Exhibit A: Proposed Amendments to Chapter 151 of the Lake County, Illinois Code of Ordinances

<u>Underline</u> and <u>Strikethrough</u> – Staff Recommendations

Amendment #1:

Amend 151.167 Landscaping to read as follows:

§ 151.167 LANDSCAPING.

- (A) Intent. This landscape section is intended to accomplish the following:
 - (1) Preserve or enhance the appearance and character of the property and its surroundings;
 - (2) Reduce noise and air pollution, light glare, soil erosion, and solar heating of the environment;
 - (3) Provide buffering between land uses and zoning districts of differing intensity;
 - (4) Promote the preservation of existing significant vegetation;
 - (5) Improve the appearance of parking areas and property abutting public rights-of-way; and
- (6) Promote the implementation of best management practices, low impact development features, and sustainable design elements. (See Appendix A.)
 - (7) Support ecological sustainability, stormwater management, and climate resilience.
 - (B) Applicability.
- (1) The standards of this section shall apply to the following development types (see also § 151.167(J) Landscape standards for transition areas):
- (a) All development subject to the site capacity calculations/site plan review procedures of § 151.070(A); and
- (b) All nonresidential development adding at least 1,000 square feet of floor area or 2,000 square feet of impervious surface (on any size parcel) when adjacent to a residential use or zoning district.
- (c) Any new nonresidential development or use on any size parcel consisting of at least 1,000 square feet of floor area or 2,000 square feet of impervious surface.
- (C) Modification of landscape standards. So long as the intended purpose of the landscaping is not compromised, landscape requirements may be modified by the Planning, Building and Development Director in instances such as:
- (1) When installing the plant material would compromise the health, vitality, or ecology of existing vegetation, or those natural resources requiring protection under § 151.070; or
 - (2) Where unique limitations of the site preclude the installation of the required plant units; or
 - (3) When the principal use of the site is changed to a principal use of the same or lesser intensity.

- (D) Previously approved development. A development that was legally established in accordance with all landscaping regulations in effect at the time of establishment shall not be deemed nonconforming solely due to the fact that it does not comply with the landscaping regulations of this section.
- (E) *Plant unit and material standards.* Plant material used to satisfy the standards of this section shall comply with the following standards:
- (1) Plant units. A plant unit is a measurement used to determine the quantity of plant material required.
- (a) One plant unit is comprised of all of the following elements, of which at least six elements shall be native:
 - 1. One canopy tree;
 - 2. Two understory trees;
 - 3. Two evergreen trees; and
 - 4. Seven shrubs.
- (2) Plant material. Plant material used to satisfy the standards of this section shall comply with the following standards:
- (a) Size. Unless otherwise expressly provided, all plant materials used to satisfy the requirements of this section shall meet the following minimum size standards:

| Plant Type | Minimum Size |
|--|-------------------------------------|
| Oaks (Quercus sp) Hickories (Carya sp) Hornbeams (Carpinus sp) | 1.25-inch caliper |
| Canopy tree (all other species) | 1.53-inch caliper |
| Understory/ornamental tree | 1.52-inch caliper or 68 feet height |
| Evergreen/conifer tree | 8 feet height |
| Shrubs | |
| Broadleaf/deciduous shrub | 3 feet height |
| Needleleaf/evergreen shrub | 2 feet height |
| Columnar evergreen shrub | 3 feet height |

- (b) Examples Types of species. Species of plant material that satisfy the requirements of this section are contained in Appendix A. That Appendix categorizes plant species as either "canopy trees," "evergreen trees," "understory trees," or "shrubs." With the exception of native species requirement, Varieties and cultivars of the plant species listed in Appendix A may be used to satisfy the other requirements of this section, provided that the variety or cultivar used complies with all applicable size and form standards.
- (c) Quality. Plants installed to satisfy the requirements of this section shall meet or exceed the plant quality standards of the most recent edition of American Standard for Nursery Stock, published by the American Horticulture Industry Association. Plants shall be nursery-grown and balled with burlapping or other suitable material that is biodegradable.

- (d) Additional landscape treatment. All required landscape areas not dedicated to trees, shrubs or preservation of existing vegetation shall be landscaped with grass, groundcover, or other landscape treatment, not including sand, rock, or pavement.
- (e) Species mix. For projects requiring more than five canopy trees, each plant type (i.e., canopy tree, understory tree, etc.) associated with the landscape requirements of this section, no single plant species shall represent more than 40% of the total plantings of each plant type. No single plant species shall represent more than 15% of the total plantings.
- (f) Berms not required in perimeter landscape transition areas. Any berm not required by this section but otherwise required by a county condition of development approval, containing at least five feet in height whose toe is within 25 feet of any right-of-way or other property line shall be improved with a minimum of one plant unit per 100 linear feet for every five feet of height up to a maximum height of 20 feet. The Planning, Building and Development Director may modify the planting requirements for berms proposed in locations that will be buffered by existing natural features or are proposed in locations that will not impact drainage patterns or neighboring land owners.
 - (F) Landscape standards for parking lots.
- (1) Applicability. The parking lot landscaping standards of this subsection (F) shall apply to all offstreet parking areas containing more than five off-street parking spaces with the exception of interior landscaping associated with multi-level parking structures. The standards of this subsection (F) shall not apply to storage of new or used motor vehicles or boats or to trucking or motor freight terminals that are not normally open to the public.
 - (2) Area and planting standards.
- (a) Parking lots that are greater than 4,000 square feet shall contain landscaped areas to break up the expanse of pavement. The landscaped areas shall be located entirely within the lot in either internal or corner islands and conform to the following area ratios:

| Parking Lot Area | Required Landscape Area | | | | |
|---------------------------------|-------------------------|--|--|--|--|
| 4,000 sq. ft. to 10,000 sq. ft. | 5% of paved surface | | | | |
| Greater than 10,000 sq. ft. | 10% of paved surface | | | | |

(b) Each 325 square feet of required landscape area shall contain the following plant material:

| 2 Canopy trees: | |
|--|-------------------|
| Oaks (Quercus sp), Hickories (Carya sp), Hornbeams (Carpinus sp) | 1.25-inch caliper |
| All other species | 31.5-inch caliper |
| 5 Shrubs (low growing, not to exceed 3 ft. ht.) | 2 ft. ht. |

- (c) Existing vegetation located within the interior or the corner portions of the parking lot may be counted towards required landscape plantings upon approval by the Planning, Building and Development Director.
- (d) Native perennials and grasses may be planted in lieu of shrubs, up to 20% of the total number of required shrubs. Three native perennial plants or native grasses shall equal one shrub.
- (e) The minimum width of all parking lot landscaped areas shall be ten feet and shall be protected by raised curbs with a minimum height of four inches with the exception of low impact development features (see Appendix A) as appropriate.

- (f) The minimum area for a corner island shall be 200 square feet.
- (g) The finished grade (crown) of interior planting areas shall not be less than three inches above curb or pavement with the exception of low impact development features as appropriate.
- (h) The parking lot perimeter shall be landscaped with a minimum of one plant unit per 100 lineal feet (not to include ingress/egress dimensions).

In situations where the perimeter of the parking lot overlaps with the required transition area, whichever requirement is greater shall apply.

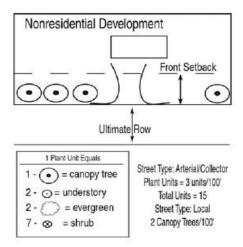
- (i) Prior to planting, all interior areas shall be excavated to a depth of three feet and amended with a soil mixture consisting of one part screened topsoil, one part existing topsoil and two parts of organic compost, or an approved equivalent, with the exception of other soil mixtures as necessary to accommodate low impact development features. This requirement may be waived upon confirmation by the Planning, Building and Development Director that the pre-existing soil is suitable for planting and drainage, and that no amendments are necessary.
- (j) All landscaped areas that are not planted in turf or native grass shall be mulched with a three-inch layer of shredded hardwood bark mulch or stone.
 - (k) A maintenance schedule shall be provided for review prior to approval of the landscape plan.
- (G) Best management practices. With the incorporation of best management practices (BMPs), low impact development practices (LIDs), or other sustainable practices into the project, the Planning, Building and Development Director may allow the required landscaping to be reduced or arranged in a manner that will enhance the design concept. Refer to Appendix A for examples of BMP, LID, and sustainability features.
 - (1) Considerations shall include the following.
- (a) To qualify for consideration, sustainability features such as swales or bio-filters shall be placed in islands or at the perimeter of the parking areas and shall be designed to improve the filtration and quality of stormwater runoff.
- (b) Proposals to modify the type or quantity of landscape material may be allowed in exchange for the installation of plant species such as native trees, shrubs, grass, or perennials that will enhance the filtering capacity of the site and promote the use of diverse native species.
- (c) Proposed swales or filters using a structural pervious surface may be used for parking or drive aisles provided the features are designed to withstand vehicular loads.
- (d) At the discretion of the Planning, Building and Development Director, an increase in the on-site impervious surface ratio of up to 10% may be allowed on the site in exchange for the addition of BMP or LID features, provided that the total impervious surface ratio shall not exceed 80%.
 - (2) The following BMP/LID incentives are available subject to the above considerations:

| BEST MANAGEMENT PRACTICE | INCENTIVES |
|--------------------------|---|
| Permeable pavement | Additional impervious surface |
| | Can be used for fur parking/drive aisle |
| | Reduced curb & gutter |
| | Wheel stops in lieu of curb & gutter |
| | Alteration of plant species/quantity |

| Structural soil | Additional impervious surface Alteration of plant species/quantity |
|--|---|
| Vegetated swale or buffer bio-retention cell/rain garden | Additional impervious surface Reduced curb & gutter Wheel stops in lieu of curb & gutter Alteration of plant species/quantity |

- (3) Provide both a short-term and long-term maintenance and management plan of BMP areas.
- (H) Landscape standards for streets.
- (1) Subdivision and local streets. Subdivision and local streets (including alleys) shall have two canopy trees per 100 feet of road frontage.
 - (2) Arterial/collector/freeway.
- (a) Residential uses abutting an arterial or collector street or a freeway shall have three plant units per 100 feet of road frontage.
- (b) Nonresidential uses abutting an arterial or collector street or a freeway shall have one plant unit per 100 feet of road frontage.
 - (3) Ultimate right-of-way provisions.
- (a) Where a parcel extends to the centerline of an existing street or where the existing street adjacent to the development site contains less than the right-of-way width specified in § 151.169, the landscape material shall be located no closer than the ultimate right-of-way line of local streets and no closer than one foot outside the ultimate right-of-way of collector streets, arterial streets, and freeways, unless the roadway authority provides written notice there is no immediate or foreseen future need to widen the right-of-way.
- (b) No landscaping shall be located within the existing right-of-way of any public road without written consent of the highway authority having jurisdiction over the public road.
 - (I) Landscape standards for common open space.
- (1) Applicability and standards. Residential subdivisions or residential developments containing common open space shall provide one-half plant unit of landscaping for each residential dwelling unit within the common open space.
 - (2) Location.
- (a) Plant material shall be installed so it relates to the natural environment and habitat in which it is placed.
- (b) Native vegetation <u>or plant species</u> shall be utilized in all instances unless site conditions or availability of species warrant the use of cultivars or similar materials compatible with the area.

Figure 151.167(H): Landscape Standards for Streets



- (J) Landscape standards for transition areas.
 - (1) Applicability.
 - (a) A transition area shall be required when a residential use is adjacent to a nonresidential use.
- (b) A transition area and associated landscaping shall be provided along the perimeter of all developments subject to the standards of this section.
 - (2) Transition landscape standards.
- (a) The width of a required transition area shall be calculated as 20% of lot width, but in no case shall the transition area be any less than ten feet or more than 30 feet in width.
- (b) Plant unit intensity shall be based on transition area width, and shall be calculated proportionately at one plant unit for every ten feet of transition area width.
- (c) Subject to this width requirement, transition area landscaping shall be determined in accordance with the following Table 151.167(J):

| | Table 151.167(J): Perimeter Transition Landscape Requirements | | | | | | | | | | | | | | |
|---------------------|---|------------|----------|----|-------|------|---------|----|------|---|---|------|-------|------|----|
| (Plai | (Plant Units Per 100 Linear Feet, Based on a 30-foot Transition Area) | | | | | | | | | | | | | | |
| | | | | | Exis | stin | g Site | | | | | | | | |
| Proposed Developing | F | Residentia | al . | | Nonre | esia | dential | | | | | V | acant | | |
| Site | Class 1 | Class 2 | Class 3 | GO | LC | RC | GC | LI | II O | | | Vac. | Vac. | Non- | AG |
| | | | | | | | | | | S | | Res. | Res. | | |
| Class 1 | - | | | | | | | | | | | Α* | - | 2 | 2 |
| Class 2 | 2 | - | | | | | | | | | | A* | - | 2 | 2 |
| Class 3 | 3 | 2 | - | | | | | | | | | A* | - | 2 | 2 |
| GO | 3+B or D | 3+B or D | 3+B or D | - | | | | | | | | Α | 3 | - | 2 |
| LC | 3+B or D | 3+B or D | 3+B or D | 1 | - | | | | | | | Α | 3 | - | 2 |
| RC | 3+B or D | 3+B or D | 3+B or D | 1 | 1 | | - | | | | | Α | 3 | - | 2 |
| GC | 3+B or D | 3+B or D | 3+B or D | 2 | 1 | | 1 | | - [| | | 2A | 3 | - | 2 |
| LI | 3+C or E | 3+C or E | 3+C or E | 2 | 2 | | 2 | 7 | 2 | - | | 2A | 3 | - | 3 |
| II | 3+C or E | 3+C or E | 3+C or E | 2 | 2 | | 2 | : | 2 | 1 | - | 2A | 3 | - | 3 |
| os | - | - | - | • | - | | - | | - | - | - | - | - | - | - |

Notes:

Nonresidential uses allowed in the Agricultural and Residential Districts shall be subject to the transition landscape requirements of the LC Zoning District.

Class 1 = Detached house, village house or lot line house

Class 2 = Duplex, patio house, atrium house, twinhouse, multiplex, townhouse

Class 3 = Multi-dwelling

A = Split rail fence or other fence not to exceed 10% opacity

B = Fence (minimum 95% opacity), 6-foot minimum height

C = Wood fence (minimum 95% opacity), 8-foot minimum height with concrete footings

D = Earthen berm, 3-foot minimum height; not required for commercial solar or wind facilities

E = Earthen berm, 5-foot minimum height; not required for commercial solar or wind facilities

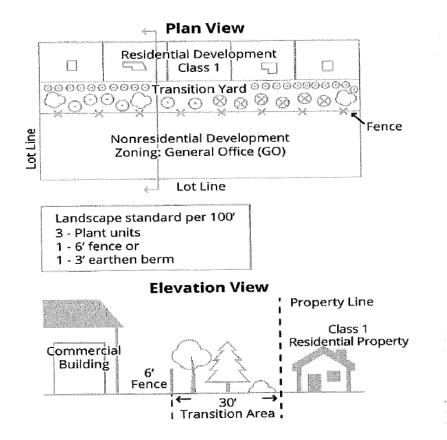
Plant units: one plant unit is comprised of all of the following: 1 canopy tree; 2 understory trees; 2 evergreen trees; and 7 shrubs.

* Fence permitted at the property line and no transition yard required, provided that no parking lot, active recreational area, or other structure is currently located within 30 feet of the adjoining property line on the OS-Zoned parcel.

(3) Location.

- (a) All plant material within transition areas shall be installed within the required setback line of the proposed development site as close to the property line as practical.
- (b) In instances where a drainage or utility easement are conterminous with the transition easement, the width of the transition area shall be increased so it does not compromise the function of the transition area plantings nor the utility or drainage easement.

Figure 151.167(J): Transition Area Landscaping



- (4) Calculation of plant units. In calculating the number of plant units required, measurements shall be measured along the external dimensions of the property.
- (K) Telecommunication and co-locate facilities. All new telecommunication towers and co-locate facilities shall require landscaping to be determined by amount, location and species on a site-specific basis.

(L) Exceptions.

- (1) Plant material existing within a transition area of a proposed development site or on an adjacent parcel that has comparable composition and density to the minimum landscape standards of this section may be used to satisfy landscape requirements, provided that the plant material is designated and protected as permanent open space and further provided that, if the plant material is located on the adjacent property, a written agreement between both adjoining property owners is reached and recorded against both properties. In this instance, the existing plant material need not comply with the "species mix" standards of this section.
- (2) A protected natural resource that exists on a proposed development site within the transition area or on an adjacent parcel may be counted toward meeting the transition landscape requirements of § 151.167(J), provided that the following minimum width is provided.

| Mature Woodland | Young Woodland or Grove | Other Resources |
|-----------------|-------------------------|-----------------|
| 30 feet | 40 feet | 100 feet |

(3) If a development is proposed on a tract of land that exceeds the minimum lot area standard of the zoning district in which it is located, the landowner may designate a smaller area of parcel as the development site and provide landscaping in accordance with this section within the smaller

development site area. In order to use this provision, the size of the designated development site and the remaining land area of the tract must both equal or exceed the minimum lot size and width standard of the underlying zoning district.

- (4) Landscaping shall not be required for accessory uses or additions to principal uses, provided that:
- (a) The accessory use or addition do not exceed 1,000 square feet of gross floor area or 2,000 square feet of impervious surface area; and
- (b) The Planning, Building and Development Director determines that no adverse land use impacts will result.
- (M) Transition agreements. In lieu of providing transition landscaping that complies with the minimum standards of this section, landowners of adjoining properties shall be entitled to enter into an agreement that provides for a waiver or partial waiver of the requirements. The agreement shall consider the relationship of the existing uses of each property and their ultimate development potential. The agreement shall state each owner's obligation for preserving and maintaining the transition easements. The agreement shall be in the form of a covenant or deed restriction and shall require approval by the Planning, Building and Development Director. Once approved, the agreement shall be recorded with the Lake County Recorder and shall run with the land.
 - (N) Use of transition and common open space landscape areas.
- (1) Passive recreation. Landscape areas may be used for passive recreation and may contain pedestrian, bicycle, or equestrian trails, provided that:
- (a) No required plant material is eliminated and the survival potential of the plant materials is not compromised; and
 - (b) For the purpose of this provision, passive recreation includes activities associated with extremely low noise levels and individual activities, such as birdwatching, walking, jogging, bicycling, horseback riding, and picnicking. Motorized activities of any kind are not included, nor are activities that involve competition, large groups or special facilities such as tennis courts, ski hills, skating rinks, or swimming pools. Lighting, if provided, shall be extremely low level, and associated with pedestrian walkways in a "campus-like" setting.
- (2) Drainage and utility easements. Drainage and utility easements may be allowed within transition and common open space landscape areas, provided that the easement and landscape requirements are compatible and the function of the easement is not adversely affected.
- (3) Structures. No structures, other than those allowed by the Planning, Building and Development Director pursuant to this subsection (N)(3), shall be permitted within transition and common open space landscape areas. The Planning, Building and Development Director shall be authorized to allow signs, decorative fences, and other accessory structures within transition and common open space landscape areas, provided that the structures will not detract from the intended purpose and function of the landscape easement and no plant material is eliminated.
 - (O) Installation, maintenance, and replacement.
 - (1) Installation.
- (a) All landscaping shall be installed according to sound nursery practices in a manner designed to encourage vigorous growth. Where possible, best management practices should be incorporated (see Appendix A). Properly amended soil shall be provided in all planting areas, and subsurface drainage

shall be provided where berms, elevated areas, or other suitable means for providing proper drainage do not exist.

- 1. All lawn and planting areas shall be cultivated to a minimum depth of six inches and amended with a mixture consisting of one part existing topsoil and two parts organic compost, or an approved equivalent.
- 2. When not specifically waived pursuant to subsection (F)(2)(j) above, planting islands shall be excavated of compacted soil to a depth of three feet and be backfilled with a soil mix consisting of one part screened topsoil, one part existing topsoil and two parts of organic compost or an approved equivalent with the exception of other soil mixtures as necessary to accommodate low impact development features.
 - 3. Individual planting pits shall be a minimum two times the width of the root ball of the plants.
- (b) Installation inspections shall be conducted at the time the planting areas area prepared so that verification of planting pit size and soil amendments can be completed. The office of the Planning, Building and Development Director should be contacted to arrange for inspections and associated inspection fees.
- (2) Maintenance and replacement. Required trees, shrubs, structures, and other landscape features shall be considered as elements of the project in the same manner as parking, building materials, and other details are elements of the plan. The property owner, or successors in interest, shall be jointly and severally responsible for the following:
- (a) All landscaping shall be maintained in good condition and in a manner that presents a healthy, neat, and orderly appearance. All landscaping shall be maintained free from disease, pests, weeds, and litter. Maintenance shall include weeding, watering, fertilizing, pruning, mowing, edging, mulching, or other care, as needed. All maintenance shall be performed in accordance with acceptable horticultural practices;
- (b) The repair or replacement of required landscape structures (e.g., fences) to a structurally sound condition;
- (c) The regular maintenance, repair, or replacement, where necessary, of any landscaping required by this section;
 - (d) Continuous maintenance of the site as a whole; and
- (e) The Planning, Building and Development Director shall be authorized to require documented assurance of continued landscape performance and/or maintenance in the form of a condition, covenant, contract, development agreement or performance/maintenance assurance to assure installation and, for a minimum one-year period, the continued maintenance of landscape improvements associated with a development. The amount of the performance assurance shall be at least 130% of the estimated cost of the required landscape improvements. The maintenance assurance shall be equal to at least 10% of the performance assurance. Notwithstanding the above, the Planning, Building and Development Director shall be authorized to reduce or waive the maintenance assurance, provided the landscape features incorporate best management practices and/or low impact development features contained in Appendix A. Any performance and/or maintenance assurance required by the Director shall be administered in accordance with the provisions of § 151.203 of this chapter.

(Ord., § 9.3, passed 10-13-2009; Ord. passed 8-14-2012; Ord. 19-1378, passed 9-10-2019)

Amendment #2:

Amend 151.271 Terms Defined to refine the following definition:

§ 151.271 TERMS DEFINED.

NATIVE VEGETATION (OR PLANT SPECIES). Tree, shrub and other Pplant species grown living in the Chicago region and northeastern Illinois, specifically this county, prior to European settlement of the region. (See Plants in of the Chicago Region, Floyd Swink and Gerald Wilhelm, Indiana Academy of Sciences.)

Amendment #3:

Amend Appendix A: Plant Materials List to read as follows:

APPENDIX A: PLANT MATERIALS LIST

| Appendix A | | | | | | | | |
|---------------------------|------------------------|-------------------------|-------------|-------------|--------------------|--------|--|--|
| Botanical Name | Common Name | Woodland Replacement | Street Tree | Parking Lot | Transition Area | Native | | |
| CANOPY TREES | | | | l | | 1 | | |
| Acer nigrum | Black Maple | Y | N | Υ | Υ | N | | |
| Acer pseudoplatanus | Sycamore Maple | Y | N | N | Υ | N | | |
| Acer miyabei | Miyabe Maple | Y | Y | N | Υ | N | | |
| Acer rubrum | Red Maple Varieties | Y | Y | Y | Y | N | | |
| Acer saccharum | Sugar Maple | Y | N | N | Υ | Υ | | |
| Aesculus glabra | Ohio Buckeye | Y | N | N | Υ | Υ | | |
| Aesculus hippocastanum | Horsechestnut | Y | N | N | Y | N | | |
| Carya species | Hickory | ¥ | N | Н | ¥ | | | |
| Carya cordiformis | Bitternut hickory | Υ | Υ | N | Υ | Υ | | |
| Carya glabra | Pignut hickory | Υ | Υ | N | Υ | Υ | | |
| Carya ovata | Shagbark hickory | Υ | Υ | N | Υ | Υ | | |
| Carya tomentosa | Mockernut hickory | Υ | Υ | N | Υ | Υ | | |
| Celtis occidentalis | Hackberry | Y | Y | Y | Υ | Υ | | |
| Cladrastis lutea | Yellowwood | Y | N | N | Υ | N | | |
| Fagus grandifolia | American Beech | Y | N | N | Υ | Υ | | |
| Fagus sylvatica | European Beech | Y | N | N | Y | N | | |
| Ginkgo biloba (male) | Ginkgo | N | Y | N | Y | N | | |
| Gymocladus dioicus | Kentucky Coffeetree | Y | ΝY | N | Y | Υ | | |
| Juglans cinerea | Butternut | ¥ | N | Н | ¥ | | | |
| Juglans nigra | Black walnut | Υ | N | N | Υ | Υ | | |

| Larix laricina | Tamarack | Υ | N | N | Υ | Υ |
|-----------------------------|--------------------------------|---|----|-----|---|----------|
| Liquidambar styraciflua | Sweetgum | Υ | N | N | Υ | N |
| Liriodendron tulipifera | Tuliptree | Υ | N | Y | Υ | N |
| Metasequoia | Dawn Redwood | Υ | N | N | Υ | N |
| glyptostroboides | | | | | | |
| Nyssa sylvatica | Black Tupelo or sour gum | Y | ΝΥ | N | Y | Y |
| Platanus acerifolia | Planetree | Υ | Y | Y | Υ | N |
| Platanus occidentalis | American Sycamore | Y | Y | Y | Y | Y |
| Pyrus calleryana | Flowering Pear | N | ¥ | N A | ¥ | |
| Populus deltoides | Eastern cottonwood | Υ | N | N | Υ | Υ |
| Quercus alba | White Oak | ¥ | ¥ | ¥ | ¥ | |
| Quercus bicolor | Swamp White Oak | Υ | Y | Y | Υ | Υ |
| Quercus coccinea | Scarlet Oak | Υ | N | N | Υ | Y |
| Quercus ellipsoidalis | Hill's Oak | ¥ | N | N | ¥ | |
| Quercus imbricaria | Shingle Oak | Υ | Υ | Y | Υ | Υ |
| Quercus macrocarpa | Bur Oak | Υ | Y | Y | Y | Υ |
| Quercus muehlenbergii | Chin <mark>k</mark> quapin Oak | Υ | Y | Y | Y | Υ |
| Quercus palustris | Pin Oak | Υ | N | N | Υ | Υ |
| Quercus prinus | Chestnut Oak | Υ | Y | Y | Y | N |
| Quercus robur | English Oak | Υ | Y | Y | Y | N |
| Quercus rubra | Northern Red Oak | Υ | ¥Ν | ΥN | Υ | Υ |
| Quercus velutina | Black Oak | Υ | Υ | Y | Υ | Υ |
| Taxodium distichum | Bald Cypress | Υ | N | N | Y | N |
| Tilia americana | American Basswood or linden | Y | Y | Y | Y | Y |
| Tilia cordata | Little Leaf Linden | Υ | Υ | Y | Y | N |
| SHRUBS | | | | • | | <u> </u> |
| Amorpha canescens | Lead plant | Υ | | N | N | Υ |
| Amorpha fruticosa | False Indigo Bush | Υ | | Υ | N | Υ |
| Aronia melanocarpa | Black Chokeberry | Υ | | ¥Ν | Υ | Υ |
| Betula pumila | Dwarf Birch | Υ | | N | Υ | N |
| Cephalanthus | New Jersey tea | Υ | | ¥Ν | Υ | Y |
| americanus | | | | | | |
| Cephalanthus occidentalis | Buttonbush | Υ | | ¥Ν | Y | Y |
| Chaenolmeles speciosa | Flowering Quince | N | | N | Y | N |
| Clethra alnifolia | Summersweet | Υ | | Y | Y | N |
| Cornus species | Dogwood | ¥ | | И | ¥ | |
| Cornus obliqua | Blue-fruited dogwood | Y | | N | Y | Y |
| | _ | | ı | | | |

| O a series and a language of | De Lestes Island | V | N. | | |
|---|--------------------------------------|---|----|---|---|
| Cornus stolonifera | Red osier dogwood | Υ | N | Y | Υ |
| Corylus americana | American Filbert or hazelnut | Y | ¥N | Y | Y |
| Corylus cornuta | Beaked Hazelnut | Υ | Y | Υ | N |
| Cotoneaster species | Cotoneaster | Υ | Y | Υ | N |
| Deutzia | Deutzia | Υ | Y | Υ | N |
| Diervilla lonicera | Dwarf honeysuckle | Υ | Υ | N | Υ |
| Forsythia | Forsythia | N | Y | Υ | N |
| Euonymus species atropurpureus | Euonymous Wahoo | Y | Y | Y | Y |
| Hamamelis vernalis viginiana | Vernal Common Witchhazel | Y | Y | Y | Y |
| Hydrangea quercifolia arborescens | Oakleaf Wild Hydrangea | Y | ¥N | Υ | Y |
| Hypericum kalmianum | Kalm's St. John's wort | Y | Y | Υ | Y |
| Hypericum prolificum | Shrubby St. John's wort | Υ | Y | Υ | Y |
| llex opaca | American Holly | Υ | Y | Y | N |
| Ilex verticillata | Winterberry | Υ | ¥Ν | Y | Υ |
| Itea virginica | Sweetspire | Y | Y | Υ | N |
| Juniperus species | Juniper | Y | Y | Υ | N |
| Lindera benzoin | Spicebush | Y | ¥N | Υ | Υ |
| Myrica pennsylvanica | Northern Bayberry | Υ | N | Y | N |
| Physocarpus opulifolius | Common Ninebark | Υ | Y | Y | Υ |
| Potentilla fruticosa | Bush/shrubby Cinquefoil | Y | Y | Υ | Y |
| Prunus americana | American plum | Υ | N | Υ | Υ |
| Ptelea trifoliata | Wafer Ash | Υ | N | Υ | Υ |
| Rhus species | Sumac | ¥ | ¥ | ¥ | |
| Rhus aromatica | fragrant sumac | Υ | N | Υ | Υ |
| Rhus copallina | shining sumac | Υ | N | Υ | Υ |
| Rhus glabra | smooth sumac | Υ | N | Υ | Υ |
| Ribes | Current | ¥ | ¥ | ¥ | |
| Ribes americanum | wild black currant | Υ | N | Υ | Υ |
| Ribes cynosbati | prickly wild gooseberry | Υ | Y | Υ | Y |
| Ribes missouriense | wild gooseberry | Υ | Υ | Υ | Υ |
| Rosa species | Rose varieties | ¥ | ¥ | ¥ | |
| Rosa blanda | Early wild rose | Υ | Υ | Υ | Υ |
| Rosa carolina | Pasture rose | Υ | N | Υ | Υ |
| Rosa palustris | Scarlet rose | Υ | N | N | Υ |

| Rosa setigera | Illinois rose | Υ | | N | Υ | Υ |
|--------------------------------|----------------------------|---|---|----|-----|---|
| Rubus odoratus | Purple flowering raspberry | Υ | | N | N | Y |
| Salix discolor | Pussy Willow | Υ | | N | Υ | Υ |
| Salix humilis | Prairie willow | Υ | | N | Υ | Υ |
| Sambucus canadensis | Elderberry | Y | 1 | N | Υ | Υ |
| Spirea species alba | Spirea Meadowsweet | N | | N | Y | Y |
| Spirea tomentosa | Steeplebush | N | | N | Υ | Υ |
| Symphoricarpos albus | Snowberry | Υ | | ¥N | Y | Υ |
| Syringa species | Lilac | N | | N | Υ | N |
| Taxus species | Yew | N | | N | Υ | N |
| Thuja species | Arborvitae | N | 1 | N | ¥ | |
| Vaccinium angustifolium | Early low blueberry | Υ | | N | Υ | Y |
| Viburnum species | Viburnum | ¥ | 1 | ¥ | ¥ | |
| Viburnum acerifolium | maple leaf viburnum | Υ | | N | Υ | Y |
| Viburnum lentago | nannyberry | Υ | 1 | N | Υ | Υ |
| Viburnum rafinesquianum | downy arrowood | Υ | | N | Υ | Y |
| Viburnum trilobum | American cranberry | Υ | | N | Υ | Υ |
| Zanthoxylum | Prickly ash | Υ | | N | N | Y |
| americanum | | | | | | |
| EVERGREEN TREES | | | | | | |
| Abies concolor | Concolor Fir | ¥ | H | N | ¥ | |
| Juniperus virginiana | Red Cedar | ¥ | N | N | ¥ | |
| Picea abies | Norway Spruce | Υ | N | Y | Υ | N |
| Picea glauca | White Spruce | ¥ | N | ¥ | ¥ | |
| Picea omorika | Serbian Spruce | Υ | N | Y | Υ | N |
| Picea pungens | Colorado Spruce | Υ | N | Y | Y | N |
| Pinus nigra | Austrian Pine | ¥ | N | ¥ | ¥ | |
| Pinus resinosa | Red Pine | ¥ | N | ¥ | ¥ | |
| Pinus strobus | White Pine | ¥ | N | ¥ | ¥ | |
| Pinus sylvestris | Scotch Pine | ¥ | N | ¥ | ¥ | |
| Pseudotsuga menziesii | Douglas Fir | ¥ | N | N | ¥ | |
| Thuja shandishii x plicata | Green Giant Arborvitae | Υ | N | N | Υ | N |
| Tsuga canadensis | Canadian Hemlock | ¥ | N | N | ¥ | |
| UNDERSTORY TREES | | · | 1 | 1 | · · | 1 |
| | Amur Maple | ¥ | N | ¥ | ¥ | |

| Amelanchier species arborea | Serviceberry | Υ | N | ¥N | Υ | Y |
|---|--|---|------|----|----|---|
| Amelanchier interior | Inland shadblow | Υ | N | N | Υ | Υ |
| Amelanchier laevis | Alleghany serviceberry | Υ | Y | N | Υ | Υ |
| Asimina triloba | Pawpaw | Υ | N | N | N | Υ |
| Betula alleghaniensis | Yellow Birch | Υ | N | ¥N | ¥N | Υ |
| Betula nigra | River Birch | Υ | N | ¥N | ¥Ν | Υ |
| Alnus | Alder | ¥ | Н | Н | ¥ | |
| Carpinus caroliniana | American Hornbeam Blue beech or musclewood | Y | N | ¥N | Y | Y |
| Cercis canadensis | Eastern Redbud | Υ | N | ¥N | Υ | Υ |
| Cornus alternifolia | Pagoda dogwood | Υ | N | N | Υ | Υ |
| Crataegus species | Hawthorn | ¥ | Н | ¥ | ¥ | |
| Crataegus coccinea | Scarlet hawthorn | Υ | N | Υ | Υ | Y |
| Crataegus crus-galli | Cockspur hawthorn | Υ | N | Υ | Υ | Υ |
| Crataegus mollis | Downy hawthorn | Υ | N | Υ | Υ | Υ |
| Euonymus atropurpureus | Wahoo | Υ | N | ¥Ν | Υ | Y |
| Hamamelis virginiana | Common Witchhazel | Y | N | ¥Ν | Y | Y |
| Larix decidua | Larch | Υ | N | ¥Ν | Υ | N |
| Malus ioensis | Prairie Crab apple | N | N | ¥N | Y | Υ |
| Magnolia species | Magnolia | Υ | N | Y | Y | N |
| Ostrya virginiana | Hophornbeam or ironwood | Y | -N Y | Y | Y | Y |
| Ptelea trifoliata | Wafer Ash | Υ | N | N | Υ | Υ |
| Sassafras albidum | Sassafras | Υ | N | N | Υ | Υ |