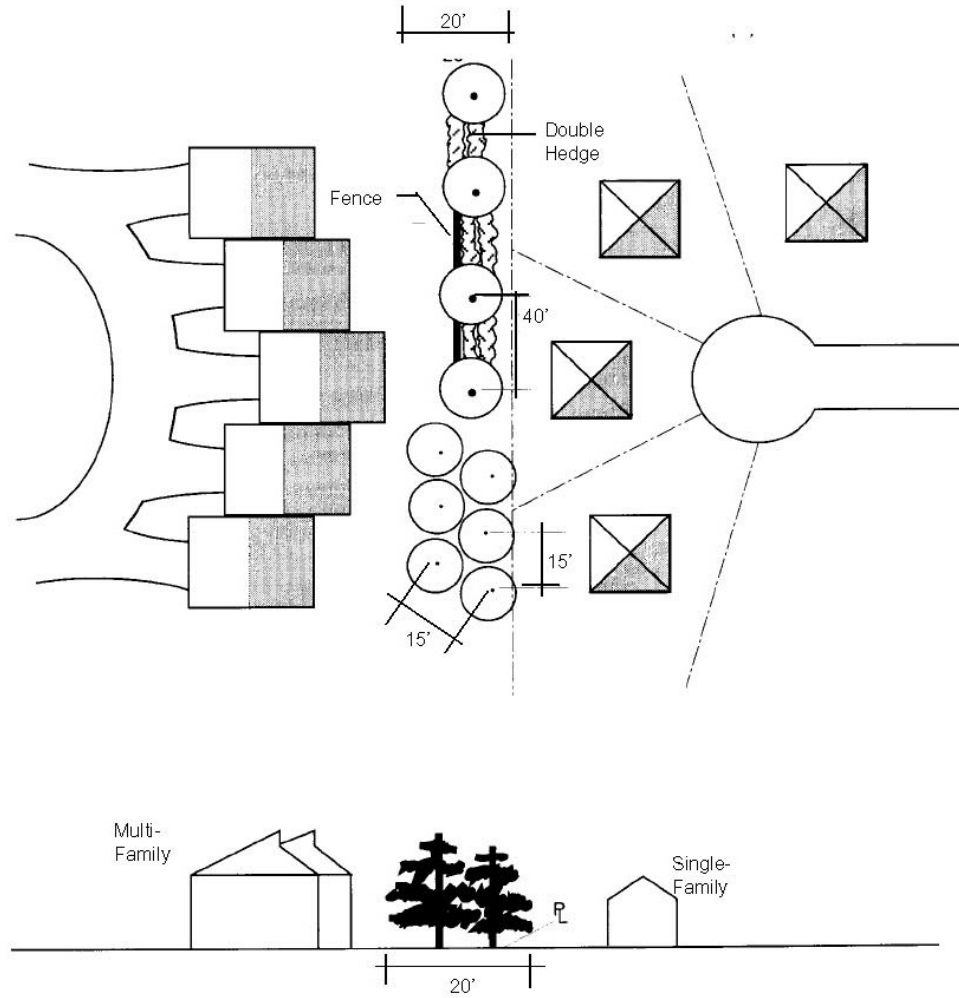
WHEN	ADJOINS	MINIMUM PLANTING STRIP	PLANT MATERIAL/OPTIONS
Any commercial or professional office zone or land use, or any conditional use	Any residential zone or land use	20 feet	1. 1 tree from plant list A or list B, plus a double row hedge from list E, plus a 6 foot wall, fence, or earth mound and a hedge from list D OR 2. double row, staggered planting of trees from list C at 15 feet on center



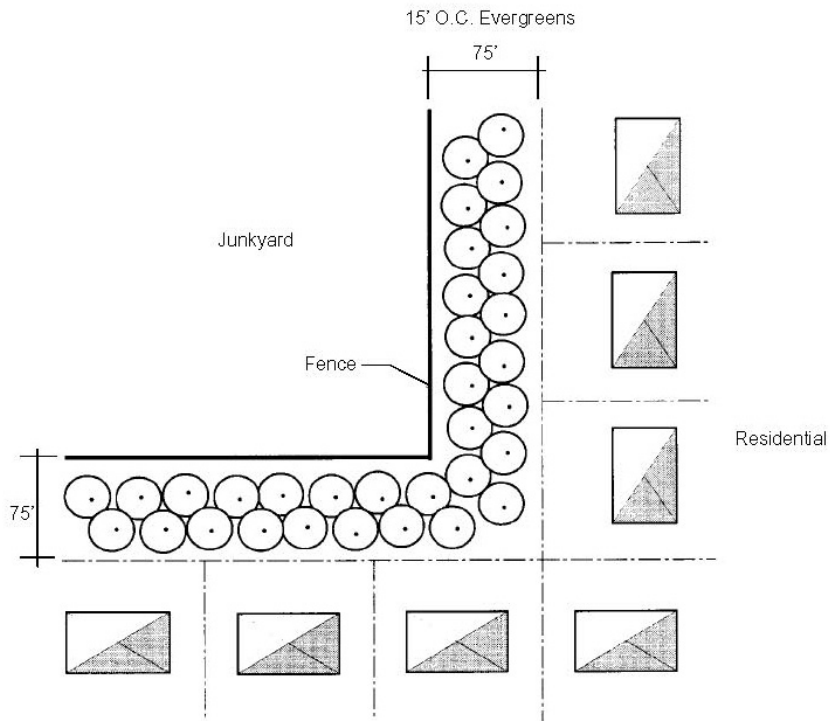
WHEN	ADJOINS	MINIMUM PLANTING STRIP	PLANT MATERIAL/OPTIONS
Any industrial zone or land use	Any residential zone	75 feet side and rear yard	Double row of staggered trees from list C at 15 feet on center, plus a 36 foot wide, 6 foot tall, earthen berm
	Any commercial or professional office zone	50 feet side and rear yard	Double row of staggered trees from list C at 15 feet on center STORAGE YARD: A hedge from list E facing the front yard only and/or any public/private street, plus a 6 foot fence or wall



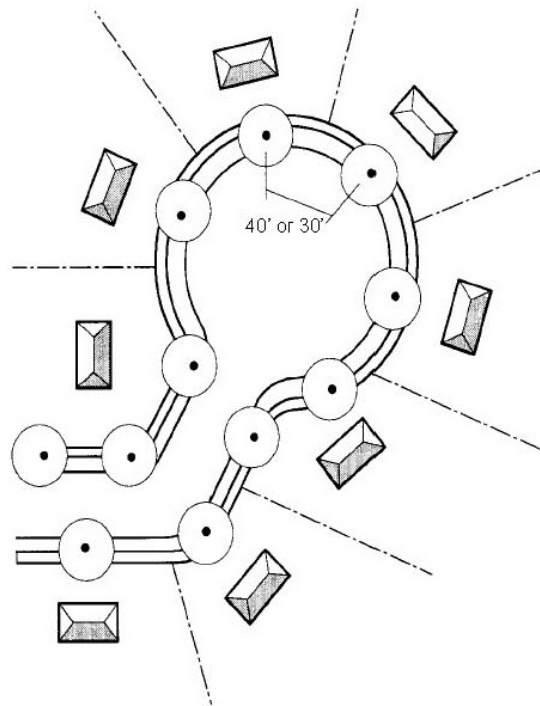
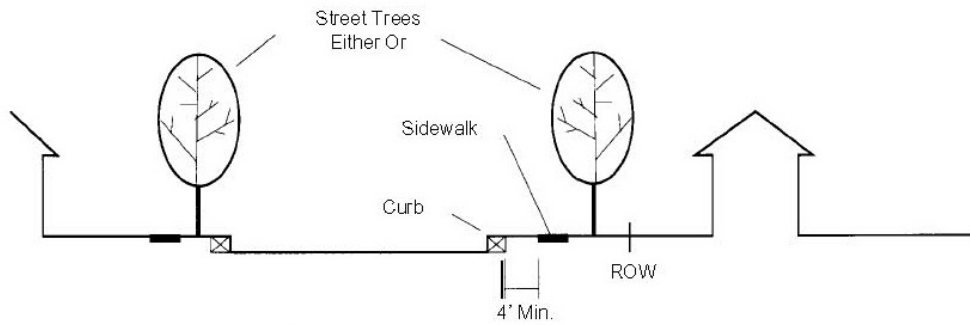
WHEN	ADJOINS	MINIMUM PLANTING STRIP	PLANT MATERIAL/OPTIONS
Any multi-family residential (3 units per building or greater density) zone or land use	Any single-family residential zone or land use	20 feet	1. 1 tree from plant list A or list B per 45 feet of linear boundary and a double row 6 foot hedge from list E or 6 foot wall, fence, or earth mound and hedge from list D OR 2. continuous staggered double row planting of trees from list C at 15 feet on center



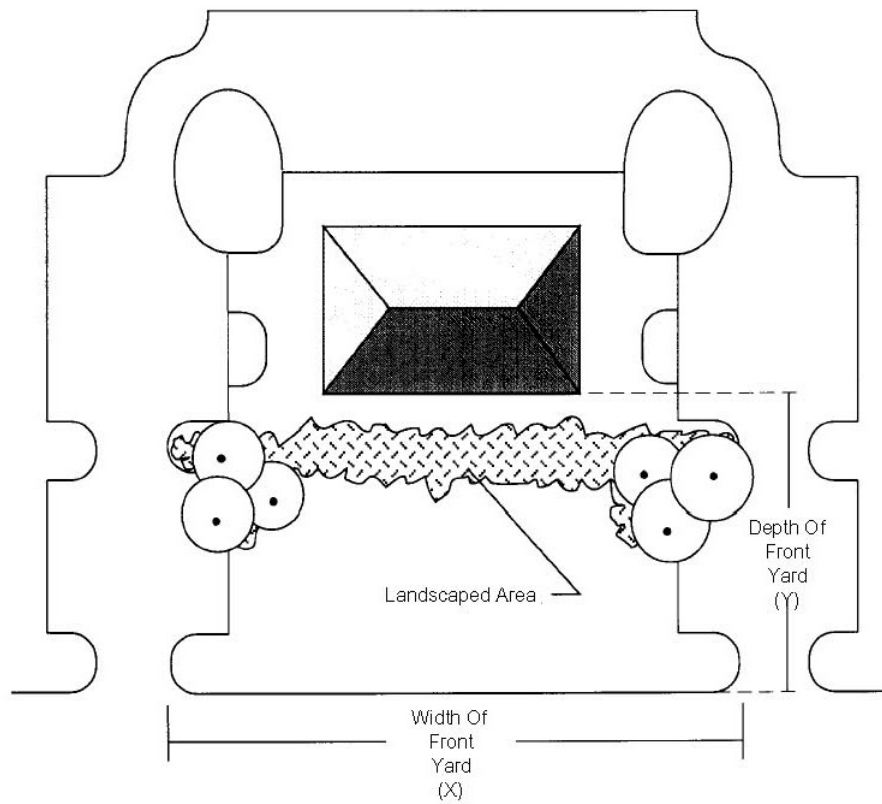
WHEN	ADJOINS	MINIMUM PLANTING STRIP	PLANT MATERIAL/OPTIONS
A junk, salvage, refuse, or parts yard or recycling center	Any residential zone	75 feet	1. 1 tree per 35 feet of linear boundary, or fraction thereof, from either list A or list B, plus a single row hedge from either list D or list E, plus a 6 foot wall or fence OR 2. A double row, staggered planting of trees from list C at 15 feet on center, plus a 6 foot solid fence or wall
	Any commercial or professional office zone	50 feet	
	Any industrial zone or street (public or private)	20 feet	



WHEN	ADJOINS	MINIMUM PLANTING STRIP	PLANT MATERIAL/OPTIONS
Street trees may be planted to meet the tree density requirements and shall be placed within the street right-of-way or within an easement immediately adjacent to the street right-of-way			<ol style="list-style-type: none"> 1. 1 tree from list A or list F at least 60 feet on center (maximum) <li style="text-align: center;">OR 2. 1 tree from list B at least 60 feet on center (maximum)



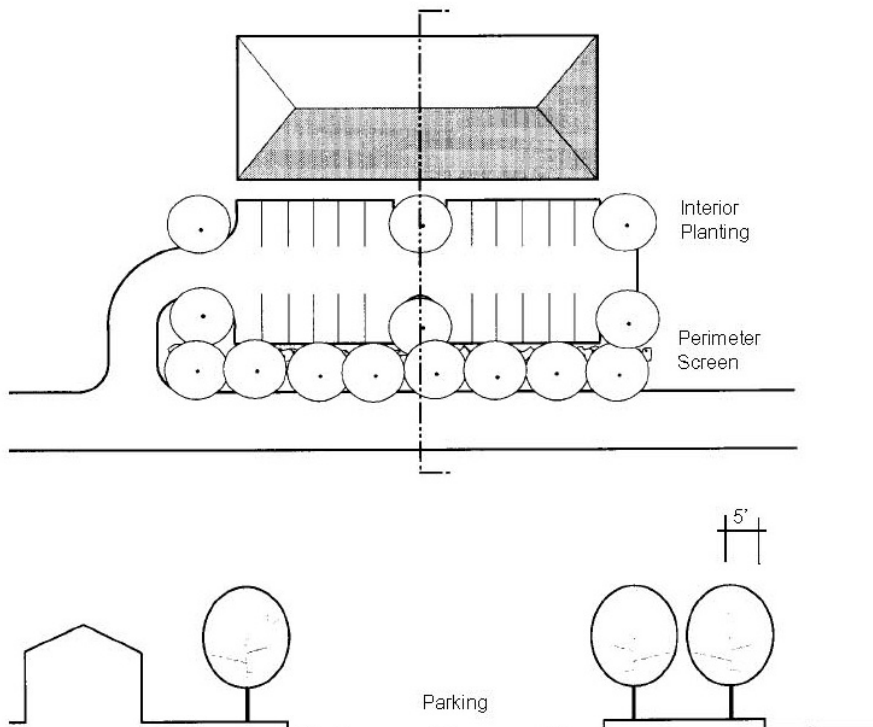
WHEN	ADJOINS	MINIMUM PLANTING STRIP	PLANT MATERIAL/OPTIONS
Any commercial, professional office, or industrial zone or land use	The public right-of-way, public or private street	10% of each yard area must be landscaped	Trees, shrubs, planting beds, and/or perennials in a motif designed by the owner. A minimum of 3 trees shall be planted per 100 linear feet of road frontage. This is not in addition to other required landscaping.

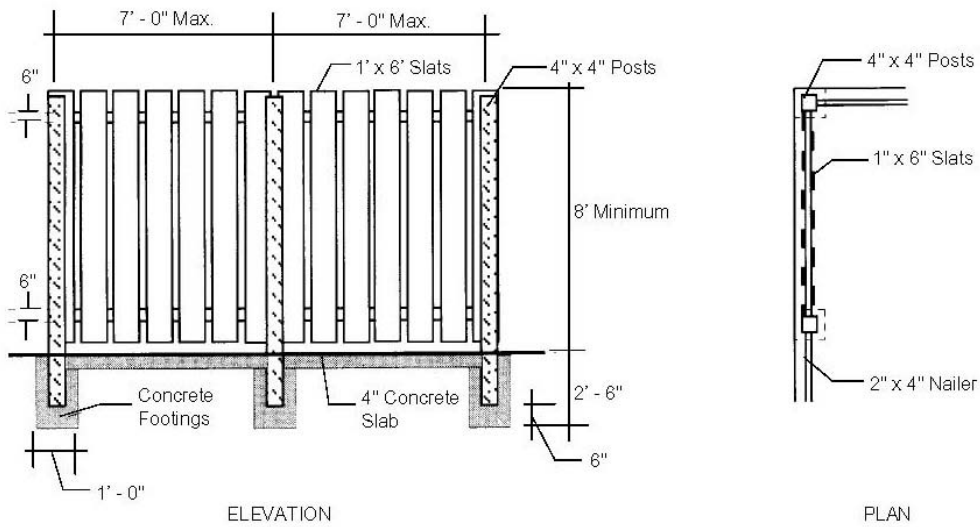
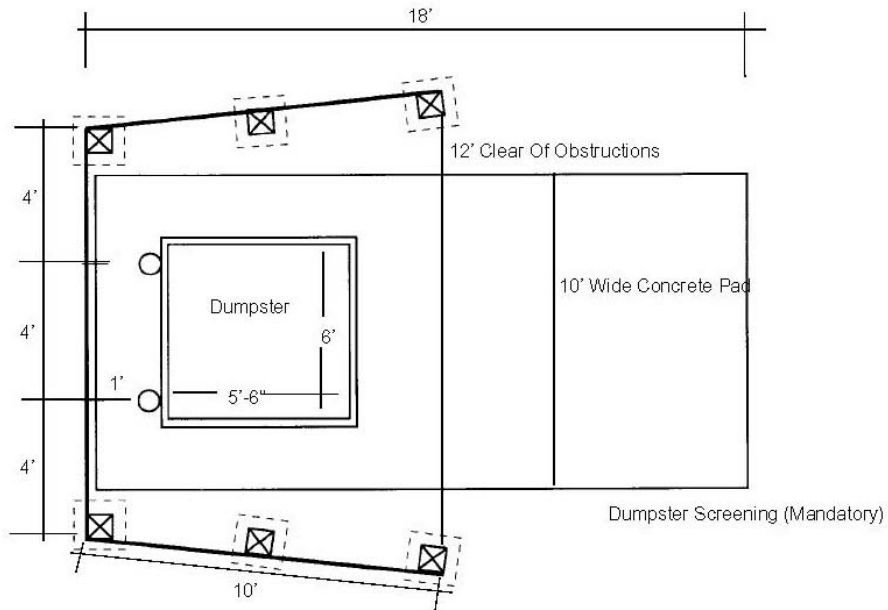


Required Front Yard Landscaping

$$(X) \times (Y) / 10$$

WHEN	ADJOINS	MINIMUM PLANTING STRIP	PLANT MATERIAL/OPTIONS
<p>A vehicular use area associated with any zone or land use, except single-family residences, banks, savings and loan, and mortgage companies, and auto dealerships</p>	<p>Any public or private street</p> <p>-- PLUS -- In all cases</p>	<p>5 feet perimeter screening easement</p> <p>-- PLUS -- 5% interior landscaped area</p>	<p>1. 1 tree from list A per 40 feet of linear boundary or fraction thereof and shrubs from list D or list E at least 3 feet on center</p> <p>OR</p> <p>2. 1 tree from list B per 25 feet of linear boundary or fraction thereof and shrubs from list D or list E at 3 feet on center (1 tree minimum)</p> <p>-- PLUS -- 1 tree from list A or list B per 250 square feet of interior landscaped area</p>





Screen Fence Detail
(Guidelines)

Other Material Such As Brick, Block, Hedges, Etc. May Be Used For Screening

If a dumpster is oriented towards a street or toward the nearest perimeter of the site, and can be seen from the street or the adjoining property, that side must also be screened

SUGGESTED REFERENCES

Barbour, Roger W. and Wharton, Mary E., *Trees and Shrubs of Kentucky*. The University Press of Kentucky, 1973.

Dirr, Michael A., *Manual of Woody Landscape Plants*. Stipes Publishing Company, 1977.

Dirr, Michael A., *Photographic Manual of Woody Landscape Plants*. Stipes Publishing Company, 1978.

Division of Planning, Lexington - Fayette Urban County Government Planting Manual, 1983.

Hudak, Joseph, *Trees for Every Purpose*. McGraw - Hill Book Co., 1980.

Wyman, Donald, *Shrubs and Vines for American Gardens*. McMillan Publishing Co., Inc., 1965.

Wyman, Donald, *Trees for American Gardens*. McMillan Publishing Co., Inc., 1965.