# 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
  - 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 or 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 in 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 trees' 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 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 Plant Botanical Name Specie Cultivars

Littleleaf Linden
Tilia cordata
x chancellor
x greenspire
x june bride

Common Plant Name Plant Botanical Name Specie Cultivars European Beech Fagus sylvatica

Acer platanoides x columnaire x crimson king x summershade

Pin Oak

Norway Maple

Common Plant Name Plant Botanical Name Specie Cultivars

Ginkgo Ginkgo biloba (male only

Ginkgo biloba (male only)

x autumn gold

x fastigiata

Quercus palustris

x sovereign

x crown rite

x sentry

Common Plant Name Plant Botanical Name Specie Cultivars

Green Ash

Fraxinus pennsylvanica lanceolata

x marshall seedless

Red Maple
Acer rubrum
x autumn flame
x october glory
x red sunset

Common Plant Name Plant Botanical Name Specie Cultivars

Japanese Pagoda Tree

Sophora japonica

x regent

Red Oak Quercus rubra

Common Plant Name Plant Botanical Name Japanese Zelkova Zelkova serrata Quercus coccinea Scarlet Oak

Specie Cultivars

Common Plant Name Plant Botanical Name Specie Cultivars London Plane Tree Platanus acerifolia

Common Plant Name Plant Botanical Name Specie Cultivars Sugar Maple Acer saccharum Sweetgum Liquidambar styraciflua

Tulip Poplar

Yellowwood

Cladrastis lutea

Liriodendron tulipifera

# PLANT LIST A (continued) SHADE TREES

Common Plant Name Plant Botanical Name

Specie Cultivars

Thornless Honey Locust Gleditsia triacanthos

x moraine x shademaster x skyline x imperial

Common Plant Name Plant Botanical Name Specie Cultivars

Willow Oak

Quercus phellos

Common Plant Name Plant Botanical Name Specie Cultivars

Common Plant Name Plant Botanical Name **Specie Cultivars** 

Common Plant Name Plant Botanical Name Specie Cultivars

Common Plant Name Plant Botanical Name Specie Cultivars

Black Maple Acer saccharum

x nigrum

Katsura Tree

Cercidiphyllum japonicum

Hardy Rubber Tree Eucommia ulmoides

American Beech Fagus grandifolia

# 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 Plant Botanical Name Specie Cultivars Callery Pear
Pyrus calleryana
x aristocrat
x chancellor

Common Plant Name Plant Botanical Name Specie Cultivars

Crabapple
Malus varieties
x bob white
x sargeant
x snowdrift
x white angel

Common Plant Name Plant Botanical Name Specie Cultivars Eastern Redbud Cercis canadensis

x flame

x forest pansy

x royal

Common Plant Name Plant Botanical Name Specie Cultivars Flowering Dogwood\*
Cornus florida
x cherokee chief
x cherokee princess

x rubra x white cloud

Common Plant Name Plant Botanical Name Specie Cultivars Kousa Dogwood\* Cornus kousa x milky way

Common Plant Name Plant Botanical Name Specie Cultivars Pagoda Dogwood\* Cornus alternifolia

Common Plant Name Plant Botanical Name Specie Cultivars Golden Raintree Koelreutaria paniculata

Common Plant Name Plant Botanical Name Specie Cultivars Green Hawthorne Crataegus viridis x winter king

# PLANT LIST B (continued) FLOWERING TREES

Common Plant Name Plant Botanical Name Specie Cultivars Sargent Cherry Prunus sargentii x columnaris x kwanzan

Common Plant Name Plant Botanical Name Specie Cultivars Saucer Magnolia\* Magnolia soulangiana

Common Plant Name Plant Botanical Name Specie Cultivars Star Magnolia\* Magnolia stellata

Common Plant Name Plant Botanical Name Specie Cultivars Fringe Tree Chionanthus virginicus

Common Plant Name Plant Botanical Name Specie Cultivars Higan Cherry Prunus subhirtella

Common Plant Name Plant Botanical Name Specie Cultivars

Downy Serviceberry Amelanchier arborea

Common Plant Name Plant Botanical Name Specie Cultivars Sweet Bay\* Magnolia virginiana

Common Plant Name Plant Botanical Name Specie Cultivars Sourwood
Oxydendron arboreum

Common Plant Name Plant Botanical Name Specie Cultivars Eastern Redbud Cercis canadensis

Common Plant Name Plant Botanical Name Specie Cultivars

Washington Hawthorn Crataegus phaenopyrum

Common Plant Name Plant Botanical Name Specie Cultivars Green Hawthorn Crataegus virides x winter king

# PLANT LIST B (continued) FLOWERING TREES

Common Plant Name Plant Botanical Name

Japanese Flowering Crabapple

Malus floribunda

Specie Cultivars

Common Plant Name Plant Botanical Name Japanese Flowering Cherry

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.

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

Common Plant Name Plant Botanical Name Specie Cultivars

Japanese Maple Acer palmatum

Common Plant Name Plant Botanical Name Specie Cultivars Camperdown Elm Ulmus galbra camperdownii

Common Plant Name Plant Botanical Name Specie Cultivars Paperbark Maple Acer griseum

Common Plant Name Plant Botanical Name Specie Cultivars River Birch Betula nigra

Common Plant Name Plant Botanical Name Specie Cultivars Trident Maple Acer buereranum

Common Plant Name Plant Botanical Name Specie Cultivars Hedge Maple Acer campestre

Common Plant Name Plant Botanical Name Specie Cultivars Amur Maple Acer ginnala

# 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 Plant Botanical Name Specie Cultivars American Holly llex opaca x xanthocarpa

Common Plant Name Plant Botanical Name Specie Cultivars

Austrian Pine Pinus nigra

Common Plant Name Plant Botanical Name Specie Cultivars Canadian Hemlock Tsuga canadensis

Common Plant Name Plant Botanical Name Specie Cultivars Carolina Hemlock Tsuga caroliniana

Common Plant Name Plant Botanical Name Specie Cultivars

Eastern Red Cedar Juniperus virginiana

Common Plant Name Plant Botanical Name Specie Cultivars

Colorado Blue Spruce Picea pungens

x glauca

Common Plant Name Plant Botanical Name Specie Cultivars

Norway Spruce Picea abies

Common Plant Name Plant Botanical Name Specie Cultivars Scotch Pine Pinus sylvestris

Common Plant Name Plant Botanical Name Specie Cultivars White Fir Abies concolor

Common Plant Name Plant Botanical Name Specie Cultivars White Pine Pinus strobus

# PLANT LIST C (continued) EVERGREEN/BROADLEAF TREES

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

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

# 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 Plant Botanical Name Specie Cultivars Burning Bush Euonymus alata x compacta

Common Plant Name Plant Botanical Name Specie Cultivars Doublefile Viburnum Viburnum plicatum tomentosum

Common Plant Name Plant Botanical Name Specie Cultivars Forsythia Species

Common Plant Name Plant Botanical Name Specie Cultivars Glossy Abelia Abelia grandiflora

Common Plant Name Plant Botanical Name Specie Cultivars Quince Chaenomeles specina

Common Plant Name Plant Botanical Name Specie Cultivars Shrub Cinquefoul Potentilla fruticosa

Common Plant Name Plant Botanical Name Specie Cultivars Spiria Species

Common Plant Name Plant Botanical Name Specie Cultivars Spreading Cotoneaster Cotoneaster divaricata

Common Plant Name Plant Botanical Name Specie Cultivars Wintergreen Barberry Berberis julianne

Common Plant Name Plant Botanical Name Specie Cultivars Cornelian Cherry Dogwood

Cornus mas

# PLANT LIST D (continued) DECIDUOUS SHRUBS

Common Plant Name Plant Botanical Name Specie Cultivars Large Fothergilla\* Fothergilla major

Common Plant Name Plant Botanical Name Specie Cultivars Arnold Promise Witchhazel\*
Hamamelis intermedia
x arnold promise

Common Plant Name Plant Botanical Name Specie Cultivars Vernal Witchhazel Hamamelis vernalis

Common Plant Name Plant Botanical Name Specie Cultivars Snowball Hydrangea Hydrangea paniculata x grandiflora

Common Plant Name Plant Botanical Name Specie Cultivars Winterberry Ilex verticullata

Common Plant Name Plant Botanical Name Specie Cultivars Panicle Hydrangea Hydranga paniculata

Common Plant Name Plant Botanical Name Specie Cultivars Beauty Bush Kolkwitzia amabilis

Common Plant Name Plant Botanical Name Specie Cultivars Spicebush Lindera benzoin

Common Plant Name Plant Botanical Name Specie Cultivars Cutleaf Buckthorn Rhamnus frangula x asplenifolia

Common Plant Name Plant Botanical Name Specie Cultivars Burkwood Viburnum Viburnum burkwoodii

Common Plant Name Plant Botanical Name Specie Cultivars Fragrant Viburnum Viburnum carlcephalum

# PLANT LIST D (continued) DECIDUOUS SHRUBS

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

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

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

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

Common Plant Name Plant Botanical Name Specie Cultivars Blue Holly
Ilex meserveae
x blue angel
x blue prince
x blue princess

Common Plant Name Plant Botanical Name Specie Cultivars Chinese Juniper Juniperis chinensis

x keteleeri x mint julip x robusta green x mount batten x pfitzeriana

x hetzii

Common Plant Name Plant Botanical Name Specie Cultivars Japanese Holly llex crenata x microphylla x rotundifolia

Common Plant Name Plant Botanical Name Specie Cultivars Japanese Yew
Taxus cuspidata
x capitata
x intermedia

Korean Boxwood

x intermedia x nana

Common Plant Name Plant Botanical Name Specie Cultivars

Buxus microphylla koreana

x koreana

Common Plant Name Plant Botanical Name Specie Cultivars Leatherleaf Viburnum Viburnum rhytidophyllum

# PLANT LIST E (cont.) EVERGREEN /BROADLEAF SHRUBS

Common Plant Name Plant Botanical Name Specie Cultivars Mugho Pine Pinus mugho

Common Plant Name Plant Botanical Name Specie Cultivars Spreading Yew Taxus baccata

Common Plant Name Plant Botanical Name Specie Cultivars Mountain Laurel Kalmia latiolia

Common Plant Name Plant Botanical Name Specie Cultivars

Dwarf Alberta Spruce Picea glauco x conica

Common Plant Name Plant Botanical Name Specie Cultivars Catawba Rhododendron Rhododendron catawbiense

Common Plant Name Plant Botanical Name Specie Cultivars Azalea (Evergreen) Rhododendron

# 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 Plant Botanical Name Specie Cultivars Trident Maple Acer ginnela

Common Plant Name Plant Botanical Name Specie Cultivars Cockspur Hawthorn Crataegus crus-galli x lavallai

Common Plant Name Plant Botanical Name Specie Cultivars English Hawthorn Crataegus monogyna x laevigata

**Medium Trees** 

Common Plant Name Plant Botanical Name Specie Cultivars American Hornbeam Carpinus caroliniana

Hop Hornbeam Ostrya virginia

Common Plant Name Plant Botanical Name Specie Cultivars

\* Callery Pear Pyrus calleryana Japanese Hornbeam Carpinus carolina x japonica

Common Plant Name Plant Botanical Name Specie Cultivars European Hornbeam Carpinus betulas

Nikko Maple Acer maximowicziana

Common Plant Name Plant Botanical Name Specie Cultivars Green Hawthorn Crataegus viridis x winter king Mulberry spp. Morus spp.

Common Plant Name Plant Botanical Name Specie Cultivars Hedge maple Acer camestre

# PLANT LIST F (continued) STREET TREES

# Large Trees

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

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

Plant Botanical Name Specie Cultivars Kentucky Coffee Tree (female)

Gymnocledus dioica

Walnut

Juglans species

Common Plant Name

Plant Botanical Name Specie Cultivars Mimosa

Albizza julibrisson

Weigela

Weigela florida

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

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

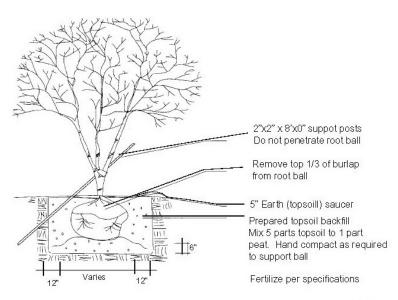
Prior to final approval of a new development project, the requirements of the Landscape Ordinance must have been met. The following guidelines are for the benefit of the Inspector to aid in checking the requirements of the approved landscape plan. In addition to these guidelines, the Inspector shall 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

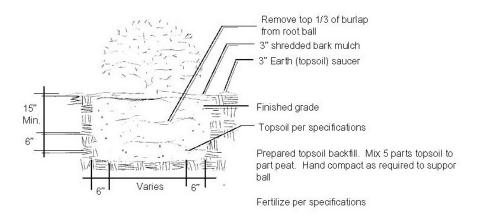


#### Note:

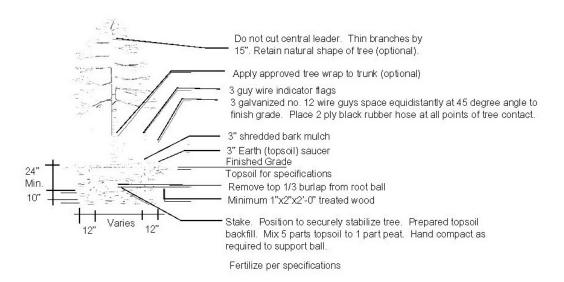
Container grown plant material may be substitututed for burlap material

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

#### TYPICAL SHRUB PLANTING



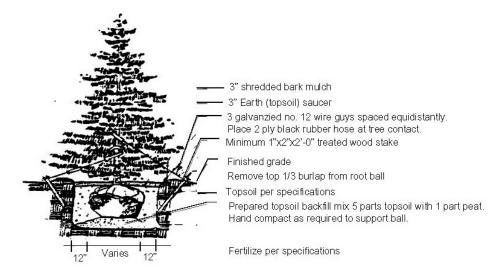
#### TYPICAL LARGE TREE PLANTING



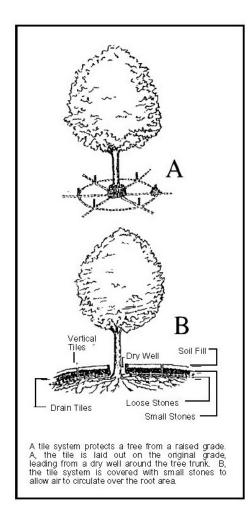
#### Note:

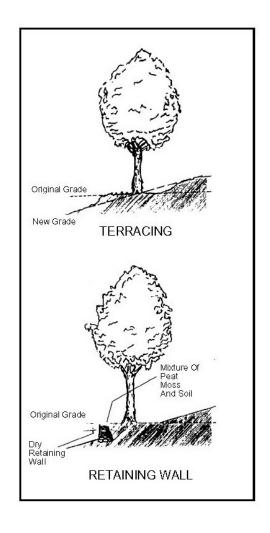
Any series of trees placed in a particular arrangement will be field checked for accuracy. Any trees misplaced will be subject to rejection.

#### TYPICAL EVERGREEN TREE PLANTING

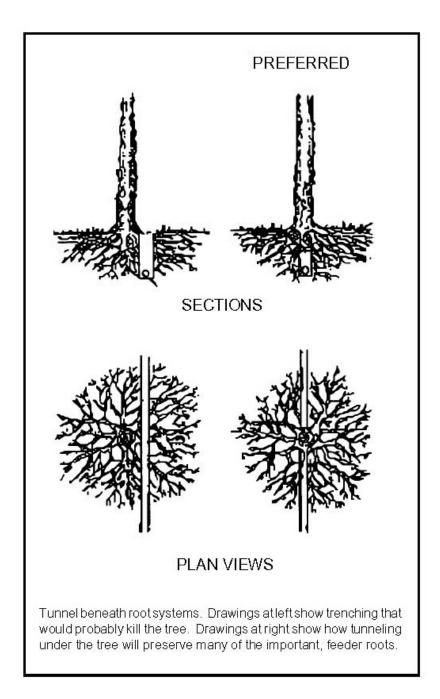


# FIGURE 1

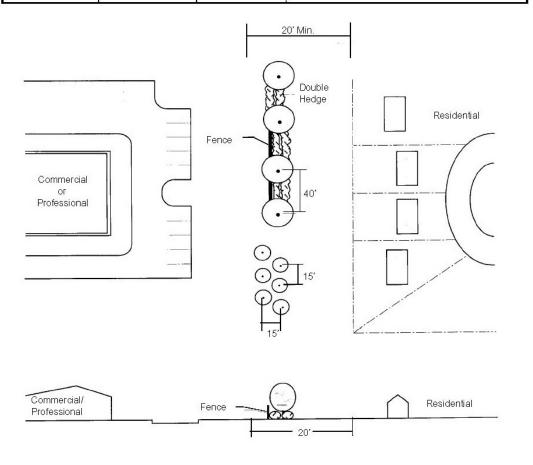




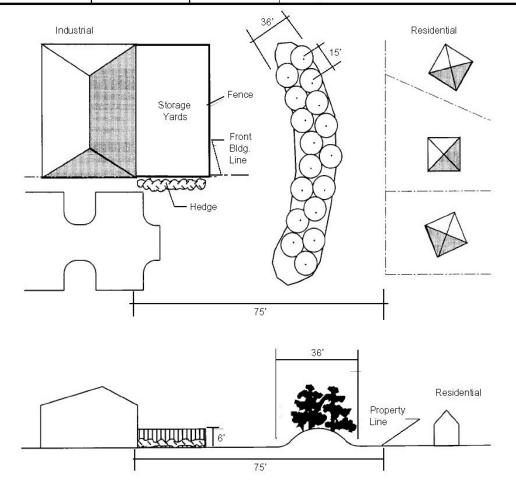
# FIGURE 2



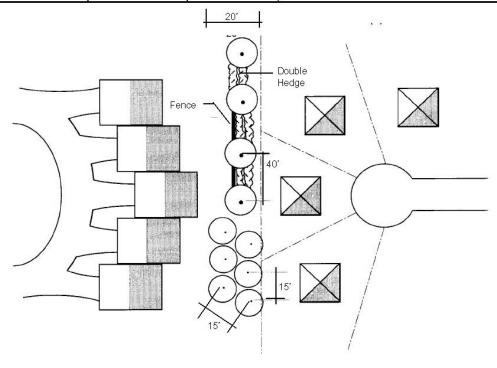
WHEN	ADJOINS	MINIMUM PLANTING STRIP	PLANT MATERIAL/OPTIONS
Any commercial or professional office zone or land use, or any conditional use	Any residential zone or land use	20 feet	<ol> <li>1. 1 tree from plant list A or list B, plus a double row hedge from list E, plus a 6 foot wall, fence, or earth mound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

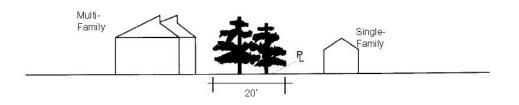


WHEN	ADJOINS	MINIMUM PLANTING STRIP	PLANT MATERIAL/OPTIONS
Any industrial zone or land use	Any residential, zone  Any commercial or professional	75 feet side and rear yard 50 feet side and rear yard	Double row of staggered trees from list C at 15 feet on center, plus a 36 foot wide, 6 foot tall, earthen berm Double row of staggered trees from list C at 15 feet on center
	office zone		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

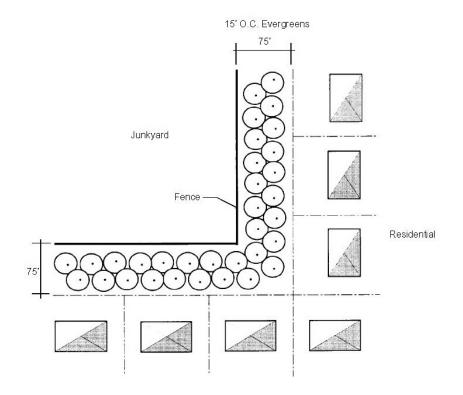


WHEN	ADJOINS	MINIMUM PLANTING STRIP	PLANT MATERIAL/OPTIONS
Any multi-family residential (3 units per building or greater density) zone or land use	Any single-family residential zone or land use	20 feet	1. 1 tree from plant list A or list B per 45 feet of linear boundary and a double row 6 foot hedge 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

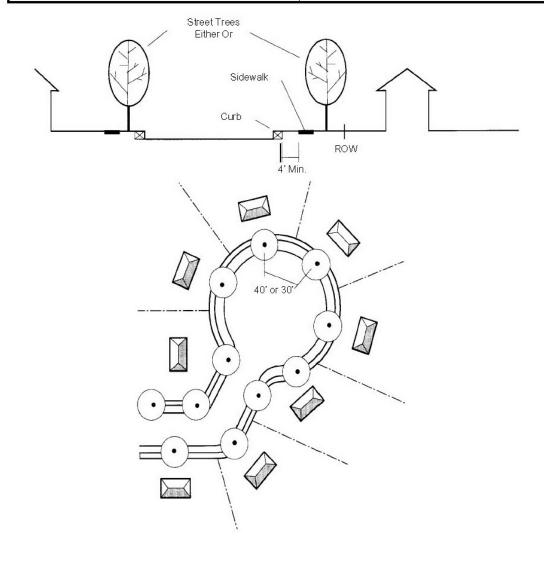




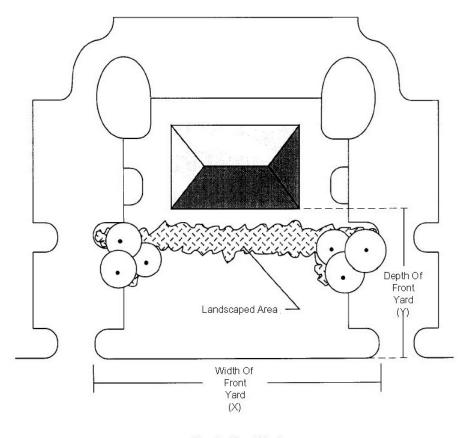
WHEN	ADJOINS	MINIMUM PLANTING STRIP	PLANT MATERIAL/OPTIONS
A junk, salvage, refuse, or parts yard or	Any residential zone	75 feet	1. 1 tree per 35 feet of linear boundary, or fraction thereof, from either list A or list     B, plus a single row hedge from either
recycling center	Any commercial or professional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



₩HEN	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		n the street	1. 1 tree from list A or list F at least 60 feet on center (maximum)     OR     2. 1 tree from list B at least 60 feet on center (maximum)



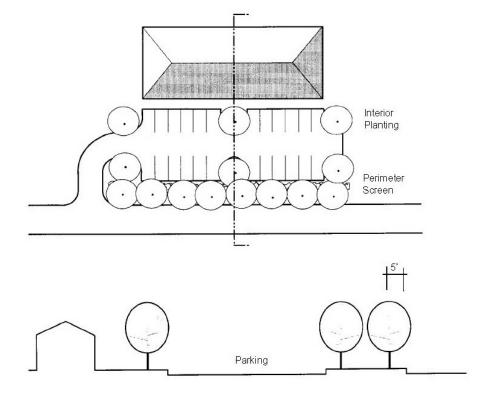
WHEN	ADJOINS	MINIMUM PLANTING STRIP	PLANT MATERIAL/OPTIONS
Any commercial, professional office, or industrial zone or land use	The public right- of-way, public or private street	10% of each yard area must be lands caped	Trees, shrubs, planting beds, and/or perennials in a motif designed by the owner.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

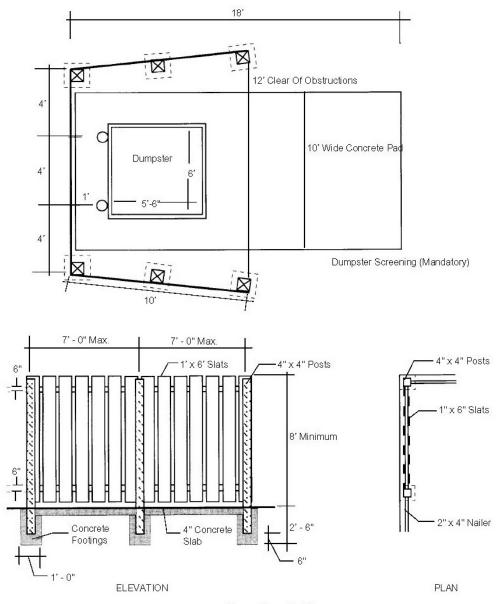


Required Front Yard Landscaping

(X) x (Y) /10

WHEN	ADJOINS	MINIMUM PLANTING STRIP	PLANT MATERIAL/OPTIONS
A vehicular use area associated with any zone or land use, except single-family residences, banks, savings and loan, and mortgage companies, and	Any public or private street	5 feet perimeter screening easement	<ol> <li>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         OR         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)</li> </ol>
auto dealerships	PLUS	PLUS	PLUS
	In all cases	5% interior	1 tree from list A or list B per 250 square
		landscaped area	feet of interior landscaped area





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. McMillian Publishing Co., Inc., 1965.