

## SECTION 26

### LANDSCAPE STANDARDS

#### 26.1 PURPOSE AND INTENT

- A. Section 26 is established to create uniform landscape, screening and tree preservation standards for development of property in the Village of Lake in the Hills and to provide screening or transition buffer areas that will promote compatibility among land uses, the planting of street trees, and landscaping of residential and non-residential properties, in order to preserve and promote the health, safety and general welfare of Lake in the Hills.
- B. These regulations are intended to minimize the harmful or nuisance effects resulting from noise, heat, glare and accumulation of dust, and to provide shade, air purification, oxygen regeneration, groundwater recharge, stormwater runoff reduction, and privacy from noise and visual intrusion of objectionable sights and activities
- C. Village-owned park sites shall be exempt from the regulations within this section.

#### 26.2 DEFINITIONS

For the purpose of this Section, the following definitions shall apply, unless the context clearly indicates or requires a different meaning.

**ARTERIAL STREET** - As defined in the Lake in the Hills Subdivision Control Ordinance.

**BERM** - An earthen mound, designed to provide visual interest and screen undesirable views.

**CALIPER** - A measurement of the tree 6 inches above the ground for trees with caliper of four inches or less, and 12 inches above ground for trees that are larger, as defined in the American Standard for Nursery Stock, ANSI Z60.1.

**COLLECTOR STREET** - As defined in the Lake in the Hills Subdivision Control Ordinance.

**DECIDUOUS** - A plant with foliage that is shed annually.

**EVERGREEN** - A plant with foliage that persists and remains green year-round.

**ENVIRONMENTAL BUFFER** - An area that is landscaped with native plant material and designed to stabilize slopes (where applicable), slow runoff, recharge aquifers and absorb nutrients and pollutants before stormwater enters an environmental resource such as wetland, fen, stream or creek.

**MINOR STREET** - As defined in the Lake in the Hills Subdivision Control Ordinance.

**PARKWAY** - That portion of Village-owned property between the curb line, shoulder line, traveled portion of the roadway or alley and the private property line.

**SCREEN** - An area of planting that provides an effective visual barrier that includes a combination of physical space and vertical elements, such as plants, berms, fences, or walls, the purpose of which is to separate and screen incompatible land uses from one another.

**TRANSITION YARD** - That portion of a yard that separates two incompatible land uses

**TREE, OVERSTORY** - A self-supporting woody plant having one well-defined stem or trunk and normally attaining a mature height and spread of at least 30 feet, and having a trunk that may, at maturity, be kept clear of leaves and branches at least 8 feet above grade.

**TREE, UNDERSTORY** - A self-supporting woody plant having at least one well-defined stem or trunk and normally attaining a mature height and spread of less than 30 feet, with branching less than 8 feet above grade.

### 26.3 PERIMETER LANDSCAPING

26.3-1 *Perimeter landscaping required:* Landscaping shall be installed along the perimeter of all non-residential and multiple-family residential lots, consistent with standards for yard width and type and intensity of planting identified below to provide visual and physical separation between uses, and to create an attractive development. For the purpose of this Ordinance, perimeter yards shall be defined as that portion of a lot that runs parallel to a front, corner, side or rear lot line, and shall be measured in width.

26.3-2 *Front, corner, side and rear yards abutting a street:* The following table identifies the type and intensity of plantings required in perimeter yards that abut a street. Trees, shrubs and groundcovers required for installation

in these yards shall be selected from the plant lists found in Section 26.13.

26.3-3 *Design of a landscape berm:* Where a berm is required or proposed as part of a perimeter yard, it shall be undulating in form, and not exceed a slope of 3:1.

26.3-4 *Required plant material:* Minimum standards for landscaping presented below are based on 100 linear feet of street frontage. The intensity of landscaping and width of the perimeter yard varies, depending upon the classification and function of the street. Where two streets intersect, the requirements of the higher street classification take precedence at property corners. The width of the yard shall then be subtracted from subsequent frontage lengths in calculating the quantity of plant materials required for other yards. The pavement width of driveways shall also be subtracted from frontage lengths in calculating the quantity of plant materials required for yards.

26.3-5 *Grasses and perennials recommended:* The introduction of native and ornamental grasses and perennials into the landscape is encouraged. The proposed planting of such grasses and perennials may result in a reduction from required shrubs, depending on the type, location, and intensity of grasses and perennials that are proposed.

**TABLE 26.31**

<b>Zoning District</b>	<b>Minor/100 linear feet</b>	<b>Collector/100 linear feet</b>	<b>Arterial/100 linear feet</b>
<b>Residential</b> (all locations, except the front yard of a single-family, two-family or town home)	<ul style="list-style-type: none"> <li>▪ 25 foot wide yard</li> <li>▪ 2 overstory trees</li> <li>▪ 1 understory tree</li> <li>▪ 3 evergreen trees</li> <li>▪ 9 large shrubs, of which 33% or more must be evergreen</li> </ul>	<ul style="list-style-type: none"> <li>▪ 25 foot wide yard</li> <li>▪ 3 to 5' berm</li> <li>▪ 2 overstory trees</li> <li>▪ 2 understory trees</li> <li>▪ 3 evergreen trees</li> <li>▪ 9 large shrubs, of which 33% or more must be evergreen</li> </ul>	<ul style="list-style-type: none"> <li>▪ 25 foot wide yard</li> <li>▪ 3 to 5' berm</li> <li>▪ 3 overstory trees</li> <li>▪ 3 understory trees</li> <li>▪ 3 evergreen trees</li> <li>▪ 12 large shrubs, of which 33% or more must be evergreen</li> </ul>
<b>Open Space and Institutional Buildings</b> (excluding IL Route 47)	<ul style="list-style-type: none"> <li>▪ 25 foot wide yard</li> <li>▪ 2 overstory trees</li> <li>▪ 1 understory tree</li> <li>▪ 1 evergreen tree</li> <li>▪ 9 large shrubs and 3 medium shrubs, of which 33% or more must be evergreen</li> </ul>	<ul style="list-style-type: none"> <li>▪ 25 foot wide yard</li> <li>▪ 3 to 5' berm</li> <li>▪ 2 overstory trees</li> <li>▪ 2 understory trees</li> <li>▪ 1 evergreen tree</li> <li>▪ 9 large shrubs and 3 medium shrubs, of which 33% or</li> </ul>	<ul style="list-style-type: none"> <li>▪ 25 foot wide yard</li> <li>▪ 3 to 5' berm</li> <li>▪ 3 overstory trees</li> <li>▪ 3 evergreen trees</li> <li>▪ 12 large shrubs and 6 medium shrubs, of which 33% or more must be evergreen</li> </ul>

**TABLE 26.31**

<b>Zoning District</b>	<b>Minor/100 linear feet</b>	<b>Collector/100 linear feet</b>	<b>Arterial/100 linear feet</b>
		more must be evergreen	
<b>Business</b> (excluding IL Route 47)	<ul style="list-style-type: none"> <li>▪ 30 foot wide yard</li> <li>▪ 3 overstory trees</li> <li>▪ 1 understory tree</li> <li>▪ 1 evergreen tree</li> <li>▪ 6 large shrubs and 3 medium shrubs, of which 33% or more must be evergreen</li> </ul>	<ul style="list-style-type: none"> <li>▪ 30 foot wide yard</li> <li>▪ 3 to 5' berm</li> <li>▪ 3 overstory trees</li> <li>▪ 1 understory tree</li> <li>▪ 1 evergreen tree</li> <li>▪ 9 large shrubs and 3 medium shrubs, of which 33% or more must be evergreen</li> </ul>	<ul style="list-style-type: none"> <li>▪ 30 foot wide yard</li> <li>▪ 3 to 5' berm</li> <li>▪ 3 overstory trees</li> <li>▪ 1 understory tree</li> <li>▪ 2 evergreen trees</li> <li>▪ 9 large shrubs and 6 medium shrubs, of which 33% or more must be evergreen</li> </ul>
<b>Manufacturing and Airport</b> (excluding IL Route 47)	<ul style="list-style-type: none"> <li>▪ 30 foot wide yard</li> <li>▪ 3 overstory trees</li> <li>▪ 2 understory trees</li> <li>▪ 1 evergreen tree</li> <li>▪ 9 large shrubs and 3 medium shrubs, of which 33% or more must be evergreen</li> </ul>	<ul style="list-style-type: none"> <li>▪ 30 foot wide yard</li> <li>▪ 3 to 5' berm</li> <li>▪ 3 overstory trees</li> <li>▪ 2 understory trees</li> <li>▪ 3 evergreen trees</li> <li>▪ 9 large shrubs and 6 medium shrubs, of which 33% or more must be evergreen</li> </ul>	<ul style="list-style-type: none"> <li>▪ 30 foot wide yard</li> <li>▪ 3 to 5' berm</li> <li>▪ 3 overstory trees</li> <li>▪ 2 understory trees</li> <li>▪ 3 evergreen trees</li> <li>▪ 12 large shrubs and 6 medium shrubs, of which 33% or more must be evergreen</li> </ul>
<b>IL Route 47</b> (all uses, except residential)	Not applicable	Not applicable	<ul style="list-style-type: none"> <li>▪ 100 foot wide yard</li> <li>▪ All native plants</li> <li>▪ 3 overstory trees</li> <li>▪ 1 understory tree</li> <li>▪ 15 large shrubs in clusters</li> </ul>

26.3-6 *Side and rear yards that do not abut a street:* The table that follows identifies the type and intensity of plantings required in perimeter yards that **do not** abut a street and that do not require screening as defined in Section 26.4. Trees, shrubs and groundcovers required for installation in these yards shall be selected from the plant lists found in Section 26.13.

**TABLE 26.32**

<b>Zoning</b>	<b>Side Yard/100 linear</b>	<b>Rear Yard/100 linear</b>
<b>Residential</b> (all locations except the front yard of a single-family, two-family-or townhome)	<ul style="list-style-type: none"> <li>▪ 10 foot wide yard</li> <li>▪ 2 overstory trees</li> <li>▪ 1 understory or 1 evergreen tree</li> <li>▪ 9 large shrubs, of which 33% or more shall be evergreen</li> </ul>	<ul style="list-style-type: none"> <li>▪ 10 foot wide yard</li> <li>▪ 2 overstory trees</li> <li>▪ 1 understory tree</li> <li>▪ 1 evergreen trees</li> <li>▪ 9 large shrubs and 3 medium shrubs, of which 33% or more shall be evergreen</li> </ul>
<b>Open Space and Institutional Buildings</b>	Same as residential	Same as residential
<b>Business</b>	<ul style="list-style-type: none"> <li>▪ 10 foot wide yard</li> <li>▪ 2 overstory trees</li> <li>▪ 1 understory or 1 evergreen tree</li> <li>▪ 9 large shrubs and 3 medium shrubs, of which 33% or more shall be evergreen</li> </ul>	<ul style="list-style-type: none"> <li>▪ 10 foot wide yard</li> <li>▪ 2 overstory trees</li> <li>▪ 1 understory or evergreen tree</li> <li>▪ 9 large shrubs and 6 medium shrubs, of which 33% or more shall be evergreen</li> </ul>
<b>Manufacturing and Airport</b>	<ul style="list-style-type: none"> <li>▪ 10 foot wide yard</li> <li>▪ 2 overstory trees</li> <li>▪ 2 understory or evergreen trees</li> <li>▪ 9 large shrubs and 6 medium shrubs, of which 33% or more shall be evergreen</li> </ul>	<ul style="list-style-type: none"> <li>▪ 10 foot wide yard</li> <li>▪ 3 overstory trees</li> <li>▪ 2 understory or evergreen trees</li> <li>▪ 12 large shrubs and 6 medium shrubs, of which 33% or more shall be evergreen</li> </ul>

26.3-7 *Sight Lines maintained:* Notwithstanding the above, landscape screening that is within 20 feet of an intersection shall be not more than 30 inches tall without approval by the Community Development Director.

26.3-8 *Shared Yards:* Where two yards on adjacent properties combine to provide a larger landscape yard, the plantings required by each development shall, where possible, work together to provide a common design and planting theme.

26.3-9 *Shared Parking:* For development sites under five acres, two adjacent lots shall not be required to have a ten (10) foot wide yard along the common lot line if the two lots: 1) have a shared parking agreement and cross access agreement; or 2) share a common site access and have a cross access agreement.

26.4 **SCREENING**

26.4-1 *Landscape screening required:* Landscape screening shall be required when:

- A. A non-residential land use abuts, or will abut a residential land use.
- B. A residential land use (single- or multiple-family) abuts, or will abut a non-residential land use.
- C. Outdoor storage is, or will be, located on a non-residential lot.
- D. Off-street loading is proposed or exists in a side or rear yard that abuts a residential land use.
- E. Off-street parking is proposed or exists in a side or rear yard that abuts a residential land use.
- F. Off-street parking is proposed or exists along a public street (see Section 26.6).

26.4-2 *Type of screening required:* Such screening shall be provided as follows:

- A. By installing a 6 foot tall fence or wall, with at least 1 overstory tree for each 30 linear feet planted along the outside of the fence to provide for screening above the top of the fence. Evergreen trees may be substituted for shade trees, provided that at least 50% of the required trees are deciduous overstory trees; **OR**
- B. By installing a landscaped berm, not less than three feet tall, planted with a combination of evergreen trees, overstory trees, understory trees and shrubs to provide a dense planting that achieves a solid screen; **OR**
- C. A combination of a fence, wall or landscaped berm, such that a solid screen is created.

26.4-3 *Sight Lines maintained:* Notwithstanding the above, landscape screening that is within 20 feet of an intersection shall be not more than 30 inches tall without approval by the Community Development Director.

26.5 **ENVIRONMENTAL BUFFERS**

26.5-1 *Buffers required:* Environmental buffers shall be provided around all regulatory resources including

wetlands, fens, streams or creeks according to standards below, unless other regulatory agencies requires a more restrictive buffer, in which case that agency's requirements shall apply.

26.5-2 *Native plants required:* Buffers shall be planted with plants native to McHenry County. Recommended plant mixes for native prairie and recommended riparian zone plantings along a stream or creek are included in Section 26.13.

**TABLE 26.5-1**

<b>Resource</b>	<b>Buffer Width</b>	<b>Planting Requirement</b>
Wetland	50 foot average, 30 foot minimum	Native prairie, unless buffer is wooded, in which case no planting is required
Fen	100 feet minimum	Native prairie, unless buffer is wooded, in which case no planting is required
Stream or Creek	75 feet minimum	1 tree/25 linear feet, clustered and riparian floodplain mix, unless buffer is already wooded, in which case no planting is required

26.5-3 *Required maintenance and management plan:*

- A. Wetlands, fens, or the riparian zone along a stream or creek that is located on private property shall be managed to create a native plant community that slows stormwater runoff, increases infiltration of water into the ground, assimilates pollutants, and provides wildlife habit.
- B. Maintenance and management of buffers around wetlands, fens, streams and creeks shall, at a minimum, include the following:
  - (1) Initial removal of invasive shrubs and woody plant material, as applicable, and enhancement of buffer with native plantings, as described in Section 26.5-2.

(2) Implementation of regular prescribed burn management for native plant communities.

- C. Buffers along streams or creeks shall be managed to encourage growth of native shrubs and trees by allowing seedlings and saplings to re-establish and mature.

## 26.6 PARKING LOT LANDSCAPING

26.6-1 *Pavement setbacks required:* Parking and access drives for multiple-family dwellings and all non-residential land uses shall not be allowed within (running parallel with) a required perimeter yard, as presented in Section 26.3.

26.6-2 *Screening required:* Where parking or an access drive is located between a building and the street of a multiple-family or non-residential property, screening shall be provided. With the exception of properties along Illinois Route 47, such screening shall include the following, in addition to landscaping identified in Section 26.3.

- A. An undulating berm, not less than 3 feet tall, with a maximum 3:1 slope.
- B. A combination of evergreen and deciduous shrubs that, when combined with the berm, provide continuous screening not less than 4 feet tall, except where screening is located within 20 feet of an intersection, in which case landscaping shall not exceed 30 inches in height. Required plantings shall be informally arranged, rather than in linear rows, to create a natural appearance, unless a formal landscape theme is proposed for the entire landscape.
- C. Where parking lot screening is proposed to be located within a required perimeter yard (see Section 26-3), the intensity of perimeter yard landscaping around the parking lot shall be increased to provide a full screen.

26.6-3 *Tree and shrub planting required:*

- A. *Required tree plantings:* A minimum of 1 tree shall be planted or preserved for each 15 parking spaces in an outdoor parking facility. Such trees shall be located in landscaped islands or median strips that are not less than 162 square feet in area (measured to back of curb), and a minimum of 9 feet in any direction. They

shall be dispersed throughout the parking lot to provide shade on the paved surface.

- B. *Required shrub/groundcover plantings:* In addition to required trees, all landscaped islands shall be planted with shrubs, groundcovers (other than turf grass), or native plants such that 50% or more of the island includes live plant material. At the ends of parking islands (minimum 9' x 9'), such material shall not exceed 30" in height at maturity to ensure that motorist visibility is not compromised.
- C. *Motorist Visibility:* Evergreen and ornamental trees (other than Callery Pear cultivars) shall not be allowed in parking lot islands (i.e., 9' x 18', typical, installed parallel to a parking space) since their growth characteristics can block the visibility of motorists traveling through the parking lot, potentially compromising safety for pedestrians and motorists. Evergreen trees and ornamental trees may be planted in median strips (typically 10' or more in width, constructed parallel to a row of parking spaces) constructed in parking lots, provided such trees are set back 10 feet from the ends of the median to protect motorist line of sight.

26.6-4 *Protecting landscapes:*

- A. All landscaped areas adjacent to parking lots and within parking lot islands shall be protected from parked vehicles by curbing.
- B. Landscaping shall be set back at least 2 feet from parking island curbs, medians, or the perimeter of a parking lot to protect plantings from damage by car overhang.
- C. Adequate space shall be provided for snow storage and shall be designated on the landscape plan.

26.6-5 *Areas to be planted:* All parkways and areas that are not improved with buildings or pavement shall be provided with landscaping that includes groundcover (seed, sod, or other ornamental or native plantings) and trees and shrubs.

**26.7 STORMWATER MANAGEMENT AREAS**

26.7-1 *Required landscaping:* Landscaping shall be provided around the perimeter of all retention or detention basins, generally above the high water level:

- A. Only those plants that are adapted to temporary flooding may be planted below the high water level.
- B. A hydroperiod analysis shall be submitted for the 5-, 10-, and 25-year storm events so that it can be confirmed that groundcover and other landscaping will be able to withstand the frequency and duration of these storm events.

26.7-2 *Type and intensity of planting required for stormwater management areas:*

- A. Unless otherwise approved, only native trees, shrubs, grasses and wildflowers shall be installed around the perimeter of a stormwater management facility to slow runoff, filter pollutants, recharge aquifers and enhance water quality in Lake in the Hills.
- B. Native overstory trees shall be planted at a ratio not less than 1 tree for every 40 linear feet around the perimeter of a retention or detention basin (as measured at the high water mark). Required trees shall be informally clustered, rather than evenly spaced, to create a natural appearance. Native plantings shall provide complete coverage of the perimeter of the basins. Understory trees or shrubs may also be included provided such materials can be installed without compromising the viability and required management of native plantings.
- C. Where a stormwater basin is proposed to be located within a required perimeter yard (see Section 26-3), the intensity of landscaping around the basin shall be increased to comply with the applicable standard for the perimeter yard.
- D. The selection of all plant material in these areas shall be made from the approved plant lists in Section 26.13.

**26.8 LANDSCAPING AROUND SIGNS**

- 26.8-1 *Where required:* Landscaping shall be installed around the base of all ground signs to visually anchor the sign and help it blend into the landscape.
- 26.8-2 *Type and intensity of planting required:* Landscaping shall include shrubs or other groundcovers (excluding turf grass) that are large enough to cover or soften the base of the sign without blocking the sign copy.

## 26.9 TREE PRESERVATION

### 26.9-1 *Required survey:*

- A. Properties proposed for development that possess existing trees shall be surveyed prior to the issuance of a building permit. The survey shall identify all deciduous trees that are greater than 4 inches in diameter as measured at breast height, and all evergreen trees that are 5 feet or greater in height.
- B. The survey shall identify the location, size, species and condition of those existing trees that qualify for surveying as defined in Section 26.10-1 A, above.

### 26.9-2 *Tree preservation plan:*

- A. *Decision to remove or replace trees:* Identification of which trees will be preserved, removed or replaced shall be coordinated with the Director of Community Development or designee, and based upon:
  - (1) The health of the tree or trees
  - (2) Need to provide for essential grade changes
  - (3) Need to provide for surface water drainage and utility installations
  - (4) Ability to locate proposed development without causing unreasonable economic hardship
  - (5) Good forestry practices, regarding the number, species and location of healthy trees the parcel will support
  - (6) The potential that a tree will pose a hazard to pedestrian or vehicular traffic, or safety hazard to buildings, both existing and proposed.
- B. *Preservation techniques:*
  - (1) Protective fencing shall be installed at the critical root zone of a tree or trees identified for preservation, to protect such trees from grading and root compaction by construction equipment. Where construction is allowed to take place within the critical root zone of one side of a tree proposed for preservation, protective fencing shall be extended beyond the critical root zone of the other side of the tree, in order to maximize protection of the root system. The

area of the root system protected by protective fencing shall, in no case, be less than the area of the critical root zone of the tree.

- (2) The crowns and roots of all trees that could be negatively affected by construction shall, unless otherwise approved by the Director of Community Development or designee, be pruned by a qualified arborist according to tree standards set by ANSI Z100 to compensate for root loss due to construction and to minimize damage to root systems.
- (3) Crushed limestone or other materials detrimental to the health of a tree shall be placed outside the drip line of a tree or group of trees planned for preservation, and drainage routed away from such trees.

26.9-3 *Removal and replacement criteria* - Trees that are removed shall be replaced according to the following:

A. *Deciduous trees:*

- (1) All deciduous trees that are proposed to be removed with approval by Lake in the Hills shall be replaced with new trees at a rate of 1" caliper of replacement tree equal to 1" caliper of tree removed, unless otherwise approved by the Director of Community Development.
- (2) In the event a deciduous tree or trees designated for preservation is destroyed or removed without Village approval, the tree or trees shall be replaced with new trees at a rate of 1 ½" caliper of replacement tree for each 1" caliper of tree removed.
- (3) When calculating required tree replacement, fractions less than 1" may be disregarded. If the fraction is ½ or greater, it shall be counted as 1".
- (4) Replacement deciduous trees shall be 3" or more in caliper, and selected from the approved plant lists in Section 26.13.

B. *Evergreen trees:*

- (1) All evergreen trees that are proposed to be removed with approval by Lake in the Hills shall be replaced with new trees at a rate of one-

vertical foot for each one-vertical foot of tree removed, unless otherwise approved by the Director of Community Development.

- (2) In the event an evergreen tree or trees designated for preservation is destroyed or removed without Village approval, the tree or trees shall be replaced with new trees at a rate of 1 ½ vertical feet for each one vertical foot of tree removed.
- (3) Replacement evergreen trees shall be 7' or more in height, and selected from the approved plant lists in Section 26.13.

26.9-4 *Enforcement*: In the event that a tree designated for preservation is destroyed or razed during the construction process, or has been removed without prior approval by Village staff, each tree shall be replaced according to replacement criteria presented in 26.10-3, above. Also, a minimum penalty of \$500 per tree shall be assessed upon the Owner of the property upon which trees were removed, and a temporary stop work order shall be issued until such time as the Village has identified the extent of tree removal and the number of replacement trees required.

#### 26.10 **FEXIBILITY IN APPLYING STANDARDS**

The Director of Community Development may administratively vary any specific requirement of this Section 26, provided such variation is less than 25% of the requirement. Any deviation of 25% or more from any specific requirement of this Section 26 shall be subject to review and approval by the Planning and Zoning Commission. Whenever the Village allows or requires a deviation from the requirements set forth in this section, the reasons for such deviation shall be affixed to the landscape plan for future reference and use.

#### 26.11 **PLANTING SPECIFICATIONS**

Plant materials used in conformance with the provisions of this Section 26 shall conform to the latest edition of the American Association of Nurserymen's (now the American Nursery & Landscape Association (ANLA)), Standard for Nursery Stock (ANSI Z60.1). Planting stock shall be well-branched and well-formed, sound, vigorous, healthy and free from disease, sun-scald, windburn, abrasion, harmful insects or insect eggs, and shall have healthy, normal and unbroken root systems. Overstory trees shall have straight single (or central) leaders with no disfiguring knots or crotches.

26.12 **GENERAL MAINTENANCE**

The owner, tenant, or their agent, if any, shall be responsible for the maintenance of all landscaping located on the site that is required by this Section of the Zoning Ordinance. Landscaping shall be maintained in good condition so as to present a healthy, neat and orderly appearance and kept free from refuse and debris. Any dead or severely damaged or diseased plant material shall be replaced by the owner, tenant or their agent during the next planting season. If the cost of the new landscaping materials indicated on an approved plan exceeds \$1,000, the petitioner shall furnish an itemized cost estimate of the landscaping materials and a two (2) year landscape maintenance bond in an amount equal to 10% of the total cost. In lieu of the landscape maintenance bond, the petitioner may deposit a cash bond of the same amount with the Village for a period of two years. After the two-year period, if the Village does not need to use the cash for landscape maintenance, the deposit will be returned without interest.

26.13 **PLANT LISTS**

The following lists have been developed to assist the landscape architect and architect in the selection of plant material.

Section 26.131: General plant list for on-site landscaping

Section 26.132: Seed mixes for native landscapes, buffers and detention basins.

Street trees shall be selected and installed according to Chapter 6 of the Lake in the Hills Municipal Code. Trees, shrubs, grasses and groundcovers used for landscaping as required by this Section 26 shall be selected from lists provided in Sections 26.131 and 26.132 of this Zoning Ordinance and Chapter 6 of the Lake in the Hills Municipal Code unless otherwise approved by the Director of Community Development. Minimum sizes required for trees, shrubs grasses and groundcovers at installation are identified within each category.

26.13-1 *General plant list:* The list that follows includes native and ornamental species. Native plants include a double asterisk (\*\*) after the botanical name of each plant.

**TABLE 26.131**

<b>Scientific Name</b>	<b>Common Name</b>
<b><i>Overstory Trees (3" minimum, as measured 6" above grade)</i></b>	
<i>Acer x freemanii</i> "Autumn Blaze"	Autumn Blaze Freeman Maple
<i>Acer nigrum</i> **	Black Maple
<i>Acer rubrum</i> "Morgani"	Morgani Red Maple
<i>Acer rubrum</i> **	Red Maple

TABLE 26.131

Scientific Name	Common Name
<i>Acer saccharum</i> **	Sugar Maple
<i>Acer s.</i> "Green Mountain"	Green Mountain Sugar Maple
<i>Aesculus glabra</i> **	Ohio Buckeye
<i>Aesculus hippocastanum</i> "Baumanii"	Baumanaii Horsechestnut
<i>Catalpa speciosa</i>	Northern Catalpa
<i>Celtis occidentalis</i> **	Common Hackberry
<i>Fagus grandiflora</i> **	American Beech
<i>Fraxinus americana</i> **	White Ash
<i>Fraxinus americana</i> "Rosehill"	Rosehill White Ash
<i>Fraxinus pennsylvanica</i> **	Green Ash
<i>Fraxinus pennsylvanica</i> "Marshall Seedless"	Marshall Seedless Green Ash
<i>Ginkgo biloba</i>	Ginkgo
<i>Gleditsia triacanthos</i> var. <i>inermis</i> **	Thornless Honeylocust Cultivars
<i>Gymnocladus dioicus</i> **	Kentucky Coffeetree
<i>Juglans nigra</i> **	Black Walnut
<i>Ostrya virginiana</i> **	American Hophornbeam
<i>Pyrus calleryana</i>	Callery Pear
<i>Quercus alba</i> **	White Oak
<i>Quercus bicolor</i> **	Swamp White Oak
<i>Quercus macrocarpa</i> **	Bur Oak
<i>Quercus palustris</i> **	Pin Oak
<i>Quercus rubra</i> **	Northern Red Oak
<i>Robinia pseudoacacia</i> 'Chicago Blues' (Benjamin)	Chicago Blues Black Locust
<i>Taxodium distichum</i>	Common Baldcypress
<i>Tilia americana</i> **	American Linden
<i>Tilia cordata</i>	Littleleaf Linden
<i>Tilia cordata</i> "Greenspire"	Greenspire Littleleaf Linden
<i>Ulmus japonica x wilsonia</i> "Accolade"	Accolade Elm
<b>Evergreen Trees (7' height, minimum)</b>	

TABLE 26.131

Scientific Name	Common Name
<i>Abies concolor</i>	White Fir
<i>Picea abies</i>	Norway Spruce
<i>Picea glauca</i> var. <i>densata</i>	Blackhills Spruce
<i>Picea omorika</i>	Serbian Spruce
<i>Picea pungens</i>	Colorado Spruce (Green)
<i>Pinus flexilis</i>	Limber Pine
<i>Pinus nigra</i> var. <i>nigra</i>	Austrian Pine
<i>Pinus strobus</i> **	Eastern White Pine
<i>Pinus sylvestris</i>	Scotch Pine
<i>Pseudotsuga menziesii</i>	Douglas Fir
<i>Tsuga canadensis</i>	Canadian Hemlock
<b>Ornamental/Understory Trees (1 ½" minimum, single-stem; 8' height, multi-stem)</b>	
<i>Acer campestre</i>	Hedge Maple
<i>Acer ginnala</i>	Amur Maple (clump)
<i>Alnus glutinosa</i>	European Alder
<i>Amelanchier canadensis</i> (arborea) **	Shadblow Serviceberry
<i>Amelanchier x grandiflora</i>	Apple Serviceberry
<i>Amelanchier laevis</i> **	Allegheny Serviceberry
<i>Betula nigra</i> **	River Birch (clump)
<i>Cercis canadensis</i> **	Eastern Redbud
<i>Cornus alternifolia</i> **	Pagoda Dogwood
<i>Cornus mas</i>	Cornelian Cherry Dogwood
<i>Crataegus crusgalli inermis</i> **	Thornless Cockspur Hawthorn
<i>Crataegus phaenopyrum</i>	Washington Hawthorn
<i>Crataegus viridis</i> "Winter King"	Winter King Hawthorn
<i>Magnolia liliiflora x stellata</i> "Susan"	"Susan" Little Girl Magnolia
<i>Magnolia stellata</i> "Royal Star"	Royal Star Magnolia
<i>Malus floribunda</i>	Japanese Flowering Crabapple
<i>Malus</i> "Jackmanii"	Baccata Jackii Crabapple
<i>Malus</i> "Sentinel"	Sentinel Crabapple
<i>Malus</i> "Spring Snow"	Spring Snow Crabapple
<i>Malus zumi</i> "Calocarpa"	Zumi Crabapple
<i>Syringa reticulata</i>	Japanese Tree Lilac

TABLE 26.131

Scientific Name	Common Name
<b>Large Deciduous Shrubs (36" minimum)</b>	
<i>Aronia arbutifolia</i> "Brilliantissima"	Red Chokeberry
<i>Aronia melanocarpa</i> **	Black Chokeberry
<i>Cornus sericea</i>	Isanti Redtwig Dogwood
<i>Euonymus alatus</i>	Burning Bush
<i>Euonymus alatus</i> "Compactus"	Dwarf Burning Bush
<i>Euonymus atropurpureus</i>	Eastern Wahoo
<i>Hamamelis vernalis</i>	Vernal Witchhazel
<i>Hamamelis virginiana</i> **	Fall Blooming Witchhazel
<i>Hydrangea</i> species	Tardiva Hydrangea PeeGee Hydrangea
<i>Viburnum dentatum</i>	Arrowwood Viburnum
<i>Viburnum x burkwoodii</i>	Burkwood Viburnum
<i>Viburnum trilobum</i>	American Cranberrybush Viburnum **
<i>Viburnum trilobum</i>	Hahs Viburnum
<i>Viburnum lantana</i>	Mohican Viburnum
<i>Viburnum lentago</i> **	Nannyberry Viburnum
<i>Viburnum carlesii</i>	Koreanspice Viburnum
<b>Medium Deciduous Shrubs (24" minimum)</b>	
<i>Corylus americana</i> **	American Hazelnut
<i>Cotoneaster acutifolius</i>	Peking Cotoneaster
<i>Forsythia</i> species	Sunrise Forsythia Early Forsythia
<i>Hydrangea</i> species	Annabelle Smooth Hydrangea ** Oak-leaf Hydrangea
<i>Ilex verticillata</i> **	Afterglow Winterberry Holly (female)
<i>Ilex verticillata</i> **	Jim Dandy Winterberry Holly (male)
<i>Rosa</i> species	Rugosa Rose Shrub Rose
<i>Spiraea</i> species	Anthony Waterer Frobelli Grefsheim Snowmound Spirea Meadowsweet **

TABLE 26.131

Scientific Name	Common Name
<b>Medium Deciduous Shrubs (18" minimum)</b>	
<i>Cotoneaster apiculatus</i>	Cranberry cotoneaster
<i>Rhus aromatica</i>	Grow-Low Sumac **
<i>Spiraea</i> species	Little Princess
<b>Large Evergreen Shrubs (30" minimum)</b>	
<i>Juniperus chinensis</i>	Pfitzer Juniper Sea Green Juniper
<i>Taxus x media</i>	Brown Yew Hatfield Yew Hicks Yew Japanese Yew
<b>Medium Evergreen Shrubs (18" minimum)</b>	
<i>Juniperus horizontalis**</i>	Hughes Juniper Sargent Juniper Broadmoor Juniper Blue Chip Juniper Trailing Juniper
<i>Taxus x media</i>	Taunton Yew Dense Yew Nana Yew
<b>Perennials (1 gallon container, minimum)</b>	
<i>Achillea</i> species	Moonshine Yarrow Heidi Yarrow Paprika Yarrow
<i>Aster novae-angliae**</i>	New England Aster
<i>Astilbe</i> species	Fanal Astilbe Peach Blossom Astilbe Pumila Astilbe
<i>Boltonia latisquama**</i>	False Aster
<i>Coreopsis</i> species	Coreopsis
<i>Echinacea</i> species**	Purple Coneflower White Coneflower
<i>Hemerocallis</i> species	Daylily
<i>Hosta</i> species	Hosta

TABLE 26.131

Scientific Name	Common Name
<i>Iris virginica</i> var. <i>shrevei</i> **	Wild Blue Iris
<i>Lavandula</i> species	Lavender
<i>Leucanthemum</i> species	Shasta Daisy
<i>Liatris aspera</i> **	Rough Blazing Star
<i>Liatris spicata</i> **	Gay Feather
<i>Monarda</i> species	Bee Balm
<i>Nepeta faassenii</i>	Catmint
<i>Penstemon digitalis</i> **	Foxglove Beard Tongue
<i>Perovskia atriplicifolia</i>	Russian Sage
<i>Phystostegia virginiana</i> **	False Dragonshead
<i>Rudbeckia fulgida</i> "Goldsturm"	Black-eyed Susan
<i>Rudbeckia hirta</i> **	Black-eyed Susan
<i>Salvia</i> species	Sage
<i>Sedum</i> species	Stonecrop
<i>Solidago nemoralis</i> **	Gray Goldenrod
<i>Solidago speciosa</i> **	Showy Goldenrod
<i>Veronica</i> species	Speedwell
<b>Ornamental Grasses (1 gallon container, minimum)</b>	
<i>Andropogon gerardii</i> **	Big Bluestem
<i>Andropogon scoparius</i> **	Little Bluestem
<i>Calamagrostis acutiflora</i>	Feather Reed Grass
<i>Deschampsia caespitosa</i> **	Tufted Hair Grass
<i>Helictotrichon sempervirens</i>	Blue Oat Grass
<i>Miscanthus</i> species	Silver Grass
<i>Panicum virgatum</i> **	Switch Grass
<i>Pennisetum alopecuroides</i>	Fountain Grass
<i>Sorghastrum nutans</i> **	Indian Grass

TABLE 26.131

Scientific Name	Common Name
<i>Spodiopogon sibiricus</i>	Silver Spike Grass
<i>Sporobolus heterolepis</i> **	Prairie Dropseed

\*\*Native Plant Species

26.13-2 *Seed mixes:* The following seed mixes may be used for stormwater management areas and buffer zones, as applicable. Substitutions may be made with approval by the Director of Community Development.

A. *Detention/Retention Seed Mixes:*

TABLE 26.132  
IDOT CLASS 4B SEED MIX

Scientific Name	Common Name	% By Weight	Lbs. per
<i>Avena sativa</i>	Spring oats		25
<i>Lolium multiflorum</i>	Annual Rye Grass		25
<b>Wetland Grasses (Below)</b>			
<i>Calamagrostis canadensis</i>	Blue Joint Grass	2	6
<i>Carex lacustris</i>	Lake-Bank Sedge	6	
<i>Carex stipata</i>	Awl-Fruited Sedge	6	
<i>Carex stricta</i>	Tussock Sedge	6	
<i>Carex vulpinoidea</i>	Fox Sedge	6	
<i>Eleocharis acicularis</i>	Needle Spike Rush	2	
<i>Eleocharis obtusa</i>	Blunt Spike Rush	2	
<i>Glyceria striata</i>	Fowl Manna Grass	14	
<i>Juncus effusus</i>	Common Rush	6	
<i>Juncus tenuis</i>	Slender Rush	6	
<i>Juncus torreyi</i>	Torrey's Rush	6	
<i>Leersia oryzoides</i>	Rice Cut Grass	10	
<i>Scirpus acutus</i>	Hard-Stemmed Bulrush	2	
<i>Scirpus atrovirens</i>	Dark Green Rush	2	
<i>Scirpus fluviatilis</i>	River Bulrush	2	
<i>Scirpus validus</i>	Softstem Bulrush	2	
<i>Spartina pectinata</i>	Cord grass	4	
<b>Total Lbs. Per Acre</b>			<b>56</b>

**TABLE 26.133  
CLESEN RETENTION MIX (D)**

<b>% Cover</b>	<b>Cover</b>
70%	Kentucky 31 Tall Fescue
33%	Perennial Ryegrass

**TABLE 26.13.4  
DETENTION BASIN COOL SEASON MIX**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Lbs. per Acre</b>
<i>Agrostis alba</i>	Redtop	7.500
<i>Agrostis alba palustris</i>	Creeping Bent	7.500
<i>Eleocharis palustris</i>	Spike Rush	0.375
<i>Festuca rubra</i> "Dawson's"	Dawson's Creeping Red Fescue	68.000
<i>Lolium perenne</i>	Perennial Rye	15.000
<i>Poa pratensis</i>	Kentucky Bluegrass	52.000
<b>Total Lbs. Per Acre</b>		<b>150.375</b>

**TABLE 26.135  
TOUGH WATER LINE NATIVE SEED MIX**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Lbs. per Acre</b>
<b>Temporary Matrix</b>		
<i>Agrostis alba</i>	Redtop	0.500
<i>Agrostis alba palustris</i>	Creeping Bent	0.084
<i>Avena sativa</i>	Seed Oats	32.000
<i>Alopecurus arundinaceus</i>	Creeping Foxtail	0.250
<i>Echinochloa crusgalli frumentacea</i>	Millet	0.500
<i>Lolium multiflorum</i>	Annual Rye	5.000
<i>Phleum pratense</i>	Timothy	0.500
<b>Permanent Matrix</b>		
<b>Grass and Grass-Like Plants</b>		
<i>Alisma subcordatum</i>	Water Plantain	0.250
<i>Carex hyalinolepis</i>	Hyaline Sedge	0.125
<i>Carex vulpinoidea</i>	Brown Fox Sedge	0.250
<i>Eleocharis palustris</i>	Spike Rush	0.250
<i>Elymus triticoides</i>	Creeping Wild Rye	1.000
<i>Puccinella distans</i>	Fults Salt Grass	0.172

"Fults"		
<i>Scripus acutus</i>	Hard-Stem Bulrush	0.556
<i>Scirpus atrovirens</i>	Dark Green Rush	0.038
<b>Forbs</b>		
<i>Sparganium eurycarpum</i>	Common Bur Reed	1.000
<b>Total Lbs. Per Acre</b>		<b>42.475</b>

**TABLE 26.136  
RIPARIAN FLOODPLAIN SEED MIX**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Lbs. per Acre</b>
<b>Temporary Matrix</b>		
<i>Agrostis alba</i>	Redtop	1.000
<i>Agrostis alba palustris</i>	Creeping Bent	0.031
<i>Avena sativa</i>	Seed Oats	64.000
<i>Echinochloa cryusgalli frumentacea</i>	Millet	1.000
<i>Lolium multiflorum</i>	Annual Rye	5.000
<i>Phleum pratense</i>	Timothy	0.125
<i>Polygonum pennsylvanicum</i>	Pinkweek	1.000
<i>Puccinella distans</i> "Fults"	Fults Salt grass	0.188
<b>Permanent Matrix</b>		
<b>Grass and Grass-Like Plants</b>		
<i>Carex buxbaumii</i>	Brown Sedge	0.047
<i>Carex cornosa</i>	Dark-Scaled Sedge	0.125
<i>Carex cristatella</i>	Crested Oval Sedge	0.016
<i>Carex hyalinolepis</i>	Hyaline Sedge	0.016
<i>Carex vulpinoidea</i>	Brown Fox Sedge	0.125
<i>Elymus virginicus</i>	Virginia Wild Rye	0.063
<i>Glyceria striata</i>	Fowl Manna Grass	0.046
<i>Juncus torreyi</i>	Torrey's Rush	0.016
<i>Leersia oryzoides</i>	Rice Cut Grass	0.016
<i>Scirpus atrovirens</i>	Dark Green Rush	0.375
<i>Scirpus cyperinus</i>	Wool Grass	0.031
<i>Scirpus pendulus</i>	Red Bulrush	0.006
<i>Scirpus pungens</i>	Chairmaker's Rush	0.009
<i>Scirpus validus</i>	Soft-Stem Bulrush	0.188

**TABLE 26.136  
RIPARIAN FLOODPLAIN SEED MIX**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Lbs. per Acre</b>
<b>Forbs</b>		
<i>Acorus calamus</i>	Sweet Flag	0.031
<i>Alisma subcordatum</i>	Water Plantain	0.313
<i>Asclepias incarnata</i>	Swamp Milkweed	0.094
<i>Bidens species</i>	Various Species Bidens	0.016
<i>Boltonia latisquarma recognita</i>	False Aster	0.022
<i>Cicuta maculata</i>	Water Hemlock	0.016
<i>Eleocharis palustris</i>	Spike Rush	0.375
<i>Eupatorium maculatum</i>	Spotted Joe Pye	0.063
<i>Iris virginica shrevei</i>	Blue Flag	0.063
<i>Napaea dioica</i>	Glade Mallow	0.031
<i>Peltandra virginica</i>	Arrow Arum	0.500
<i>Penthorum sedoides</i>	Ditch Stonecrop	0.009
<i>Pontedaria cordata</i>	Pickernel Weed	0.313
<i>Rudbeckia lacinata</i>	Wild Golden Glow	0.016
<i>Sagittaria latifolia</i>	Common Arrowhead	0.188
<i>Silphium perfoliatum</i>	Cup Plant	0.125
<i>Sparganium eurycarpum</i>	Common Bur Reed	1.000
<b>Total Lbs. Per Acre</b>		<b>76.594</b>

**TABLE 26.137  
DETENTION BASIN WET PRAIRIE MIX**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Lb. Per Acre</b>
<b>Temporary Matrix</b>		
<i>Agrostis alba</i>	Redtop	1.000
<i>Avena sativa</i>	Seed Oats	32.000
<i>Lolium multiflorum</i>	Annual Ryegrass	5.000
<i>Phleum pratense</i>	Timothy	0.500
<b>Permanent Matrix</b>		
<i>Andropogon gerardii</i>	Big Bluestem	0.187
<i>Beckmannia syzigachne</i>	American Sloughgrass	0.735
<i>Bromus ciliatus</i>	Fringed Brome	0.490
<i>Calamagrostis canadensis</i>	Blue Joint Grass	0.032
<i>Carex bebbii</i>	Bebb's Oval Sedge	0.136

**TABLE 26.137**  
**DETENTION BASIN WET PRAIRIE MIX**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Lb. Per Acre</b>
<i>Carex comosa</i>	Bristly Sedge	0.136
<i>Carex hystericinia</i>	Porcupine Sedge	0.136
<i>Carex lupulina</i>	Common Hop Sedge	0.136
<i>Carex stipata</i>	Common Fox Sedge	0.136
<i>Carex vulpinoidea</i>	Brown Fox Sedge	0.136
<i>Elymus canadensis</i>	Canada Wild Rye	0.490
<i>Elymus virginicus</i>	Virginia Wild Rye	0.490
<i>Glyceria grandis</i>	Reed Manna Grass	0.136
<i>Juncus effusus</i>	Common Rush	0.068
<i>Juncus interior</i>	Inland Rush	0.028
<i>Panicum virgatum</i>	Switch Grass	0.136
<i>Scirpus atrovirens</i>	Dark-green Bulrush	0.677
<i>Scirpus cyperinus</i>	Wool Grass	0.353
<i>Scirpus validus</i>	Great Bulrush	0.068
<i>Sorghastrum nutans</i>	Indian Grass	0.899
<i>Spartina pectinata</i>	Cord Grass	0.136
<b>Grasses</b>		
<i>Andropogon gerardii</i>	Big Bluestem	0.187
<i>Beckmannia syzigachne</i>	American Sloughgrass	0.735
<i>Bromus ciliatus</i>	Fringed Brome	0.490
<i>Calamagrostis canadensis</i>	Blue Joint Grass	0.032
<i>Carex bebbii</i>	Bebb's Oval Sedge	0.136
<i>Carex comosa</i>	Bristly Sedge	0.136
<i>Carex hystericinia</i>	Porcupine Sedge	0.136
<i>Carex lupulina</i>	Common Hop Sedge	0.136
<i>Carex stipata</i>	Common Fox Sedge	0.136
<i>Carex vulpinoidea</i>	Brown Fox Sedge	0.136
<i>Elymus canadensis</i>	Canada Wild Rye	0.490
<i>Elymus virginicus</i>	Virginia Wild Rye	0.490
<i>Glyceria grandis</i>	Reed Manna Grass	0.136
<i>Juncus effusus</i>	Common Rush	0.068
<i>Juncus interior</i>	Inland Rush	0.028
<i>Panicum virgatum</i>	Switch Grass	0.136
<i>Scirpus atrovirens</i>	Dark-green Bulrush	0.677
<i>Scirpus cyperinus</i>	Wool Grass	0.353
<i>Scirpus validus</i>	Great Bulrush	0.068
<i>Sorghastrum nutans</i>	Indian Grass	0.899

**TABLE 26.137**  
**DETENTION BASIN WET PRAIRIE MIX**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Lb. Per Acre</b>
<i>Spartina pectinata</i>	Cord Grass	0.136
<b>Forbs</b>		
<i>Acorus calamus</i>	Sweet Flag	0.1363
<i>Alisma subcordatum</i>	Mud Plantain	0.0677
<i>Allium cernuum</i>	Nodding Onion	0.1363
<i>Anemone canadensis</i>	Canada Anemone	0.034
<i>Asclepias incarnata</i>	Swamp Milkweed	0.477
<i>Aster novae-angliae</i>	New England Aster	0.068
<i>Aster umbellatus</i>	Flat-topped Aster	0.032
<i>Boltonia asteroides</i>	False Aster	0.032
<i>Chelone glabra</i>	Turtlehead	0.054
<i>Eupatorium maculatum</i>	Joe Pye Weed	0.054
<i>Eupatorium perfoliatum</i>	Boneset	0.032
<i>Gentiana flavida/andrewsii</i>	Cream/Bottle Gentian Mix	0.068
<i>Helenium autumnale</i>	Sneezeweed	0.068
<i>Heliposis helianthoides</i>	Early Sunflower	0.068
<i>Hibiscus militaris</i>	Rose Mallow	0.273
<i>Iris virginica shrevei</i>	Southern Blue Flag	0.273
<i>Liatris pycnostachya</i>	Prairie Blazing Star	0.340
<i>Lobelia siphilitica</i>	Great Blue Lobelia	0.068
<i>Pedicularis lanceolata</i>	Marsh Betony	0.068
<i>Physostegia virginiana</i>	Obdient Plant	0.068
<i>Pycnanthemum virginianum</i>	Mountain Mint	0.068
<i>Rudbeckia hirta</i>	Black-eyed Susan	0.136
<i>Rudbeckia subtomentosa</i>	Sweet Black-eyed Susan	0.343
<i>Rudbeckia triloba</i>	Brown-eyed Susan	0.034
<i>Silphium laciniatum</i>	Compass Plant	0.273
<i>Silphium perfoliatum</i>	Cup Plant	0.136
<i>Silphium terebinthinaceum</i>	Prairie Dock	0.204
<i>Solidago riddellii</i>	Riddell's Goldenrod	0.068
<i>Soldiago uliginosa</i>	Bog Goldenrod	0.032
<i>Thalictrum dasycarpum</i>	Purple Meadow Rue	0.204
<i>Verbena hastata</i>	Blue Vervain	0.068
<i>Vernonia fasciculata</i>	Common Ironweed	0.136
<i>Veronicastrum virginicum</i>	Culver's Root	0.032
<i>Zizia aurea</i>	Golden Alexanders	0.136
<b>Total Lbs. Per Acre</b>		<b>53.930</b>

B. Wetland or Fen Buffer Seed Mix:

**TABLE 26.138**  
**LOW PROFILE BROAD SPECTRUM PRAIRIE WITH FLOWER SEED MIX**

Scientific Name	Common Name	Lbs. per Acre
<b>Temporary Matrix</b>		
<i>Avena sativa</i>	Seed Oats	32.000
<i>Elymus canadensis</i>	Prairie Wild Rye	1.000
<i>Hordeum jubatum</i>	Squirrel Tail Barley	0.006
<i>Lolium multiflorum</i>	Annual Rye	5.000
<i>Phleum pratense</i>	Timothy	2.000
<b>Permanent Matrix</b>		
<i>Andropogon gerardii</i>	Big Blue Stem	0.250
<i>Andropogon scoparius</i>	Little Blue Stem	4.000
<i>Bouteloua curtipendula</i>	Side Oats Grama	1.750
<i>Panicum virgatum</i>	Prairie Switch Grass	0.500
<i>Sorghastrum nutans</i>	Indian Grass	0.094
<b>Forbs</b>		
<i>Amorpha canescens</i>	Lead Plant	0.125
<i>Aster laevis</i>	Smooth Blue Aster	0.016
<i>Aster novae angliae</i>	New England Aster	0.031
<i>Baptisia leucantha</i>	White Wild Indigo	0.078
<i>Cassia fasciculata</i>	Partridge Pea	0.125
<i>Ceanothus americanus</i>	New Jersey Tea	0.031
<i>Coreopsis palmata</i>	Prairie Coreopsis	0.031
<i>Dodecatheon meadia</i>	Shooting Star	0.016
<i>Echinacea pallida</i>	Pale Purple Coneflower	0.281
<i>Eryngium yuccifolium</i>	Rattlesnake Master	0.188
<i>Lespedeza capitata</i>	Round-Head Bush Clover	0.125
<i>Liatris aspera</i>	Rough Blazing Star	0.125
<i>Liatris pycnostachya</i>	Prairie Blazing Star	0.188
<i>Monarda fistulosa</i>	Prairie Bergamot	0.031
<i>Parthenium integrifolium</i>	Wild Quinine	0.016
<i>Petalostemum candidum</i>	White Prairie Clover	0.125
<i>Petalostemum purpureum</i>	Purple Prairie Clover	0.156
<i>Physostegia virginiana</i>	False Dragonhead	0.094
<i>Ratibida pinnata</i>	Yellow Coneflower	0.125
<i>Rudbeckia hirta</i>	Black-eyed Susan	0.063

**TABLE 26.138**  
**LOW PROFILE BROAD SPECTRUM PRAIRIE WITH FLOWER SEED MIX**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Lbs. per Acre</b>
<i>Silphium laciniatum</i>	Compass Plant	0.006
<i>Solidago nemoralis</i>	Old-Field Goldenrod	0.125
<i>Solidago rigida</i>	Rigid Goldenrod	0.125
<i>Verbena stricta</i>	Hoary Vervain	0.125
<i>Veronicastrum virginicum</i>	Culver's Root	0.006
<i>Veronia fasciculata</i>	Common Ironweed	0.188
<b>Total Lbs. Per Acre</b>		<b>49.144</b>

**TABLE 26.139**  
**SAND PRAIRIE WITH FLOWERS SEED MIX**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Lbs. per Acre</b>
<b>Temporary Matrix</b>		
<i>Avena sativa</i>	Seed Oats	32.000
<i>Carex muhlenbergii</i>	Sand Sedge	0.063
<i>Elymus canadensis</i>	Prairie Wild Rye	1.000
<i>Stipa spartea</i>	Porcupine Grass	0.006
<b>Permanent Matrix</b>		
<i>Andropogon gerardii</i>	Big Blue Stem	0.125
<i>Andropogon hallii</i>	Sand Blue Stem	2.000
<i>Andropogon scorparius</i>	Little Blue Stem	2.000
<i>Bouteloua curtipendula</i>	Side Oats Grama	2.000
<i>Bouteloua gracilis</i>	Blue Grama	1.000
<i>Calamovilfa longifolia</i>	Sand Reed	1.000
<i>Koeleria cristata</i>	June Grass	0.188
<i>Sporobolus cryptandrus</i>	Sand Dropseed	0.125
<i>Sporobolus heterolepis</i>	Prairie Dropseed	0.006
<i>Sorghastrum nutans</i>	Indian Grass	0.063
<b>Forbs</b>		
<i>Arnorpha canescens</i>	Lead Plant	0.188
<i>Anemone cylindrica</i>	Thimbleweed	0.063
<i>Asclepias tuberosa</i>	Butterfly Weed	0.063
<i>Aster azureus</i>	Sky Blue Aster	0.006
<i>Baptisia leucantha</i>	White Wild Indigo	0.063
<i>Cassia fasciculata</i>	Partridge Pea	0.156
<i>Ceanothus americanus</i>	New Jersey Tea	0.031

**TABLE 26.139**  
**SAND PRAIRIE WITH FLOWERS SEED MIX**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Lbs. per Acre</b>
<i>Coreopsis lanceolata</i>	Sand Coreopsis	0.188
<i>Coreopsis palmata</i>	Prairie Coreopsis	0.063
<i>Desmanthus illinoensis</i>	Illinois Bundle Flower	0.094
<i>Echinacea pallida</i>	Pale Purple Coneflower	0.25
<i>Eryngium yuccifolium</i>	Rattlesnake Master	0.063
<i>Gentiana puberulenta</i>	Prarie Gentian	0.006
<i>Lespedeza capitata</i>	Round-Head. Bush Clover	0.188
<i>Liatris aspera</i>	Rough Blazing Star	0.25
<i>Lupinus perennis</i>	Wild Lupines	0.125
<i>Monarda fistulosa</i>	Prairie Bergamot	0.016
<i>Penstemon grandiflorus</i>	Large-Flowered Beard Tongue	0.125
<i>Petalostemum candidum</i>	White Prairie Clover	0.031
<i>Petalostermum purpureum</i>	Purple Prairie Clover	0.094
<i>Polytaenia nutallil</i>	Prairie Parsley	0.031
<i>Potentilla arguta</i>	Prairie Cinquefoil	0.016
<i>Ratibida pinnata</i>	Yellow Coneflower	0.063
<i>Rudbeckia hirta</i>	Black-eyed Susan	0.094
<i>Salvia pitcheri</i>	Blue Sage	0.063
<i>Solidago nemoralis</i>	Old-Field Goldenrod	0.031
<i>Solidago rigida</i>	Rigid Goldenrod	0.016
<i>Solidago speciosa</i>	Showy Goldenrod	0.063
<i>Verbena stricta</i>	Hoary Vervain	0.031
<b>Total Lbs. Per Acre</b>		<b>44.047</b>