# **APPENDIX E-4**

Wayne County Parks Division Permit Guidelines for Site Restoration This page intentionally left blank to facilitate double-sided printing



# WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES PARKS DIVISION

# PERMIT GUIDELINES FOR SITE RESTORATION

Revised: 1 July 2015

#### General Guidelines:

- 1. The Contractor shall be responsible at no expense to the Owner, for any damage to Park property, including but not limited to; athletic fields, boardwalks, bridges, comfort stations, fences, lawns, paved pathways, picnic shelters, planting material, playground structures, signs and site furnishings.
- 2. The Contractor shall provide and maintain a safe and adequate travel route at all times for Park visitors throughout the duration of the Project. All equipment shall be stored in a manner that is safe to Park visitors and approved by the Wayne County Parks Design Staff.
- 3. The Contractor shall be responsible for contacting and coordinating with all pertinent utility companies at least 72 hours in advance of any digging to familiarize themselves with all underground utilities, pipes and structures. The Contractor shall assume sole responsibility for any cost incurred due to damage of any utilities.
- 4. The Contractor shall not willfully proceed with the construction as designed when it is obvious that unknown obstructions and/or grade differences exist. Such conditions shall be immediately brought to the attention of the Wayne County Parks Design Staff. The Contractor shall assume full responsibility for all necessary revisions due to failure to give proper notification.
- 5. Any discrepancies between dimensioned layout and actual field conditions shall be immediately brought to the attention of the Wayne County Parks Design Staff. The Contractor shall assume full responsibility for all necessary revisions due to failure to give proper notification.
- 6. The Contractor shall be responsible for any coordination with subcontractors as required to accomplish installation operations.
- 7. The Contractor shall provide and maintain positive surface drainage.

# Lawn Restoration

- 1. All lawn that is disturbed due to construction activities shall be restored to its original state by the Contractor at no expense to the Owner.
- 2. Remove diseased or unsatisfactory lawn growth. Do not bury into soil. Remove topsoil containing foreign materials, including oil drippings, stone, gravel, and construction materials.
- 3. All disturbed areas shall be rough graded to meet the existing adjoining grades and any extraneous materials, i.e. rocks, wood, construction debris or equipment shall be removed and disposed of in a legal manner.

- 4. After rough grade is met, all disturbed lawn areas shall receive a minimum of 4" of clean, fertile, friable, topsoil of sandy loam character, free of any extraneous material. It will be the Contractor's responsibility to supplement any salvaged topsoil supply to meet the minimum 4" depth.
- 5. Following the installation of topsoil, the approval of final grade by the Wayne County Parks Design Staff shall be required prior to reseeding of disturbed areas.
- 6. Apply a starter fertilizer (15-30-15) at a rate of 5lbs. per 1,000 sf thoroughly and evenly via a mechanical rotary or drop type spreader.
- 7. Perform seeding operations immediately after preparation of disturbed areas and when soil is dry and winds do not exceed 5 m.p.h. Apply recommended seed via a mechanical rotary or drop type spreader. After seeding, rake or drag surface of soil lightly to incorporate seed into top of soil. Areas that are identified to be seeded prior to construction shall be designated on drawings. The following seed mix is recommended, however alternates can be submitted Wayne County Parks Design Staff for review.

Seed	Purity	Germination	Mixture %
Kentucky Bluegrass	99%	85%	10%
Turf-Type Perennial Ryegrass	99%	85%	15%
Creeping Red Fescue	98%	85%	20%
Hard Fescue	97%	85%	20%
Turf-Type Tall Fescue	98%	85%	35%

Seeding application rate: 7lbs. per 1,000 sf.

- 8. Immediately following seeding operations, the Contractor shall install straw mulch in a uniform manner with continuous coverage over all seeded areas. Anchor straw by mechanical means or with a liquid tackifier at a rate of 60 gals. per acre.
- 9. Hydroseeding applications may be utilized for establishing new lawns using a mixture of specified fertilizer, tackifier at a rate of 60 gals. per acre, wood cellulose fiber mulch at a rate of 2,000 lbs. per acre and specified seed mix.
- 10. Water newly seeded areas. The Contractor shall maintain adequate soil moisture until new grass is established.

# Grow Zones Restoration

- 1. All "Grow Zones" that are disturbed due to construction activities shall be restored to their original state.
- 2. "Grow Zones" shall be located in the field prior to construction by the Contractor and the Wayne County Parks Design Staff.
- 3. The Contractor shall consult with the Wayne County Parks Design Staff prior to restoration for the recommended Seed Mix and application method(s).

# Tree Inventory Plan

- 1. Any person wishing to perform land clearing or grubbing activities, remove or transplant trees of any D.B.H. within Park Property of Wayne County shall not do so until they have received approval from the Permits office.
- 2. Applicant shall submit a <u>Tree Inventory Plan</u> that is performed by a registered land surveyor or certified arborist and includes the following:
  - a. Topographic information delineating both existing and proposed contours.

- b. Existing and proposed structures, utilities and pavement.
- c. Property lines, R.O.W. and easements that are applicable.
- d. The location and approximate drip line of all existing deciduous trees 6" D.B.H. or greater and existing evergreen trees 10' height or greater.
  - i. These trees shall be tagged in the field by identifying numbers using noncorrosive metal tags and shown on the plan with their respective number.
- e. All existing deciduous trees 6" D.B.H. or greater and existing evergreen trees 10' height or greater shall also be identified on a list using both their common and botanical names with their corresponding number. Please also indicate size and condition. Those trees that meet the Landmark Tree Requirements below shall also be identified.
- f. Identify clearly all existing deciduous trees 6" D.B.H. or greater, existing evergreen trees 10' height or greater and any Landmark Trees that are proposed to be removed.
- g. The location of all replacement trees according to the Tree Replacement Standards below. Applicant shall also furnish a plant list that includes quantities, common and botanical names, size, root type and spacing.
- h. A table including the total number of deciduous trees 6" D.B.H. or greater, evergreen trees 10' height or greater on site, landmark trees, total number of trees proposed to be removed and the total number of replacement trees required.
- i. The location of tree protection fence and associated details per Wayne County Parks Standards shall also be included on the plan.

Botanical Name	Common Name	Landmark D.B.H. (inches)
Abies species	Fir	18
Acer species	Maple	18
Aesculus carnea	Horse Chestnut	18
Aesculus glabra	Buckeye	18
Alnus glutinosa	Black Alder	12
Asimina triloba	Pawpaw	8
Betula species	Birch	18
Carpinus species	Hornbeam	8
Carya species	Hickory	18
Castanea dentata	American Chestnut	8
Catalpa species	Catalpa	18
Cercis canadensis	Redbud	8
Cladrastis lutea	Yellowwood	12
Cornus florida	Flowering Dogwood	8
Crataegus species	Hawthorn	12
Diospyros virginiana	Persimmon	12
Fagus grandifolia	American Beech	18
Ginkgo biloba	Ginkgo	12
Gymnocladus dioicus	Kentucky Coffeetree	16
Juglans nigra	Black Walnut	18
Juniperus species	Cedar	12
Larix laricina	Larch/Tamarack	12
Liquidambar styraciflua	Sweetgum	12
Liriodendron tulipifera	Tuliptree	12

3. Landmark Trees are any existing tree in good condition that are 24" D.B.H. or greater or is of a type and D.B.H. equal to or greater than those shown on the list below.

Botanical Name	Common Name	Landmark D.B.H. (inches)
Malus species	Crabapple	12
Metasequoia glyptostroboides	Dawn Redwood	16
Nyssa sylvatica	Blackgum	16
Ostrya virginiana	Ironwood	8
Picea species	Spruce	18
Pinus species	Pine	18
Platanus species	London Plane/Sycamore	18
Prunus species	Cherry	18
Pseudotsuga menziesii	Douglas Fir	18
Quercus species	Oak	16
Sassafras albidum	Sassafras	14
Taxodium distichum	Bald Cypress	12
Tilia americana	Basswood	18
Tsuga canadensis	Eastern Hemlock	12
Ulmus americana	American Elm	18

#### Tree Replacement

1. Any person wishing to remove trees that are in good condition shall do so in accordance with the following schedule:

Size of Removed Tree	Number of replacement trees to removed tree
Deciduous Tree 6" D.B.H. or greater =	3:1 (minimum 2.5" caliper)
Evergreen Tree 10' height or greater =	3:1 (minimum 8' height)
Landmark Tree (see list) =	1:1 (number of caliper inches = D.B.H. inches

 All replacement trees shall be of similar species to those being removed. Replacement trees shall be nursery grown and comply with ANSI Z60. Species, proposed size and any substitutions must be approved by the Wayne County Parks Design Staff prior to shipment or installation. Installation shall be per Wayne County Parks Standards. The suggested plant list is indicated below.

#### **Replacement Plant suggestions:**

#### Canopy Trees

Acer rubrum – Red Maple Acer saccharum – Sugar Maple Carya ovata – Shagbark Hickory Fagus grandifolia – American Beech Lirodendron tulipifera – Tulip Tree Nyssa sylvatica – Black Gum Ostrya virginiana – Ironwood Platanus occidentalis – Sycamore Quercus bicolor – Swamp White Oak Quercus imbricaria – Shingle Oak Quercus macrocarpa – Bur Oak Quercus rubra – Red Oak Tilia americana - Basswood

#### **Evergreen Trees**

Abies concolor – White Fir Picea glauca – White Spruce Picea pungens – Colorado Spruce Pinus Strobus – White Pine Taxodium distichum – Bald Cypress Tsuga Canadensis – Eastern Hemlock

# Flowering Trees

Amelanchier canadensis – Serviceberry Cercis canadensis – Eastern Redbud Cornus florida – Flowering Dogwood Crataegus crus-galli inermis 'Crusader' Malus species – Crab Apple

#### Bike Paths

- 1. All County Bike Paths within or in close proximity of construction limits shall be adequately barricaded for the duration of construction. Appropriate signage shall be installed where necessary to adequately inform visitors of the construction zone and directions for an alternative route.
- 2. All Bike Paths removed or damaged as a result of construction shall be replaced with 3.5" depth bituminous pavement. The section of pavement shall include an 8" depth 21AA aggregate base compacted per current MDOT standards, 2" depth 13A leveling course, tack coat and a 1.5" depth 36A wearing course. The bituminous pavement shall be installed per current MDOT installation methods.

#### Road Shoulders

1. All Road shoulders shall be restored with 4" of topsoil and seeded as specified. No gravel will be allowed beyond the asphalt shoulder. Shoulder restoration shall meet all current MDOT standards.

#### Park Drives

- 1. All Park Drives that are within or in close proximity to construction limits shall be replaced and restored to their original state. Construction applications shall meet all current MDOT standards and project specifics should be taken into consideration prior to commencement of restoration.
- 2. All construction equipment and materials remaining on site following construction period shall be removed and disposed of off site.

Through the Permits Office, the Wayne County Parks Design Staff shall review all construction permits within or in close proximity to Park property prior to issuance of a permit.

Please contact: Elizabeth Iszler, Chief of Planning and Design: (734) 261-4312

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