LANDSCAPE GUIDELINES FOR DEVELOPMENT

TOWN OF GREECE

November, 2013

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1) Purpose: The purpose of these guidelines is to establish a consistent standard for landscape design and installation for development in the Town of Greece. Landscaping associated with development should be designed in accordance with the guidelines established herein and shall be subject to site plan approval by the Planning Board. Variations from any standard in these guidelines may be permitted or required by the Planning Board.

2) Definitions

A) *Invasive Species: Species' of plants which are prohibited or otherwise regulated under 6 NYCRR Part 575 Prohibited and Regulated Invasive Species.

B) *Letter-of-Credit: A financial guarantee provided by the developer to the town as a security to ensure proper installation of improvements.

C) Certificate of Occupancy: A document issued by the Building Inspector which signifies that a building or addition thereto and site comply with all applicable regulations of the Town of Greece and Title 19 NYCRR (Building Codes of New York State) and all plans and specifications for said building or addition and site.

D) Certified Nursery Professional (CNP): A landscape professional having successfully completed the examination for, and continuously maintains their status in, the Certified Nursery Professional Program administered by the New York State Nursery and Landscape Association. A current list of registered CNPs is available on the Internet at http://rochesterlandscapers.com/services/cnpd.php

E) Licensed Landscape Architect: An individual licensed by the New York State Education Department's Office of Professions to perform services further described in Title VIII of the New York State Education Law. (refer to Title VIII for legal definition).

3) General Requirements

A) Design and certification: As a general rule, Landscape design, and certification of proper installation, should be provided by a Licensed Landscape Architect or Certified Nursery Professional as described herein. Certain exceptions may be made by the Planning Board or an authorized representative.

B) Materials: Landscape materials used, plant species selection, and installation procedures should be in accordance with standards established herein.

C) Buffering: Buffering between different land uses may be required by the Planning Board. Existing vegetation may serve as an effective buffer and should be considered in project planning.

D) Wood lots: For sites with existing mature trees, the Applicant should consult the Town's Tree Council as early in the planning process as possible.

I) Existing mature trees should be incorporated into development plans to the greatest degree practicable. Refer to the attachment entitled Protection Trees During Construction.

II) On recommendations from the Town's Tree Council, the Planning Board may require that existing mature trees, or treed areas, be preserved.

III) The Planning Board may require compensation for the removal of trees within the Town's Woodlot Inventory as designated by the Tree Council.

E) Responsibilities: Ensuring the quality and proper installation of landscaping is the responsibility of the developer. Long-term maintenance of landscaping will ultimately be the responsibility of the property owner.

F) *Plan notes: Landscape plans submitted to the Town of Greece shall include the following notes:

I) The Applicant is responsible for compliance with 6 NYCRR Part 575 Prohibited and Regulated Invasive Species.

II) The landscaping on the Premises shall be maintained by the current owner of the Premises, and by any future owner. The owner of the Premises shall replace any dead plants with the same species or a similar species. The replacement plant shall be no smaller than the previous plant when it originally was installed.

III) Prior to the issuance of a Final Certificate of Occupancy for the Premises, The Applicant shall provide certification verifying proper installation of landscape areas on the site in accordance with the landscape plan approved by the Planning Board, and in accordance with the Town's Landscape Guidelines for Development. Such certification shall be on the certification form provided in such guidelines and shall be completed by a New York State Licensed Landscape Architect or Certified Nursery Professional.

G) *Invasive species:

I) Invasive species: Species which are prohibited or otherwise regulated under 6 NYCRR Part 575 (attached) shall not be included in landscape plans approved by the Town of Greece.

II) Due to the presence of the invasive Emerald Ash Borer, ash trees shall not be included in landscape plans approved by the Town of Greece

4) Commercial Development

A) Landscape design: New or redeveloped commercial, industrial, and multi-family residential site plan applications for 1 or more buildings, greater than 10,000 square feet in size AND on a lot larger than 2 acres, shall include a landscape plan developed and stamped by a New York State Licensed Landscape Architect. For applications involving a single building less than 10,000 square feet in size AND on a lot of less than 2 acres, landscape plans shall be developed in consultation with a Certified Nursery Professional (CNP). Proof of CNP review shall be provided.

B) Percentage of landscaping: As a general rule, at least 30% of new or redeveloped commercial and industrial sites, and 50% of multi-family residential sites, should be devoted to landscaped area.

C) Parking lots islands: It is recommended that 5% of parking areas over 1 acre be designed as landscaped islands and/or medians.

D) Disturbed areas: Disturbed areas on a site plan that are designated for future development should be planted to grass and maintained as lawn areas unless otherwise permitted or required by the Planning Board.

E) Landscape Plans shall include at least the following:

I) Plant schedule including symbols used, common and botanical names, size and spacing requirements of plants used

II) % of green space existing and proposed for the site as a whole

III) % of parking areas devoted to landscaping

IV) Snow storage areas

V) Planting and installation details.

VI) Show the limit of clearing. Existing vegetation should be noted on the plan as "to remain" or "to be removed".

VII) Details of tree protection methods

VIII) Any other information that may impact the landscape design including overhead and underground utilities, or any other information deemed necessary by the Planning Board.

F) Landscape Certification for commercial, industrial, and multi-family residential sites: Prior to the issuance of a Final Certificate of Occupancy for the Premises, developers of commercial, industrial, and multi-family residential sites shall provide certification verifying proper installation of landscape areas on the site, in accordance with the landscape plan approved by the Planning Board, and in accordance these guidelines. Said certification shall be provided on the attached certification form, completed by a Licensed Landscape Architect or Certified Nursery Professional.

5) Residential Development

A) Single-family residential subdivisions should provide one (1) street tree in the tree lawn of each proposed interior building lot, and two (2) for corner lots.

B) *Street trees in residential subdivisions shall be included as a line-item in the developer's Letter-of-Credit.

C) Street tree species should be selected from the Town of Greece Master Tree List, available from the Department of Public Works.

6) Landscape materials / installation / quality standards:

A) Plant selection: Plant selection should be determined in consultation with a Licensed Landscape Architect or Certified Nursery Professional. A number of factors come into play when selecting the appropriate plant for different locations of the site.

I) *Invasive species: Species which are prohibited or otherwise regulated under 6 NYCRR Part 575 (attached) shall not be included in landscape plans approved by the Town of Greece.

II) *Due to the presence of the invasive Emerald Ash Borer, ash trees shall not be included in landscape plans approved by the Town of Greece.

III) Use of native plant species and locally produced landscape media (soil, mulch, etc.) is strongly encouraged.

IV) Salt tolerance: Road salt is a common factor in the demise of landscape plantings. Plantings near roadways, parking lots, and in areas that receive drainage from those portions of the site should be selected based in part on their salt tolerance.

V) Plants on berms and sloped areas: The shallow root structures of certain trees are not suited for planting on slopes or on top of berms.

VI) Site distances: Refer to Section 211-33 of the Zoning Ordinance.

B) Suitable nursery stock:

I) Nursery stock shall meet or exceed quality standards established in the current edition of American Standard for Nursery Stock, published by the American Association of Nurserymen, Washington D.C.

II) Nursery stock should be transported, staged, and otherwise handled in accordance with standards established in American Standard for Nursery Stock.

III) Nursery stock should be obtained from a reputable nursery within Hardiness zone 4, 5, or 6 as defined by the United States Department of Agriculture.

C) Plant size: Plant sizes shall be as follows unless otherwise required or permitted by the Planning Board.

I) Deciduous shade trees and ornamental trees shall have a caliper of at least 1.75 – 2 inches upon installation.

II) Multiple-trunk trees shall have a minimum of 3 trunks, which average 6 feet in height upon installation.

III) Coniferous trees shall have a minimum height of 5 feet upon planting.

IV) Shrubs shall be a minimum of 18 inches in height or width.

D) Plant placement and spacing: Plant spacing should be based on the space requirements of individual species and in recognition of their full growth potential.

I) Plants should be spaced from one another so as to allow for full potential growth of the particular species. In the case of buffering, additional room may be needed in the plans so that plants can be staggered.

II) Plants should not be placed where they will interfere with site drainage, paved areas or sidewalks, underground or overhead utilities, or any associated easements.

III) Snow storage areas should be limited to planting of grass.

IV) Landscape islands should be provided in parking lots to channel traffic and create visual and climatic relief in large expanses of pavement. The use of shade trees is encouraged within parking lots. Species selection is of particular importance in these harsh growing conditions due to excessive heat, dry soil conditions, road salt accumulation, and snow plowing.

E) Berm consistency:

I) Earthen berms should be constructed of stable soils that are low in organic matter, should have a slope no steeper than 3 on 1, and should be covered with 6 inches of suitable topsoil unless otherwise required or permitted by the Planning Board.

II) Plantings: The shallow root structures of certain trees are not suited for planting on slopes or on top of berms. Plant selection should be determined in consultation with a Licensed Landscape Architect or Certified Nursery Professional.

7) Maintenance and Enforcement

A) Maintenance of landscaping is the responsibility of the current property owner. Replacement of dead or dying plants is a standard condition of Planning Board approval.

B) Landscape areas required or permitted by the Planning Board are elements of the approved site plan, and as such are subject to enforcement under Section 211-37 of the Zoning Ordinance (Site Plan compliance) and Section 157 of the Town of Greece Code (Property Maintenance).

C) Post approval changes of the landscape layout or plant species specified in the landscape plan can be done via change order submitted to the Planning Board Clerk. Extensive or substantial changes may require additional review and approval by the Planning Board.

LANDSCAPE CERTIFICATE OF COMPLIANCE

(To be completed by a New York State Licensed Landscape Architect or Certified Nursery Professional)

Project name_____

Address_____

☐ **The landscaping on the site is complete.** I represent that the landscaping has been installed in compliance with the approved landscaping plan and in accordance with standards set forth in the Town of Greece Landscape Guidelines for Development.

- or -

☐ **Posting a Letter of Credit for incomplete landscaping.** I personally inspected the landscaping and I have verified that all landscape plantings are correct as to their location, size, number, and species, and that all materials and installation procedures used are in accordance with the landscape plan approved by the Planning Board and standards set forth in the Town of Greece Landscape Guidelines for Development.

_____ _____

Signature of *New York State Licensed Landscape Architect or Certified Nursery Professional* — *Date*

NEW YORK STATE
DEPARTMENT OF
ENVIRONMENTAL CONSERVATION

6 NYCRR Part 575 Prohibited and Regulated Invasive Species Express Terms

The purpose of this rulemaking is to to help control invasive species, a form of biological pollution, by reducing the introduction of new and spread of existing populations, thereby having a positive impact on the environment.

Express Terms

Existing 6 NYCRR Subchapter C of Chapter V, Real Property and Land Acquisition, is renumbered Subchapter D, and existing 6 NYCRR Subchapter D of Chapter V, Water Regulation and Water Regulation, is renumbered Subchapter E. A new 6 NYCRR Subchapter C of Chapter V is added to read as follows: 'Invasive Species' . A new 6 NYCRR Part 575 is added in Chapter V, Subchapter C to read as follows:

6 NYCRR Part 575 Prohibited and Regulated Invasive Species

575.1 Purpose, scope and applicability.

(a) The purpose of this Part is to establish procedures to identify and classify invasive species and to establish a permit system to restrict the sale, purchase, possession, propagation, introduction, importation, and transport of invasive species in New York, as part of the Department of Environmental Conservation's statewide invasive species management program, as required by ECL sections 9-1709 and 71-0703.

(b) The regulations set forth in this Part may be complemented by provisions found in Titles 1 and 6 of the New York Code of Rules and Regulations and local laws or regulations that are designed to restrict the sale, purchase, possession, propagation, introduction, importation, transport and disposal of specific invasive species in New York. These existing regulations apply, unless in conflict, superseded or expressly stated otherwise in this Part.

575.2 Definitions.

As used in this Part, the following words and terms shall be defined as follows:

(a) 'Animal' means all vertebrate and invertebrate species, in any stage of development, including but not limited to mammals, birds, reptiles, amphibians, fish, mollusks, arthropods, insects, and their eggs, larvae or young, but excluding humans.

(b) 'Certificate of Inspection' means a valid form certifying the eligibility of regulated invasive species for intrastate movement under the requirements of this Part.

(c) 'Commissioner' means the commissioner of the Department of Environmental Conservation as well as meaning the Commissioner's designated agent.

(d) 'Compliance Agreement' means an approved document, executed by persons or firms, covering the restricted movement, processing, handling, or utilization of regulated invasive species.

(e) 'Container' means any object used to contain, store or transport products.

(f) 'Control' means, as appropriate, eradicating, suppressing, reducing, or managing invasive species populations, preventing spread of invasive species from areas where they are present, and taking steps such as restoration of native species and habitats to reduce the effects of invasive species and prevent further invasions.

(g) 'Cultivar' means a plant, or group of plants, of any species selected for desirable characteristics under cultivation, and may also be referred to as 'Variety'.

(h) 'Department' means the New York State Department of Environmental Conservation.

(i) 'Disposal' means the discharge, deposit, dumping or placing of any invasive species into or on any land or water in a manner that prevents the establishment, introduction or spread of the disposed species.

(j) 'Ecosystem' means the complex of a community of organisms and its environment functioning as an interactive unit.

(k) 'Education' means for the purpose of instruction or training.

(l) 'Environmental Notice Bulletin (ENB)' means the publication of the department published pursuant to section 3-0306 of the ECL, accessible on the department's Internet web site at http://www.dec.ny.gov.

(m) 'Free-living State' means unconfined and outside the control of a person, and in the case of animals other than fish, includes the ability to fly, walk, or swim outside of human control; and

(1) Invasive species found or placed in the following locations shall be considered to be a free-living state:

(i) lands identified as public lands;

(ii) lands that are continually or intermittently connected to public lands;

(iii) natural areas

(iv) waters identified as public waters;

(v) waters that are continually or intermittently connected to public waters; or

(vi) water-using facilities, such as fish hatcheries, aquatic farms, zoos, and minnow retail or wholesale operations, with outflows that provide direct access for species to enter public waters

(2) in the case of a fish or aquatic plant, the following locations are not considered a free-living state:

(i) artificial ponds such as water gardens that have no outlet to public waters;

(ii) waters whose shorelines are entirely within the land owned by a person, not continually or intermittently connected to public waters, and not identified by the Department as public waters; or

(iii) water-using facilities, such as fish hatcheries, aquatic farms, zoos, aquaria, and minnow retail or wholesale operations, with outflows that do not provide direct access for species to enter public waters.

(n) 'Fungi' means organisms such as yeast, molds, smuts, mildews, rusts, mushrooms and toadstools that reproduce by spores and lack chlorophyll, leaves, true stems, and roots.

(o) 'Import' means to bring into New York State or to arrange for another person to bring into New York State.

(p) 'Incidental' means an inadvertent act when performing an otherwise legal activity.

(q) 'Introduce' means the intentional or unintentional escape, release, dissemination, or placement of a species into an ecosystem as a result of human activity.

(r) 'Invasiveness Rank' means a rank assigned to a nonnative species to signify its level of invasiveness based on the relative maximum score (0-100); points are accrued as a percent of the maximum possible points for four categories: ecological impacts, biological characteristics and dispersal ability, ecological amplitude and distribution, and difficulty of control. Based on points, species are ranked Very High, High, Medium, Low or Insignificant.

(s) 'Invasive Species' means a species that is nonnative to the ecosystem under consideration, and whose introduction causes or is likely to cause economic or environmental harm or harm to human health. For the purposes of this Part, the harm must significantly outweigh any benefits.

(t) 'Limited Permit' means a valid form authorizing the restricted movement of regulated invasive species for specified processing, handling, or utilization.

(u) 'Native Species' means with respect to a particular ecosystem, a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem.

(v) 'Natural Areas' means those lands that are preserved, restored, or managed for their natural features, including but not limited to parks, forests, refuges, nature preserves, grasslands, wetlands and shorelines.

(w) 'Nonnative species' means a species not indigenous to an ecosystem under consideration or to New York State, and includes an individual specimen.

(x) 'Person' means any individual, firm, co-partnership, association, or corporation, other than the state or a public corporation, as the latter is defined in subdivision 1 section 3 of the General Corporation Law.

(y) 'Plant' means all plant species, in any stage of development, including, but not limited to trees, shrubs, vines, grasses, sedges, rushes, herbs, mosses, lichens, as well as submergent, emergent, free-floating or floating-leaf plants, and includes any part of the plant.

(z) 'Possess' includes actual and constructive possession and means to own, maintain control over, restrain, hold, grow, raise or keep.

(aa) ' Prohibited invasive species' means a species that poses a clear risk to New York's economy, ecological well-being and/or human health and is listed as prohibited under section 575.3.

(bb) 'Propagate' means to cause to continue to increase by sexual or asexual reproduction.

(cc) 'Propagule' means parts of a plant that are capable of producing additional plants through either sexual or asexual reproduction, including but not limited to seeds, roots, stems, rhizomes, tubers and spores.

(dd) 'Public Lands' means land in the public domain owned by a federal, state, county, city, town or local government entity.

(ee) 'Public Waters' means lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial limits of the State of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters which do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction.

(ff) 'Purchase' means to obtain by paying money or other valuable consideration.

(gg) 'Reasonable Precautions' means intentional actions that prevent or minimize the possession, transport, or introduction of invasive species.

(hh) 'Regulated Invasive Species' means a species that has the potential to cause significant harm to New York's economy, ecological well being and/or human health and could be effectively contained through regulatory programs and is listed as regulated under section 575.4.

(ii) 'Research' means to conduct systematic search for facts or scientific investigation for which its intended purpose is the discovery of new facts and their correct interpretation, the revision of accepted conclusions, or the practical application of such new or revised conclusions.

(jj) 'Sell' means to offer for sale, make or attempt to make sales, or to give up to another for money or other valuable consideration.

(kk) 'Species' means a group of organisms all of which have a high degree of physical and genetic similarity, generally interbreed only among themselves, and show persistent differences from members of allied groups of organisms.

(ll) 'Transport' means to cause, or attempt to cause, an invasive species to be imported or carried or moved within the state, and includes accepting or receiving a specimen for the purpose of transportation or shipment.

575.3 Prohibited Invasive Species.

(a) Prohibited invasive species are identified in this section by scientific and common names and by specific categories of species.

(b) Except as otherwise provided by this Part, no person shall knowingly possess with the intent to sell, import, purchase, transport, or introduce any prohibited invasive species.

(c) Except as otherwise provided by this Part, no person shall sell, import, purchase, transport, introduce or propagate any prohibited invasive species.

(d) Identification of Prohibited Species.

(1) Algae and cyanobacteria. The following algae and cyanobacteria invasive species are prohibited:

Scientific Name	Common Name
i. *Caulerpa taxifolia*	Killer Green Algae
ii. *Didymosphenia geminata*	Didymo
iii. *Prymnesium parvum*	Golden Algae

(2) Plants. The following plant invasive species are prohibited:

Scientific Name	Common Name
i. *Acer pseudoplatanus*	Sycamore Maple
ii. *Achyranthes japonica*	Japanese Chaff Flower
iii. *Alliaria petiolata*	Garlic Mustard
iv. *Ampelopsis brevipedunculata*	Porcelain Berry
v. *Anthriscus sylvestris*	Wild Chervil
vi. *Aralia elata*	Japanese Angelica Tree
vii. *Artemisia vulgaris*	Mugwort
viii. *Arthraxon hispidus*	Small Carpgrass
ix. *Berberis thunbergii*	Japanese Barberry
x. *Brachypodium sylvaticum*	Slender False Brome
xi. *Cabomba caroliniana*	Fanwort
xii. *Cardamine impatiens*	Narrowleaf Bittercress
xiii. *Celastrus orbiculatus*	Oriental Bittersweet
xiv. *Centaurea stoebe* (*C. biebersteinii, C. diffusa, C. maculosa misapplied, C. xpsammogena*)	Spotted Knapweed
xv. *Cirsium arvense* (*C. setosum, C. incanum, Serratula arvensis*)	Canada Thistle
xvi. *Cynanchum louiseae* (*C. nigrum, Vincetoxicum nigrum*)	Black Swallow-wort
xvii. *Cynanchum rossicum* (*C. medium, Vincetoxicum medium, V. rossicum*)	Pale Swallow-wort
xviii. *Dioscorea polystachya* (*D. batatas*)	Chinese Yam
xix. *Dipsacus laciniatus*	Cut-leaf Teasel
xx. *Egeria densa*	Brazilian Waterweed
xxi. *Elaeagnus umbellata*	Autumn Olive

xxii. *Euphorbia cyparissias*	Cypress Spurge
xxiii. *Euphorbia esula*	Leafy Spurge
xxiv. *Ficaria verna* (*Ranunculus ficaria*)	Lesser Celandine
xxv. *Frangula alnus* (*Rhamnus frangula*)	Smooth Buckthorn
xxvi. *Glyceria maxima*	Reed Manna Grass
xxvii. *Heracleum mantegazzianum*	Giant Hogweed
xxviii. *Humulus japonicus*	Japanese Hops
xxix. *Hydrilla verticillata*	Hydrilla, Water Thyme
xxx. *Hydrocharis morus-ranae*	Frogbit
xxxi. *Imperata cylindrica (I. arundinacea, Lagurus cylindricus)*	Cogon Grass
xxxii. *Iris pseudacorus*	Yellow Iris
xxxiii. *Lepidium latifolium*	Broad-leaved Pepper-grass
xxxiv. *Lespedeza cuneata*	Chinese Lespedeza
xxxv. *Ligustrium obtusifolium*	Border Privet
xxxvi. *Lonicera japonica*	Japanese Honeysuckle
xxxvii. *Lonicera maackii*	Amur Honeysuckle
xxxviii. *Lonicera morrowii*	Morrow's Honeysuckle
xxxix. *Lonicera tatarica*	Tartarian Honeysuckle
xl. *Lonicera x bella*	Fly Honeysuckle
xli. *Ludwigia hexapetala (L. grandiflora)*	Uruguayan Primrose Willow
xlii. *Ludwigia peploides*	Floating Primrose Willow
xliii. *Lysimachia vulgaris*	Garden Loosestrife
xliv. *Lythrum salicaria*	Purple Loosestrife
xlv. *Microstegium vimineum*	Japanese Stilt Grass
xlvi. *Murdannia keisak*	Marsh Dewflower
xlvii. *Myriophyllum aquaticum*	Parrot-feather
xlviii. *Myriophyllum heterophyllum*	Broadleaf Water-milfoil
xlix. *Myriophyllum x pinnatum*	Broadleaf Water-milfoil Hybrid
l. *Myriophyllum spicatum*	Eurasian Water-milfoil
li. *Nymphoides peltata*	Yellow Floating Heart
lii. *Oplismenus hirtellus*	Wavyleaf Basketgrass
liii. *Persicaria perfoliata (Polygonum perfoliatum)*	Mile-a-minute Weed
liv. *Phellodendron amurense*	Amur Cork Tree
lv. *Phragmites australis*	Common Reed Grass
lvi. *Phyllostachys aurea*	Golden Bamboo
lvii. *Phyllostachys aureosulcata*	Yellow Groove Bamboo
lviii. *Potamogeton crispus*	Curly Pondweed
lix. *Pueraria montana*	Kudzu
lx. *Reynoutria japonica (Fallopia japonica, Polygonum cuspidatum)*	Japanese Knotweed
lxi. *Reynoutria sachalinensis (Fallopia sachalinensis, Polygonum sachalinensis)*	Giant Knotweed

lxii. *Reynoutria x bohemica (Fallopia x bohemica, Polygonum x bohemica)*	Bohemian Knotweed
lxiii. *Rhamnus cathartica*	Common Buckthorn
lxiv. *Rosa multiflora*	Multiflora Rose
lxv. *Rubus phoenicolasius*	Wineberry
lxvi. *Salix atrocinerea*	Gray Florist's Willow
lxvii. *Silphium perfoliatum*	Cup-plant
lxviii. *Trapa natans*	Water Chestnut
lxix. *Vitex rotundifolia*	Beach Vitex

(3) Fish. The following fish invasive species are prohibited:

Scientific Name	Common Name
i. *Channa argus*	Northern Snakehead
ii. *Channa marulius*	Bullseye Snakehead
iii. *Channa micropeltes*	Giant Snakehead
iv. *Clarias batrachus*	Walking Catfish
v. *Gambusia affinis*	Western Mosquitofish
vi. *Gambusia holbrooki*	Eastern Mosquitofish
vii. *Hypophthalmichthys harmandi*	Largescale Silver Carp
viii. *Hypophthalmichthys molitrix*	Silver Carp
ix. *Hypophthalmichthys nobilis*	Bighead Carp
x. *Misgurnus anguillicaudatus*	Oriental Weatherfish
xi. *Mylopharyngodon piceus*	Black Carp
xii. *Neogobius melanostomus*	Round Goby
xiii. *Petromyzon marinus*	Sea Lamprey
xiv. *Proterorhinus semilunaris (P. marmoratus)*	Tubenose Goby

(4) Aquatic invertebrates. The following aquatic invertebrate invasive species are prohibited:

Scientific Name	Common Name
i. *Bellamya chinensis (Cipangopaludina chinensis)*	Chinese Mystery Snail
ii. *Bithynia tentaculata*	Faucet Snail
iii. *Bythotrephes longimanus (B. cederstroemi)*	Spiny Water Flea
iv. *Cercopagis pengoi*	Fishhook Water Flea
v. *Corbicula fluminea*	Asian Clam
vi. *Crassostrea ariakensis*	Suminoe Oyster
vii. *Didemnum vexillum*	Carpet Tunicate
viii. *Dreissena polymorpha*	Zebra Mussel
ix. *Dreissena rostriformis bugensis*	Quagga Mussel
x. *Eriocheir sinensis*	Chinese Mitten Crab
xi. *Hemigrapsus sanguineus*	Asian Shore Crab
xii. *Hemimysis anomala*	Bloody Red Shrimp
xiii. *Orconectes rusticus*	Rusty Crayfish

xiv. *Potamopyrgus antipodarum*	New Zealand Mud Snail
xv. *Rapana venosa*	Veined Rapa Whelk
xvi. *Styela plicata*	Asian Sea Squirt

(5) Terrestrial invertebrates. The following terrestrial invertebrate invasive species are prohibited:

Scientific Name	Common Name
i. *Achatina achatina*	Giant Ghana Snail
ii. *Achatina fulica (Lissachatina fulica)*	Giant African Land Snail
iii. *Adelges tsugae*	Hemlock Woolly Adelgid
iv. *Agrilus planipennis*	Emerald Ash Borer
v. *Amynthas spp.*	Asian Earthworms
vi. *Anoplophora glabripennis*	Asian Longhorned Beetle
vii. *Apis mellifera scutellata x A. mellifera ligustica/ A. mellifera iberiensis*	Africanized Honey Bee
viii. *Archachatina marginata*	Giant West African Snail
ix. *Cryptococcus fagisuga*	Beech Scale
x. *Lymantria dispar*	Asian and European Gypsy Moth
xi. *Monochamus alternatus*	Japanese Pine Sawyer
xii. *Pityophthorus juglandis*	Walnut Twig Beetle
xiii. *Sirex noctilio*	Sirex Woodwasp

(6) Terrestrial and aquatic vertebrates. The following terrestrial and aquatic vertebrate invasive species are prohibited:

Scientific Name	Common Name
i. *Cygnus olor*	Mute Swan
ii. *Lepus europaeus*	European Hare
iii. *Myocastor coypus*	Nutria
iv. *Nyctereutes procyonoides*	Asian Raccoon Dog
v. *Oryctolagus cuniculus*	European Rabbit
vi. *Sus scrofa (excluding Sus scrofa domestica)*	Eurasian Boar

(7) Fungi. The following fungi invasive species are prohibited:

Scientific Name	Common Name
i. *Amylostereum areolatum*	Sirex Wasp Fungus
ii. *Geomyces destructans*	White-nose Syndrome
iii. *Geosmithia morbida*	Thousand Canker Disease
iv. *Phytophthora ramorum*	Sudden Oak Death

(e) Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable.

(f) A person may possess, sell, purchase, transport or introduce for a maximum of one year following the effective date of this Part, the prohibited invasive species listed below:

Scientific Name	Common Name

1. *Berberis thunbergii*	Japanese Barberry

(g) A person may possess, sell, offer for sale, distribute, transport, or otherwise market or trade live Eurasian boars '(Sus scrofa)' until September 1, 2015. No person shall knowingly import, propagate or introduce Eurasian boars into a free-living state.

575.4 Regulated Invasive Species.

(a) Regulated invasive species are identified in this section by scientific and common names and by specific categories of species.

(b) Except as otherwise provided by this Part, no person shall knowingly introduce into a free-living state or introduce by a means that one knew or should have known would lead to the introduction into a free-living state any regulated invasive species, although such species shall be legal to possess, sell, buy, propagate and transport.

(c) Identification of Regulated Species.

(1) Algae and cyanobacteria. The following algae and cyanobacteria invasive species are regulated:

Scientific Name	Common Name
i. *Cylindrospermopsis raciborskii*	Cylindro
ii. *Grateloupia turuturu*	Red Algae

(2) Plants. The following plant invasive species are regulated:

Scientific Name	Common Name
i. *Acer platanoides*	Norway Maple
ii. *Clematis terniflora*	Japanese Virgin's Bower
iii. *Euonymus alatus*	Burning Bush
iv. *Euonymus fortunei*	Winter Creeper
v. *Miscanthus sinensis*	Chinese Silver Grass
vi. *Robinia pseudoacacia*	Black Locust

(3) Fish. The following fish invasive species are regulated:

Scientifc Name	Common Name
i. *Carassius auratus*	Gold Fish
ii. *Cyprinella lutrensis*	Red Shiner
iii. *Cyprinus carpio*	Common Carp, Koi
iv. *Gymnocephalus cernuus*	Ruffe
v. *Monopterus albus*	Asian Swamp Eel
vi. *Oreochromis aureus*	Blue Tilapia
vii. *Oreochromis niloticus*	Nile Tilapia
viii. *Pterois miles*	Common Lionfish
ix. *Pterois volitans*	Red Lionfish
x. *Sander lucioperca (Stizostedion lucioperca)*	Zander
xi. *Scardinius erythrophthalmus*	Rudd
xii. *Tinca tinca*	Tench

(4) Aquatic invertebrates. The following aquatic invertebrate invasive species are regulated:

Scientific Name	Common
i. *Bellamya japonica (Cipangopaludina japonica)*	Japanese Mystery Snail
ii. *Carcinus maenas*	European Green Crab
iii. *Daphnia lumholtzi*	Water Flea
iv. *Hemigrapsus takanoi (H. penicillatus)*	Brush-clawed Shore Crab, Grapsid Crab

(5) Terrestrial and aquatic vertebrates. The following terrestrial and aquatic vertebrate invasive species are regulated:

Scientific Name	Common Name
i. *Alopochen aegyptiacus*	Egyptian Goose
ii. *Cairina moschata*	Muscovy Duck
iii. *Myiopsitta monachus*	Monk Parakeet
iv. *Trachemys scripta elegans*	Red-eared Slider
v. *Xenopus laevis*	African Clawed Frog

575.5 Classifications.

(a) Classification. A species shall be classified and listed as prohibited or regulated by the Department and the Department of Agriculture and Markets by applying the invasiveness ranking system established in 'A Regulatory System for Non-Native Species, June 2010,' ("the Report")[1]. The Department and the Department of Agriculture and Markets shall consider the following ecological and socio-economic factors to determine the invasiveness rank and whether the species should be classified as prohibited or regulated:

(1) The species meets the definition of invasive species;

(2) The species is currently on a federal list or is listed by other states as an invasive species and its native habitat has climatic conditions similar to that of New York State;

(3) Ecological impacts including, but not limited to, natural ecosystem processes, community structure and composition, and impacts on other species or species groups;

(4) Biological characteristics and dispersal ability including, but not limited to, mode and rate of reproduction, potential for dispersal and spread, characteristics which increase competitive advantages, and known related invasive species;

(5) Ecological amplitude and distribution including, but not limited to, population status, habitats utilized, role of disturbance in establishment, and climate in native range;

(6) Difficulty of control;

(7) Economic benefits or negative impacts of the species;

(8) Human health benefits or negative impacts of the species; and

(9) Cultural or societal significance of the benefits or harm caused by the species.

(b) Species classified as prohibited are nonnative species that pose a clear risk to New York's economy, ecological well-being and/or human health and:

(1) are listed on a federal list as an invasive species and its native habitat has climatic conditions similar to New York State; or

(2) are assessed using the Report's invasiveness ranking process established by the Department and Department of Agriculture and Markets, and assigned an ecological invasive ranking of "Very High" or "High"; or

(3) for which the results of a qualitative socio-economic assessment, using an accepted ranking process, established by the Department and Department of Agriculture and Markets, justifies placing a species that ranked "Moderate" or "Low" in the ecological assessment in the prohibited category.

(c) Grace periods may be established for species classified as prohibited by the Department and the Department of Agriculture and Markets to allow businesses to plan for the management of existing stock.

(d) Species classified as regulated are nonnative species that have the potential to cause significant harm to New York's economy, ecological well being and/or human health and could be effectively contained through regulatory programs, and:

(1) are assessed using the Report's invasiveness ranking process, established by the Department and Department of Agriculture and Markets, and assigned an ecological invasive ranking of "Moderate" or higher invasiveness; or

(2) for which the results of a qualitative socio-economic assessment, using an accepted ranking process, established by the Department and Department of Agriculture and Markets justifies placing a species that ranked "Low" in the ecological assessment in the regulated category.

(e) Invasive species that are classified pursuant to this section and are identified in sections 575.3 and 575.4, are subject to requirements of this Part consistent with the respective invasive species classification. All future classifications of prohibited and regulated invasive species shall apply the invasiveness ranking system established in the Report and required by this section.

575.6 Conditions Governing Regulated Invasive Species

(a) A regulated invasive species that is sold or offered for sale in New York State shall have attached in a conspicuous place on the container used to display the regulated invasive species, and where no container is used on the species itself, a label with the words 'Invasive Species-Harmful to the Environment' in at least 14 point bold type. Where it is impracticable to display a label, written notice shall be provided upon sale to the purchaser. The label or written notice shall be of a design prescribed by the Department of Agriculture and Markets with the approval of the Department and shall offer alternative non-invasive species and provide instructions for the care or tending of the invasive species to prevent their spread in the State or the introduction into a free-living state.

(b) Before supplying or planting a regulated invasive species as part of a landscape service in the State, a person shall give written notice to the customer that the invasive species is harmful to the environment. Such notice shall include the common and scientific names of the invasive species immediately followed by the words "Invasive species-Harmful to the Environment" in no less than 14 point bold type. The notice shall offer alternative non-invasive species and shall provide instructions for the care or tending of the invasive species to prevent their spread in the State or the introduction into a free-living state.

(c) No person selling or offering for sale a regulated species shall conceal, detach, alter, deface, or destroy any label, sign, or notice required under this section.

(d) Any person who purchases a regulated invasive species shall be required to follow any instructions required by this section and maintain the required instructions until the regulated invasive species is disposed of in a manner that renders it non-living and non-viable.

575.7. Petitions to add a species to the invasive species list or remove a species from the invasive species list.

(a) A person may petition the Department to have a species added to the invasive species list or removed from the invasive species list found in this Part. Persons who submit a petition to add a species to the invasive species list or remove a species from the invasive species list must provide his or her name, address, telephone number, and e-mail address (if available). The Department may only classify additional nonnative species that meet the established criteria in section 575.5 for prohibited or regulated as invasive species and may classify them as prohibited or regulated invasive species if the commissioner, with the approval of the New York State Department of Agriculture and Markets determines the established criteria are met. Persons who submit a petition to remove a species from the invasive species list must provide his or her name, address, telephone number, and (if available) e-mail address. The Department, with the approval of the New York State Department of Agriculture and Markets, may only remove classified invasive species if those invasive species no longer meet the established criteria in section 575.5. Persons who submit a petition to add a species to the invasive species list or remove a species from the invasive species list are encouraged to provide the following information, which can facilitate the review process:

(b) Identification and background of the species.

(1) The species scientific name;

(2) Species taxonomic classification;

(3) Common synonyms;

(4) Species taxonomic classification;

(5) Common names;

(6) Summary of life history;

(7) Native and world distribution;

(8) Distribution in New York State, if any;

(9) Description of control efforts, if established in New York State; and

(10) Whether the species is regulated at the Federal or local level.

(c) Potential consequences of the species' introduction or spread.

(1) The species' habitat suitability in New York State;

(2) Dispersal potential (biological characteristics associated with invasiveness);

(3) Potential economic impacts (e.g., potential to reduce crop yields, lower commodity values, or cause loss of markets for New York State goods); and

(4) Potential environmental impacts (e.g., impacts on ecosystem processes, natural community composition or structure, human health, recreation patterns, property values, or use of chemicals to control the species).

(d) Likelihood of the species' introduction or spread.

(1) Potential pathways for the species' movement into and within New York State;

(2) Description of control efforts either within New York or nearby areas where this species is present; and

(3) The likelihood of survival and spread of the species within each pathway.

(e) Evidence that the species is distributed throughout its potential range or has spread too far to implement effective control.

(f) Evidence that control efforts have been unsuccessful and further efforts are unlikely to succeed.

(g) For cultivars of a listed invasive species, scientific evidence that the cultivar has a combination of risk elements that result in a low risk.

575.8 Exemptions.

(a) Compliance with the provisions of this Part do not apply to:

(1) a person who possesses, imports, sells, purchases, propagates, transports, or introduces a prohibited invasive species or regulated invasive species, if the Department determines that the possession, sale, importation, purchase, transportation, or introduction was incidental or unknowing, and was not due to the person's failure to take reasonable precautions.

(2) a person who possesses or transports a prohibited or regulated invasive species for the purposes of control or management of that existing invasive species that was not introduced due to the person's failure to take reasonable precautions.

(3) a person who transports a prohibited invasive species or regulated invasive species for the purpose of identification or disposal.

(4) a person who possesses, sells, imports, purchases, transports, or introduces a plant cultivar whose parent species is a prohibited invasive species or regulated invasive species, for which the Department determines:

(i) that the primary means of reproduction of the cultivar's parent species is sexual, not vegetative, and

(ii) that the cultivar and its offspring do not revert to express the invasive characteristics of the parent species, including,

('a') the cultivar is completely sterile or has no reproductive parts; or,

('b') demographic modeling predicts that the cultivar is unable to establish expanding populations in natural areas.

(iii) The Department will publish a list of cultivars meeting the criteria of this subparagraph in the State Register and Environmental Notice Bulletin. Only cultivars listed pursuant to this section are eligible for this exemption.

(5) a person who is authorized by permit issued by the Department or Department of Agriculture and Markets to possess, sell, import, purchase, transport or introduce a species for disposal, control, research, or education, but the species shall not be introduced into a free-living state unless explicitly authorized by permit pursuant to section 575.9.

(6) a person operating under a compliance agreement, limited permit, or certificate of inspection pertaining to a prohibited or regulated invasive species, issued by the Department, Department of Agriculture and Markets and/or the USDA Animal and Plant Health Inspection Service.

(7) a person to whom a permit has been issued by the Department or the Department of Agriculture and Markets for importation, transport, distribution or release of a pest or biological control agent that is a listed or designated prohibited invasive species or regulated invasive species.

(8) wetland plant species associated with a vegetation treatment unit used in a wastewater treatment facility authorized by a Department permit prior to the adoption of this Part.

575.9 Invasive Species Permits.

(a) A person may possess, with the intent to sell, import, purchase, transport or introduce, a prohibited invasive species if the person has been issued a permit by the Department for research, education, or other approved activity, under this Part.

(b) A person may only introduce a regulated invasive species into a free-living state if the person is issued a permit under this section expressly authorizing such introduction.

(c) Written Application Required.

(1) Applications for permits under this chapter shall be submitted in writing to the Department on forms available from the Department. The application shall include:

(i) the name and quantity or number of invasive species specimens for which a permit is sought;

(ii) whether the permit is sought for research, education, or other activity;

(iii) a description of other relevant permits, approvals or licenses of the applicant,

(iv) the applicant's purpose or reason for seeking the permit and;

(v) other relevant information, including control and disposal measures.

(2) The Department may request additional information including, but not limited to: location or storage area of the invasive species, or how it will be kept or stored to prevent spreading into the wild, how it will be disseminated, and how it will be destroyed once the applicant is done using them.

(3) The Department shall act on complete permit applications within 45 days following receipt of the application.

(d) Approval Criteria. The Department shall review permit applications to determine whether all of the following criteria are met.

(1) The applicant is knowledgeable in the proper handling, control, and disposal of the invasive species.

(2) The applicant has an adequate site or facility for containment of the invasive species.

(3) The applicant has demonstrated to the Department's satisfaction that permitted activities will not cause significant ecologic or economic harm or harm to human health.

(4) The applicant has complied with the conditions of any previous Department permits issued under this chapter.

(5) The Department accepts proposed disposal methods and protocols which will render the invasive species non-viable and will prevent the introduction and spread of the invasive species.

(e) Issuance and Conditions.

(1) If the Department determines that there is significant public interest, it may hold a public information hearing on a permit application before acting on the application.

(2) An applicant meeting the approval criteria may be issued a permit subject to conditions the Department considers reasonable.

(f) Records and Reporting.

(1) Each permittee shall keep a current, correct and complete record of all permit activities as required by the Department, on forms available from the Department. Permit records may be inspected and copied by the Department at any time. Copies of records shall be provided to the Department upon request.

(g) Permit Transfer; Alterations.

(1) Unless expressly provided by the terms of the permit or by subsequent written approval of the Department, permits issued under this Part are not transferable. No person shall alter or deface a permit issued under this Part.

(h) Other Permits or Approvals.

(1) A person who holds a permit or approval issued by the Department under another regulation or a statute, other than a license or permit or order issued by the Department pursuant to section 9-1709 of the Environmental Conservation Law or pursuant to the provisions of this Part, is not required to hold a permit under this Part for disposal, control, research or education involving a prohibited or regulated invasive species if the Department determines that the following apply:

(i) the permit or approval expressly authorizes the disposal, control, research or education activity involving a prohibited or regulated invasive species;

(ii) the permit or approval includes legally enforceable requirements that are at least equivalent to those that would be contained in a permit issued by the Department under this Part; and

(iii) the person is not in violation of the permit or approval.

575.10 Penalties and Enforcement

(a) Any person who violates this Part or any license or permit or order issued by the Department, or Department of Agriculture and Markets, pursuant to section 9-1709 of the Environmental Conservation Law or pursuant to the provisions of this Part shall be liable for all penalties and other remedies provided for in the Environmental Conservation Law including section 71-0703(9). With respect to Eurasian boars, any person who violates this Part shall also be liable for all penalties provided for in the Environmental Conservation Law, including section 71-0925. Such penalties and remedies may be in addition to any other penalty or remedy available under any other law, including but not limited to, permit revocation.

575.11 Coordination

(a) This Part does not affect the authority of the Department of Agriculture and Markets. The Department of Agriculture and Markets shall inspect registered growers and dealers of plant material pursuant to Agriculture and Markets Law, Article 14 section 166, for compliance with this Part. Any violation issued by the Department of Agriculture and Markets shall be referred to the Department of Environmental Conservation for assessment of penalties pursuant to Environmental Conservation Law, section 71-0703.

575.12 Severability

(a) If a provision of this Part or its application to any person or circumstance is determined to be contrary to law by a court of competent jurisdiction, such determination shall not affect or impair the validity of the other provisions of this Part or the application to other persons and circumstances.

[1] The Report is available for inspection and copying from the Division of Lands and Forests of the New York State Department of Environmental Conservation offices at 625 Broadway, Albany, NY 12233-4752, or can be accessed from the Department's website.

RECOMMENDED TREE SPECIES FOR STREET TREES
TOWN OF GREECE MASTER TREE LIST

Recommended trees for under power lines or for tree lawns that are 4-6 feet wide

Common Name	Latin Name	Family	Height (feet)	Spread (feet)	Shape	Soil	Comments	Salt Tolerance	Transplant
Thornless C. Hawthorn	Crataegus crusgalli inermis	Rose	25	20	Wide round	Tolerates high pH	White flower, red fruit	Tolerant	Spring
Washington Hawthorn	Crataegus phaenopyrum	Rose	20-30	20-30	Broad	Well drained	Thorned	Tolerant	Spring
Robin Hill Serviceberry	Amerlanchier x grand. 'Robin Hill'	Rose	20	12	Wide	Moist, acidic, well drained	Pink flower	Intermediate	Spring/Fall
Spring Snow Crabapple	Malus x 'Spring Snow'	Rose/Apple	20	15	Oval	Well drained, acidic	White flower, no fruit	Intermediate	Spring/Fall
Centurion Crabapple	Malus x 'Centurion'	Rose/Apple	20	15	Upright oval	Well drained, acidic	Pink/Red flower, red/green leaf, red fruit	Intermediate	Spring/Fall
Red Spire Pear	Pyrus calleryana 'Red Spire'	Rose/Apple	30	20	Oval	High pH	Showy flower, orange/red fall color	Intermediate	Spring
Cleveland Select Pear	Pyrus calleryana 'Cleveland Select'	Rose/Apple	30	18	Narrow pyramidal	Tolerates High pH	White flower	Tolerant	Spring
Aristocrat Pear	Pyrus calleyana 'Aristocrat'	Rose/Apple	30	20-25	Wide	All	White flower, small fruit	Intermediate	Spring
Accolade Cherry	Sargentii x subcordata 'Accolade'	Rose/Cherry	20-30	15	Wide	Moist	Short lived pale pink flower	Intolerant	Spring
Eastern Red Bud	Cercis canadensis	Legume/Pea	15-20	25-30	Round	Tolerates most soils	White or purplish pink to red flowers	Tolerant	Spring
Ivory Silk Japanese Tree Lilac	Syringa reticulata 'Ivory silk'	Olive	25	20	Oval	Well drained	Early summer flowers	Tolerant	Spring/Fall
Frontier Elm	Ulmus frontier	Elm	25-40	15	Pyramidal	Tolerates poor soil	Great street tree with outstanding fall color	Tolerant	Spring
Paper Bark Maple	Acer griseum	Maple	25-35	15-30	Oval	Moist, well drained	Spectacular fall leaf color	Intermediate	Spring
Red Sunset Maple	Acer rubrum 'Red Sunset'	Maple	45	35	Rounded	Wide range	Reddish orange	Tolerant	Spring

Recommended trees for tree lawns 6-8 feet wide

Common Name	Latin Name	Family	Height (feet)	Spread (feet)	Shape	Soil	Comments	Salt Tolerance	Transplant
Shademaster Honeylocust	Gleditsia triacanthos inermis 'Shademaster'	Legume/Pea	45	35	Wide	All	Hot dry sites	Tolerant	Spring/Fall
Skyline Honeylocust	Gleditsia triacanthos inermis 'Skyline'	Legume/Pea	40	40	Wide	All	Upright	Tolerant	Spring/Fall
Armstrong Maple	Acer x freemaini 'Armstrong'	Maple	35-50	15	Upright narrow	All - prefers acidic	Fast grower, good for narrow tree lawns	Intermediate	Spring
Hedge Maple	Acer campestre	Maple	25-35	25	Wide	pH tolerant, dry alkaline, well drained	Compact, handsome street tree	Tolerant	Spring/Fall
Autumn Flame Maple	Acer rubrum 'Autumn Flame'	Maple	40-60	25-40	Oval	Tolerates most soils	Quick growing with beautiful fall leaves	Intolerant	Spring
Karpick Maple	Acer rubrum 'Karpick'	Maple	35-40	30	Narrow oval	Tolerates most soils	Uniform, fast growing with red twigs	Intolerant	Spring
Crimson King Maple	Acer platanoides	Maple	35-45	25-35	Broadly ovate	Wide range	Purplish, red leaf	Intermediate	Spring/Fall
American Hornbeam	Carpinus caroliniana	Birch	30-40	20-30	Cone	Well drained, slightly acidic	Performs well, narrow tree lawns	Intolerant	Spring
Pyramidal European Hornbeam	Carpinus betulus fastigiata	Birch	35	15	Narrow dense	All	Spreads out in old age	Intolerant	Spring
European Hornbeam	Carpinus betulus	Birch	40	25	Pyramidal	All	Nice looking	Intolerant	Spring
Magyar Ginkgo	Ginkgo biloba 'Magyar'	Ginkgo	40-50	20-30	Pyramidal	Widely adaptable	Vigorous grower, good street tree	Tolerant	Spring/Fall
Columnaris Sargent Cherry	Prunus sargentii 'Columnaris'	Rose/Cherry	40	30-40	Columnar	Acid, well drained	Deep rose flower, small black fruit, 20 year longevity	Tolerant	Spring
Prarie Pride Hackberry	Celtis occidentalis 'Prairie Pride'	Elm	60	30-40	Wide	Moist, well drained	Good street tree, rapid grower	Intolerant	Spring
Golden raintree	Koelreuteria paniculata	Soapberry	30-40	40	Rounded, dense spreading branches	Adaptable to many soils	Yellow, flowering	Intermediate	Spring

Recommended for tree lawns 8 feet or greater									
Common Name	**Latin Name**	**Family**	**Height (feet)**	**Spread (feet)**	**Shape**	**Soil**	**Comments**	**Salt Tolerance**	**Transplant**
River Birch	Betula nigra	Birch	40-50	30-40	Wide	Moist, well-drained	Needs room	Intermediate	Spring
Turkish Filbert	Corylus colurna	Birch	50	30	Wide	Alkaline	Drought resistant	Intolerant	Spring
Greenspire Linden	Tilia cordata 'Greenspire'	Linden	50	35	Narrowly oval, dense	All	Good street tree, uniform	Intolerant	Spring/Fall
Crimean Linden	Tilia cordata x euchlora	Linden	50	40	Wide	All	Short lived, small yellow flowers	Intolerant	Spring/Fall
Silver Linden	Tilia tomentosa	Linden	60	40	Wide	Tolerates high pH	Dense crown, attractive silvery underside of leaf	Intolerant	Spring
Legacy Maple	Acer saccharum 'Legacy'	Maple	50	35	Wide	Gravely loam	Excellent shade tree, drought resistant	Intolerant	Spring/Fall
Autumn Blaze Maple	Acer x freemani 'Autumn Blaze'	Maple	50	40	Wide	Acidic	Fast grower, bright red fall leaf	Intolerant	Spring/Fall
Seneca Chief Sugar Maple	Acer saccharum 'Seneca Chief'	Maple	60-70	40-45	Narrowly conical	Well drained	Avoid tree lawns less than 6', vigorous, bright fall colors	Intolerant	Spring/Fall
Arrowhead Sugar Maple	Acer saccharum 'Arrowhead'	Maple	60	35	Pyramidal	Gravely loam	Vigorous grower	Intermediate	Spring/Fall
Green Mountain Sugar Maple	Acer saccharum 'Green Mountain'	Maple	40-60	35-45	Oval	Widely adaptable	Brillian fall colors	Intolerant	Spring/Fall
Red Maple	Acer rubrum	Maple	75	50	Wide	Wet	Good street tree, red/orange fall color	Intolerant	Spring
English Oak	Quercus robur	Beech	50-60	40-60	Wide	Well drained, all types	Retains foilage late into fall	Tolerant	Spring/Fall
Northern Red Oak	Quercus rubra borealis	Beech	60-75	45	Round	Tolerates most soils	Known for its brilliant firey red fall color	Tolerant	Spring
Rivers Purple European Beech	Fagus sylvatica 'Riversii'	Beech	50-60	45-55	Oval	Wide range	Slow grower, purple fall leaf	Intermediate	Spring
American Beech	Fagus grandifolia	Beech	75	50	Broad pyramidal	Moist	Silver-grey bark, bronze foliage	Intermediate	Fall
Bloodgood London Plane	Platanus x acerifalia 'Bloodgood'	Sycamore	70	50	Wide	Tolerates high pH	Cross of an American and Oriental	Intermediate	Spring

Recommended for tree lawns 8 feet or greater (continued)									
Common Name	**Latin Name**	**Family**	**Height (feet)**	**Spread (feet)**	**Shape**	**Soil**	**Comments**	**Salt Tolerance**	**Transplant**
Ginkgo	Ginkgo biloba - fruitless variety - male only	Ginkgo	70	40	Upright	Well drained	Disease and pest free, survives city streets and pollution, slow grower	Intermediate	Spring/Fall
Tuliptree	Liriodendron tulipifera	Magnolia	70	40	Very wide	Good	Showy flowers in June	Intolerant	Spring
Japanese Zelkova	Zelkova serrata	Elm	55	50	Wide	Alkaline	Vase shaped, like a small American Elm	Intermediate	Spring
Kentucky Coffeetree	Gymnocladus dioicus	Legume/Pea	45	35	Oval	Alkaline, droughty	At maturity creates a nice branching silhouette, fall color	Intermediate	Spring/Fall
Ft. McNair Buckeye	Aesculus x. carnea 'Ft. McNair'	Chestnut/ Buckeye	30-40	25-30	Broad, rounded crown	Well drained, drought tolerant	Slow growing, spring flowering	Unknown	Spring/Fall
Rubber Tree	Eucommia ulmoindes	Mulberry/ Fig	30-45	25-30	Dense oval	Well drained, all types	Light green leaves, great shade tree	Moderate	Spring/Fall
Shamrock Linden	Tilia cordata 'Shamrock'	Linden	50	30	Broad pyramidal	Drought tolerant, any pH	Top notch shade tree, fragrant yellow flowers	Tolerant	Fall
Sweetgum	Liquidambar styraciflua	Gum	60-75	30-40	Broad pyramidal	Moist, well drained	Pink-scarlet fall leaves	Unknown	Spring

PROTECTING TREES DURING CONSTRUCTION

The primary reason that trees in new development die is construction related. The health of those trees, which live, is directly related to the extent of the damage to their roots during the disturbance of earth. Generally, any change to the root zone greater than 35 percent will precipitate the unrecoverable decline of trees. It is the responsibility of the developer/contractor to protect all trees that are located within the project limits to minimize any possible damage due to construction activities. The following guidelines will help assure tree preservation during construction.

1. Trees to be preserved should be protected with fences. Fences protect trees from cutting, breaking, skinning, and bruising of tree roots, bark and branches. Fencing recommended for use is the fluorescent orange construction safety fence, 4 feet in height. Protective fencing must be installed before any construction activities begin and should remain in place until final grading and seeding operations are performed. Trees should be fenced so as to encompass the entire tree canopy. In no case should the fencing be less than 2 feet from the edge of the tree.
2. In order to prevent smothering of the tree root system, construction, excavation materials and topsoil must not be stockpiled under a tree's canopy.
3. In order to avoid soil and root zone compaction, vehicles and construction equipment must not be parked over any tree root system.
4. Construction equipment must not be left idling under a tree's canopy.
5. As much as possible, avoid digging under a tree's canopy.
6. If digging is unavoidable within the root zone, tunneling is preferable to trenching. Tunnels should be located according to the following table:

TREE DIAMETER (DBH)	MINIMUM DISTANCE OF TUNNEL FROM TREE TRUNK (FT)	MINIMUM DEPTH OF TUNNEL (FT)
less than 10"	6	2 1/2
10" to 14"	10	3
15" to 19"	12	3 1/2
20" and greater	15	4

7. Where tree root cutting is conducted, it must be with sharp cutting tools. Exposed tree roots must be backfilled as soon as possible. If roots must be exposed for a long period of time, they should be covered with burlap to prevent excessive loss of moisture. When burlap is used, it must be kept wet until the roots can be re-buried. There is no need to paint or treat the cut root ends.

8. Where extensive cutting of a tree root system has occurred, it is essential the tree root system receive between 1/2 inch and 1 inch of water on a weekly basis. When weather conditions are consistently dry and when less than 1/2 inch of rain has fallen during any given week, the developer/contractor needs to apply at least 1/2 inch of water on the tree root system.

9. Care should be taken to avoid any permanent changes in the surface level of soil under the tree as a result of construction. When the grade level is changed by removing soil from the top of the roots or by adding soil over the top of the roots, the tree has difficulty obtaining required amounts of air, water and minerals. Minor filling (6 inches of less in depth) will not harm most species of trees if the fill is good topsoil, high in organic matter and loamy in texture. Major grade changes require that air be supplied to the roots. This may be done by welling around a tree or installing a layer of gravel and a system of drain tiles over the roots of the tree. Protecting a tree from lowered grade can be achieved by terracing or building a retaining wall, if necessary.*Prepared by the Town of Greece Environmental Board, March, 1995.*

References:
1. Protecting Trees From Excavation Damage, NYSDEC
2. Protecting Shade Trees During Home Construction, U.S. Dept. of Agriculture, Home and Garden Bulletin #104
3. Trenching & Tunneling Near Trees, The National Arbor Day Foundation
4. City of Rochester, A. Pleninger, City Planner

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