

VILLAGE OF HOLMEN
LA CROSSE COUNTY, WISCONSIN

ORDINANCE 5-2017

AN ORDINANCE CREATING ARTICLE XVII, LANDSCAPING & BUFFERYARDS
OF THE VILLAGE OF HOLMEN CODE OF ORDINANCES

BE IT ORDAINED by the Village Board of Trustees, Village of Holmen, La Crosse County, Wisconsin, as follows:

Section 1. Article XVII and all Sections contained therein are hereby created to read as identified on the following attached pages.

Section 2. Effective Date. Article XVII and all Section contained therein shall become effective and incorporated into the Village of Holmen Code of Ordinances on the date of passage.

Date approved and adopted: December 14, 2017

VILLAGE OF HOLMEN

Nancy Proctor, Village President

Angela Hornberg, Clerk/Treasurer

ARTICLE XVII

Landscaping & Bufferyards

§ 195-75. Purpose.

The purpose of this Article is to establish landscaping requirements and other regulations intended to preserve and maintain vegetation in a manner that promotes the natural resource protection, high quality aesthetics, and public health goals of the Village. It is also the intent of this article to provide flexible requirements that encourage and allow for creativity in landscape design.

§ 195-76. Applicability.

- A. The requirements of this Article shall not apply retroactively to existing buildings, structures, or paved areas, including requirements for bufferyards.
- B. Any use, except for those listed under subsection (E), shall provide landscaping in accordance with the regulations of this Article, including new construction and expansion activities which adds impervious surface (e.g., expansion of existing buildings, structures and parking lots).
- C. Additional landscaping requirements may be specified by the Zoning Administrator and/or Site Plan and Architectural Review Board (SPAR Board) to meet the intent of the Village's Comprehensive Plan.
- D. Where insufficient site area remains to comply with all provisions of this section, the Village may require compliance to the extent practical.
- E. Single family, two-family, and agricultural land uses are exempt from landscaping requirements.

§ 195-77. Landscaping Plan and Design Standards.

- A. The applicant shall provide a landscaping plan prepared by a Landscape Architect, depicting the following:
 - (1) Plan shall be drawn at a reasonable scale to clearly delineate the landscape improvements and shall include a north arrow, property lines, and easements.
 - (2) Zoning of the subject property and abutting properties.
 - (3) Linear feet of the new/expanded building foundation and street frontage.
 - (4) Square footage of the total lot and new/expanded paved area.
 - (5) Existing landscaping to be removed.
 - (6) Existing landscaping to remain including type/name, size, number, and number of landscaping points per Figure 195.78 doubled.
 - (7) Proposed landscaping meeting the requirements of this Article including type/name, size, number, and number of landscaping points per Figure 195.78.
- B. Plant and Groundcover Material.
 - (1) Plant materials provided in conformance of the provisions of this Section shall be of nursery quality and tolerant of individual site microclimates.
 - (2) Mulch is encouraged to consist of shredded bark or chipped wood or other organic material. Landscape stone mulch is discouraged.

- (3) Mulches shall be installed so that they will not erode, fall, be plowed or otherwise transported into walks, drives, streets or other hard surfaced portions of the site.

C. Parking Lot Design.

- (1) Parking spaces must be broken by a tree island at the rate of one island for each linear row of 20 parking spaces.
- (2) All tree islands and landscaped areas with trees shall have a minimum of 8 feet as measured from outside the curb or frame.
- (3) All landscaped areas without trees, but planted with shrubs, shall have a minimum width of 3 feet measured from inside the curb or frame.
- (4) Parking lots adjacent to residential properties shall provide opaque screening of vehicle lights to a minimum height of four feet. Screening devices may include a fence, berm, and/or evergreen trees.

D. Landscaping Locations.

- (1) Landscaping shall be distributed throughout the property, along street frontages, within parking lot interiors, and as foundation plantings as specified in this Article.
- (2) Unless meeting the requirements in subsection (3) below, landscaping shall not be located within a public right of way, and shall not impede vehicle or pedestrian visibility.
- (3) The Village may require the street frontage landscaping to be placed within the right-of-way and shall collect fees to purchase and install such landscaping.

E. Use of Required Bufferyard and Landscaped Areas.

- (1) Any and all required bufferyards or landscaped areas may be used for passive recreation activities. Said areas may contain pedestrian and bike trails provided: 1) no required material is eliminated; 2) the total width of the required bufferyard, or the total area of required landscaping, is maintained; and, 3) all other regulations of this Chapter are met.
- (2) No active recreational uses (e.g., swimming pools, tennis courts, sports fields, golf courses, etc.), parking areas, buildings, outdoor light fixtures and outdoor display areas shall be permitted in required bufferyards and landscaped areas.
- (3) Paving in such areas shall be limited to that required for necessary access to, through, or across the subject property.

F. Other Green Space Areas.

- (1) Green space areas not used for landscape plantings, excluding natural resource protection areas, shall be graded and seeded or sodded with an acceptable maintainable seed mix, restored to native vegetation, or maintained in crop production (if approved by the Plan Commission).

§ 195-78. Landscaping Points.

This section shall be used to establish the points per plant species and type, as described below and in Figure 195.78. See Sections 195-79 and 195-80 for landscaping requirements by zoning district. See Section 195-86 for prohibited plant species and Section 195-87 for points by permitted plant species.

- A. In calculating the number of required landscaping points under the provisions of this section, all areas and distances on which required calculations are based shall be rounded up to the nearest whole number. Any partial plant derived from the required calculations of this section shall be rounded up to the next whole plant (e.g., 23.3 rounds up to 24).
- B. In the case of building/paving expansion, only the new portion is required to provide landscaping. This is calculated by taking the square footage of the addition divided by the square footage of the existing building/paving area. This percent increase shall be used to dictate meeting the requirements of this Article.
- C. The installation of a rain garden or bioswale may count toward meeting the Village’s yard area, building foundation, and/or paved area landscaping point requirement based on a 20 points for every 20 square feet, provided the requirements of Section 195-81 are met.
- D. Landscaping point values shall be doubled for mature existing tree plantings that are retained and protected with the development of the site, except for those listed on the prohibited plant species list (see Section 195-86). The preserved tree shall be protected during construction through the use of a fence around the drip line. If any preserved trees are lost to damage or disease within three years after plan approval, the owner shall replace said trees with the number of trees that would otherwise have been required.
- E. Landscaping materials, fences and berms located within a duly recorded utility or a pedestrian easement shall not count toward meeting a landscaping requirement, unless authorized otherwise by the Village. The width of such area(s) may be counted as part of a landscaping requirement.

Figure 195.78: Landscaping Points

Plant Category	Points Per Plant	Minimum Installation Size
Shade Tree	75	2” Caliper
Tall Deciduous Tree	30	1 ½” Caliper
Medium Deciduous Tree	15	6’ Tall
Low Deciduous Tree	10	4’ Tall
Tall Evergreen Tree	40	5’ Tall
Medium Evergreen Tree	20	4’ Tall
Low Evergreen Tree	12	3’ Tall
Tall Deciduous Shrub	5	36” Tall
Medium Deciduous Shrub	3	24” Tall
Low Deciduous Shrub	1	18” Tall
Medium Evergreen Shrub	5	18” Tall/Wide
Low Evergreen Shrub	3	12” Tall/Wide
Rain Garden / Bioswale	20 / 20 SF	N/A
Non-contributory Plants	0	N/A

Source: A Guide to Selecting Landscape Plants for Wisconsin, E. R. Hasselkus, UW-Extension Publication: A2865

§ 195-79. Landscaping Distribution Requirements, excluding Bufferyards.

Landscaping shall be provided based on the following requirements for building foundations, paved areas, street frontages, and yard areas (summarized in Figure 195.79A and illustrated in Figure 195.79B). These requirements are additive to each other and any other landscaping or screening requirements in this Article, specifically bufferyard requirements (see Section 195.80).

Figure 195.79A: Landscaping Requirements for Regular Development

Landscaping Component					
	Building Foundation	Paved Areas	Street Frontages	Yard Areas	
Type of Landscaping	Tall trees not allowed	A minimum of 30% of points devoted to tall trees and 40% to shrubs	Shrubs not allowed; a minimum of 50% of points devoted to tall trees and 30% to medium trees	Any type allowed	
Placement of Landscaping	Within 10 feet of building foundation	Within paved area or within 10 feet of paved area	Within 10 feet of the public right of way	Any location	
Calculation of Landscaping Points	Points per 100 linear feet of building foundation	Points per 20 parking spaces	Points per 100 feet of street frontage	Points per 1,000 square feet of gross floor area	
Zoning Districts:	Conservancy (C)*	20	20	20	10
	Agricultural (A)*	20	20	20	10
	Single-Family Residential (R-1, R-2, R-3)*	40	100	100	20
	Two-Family Residential (R-4)*	45	100	100	20
	Zero Lot Line Two-Family Residential (R-6)*	60	100	100	30
	Townhome MF Residential (R-7)*	75	100	100	20
	Multi-Family Residential (R-5)*	40	100	100	20
	Neighborhood Commercial (B-3)*	40	80	60	15
	General Business (B-2)*	0	80	0	0
	Downtown Business (B-1)*	25	75	50	15
	Light Industrial (LI)	20	50	25	10

**Note: Single-family, two-family, and all agricultural land uses are exempt from landscaping requirements.*

A. Building Foundations.

- (1) For every 100 linear feet of building foundation, the landscaping installed shall at a minimum meet the number of landscaping points specified in Figure 195.78.
- (2) Building foundation landscaping shall be placed so that at maturity, the plant's drip line is located within 10 feet of the building foundation.
- (3) Tall trees shall not be used to meet building foundation landscaping requirements.

B. Paved Areas.

- (1) For every 20 off-street parking stalls, landscaping shall at a minimum meet the number of landscaping points specified in Figure 195.78.
- (2) Paved area landscaping shall be placed so that at maturity, the plant's drip line is located within 10 feet of the paved area. Said area does not have to be provided in one contiguous area.
- (3) Plants used to fulfill this requirement shall visually screen parking, loading and circulation areas from view from public streets.
- (4) A minimum of 30% of all points shall be devoted to medium or tall trees, or a combination of such trees, and a minimum of 40% of all points shall be devoted to shrubs.

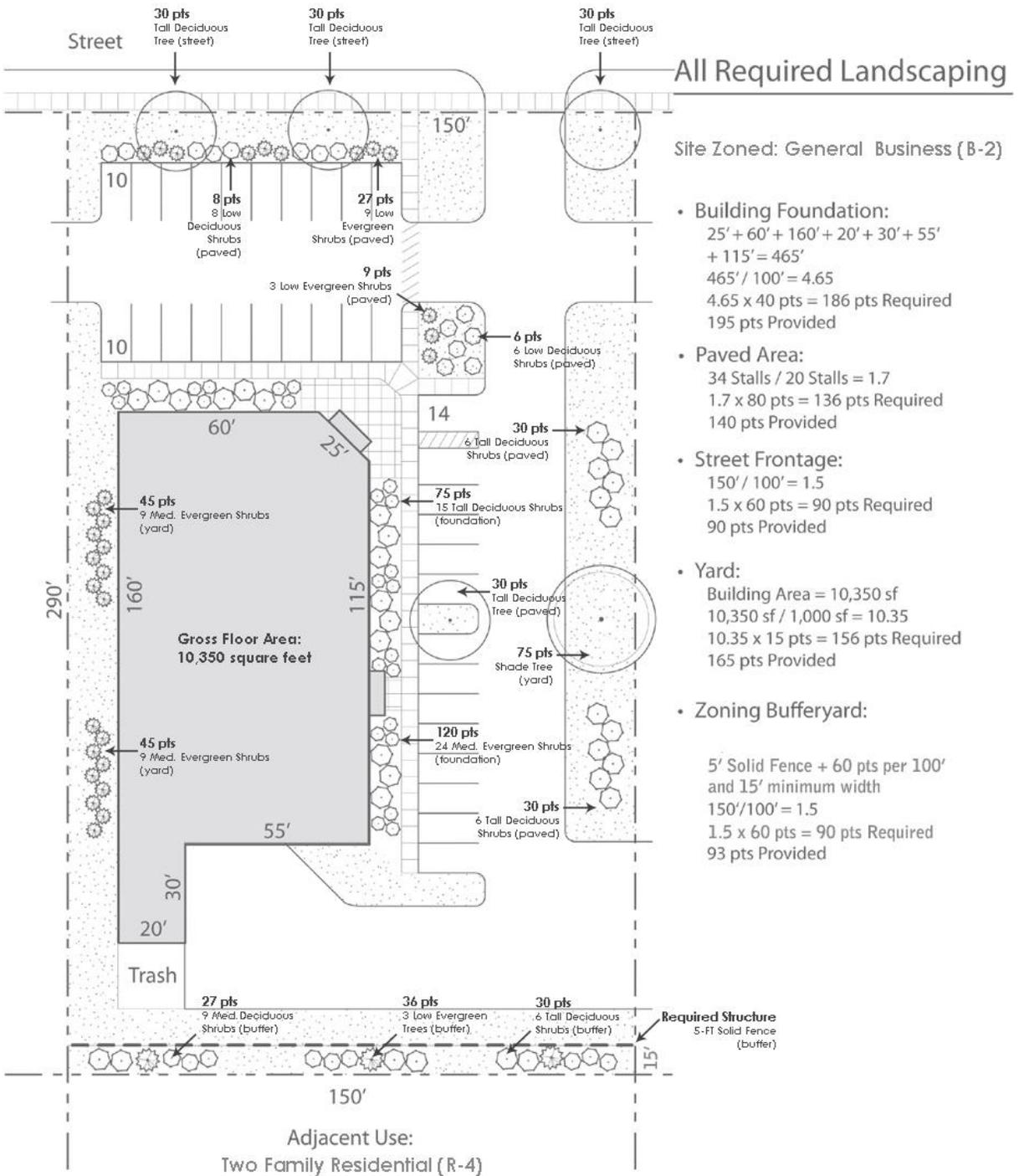
C. Street Frontages.

- (1) For every 100 linear feet of street frontage of a developed lot abutting a public street right of way, the landscaping installed shall at a minimum meet the number of landscaping points specified in Figure 195.78.
- (2) Street frontage landscaping shall be placed so that at maturity, the plant's drip line is located within 10 feet of the public street right of way.
- (3) Shrubs shall not be used to meet street frontage landscaping requirements. A minimum of 50 percent of all points shall be devoted to decorative or medium trees, or a combination of such trees.

D. Yard Areas.

- (1) For every 1,000 square feet of gross floor area, the landscaping installed shall at a minimum meet the number of landscaping points specified in Figure 195.78.
- (2) The intent of this Section is to provide yard shade and to require a visual screen of a minimum of 6 feet in height for all detached exterior appurtenances (such as HVAC, utility boxes, standpipes, stormwater discharge pipes and other pipes).
- (3) Landscaping required by this Section is most effective if located away from those areas required for landscaping as building foundations, street frontages, paved areas, protected green space areas, or reforestation areas.
- (4) Up to fifty (50) percent of the landscaping required by this Section may be placed in the bufferyard to enhance the physical barrier between incompatible uses.

Figure 195.79B: Sample Landscaping Scheme – All Required Landscaping, including bufferyards (see Section 195.80)



§ 195-80. Bufferyards.

A bufferyard is a combination of distance and a visual buffer or barrier. It includes an area, together with the combination of plantings, berms and/or fencing that are required to eliminate or reduce existing or potential nuisances (e.g., dirt, litter, noise, glare, signs, and incompatible land uses, buildings, or parking areas) between adjacent land uses.

- A. The required level of bufferyard opacity is listed in Figure 195-80A. Opacity is a quantitatively-derived measure which indicates the degree to which a particular bufferyard screens the abutting property. The required level of opacity indicated is directly related to the degree to which the potential character of development differs between different zoning districts.

Figure 195.80A: Required bufferyard opacity values

		Apply the required opacity value from this Figure to Figure 195-80B and select the most appropriate bufferyard option. Note that certain land uses, conditional uses, and planned development projects may have more stringent bufferyard requirements.													
		C	A	R-1	R-2	R-3	R-4	R-6	R-7	R-5	B-3	B-2	B-1	LI	M
Subject Property Zoning District:	Conservation (C)	0	0												
	Agriculture (A)	0	0												
	New Single Family Residential-1 (R-1)	0	0	0											
	New Single Family Residential-2 (R-2)	0	0	0	0										
	Single-Family Mixed Residential (R-3)	0	0	0	0	0									
	Two-Family Residential (R-4)	0	0	0	0	0	0								
	Zero Lot Line Two-Family Res. (R-6)	0	0	0	0	0	0	0							
	Townhome MF Residential (R-7)	0	0	0.2	0.2	0.2	0.2	0.1	0						
	Multi-Family Residential (R-5)	0	0	0.3	0.3	0.3	0.3	0.2	0.1	0					
	Neighborhood Commercial (B-3)*	0	0	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0				
	General Business (B-2)*	0	0	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0			
	Downtown Business (B-1)*	0	0	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0		
	Light Industrial (LI)	0	0	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.1	0.1	0	
Manufacturing (M)	0	0	0.5	0.5	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.1	0	

- B. Bufferyards shall meet the minimum landscaping points defined in Figure 195.80B. Opacity levels (Figure 195.80A) are met by either installing the required minimum landscaping points with no buffering structure (no fence or berm), or installing a buffering structure (per minimum requirements in Figure 195.80B) at the identified reduced landscaping point requirement. See Figure 195-80C for an example of landscaping plan meeting all landscaping requirements.

- (1) Bufferyards shall be located along (and within) the outer perimeter of a lot wherever two different zoning districts abut one another. Bufferyards shall not be required in front yards.
- (2) Bufferyards are not required where additions to existing buildings or paved areas are not visible from adjacent properties eligible for buffering.
 - a. For structures and parking additions parallel to or extending closer to an abutting property eligible for buffering, landscaping points shall be based on the linear frontage

of the addition visible from abutting properties measured parallel along the property line.

- (3) Bufferyard fencing shall be placed within the required or provided bufferyard along the perimeter of the abutting properties eligible for buffering.
- (4) The visual screening for bufferyards, without a structural solid fence and required opacity of 0.4 or greater, shall have at least 50% of the required landscaping points be a combination of coniferous species, either shrubs or trees.
- (5) Bufferyards shall meet the minimum width identified in Figure 195-80B, and shall be outside the identified paved area and building foundation planting zones per Section 195-79(A) and Section 195-79(B).
 - a. Where the minimum permitted width for the required bufferyard is not available under the current state of development, the SPAR Board may reduce the width required for the bufferyard to that currently available on the site.

Figure 195.80B: Detailed Bufferyard Requirements

Opacity	Minimum Bufferyard Width (feet)	Minimum Landscaping Points per 100 Linear Feet	Minimum Required Structure
0.10	5	0	4 FT Solid Fence
		40	---
0.20	10	0	4 FT Solid Fence
		80	---
0.30	10	30	5 FT Solid Fence
		120	---
0.40	15	60	5FT Solid Fence -OR- 4 FT Berm
		160	---
0.50	15	90	6 FT Solid Fence -OR- 5 FT Berm
		200	---

Side Note: Figure above is a chart to help calculate the minimum bufferyard requirements. First locate the appropriate opacity value in the left column that was established by intersecting the subject property and the abutting property zoning district in Figure 195.80(A). The next column is the minimum bufferyard width measured perpendicular from the property line. The third column is the minimum required landscape points per 100 lineal feet of abutting property eligible for buffering. The fourth column indicates whether or not a structure is required as part of the bufferyard.

§ 195-81. Rain Gardens and Bioswales.

Rain gardens and bioswales can serve both as landscaping and stormwater management features on a building site, where appropriately designed and sited.

A. Definitions.

- (1) A **Rain Garden** is a shallow, depressed garden that is designed and positioned on a site to capture stormwater runoff and allow for the infiltration of water back into the ground. Rain garden plants are carefully chosen for their ability to withstand moisture extremes and potentially high concentrations of nutrients and sediments that are often found in stormwater

runoff. A well designed and maintained rain garden serves as an attractive component of an overall landscaping plan for a development site.

- (2) A **Bioswale** is a linear, vegetative stormwater runoff conveyance system that is designed to store and infiltrate water from small storm events back into the ground and direct water from heavy rain events to appropriate storm sewer inlets or other management facilities. The flow of water being conveyed through a bioswale is slowed down, allowing for municipal storm systems to more effectively manage heavier rain events and help reduce the risk of flooding on or off-site. Water being infiltrated or conveyed via a bioswale is also filtered by the vegetation within it, generally improving both ground and surface water quality.

B. Requirements.

- (1) The installation of a rain garden or bioswale may contribute to the overall stormwater management plan for a development site and count toward meeting the Village's landscaping point requirements per Section 195-78C.
- (2) Detailed plans shall be provided that show all proposed dimensions of the rain garden or bioswale including length, width, depth, and slope of depression; location of the rain garden or bioswale on the lot relative to hard-surfaced areas, downspouts, and site topography; characteristics of the soil underlying the rain garden or bioswale; description of planting media; the species, number, and size at time of installation of all vegetation proposed for the rain garden or bioswale; and information on any other materials (e.g., rocks) that will be used to line the rain garden or bioswale.
- (3) Installation shall not be proposed for any of the following areas of a site:
 - a. Areas where there is known soil contamination unless the rain garden or bioswale is proposed to be constructed with an under- drain;
 - b. Areas where the characteristics of the soil would not allow for the proper infiltration of water into the ground; or
 - c. Areas where there are expected to be high levels of foot traffic.
- (4) The owner of the site shall demonstrate that the rain garden or bioswale will be properly maintained; kept free of trash, weeds, debris, and dead or dying plants; any pipes associated with the rain garden or bioswale shall be inspected on an annual basis and kept free of debris; and by the beginning of every spring dead plant materials shall be cut back or removed.
- (5) Bioswales and rain gardens shall be generously (and appropriately) vegetated to qualify for landscaping points. Bioswales and rain gardens (or portions thereof) that are lined with turf and/or rocks but do not include other vegetation will not count toward meeting landscaping point requirements.
- (6) Rain gardens and bioswales may serve as a component of an overall stormwater management plan for a site only if detailed plans, calculations, and specifications are submitted. Detailed plans shall include the location and description of all other stormwater management facilities serving the site, particularly those to which any bioswale will be directed.

§ 195-82. Installation and Maintenance.

- A. Installation. Any and all landscaping and bufferyard material required by the provisions of this Article shall be installed on the subject property, in accordance with the approved site plan within 365 days of the issuance of an occupancy permit for any building on the subject property, unless a conditional use is approved to allow for greater than 365 days.

B. Surety.

- (1) If the subject property is to be occupied prior to the installation of all required landscaping and bufferyard material, the property owner shall sign an instrument agreeing to install the landscaping within the 365 day period and shall furnish to the Village an irrevocable letter of credit or performance bond sufficient to guarantee completion of the work. Such security shall be provided by the property owner at the time that the agreement is signed. It shall be in an amount equal to 110 percent of the estimated actual cost for all of the required elements of the approved site plan and shall specifically guarantee that all such elements shall be made and installed according to the approved site plan. The costs of the work shall be furnished by the property owner and shall be verified by the Village. The financial security shall remain in force until all of the work has been completed and approved by the Village. Upon completion of the work and approval by the Village, the security shall be reduced to 10% of the original amount. The reduced security shall be held by the Village for 14 months following approval by the Village in order to provide a warranty for the work. This agreement shall also contain a statement indicating that the property owner's failure to comply with the requirements of the terms of the agreement will constitute a violation of the Article and subject the property owner to any remedies available to the Village, including having the Village complete the work and withhold funds from the security to reimburse the Village for the work performed.
- (2) If the required landscaping and bufferyard materials are to be installed during different phases of a subdivision development, the developer may furnish for each phase financial security in an amount sufficient to guarantee completion of the landscaping and bufferyard work performed during a particular phase, unless the land division regulations requires otherwise.
- (3) If the property owner is a governmental unit, it may, in lieu of signing an agreement and furnishing a guarantee, file a resolution or letter from officers authorized to act in its behalf, agreeing to comply with the provisions of this Article.

C. All landscaping and bufferyard areas shall be seeded with lawn or native ground cover unless such vegetation is already fully established.

D. The exact placement of plants and structures shall be depicted on the required detailed landscaping plan submitted to the Village for its approval. Such plant and structure location shall be the decision of each property owner provided the following requirements are met:

- (1) Evergreen shrubs shall be planted in clusters to maximize their chance for survival.
- (2) Where a combination of plant materials, berming, and fencing is used in a bufferyard, the fence and/or berm shall be located toward the interior of the subject property and the plant material shall be located toward the exterior of the subject property.
- (3) A property owner may establish through a written agreement, recorded with the Register of Deeds that an abutting property owner agrees to provide on the immediately abutting portion of his or her land a partial or full portion of the required bufferyard, thereby relieving the developer of the responsibility of providing the entire bufferyard on his property.
- (4) Under no circumstance shall landscaping or bufferyard materials be selected or located in a manner resulting in the creation of a safety or visibility hazard.
- (5) The restrictions on types of plants listed in this Article shall apply.

E. Maintenance. The continual maintenance of all required landscaping and bufferyard materials shall be a requirement of this Article and shall be the responsibility of the owner of the property on which said materials and plants are required. This requirement shall run with the property and shall be binding upon all future property owners. Development of any or all property following the

effective date of this Article shall constitute an agreement by the property owner to comply with the provisions of this Section. If the property owner fails to comply with these provisions, the Village may enter upon the property for the purpose of evaluating and maintaining all required landscaping and bufferyard materials, and may specially assess the costs thereof against the property. A property owner's failure to comply with this requirement shall also be considered a violation of this Article, and shall be subject to any and all applicable enforcement procedures and penalties.

§ 195-83. Appeals.

Any person aggrieved by any decisions of the SPAR Board concerning this Article may appeal the decision to the Village's Zoning Board of Appeals. Such appeal shall be filed with the Clerk within 30 days after filing of the decision with the Clerk.

§ 195-84. Violations and Penalties.

Any person who violates any provision of this article shall be required to forfeit not less than \$50 nor more than \$500, plus costs, for each violation. Each consecutive day in which the violation has not been remedied, shall be considered as a new violation subject to further penalty, up to a maximum of \$5,000.

§ 195-85. Findings and Modifications.

- A. The SPAR Board shall not approve any application unless it finds that the purposes and regulations set forth in this Article have been reasonably met. In certain situations, the SPAR Board may allow modifications or grant exceptions to these standards set forth in this Article on the basis of compelling landscape architecture merit, or where the strict application or adherence to established standards may be impractical or impossible due to site conditions or other circumstances beyond the control of the applicant.
- B. The SPAR Board may, on a case-by-case basis, require more stringent regulations than the regulations listed within this Article when deemed necessary by the Village to meet the purpose of this Article and the purpose and intent of the Village's Zoning Code.
- C. The Zoning Officer may allow modifications to the approved landscaping plan during installation where the strict application or adherence to approved landscaping plan may be impractical or impossible due to site conditions (e.g., unknown utility infrastructure) or other circumstances beyond the control of the applicant.

§ 195-86. Prohibited Plant Species.

The purpose of this provision is to limit the planting of species that are invasive, have invasive tendencies, or that may perpetuate or spread disease.

- A. Prohibited Species are listed in Figure 195.86 (below), and shall not be included as part of any landscaping plan. Protecting and retaining these prohibited plant species are exempt from receiving double points per Section 195-78C.

Figure 195.86: Prohibited Species

Classification	Common Name	Scientific Name	Reason
Shade Tree	Non-resistant elms	<i>Ulmus spp.</i>	Dutch Elm Disease
Shade Tree	Boxelder	<i>Acer negundo</i>	Spread quickly
Shade Tree	Freeman Maple	<i>Acer x freemanii</i>	Over-planted
Shade Tree	Norway Maples	<i>Acer platanoides</i>	Over-planted, dense
Shade Tree	Silver Maple	<i>Acer saccharinum</i>	Weak wood and aggressive root systems
Tall Deciduous Tree	Ash trees	<i>Fraxinus spp.</i>	Emerald Ash Borer
Tall Deciduous Tree	Cottonwood	<i>Populus deltoids, populus fremontii, or populus nigra</i>	Weak wood and aggressive root systems
Tall Deciduous Tree	Willow	<i>Salix</i>	Drops branches
Medium Deciduous Tree	Ailanthus, Tree of Heaven	<i>Ailanthus altissima</i>	Invasive non-native
Medium Deciduous Tree	White mulberry	<i>Morus alba</i>	Invasive non-native
Tall Deciduous Shrub	Buckthorns	<i>Rhamnus</i>	Invasive non-native
Tall Deciduous Shrub	Autumn-olive	<i>Elaeagnus umbellata</i>	Invasive non-native
Tall Deciduous Shrub	Multiflora rose	<i>Rosa multiflora</i>	Invasive non-native
Medium Deciduous Shrub	Japanese spirea	<i>Spiraea japonica</i>	Invasive (reseed)
Medium Deciduous Shrub	Burning bush	<i>Euonymus alatus</i>	Invasive non-native
Medium Deciduous Shrub	Honeysuckle	<i>Lonicera spp.</i>	Invasive non-native
Low Deciduous Shrub	Japanese Barberry	<i>Berberis thunbergii</i>	Invasive; over- planted

§ 195-87. Permitted Plant Species.

Species suitable for landscaping and compatible with local climate and soil factors are listed in Figure 195.87A-195.87M. However, this list is not intended to be exhaustive, and the Zoning Administrator shall review proposals for the applicability of species not listed, and is authorized to approve appropriate similar species and assign landscaping points to said similar species.

The following sources were used in compiling Figures 195.87A-195.87M of plant species:

Department of Natural Resources. *Forest Trees of Wisconsin: How to Know Them*. Madison, Wisconsin: Department of Natural Resources, 1987.

Hasselkus, E.R. *A Guide to Selecting Landscape Plants for Wisconsin*. Madison, Wisconsin: College of Agricultural and Life Sciences University of Wisconsin - Extension, Cooperative Extension Programs, 1982.

Hightshoe, Gary L. *Native Trees, Shrubs, and Vines for Urban and Rural America: A Planting Design Manual for Environmental Designers*. New York: Van Nostrand Reinhold, 1988.

Iowa State University. *Landscape Plants for Iowa*. Ames, Iowa: Iowa State University Cooperative Extension Service, May 1984.

Figure 195.87A: Common Shade Tree Species (75 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Shade Trees (75 Points)				
* <i>Acer saccharum</i> RF	Sugar Maple	S	Round	Rich soil; salt-sensitive; oval when young; yellow, orange or scarlet fall color.
“Green Mountain”				Scorch-resistant; leathery leaves.
* <i>Carya ovata</i> RF	Shagbark Hickory			Native and very adaptable, salt-sensitive, fruit-nut, lawn tree.
Ginkgo bilboa	Ginkgo	S	Pyramidal	Very urban, dioecious, females produce smelly fruits, golden yellow fall color.
“Fastigiata”	Sentry Ginkgo		Columnar	Seedless.
<i>Juglans nigra</i> RF	Walnut	F		Best in public open spaces or lawns; not to be used as a street tree; poisonous to other plants within the drip zone; susceptible to caterpillars and leaf-spot disease.
	Eastern Walnut Black Walnut			
* <i>Quercus alba</i> RF	White Oak	S	Round	Extremely sensitive to soil compaction; tolerant of urban conditions; dry soil; subject to iron chlorosis; red fall color; very difficult to transplant; excellent lawn or shade tree.
* <i>Quercus bicolor</i> RF	Swamp White Oak	S	Round	Very tolerant of urban conditions; moist to wet, intolerant of alkaline soil; tolerates poor drainage; difficult to transplant; yellow fall color.
* <i>Quercus macrocarpa</i> RF	Bur Oak Mossycup Oak	S	Round	Sensitive to soil compaction; tolerant of urban conditions; dry to wet soil; no fall color; very difficult to transplant.
* <i>Quercus palustris</i>	Pin Oak	M	Pyramidal	Sensitive to soil compaction; tolerant of urban conditions; moist, acid soil; pendulous lower branches; red fall color; iron chlorosis on alkaline soil; lawn tree; cultivar “Sovereign” best for streets.
* <i>Quercus rubra</i> RF	Northern Red Oak Red Oak	M	Round	Sensitive to soil compaction; tolerant of urban conditions; pyramidal when young; red fall color; well-drained soil; fast-growing for oaks; excellent lawn, shade, and street tree.
(<i>Quercus borealis</i>)				
KEY: *Wisconsin native S=Slow M=Medium F=Fast				

Figure 195.87B: Common Tall Deciduous Tree Species (30 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Tall Deciduous Trees (30 Points)				
<i>Acer nigrum</i>	Black Maple	M	Oval	Does well in poor, dry soils; red to bright gold fall color; excellent for lawn, shade, or street.
<i>Acer platanoides</i>	Norway Maple	M	Round	Shallow root system; not to be used along streets.
* <i>Acer rubrum</i> RF	Red Maple Scarlet Maple Swamp Maple		Round	Moist, acid soil; tolerates poor drainage; smooth gray bark; yellow, orange, or red fall color; salt-sensitive.
* <i>Acer saccharinum</i> RF	Silver Maple Soft Maple White Maple River Maple	F	Vase	Heart and fast-growing; moist soil; tolerates poor drainage; fine-textured; weak-wooded (develops heart rots after fifty years, limbs may fall); yellowish or no fall color
<i>Aesculus hippocastanum</i>	Horsechestnut	M	Round	Urban; course; showy, white May flowers; litter problem; no fall color; difficult to transplant; pest or disease problems may limit use.
<i>Alnus glutinosa</i>	European Alder Black Alder	F	Oval	Rich or wet soils; produces catkins; possible winterkill.
<i>Betula lutea</i> RF	Yellow Birch	M	Round	Drooping branches; moist well-drained soils; yellow-orange bark; rusty yellow fall color.
KEY: *Wisconsin native S=Slow M=Medium F=Fast				

Figure 195.87B (CONTINUED): Common Tall Deciduous Tree Species (30 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Tall Deciduous Trees (30 Points)				
<i>Catalpa speciosa</i>	Northern Catalpa	F	Oval	Poor, dry soil; showy, white June flowers; coarse; litter problem; no fall color.
* <i>Celtis occidentalis</i> RF	Common Hackberry	M	Vase	Tolerates alkaline soils; "pebbled" bark; yellowish fall color; pest or disease problem may limit use.
* <i>Fagus grandifolia</i> RF	American Beech	S	Oval	Moist, rich soil; smooth, gray bark; yellow-bronze fall color; difficult to transplant; salt-sensitive; sensitive to soil compaction.
<i>Fagus sylvatica</i>	European Beech	S	Round	Moist, rich soil; less difficult to transplant than American Beech; several cultivars available; excellent lawn tree.
* <i>Gleditsia triacanthos inermis</i>			Vase	Tolerates poor drainage; thornless, as are all of the following; pest or disease problem may limit use; salt-tolerant; yellow fall color.
* <i>Gymnocladus dioica</i>	Kentucky Coffeetree	M	Upright	Moist, rich soil; coarse and rugged; dioecious; yellowish fall color.
<i>Juglans cinerea</i> RF	Butternut	S		Needs good soil and consistent moisture; fairly good shade tree; susceptible to butternut decline.
<i>Larix decidua</i>			Pyramidal	Full sun; graceful, fine-textured; transplant in spring before buds open; yellow fall color.
<i>Larix kaempferi</i>	Japanese Larch	F	Wide-Pyramidal	Similar to European Larch, more picturesque.
<i>Larix laricina</i> RF	American Larch Tamarack	M	Narrow-Pyramidal	Hardy; drought tolerant; used in shelterbelts.
<i>Liriodendron tulipifera</i>	Tuliptree	F	Upright	Rich, moist soil; unique leaves and interesting June flowers; yellow fall color; purchase from northern source.
* <i>Platanus occidentalis</i>	Sycamore American Planetree	F	Pyramidal	Moist soil; tolerates poor drainage; mottled bark; coarse, maple-like leaves; no fall color; pest or disease problem may limit use.
<i>Populus alba</i>	White Poplar	F	Fastigate	Moist soil; tolerates poor drainage; mottled bark; coarse, maple-like leaves; no fall color; pest or disease problem may limit use.
<i>Populus deltoides</i> RF	Eastern Poplar		Fastigate	Hardy, fast growing; golden yellow fall color; tolerates drought; brittle; may produce "cotton"; too large for homes.
<i>Populus grandidentata</i> RF	Bigtooth Aspen	F	Narrow	Moist, sandy, gravelly soils; not shade tolerant; yellow fall color.
* <i>Prunus serotina</i> RF	Black Cherry	M	Oval	Dry soil; white flowers and black fruits in drooping racemes; orange fall color; pest or disease problem may limit use.
<i>Taxodium distichum</i>	Baldcypress	F	Pyramidal	Moist, intolerant of alkaline soil; tolerates poor drainage; sun; bronze fall color; fine texture.
* <i>Tilia americana</i> RF		M	Round	Sensitive to soil compaction; salt-sensitive; coarse; rich soils.
<i>Tilia cordata</i>	Littleleaf Linden	S	Pyramidal	Urban; moist soil; fragrant flowers; poor branch structure, needs training while young; yellow fall color.
<i>Tilia x euchlora</i>	Redmond Linden	M	Pyramidal	Urban; dark green foliage.

KEY: *Wisconsin native S=Slow M=Medium F=Fast

Figure 195.87C: Common Medium Deciduous Tree Species (15 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Medium Deciduous Trees (15 Points)				
<i>Aesculus x carnea</i> "Briotii"	Ruby Horsechestnut	S	Round	Rich, moist soil; red flowers.
<i>Aesculus glabra</i>	Ohio Buckeye	S	Round	Rich, moist soil; yellow-green flowers; orange fall color.
<i>Alnus glutinosa</i>	European Alder	F	Oval	Wet; tolerates poor drainage; catkins; cone fruits; no fall color.
* <i>Betula nigra</i> RF	River Birch	M	Vase	Wet to dry, intolerant of alkaline soils; tolerates poor drainage; pinkish, peeling bark.
* <i>Betula papyifera</i> RF	Paper Birch	M	Oval	Cool, moist soil; white, peeling bark; golden yellow fall color; pest or disease problem.
<i>Betula pendula</i> "Gracilis"	Cutleaf European Birch	M	Weeping	Cool, moist soil; dissected leaves; yellow fall color; pests & disease.
<i>Betula platyphylla japonica</i>	Japanese White Birch	M	Pyramidal	White bark; some resistance to bronze birch borer.
<i>Cercidiphyllum japonicum</i>	Katsuratree	M	Columnar	Moist soil; dioecious; form controlled by pruning, wide spreading if multi-trunked; yellow to red fall color.
<i>Cladrastis lutea</i>	American Yellowwood	S	Round	Moist, rich soil; smooth, light gray bark; fragrant, white June flowers in large clusters; yellow fall color.
<i>Magnolia acuminata</i>	Cucumbertree	F	Pyramidal	Inconspicuous, greenish flowers; pink to red fruits; coarse foliage; no fall color.
* <i>Nyssa sylvatica</i>	Black Gum	S	Pyramidal	Moist soil; tolerates poor drainage; dense habit; dioecious; orange to scarlet fall color; difficult to transplant.
<i>Phellodendron amurense</i>	Amur Corktree	M	Round	Urban; dry soil; dioecious; compound leaves; corky bark; yellow fall color.
<i>Prunus maackii</i>	Amur Chokecherry	M	Round	Amber exfoliating bark; does well in containers.
<i>Prunus padus commutata</i>	Harbinger European Bird Cherry	S	Round	Sun; early to leaf out in spring; pest or disease problem.
* <i>Prunus pennsylvanica</i> RF	Pin Cherry	M	Upright	Poor, dry soil; sun; graceful; shortlived; suckering; red fruits; orange to red fall color.
<i>Prunus sargentii</i>	Sargent Cherry	M	Upright	Sun, well-drained soil; early, pink flowers; red fall color.
<i>Salix alba tristis</i>	Golden Weeping Willow	F	Weeping	Wet soil; tolerates poor drainage; bright yellow twigs; fine-textured; litter problem.
<i>Ulmus parvifolia</i>	Chinese Elm	M	Vase	Disease resistant; exfoliating bark.
KEY: * Wisconsin native S=Slow M=Medium F=Fast				

Figure 195.87D: Common Low Deciduous Tree Species (10 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Low Deciduous Trees (10 Points)				
<i>Acer ginnala</i>	Amur Maple	M	Round	Sun, shade; red fruit; red fall color.
* <i>Alnus rugosa</i>	Speckled Alder	F	Round	Wet soil; tolerates poor soil; lenticled bark.
* <i>Amelanchier arborea</i> RF	Downy Serviceberry	S	Upright	Dry soil; shade; gray bark; white flowers; yellow to red fall color; edible fruits.
<i>Amelanchier x grandiflora</i>	Apple Serviceberry	S	Spreading	Semi-shade; large, white flowers, edible fruits.
* <i>Amelanchier laevis</i>	Allegheny Serviceberry	S	Upright	Moist soil; shade; white flowers; orange to red fall color, edible fruits.
* <i>Carpinus caroliniana</i> RF	American Hornbeam	S	Spreading	Moist soil; shade; smooth, gray muscle-like trunks; orange fall color.
KEY: * Wisconsin native S=Slow M=Medium F=Fast				

Figure 195.87D (CONTINUED): Common Low Deciduous Tree Species (10 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Low Deciduous Trees (10 Points)				
<i>Cercis canadensis</i>	Eastern Redbud	M	Spreading	Sun or shade; purplish-pink flowers; yellow fall color; purchase form northern source.
* <i>Cornus alternifolia</i>	Pagoda Dogwood	M	Spreading	Cool, moist soil; shade; blue-black berries on red stalks; early, maroon fall color.
* <i>Crataegus crus-galli</i>	Thornless Cockspur Hawthorn		Spreading	Urban; sun; persistent, brick red fruits; orange to red fall color; no thorns.
<i>Crataegus laevigata</i>	Paul's Scarlet Hawthorn			Heavy soil; sun; double, scarlet flowers in late May; no fall color; pest or disease problem.
<i>Crataegus x lavallei</i>	Lavalle Hawthorn	S	Upright	Urban; sun; glossy foliage; bronzy-red fall color.
* <i>Crataegus mollis</i>	Downy Hawthorn	S	Upright	Sun; large, red, early-ripening fruit; yellow fall color; pest or disease problem.
<i>Crataegus phaenopyrum</i>	Washington Hawthorn	M	Upright	Urban; sun; latest blooming; small, persistent, orange-red fruits in clusters; orange fall color.
* <i>Crataegus punctata</i>	Dotted Hawthorn	S	Spreading	Moist, heavy soil; sun; picturesque; pest or disease problem may limit use.
<i>Crataegus x "Toba"</i>	Toba Hawthorn	S		Sun; double, pink, fragrant flowers; glossy leaves; red fruits; dwarf-15.
<i>Elaeagnus angustifolia</i>	Russianolive	F	Round	Dry, alkaline soil; sun; fragrant, inconspicuous flowers; silver-gray foliage; no fall color; pest or disease problem may limit use.
<i>Magnolia x loebneri</i>	Dr. Merrill Magnolia	M	Pyramidal	Rich soil; sun; white, many-petaled flowers; difficult to transplant.
<i>Magnolia x soulangiana</i>	Saucer Magnolia	S	Round	Rich soil; sun; large pink flowers; difficult to transplant.
<i>Malus</i> species & cultivars	Flowering Crabapples			All require sun and well drained soil. They all possess a high degree of resistance to the apple scab disease.
<i>Malus baccata jackii</i>	Jack Flowering Crabtree	M	Upright spreading	Slightly susceptible to fire blight; white flowers; tiny 1/3-1/2" diam., dark red fruits.
<i>Malus</i> "Bob White"	Bob White Flowering Crabtree	M	Rounded	Moderately susceptible to fire blight; white flowers; 5/8" diam., persistent, yellow fruits.
<i>Malus</i> "Candied Apple"	Weeping Candied Apple Flowering Crabtree		Weeping	Slightly susceptible to scab; pink flowers; 5/8" diam., persistent cherry-red fruits; foliage tinged with red.
<i>Malus</i> "Centurian"	Centurian Flowering Crabtree		Narrow-Upright	Disease resistant; rose-red flowers; 5/8" diam., persistent, cherry-red fruits.
<i>Malus</i> "David"	David Flowering Crabapple	M	Rounded	Slightly susceptible to fire blight and scab; white glowers; 1/4-1 1/2" diam., reddish fruits for in alternate years.
<i>Malus</i> "Dolgo"	Dolgo Flowering Crabtree	M	Upright-Spreading	Slightly susceptible to fire blight and scab; white flowers; 1 1/4-1 1/2" diam., persistent red fruits.
<i>Malus</i> "Donald Wyman"	Donald Wyman Flowering Crabtree	M	Rounded	Disease-resistant; white flowers; 3/8" diam.; persistent red fruits.
<i>Malus</i> "Dorothea"	Dorothea Flowering Crabtree	S	Horizontal	Moderately susceptible to scab; clear pink semi-double flowers; 1/2" diam., yellow fruits.
<i>Malus</i> "Gibb's Golden Gage"	Gibb's Golden Gage Flowering Crabtree		Rounded	Disease resistant; white flowers; 1" diam., persistent, yellow fruits.
KEY: *Wisconsin native S=Slow M=Medium F=Fast				

Figure 195.87D (CONTINUED): Common Low Deciduous Tree Species (10 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Low Deciduous Trees (10 Points)				
<i>Malus</i> "Indian Summer"	Indian Summer Flowering Crabtree		Rounded	Disease resistant; rose-red flowers; 5/8-3/4" diam., red fruits.
<i>Malus</i> "Mary Potter"	Mary Potter Flowering Crabtree	S	Horizontal	Moderately susceptible to fire blight and scab; white flowers; 1/2" diam., red fruits; 10' height.
<i>Malus</i> "Ormiston Roy"	Ormiston Roy Flowering Crabtree	M	Rounded	Slightly susceptible to fire blight; white flowers, 3/8" diam., persistent, yellow fruits.
<i>Malus</i> "Profusion"	Profusion Flowering Crabtree	M	Rounded-Spreading	Slightly susceptible to fire blight; rose-red flowers; 1/2" diam., deep red fruits; bronze- green foliage.
<i>Malus</i> "Red Jewel"	Red Jewel Flowering Crabtree		Horizontal	Moderately susceptible to scab; white flowers; 1/2" diam., persistent, bright red fruits.
<i>Malus</i> "Robinson"	Robinson Flowering Crabtree		Upright-Spreading	Disease resistant; rose-red flowers; 3/8" diam, persistent, bright red fruits, bronze- green foliage.
<i>Malus</i> "Sentinel"	Sentinel Flowering Crabtree		Narrow-upright	Slightly susceptible to fire blight and scab; pale pink flowers; 1/2" diam., persistent, bright red fruits.
<i>Malus</i> "White Cascade"	White Cascade Flowering Crabtree	S	Weeping	Disease resistant; white flowers, 1/2" diam., yellowish fruits.
* <i>Ostrya virginiana</i> RF	Hophornbeam	S	Pyramidal	Dry soil; shade; catkins; elm-like leaves; yellow fall color.
* <i>Prunus americana</i> RF	American Plum	F	Horizontal	Dry soil; sun; suckering habit; white flowers; yellow to orange fall color.
<i>Prunus cerasifera</i>	Newport Plum	M	Round	Sun; reddish-purple summer foliage.
* <i>Prunus virginiana</i> RF	Chokecherry			Dry, infertile soil; suckering habit; white flowers; yellow to orange fall color.
"Canada Red" or "Shubert"	Shubert Chokecherry	M	Upright	Sun; foliage changes from green to purple in early summer.
<i>Pyrus calleryana</i> and cultivars	Callery Pear	M	Oval	Sun; early, white flowers; late red fall color.
<i>Salix matsudana</i>	Corkscrew or Contorted Willow	F	Upright	Wet soil; tolerates poor drainage; sun; twisted branches; pest or disease problem may limit use.
<i>Salix pentandra</i>	Laurel Willow	M	Round	Wet soil; sun; foliage glossy, dark green; dense habit.
<i>Sorbus alnifolia</i>	Korean Mountainash	S	Oval	Cool soil; simple leaves; small flowers and fruits; orange to red fall color; pest or disease problem.
<i>Sorbus aucuparia</i> and cultivars	European Mountainash	M	Oval	Cool soil; orange fruits; pest or disease problem
* <i>Sorbus decora</i>	Showy Mountainash	S	Upright	Cool Soil; large, reddish fruits; pest or disease problem.
<i>Syringa reticulata</i>	Japanese Tree Lilac	S	Horizontal	Sun; large, pyramidal, cream-white flower clusters in June; tan fruits.
KEY: *Wisconsin native S=Slow M=Medium F=Fast				

Figure 195.87E: Common Tall Evergreen Tree Species (40 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Tall Evergreen Trees (40 Points)				
<i>Abies concolor</i>	White Fir	M	70'	Dry soil; heat; gray-green foliage.
<i>Picea abies</i>	Norway Spruce	F	75'	Deep soil; dark green foliage; long cones; pendulous branchlets
* <i>Picea glauca</i> RF	White Spruce	M	50'	Moist soil; sun; light green needles.
<i>Picea omorika</i>	Serbian Spruce	S	50'	Sun; narrow habit; pendulous branchlets.
<i>Picea pungens glauca</i>	Blue Colorado Spruce	S	60'	Sun; urban; blue needles; stiff, formal habit.
<i>Pinus cembra</i>	Swiss Stone Pine	S	50'	Sun; narrow habit.
<i>Pinus nigra</i>	Austrian pine	M	50'	Sun; urban; stout, dark green needles, pest or disease problem.
* <i>Pinus resinosa</i> RF	Red Pine	F	50'	Dry soil; sun; reddish bark; yellow-green winter color.
* <i>Pinus strobus</i> RF	Eastern White Pine	M	75'	Moist soil; sun; picturesque; soft, green foliage, pest or disease problem.
<i>Pinus sylvestris</i>	Scots Pine	F	50'	Dry soil; sun; orange bark; bluish needles.
<i>Pseudotsuga menziesii</i>	Douglas Fir	M	70'	Half-shade; flat, dark green needles.
* <i>Tsuga Canadensis</i> RF	Canada Hemlock	M	75'	Moist soil; soft, feathery foliage.
KEY: *Wisconsin native S=Slow M=Medium F=Fast				

Figure 195.87F: Common Medium Evergreen Tree Species (20 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Medium Evergreen Trees (20 Points)				
* <i>Thuja occidentalis</i> RF	American Arborvitae	M	40'	Wet soil; half-shade; light green, soft, scale-like foliage.
KEY: *Wisconsin native S=Slow M=Medium F=Fast				

Figure 195.87G: Common Low Evergreen Tree Species (12 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Low Evergreen Trees (10 Points)				
<i>Juniperus chinensis</i>	Keteleer Juniper	S	20'	Dry soil; sun; green foliage; large fruits.
	Mountbatten Juniper	S	20'	Dry soil; sun; narrow, columnar form; large fruits.
* <i>Juniperus virginiana</i> RF	Eastern Red Cedar	S	20'	Dry soil; sun; brownish winter color.
“Burkii”	Burke Eastern Red Cedar			Fine-textured, gray-green foliage.
“Canaertii”	Canaert Eastern Red Cedar			Dark green, tufted foliage.
“Glauca”	Silver Eastern Red Cedar			Silver-gray foliage; informal habit.
“Hillii”	Hill Dundee Eastern Red Cedar			Gray-green foliage turns purple in winter, no fruits.
KEY: *Wisconsin native S=Slow M=Medium F=Fast				

Figure 195.87G (CONTINUED): Common Low Evergreen Tree Species (12 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Low Evergreen Trees (10 Points)				
* <i>Picea glauca</i> RF	Black Hills Spruce	S	20'	Dry soil; sun; narrow, dense habit.
<i>Taxus cuspidata</i>	Japanese Yew	S	20'	Shade; urban, deep green needles; often sold as <i>Taxus cuspidata</i> "Capitata"
* <i>Thuja occidentalis</i> RF	Pyramidal Arborvitae	M	25'	Narrow columnar form.
	Techny Arborvitae	S	20'	Deep green foliage, year round.
KEY: *Wisconsin native S=Slow M=Medium F=Fast				

Figure 195.87H: Common Tall Deciduous Shrub Species (5 Points)

Botanical Name	Common Name	Form	Adaptation and Remarks
Tall Deciduous Shrubs (5 Points)			
* <i>Amelanchier sp.</i> (See also low trees)	Serviceberry	Upright	Shade; alkaline soil; white flowers; edible purple fruits; smooth, gray bark; yellow to orange fall color; fireblight a problem.
<i>Caragana arborescens</i>	Siberian Peashrub	Erect, Oval	Dry, alkaline soils; yellow flowers; green twig.
<i>Chionanthus virginicus</i>	Fringetree	Spreading	Moist soil; shade; white flowers; blue fruits; coarse.
* <i>Cornus alternifolia</i>	Pagoda Dogwood	Spreading	Moist soil; shade; white flowers; blue fruits; horizontal branches; early, maroon fall color.
<i>Cornus mas</i>	Corneliancherry Dogwood	Oval	Shade; urban; yellow flowers in April; flower buds may be injured or killed during some winters; edible red fruits.
* <i>Cornus racemosa</i>	Gray Dogwood	Erect	Dry or wet soils; shade; white flowers; white fruits; purple fall color.
<i>Cornus sericea</i>	Redosier Dogwood	Spreading	Wet, moist soils; tolerates poor drainage; white flowers; white fruits; red twigs; often sold a <i>C. stolonifera</i> .
<i>Cornus sericea baileyi</i>	Bailey Redosier Dogwood	Erect	
<i>Cotoneaster multiflora</i>	Manyflowered Cotoneaster	Mounded	Sun; well-drained soil; white flowers; red fruits; very wide-spreading; pests/diseases.
<i>Elaeagnus umbellata</i>	Autumnolive	Spreading	Poor, dry soil; sun; fragrant flowers; edible, red fruits; twiggy.
<i>Euonymus alata</i>	Winged Euonymus	Spreading	Sun or shade; well-drained soil; corky, winged twigs; pink to rose fall color.
* <i>Euonymus atropurpurea</i>	Eastern Wahoo	Tree-like	Moist soil; shade; tiny, purplish flowers; orange to purple fall color.
<i>Euonymus europaea</i>	Spindletree of European Euonymus	Tree-like	Dry-soil; urban; striped bark; persistent pink fruit; orange to purple fall color.
"Aldenhamensis"	Aldenham European Euonymus		Bright pink fruit; shrubby form
"Redcap"	Redcap European Euonymus		Bright red fruit.
<i>Exochorda racemosa</i>	Pearlbush	Leggy	Sun; pearl-like flower buds; tan fruit capsules.
* <i>Hamamelis virginiana</i>	Common Witchhazel	Spreading	Shade; yellow October flowers.
<i>Hydrangea paniculata</i>	Peegee Hydrangea	Upright	Moist soil; white to pink flowers in August; persistent, tan flower clusters.
"Grandiflora"			
<i>Kolkwitzia amabilis</i>	Beauty bush	Upright	Alkaline soil; sun; pink flowers in June; shredded bark; leggy.
KEY: *Wisconsin native			

Figure 195.87H (CONTINUED): Common Tall Deciduous Shrub Species (5 Points)

Botanical Name	Common Name	Form	Adaptation and Remarks
Tall Deciduous Shrubs (5 Points)			
<i>Ligustrum amurense</i>	Amur Privet	Erect	Dry soil; white flowers; black fruits; hedge plant
<i>Ligustrum vulgare</i> "Cheyenne"	Cheyenne Privet	Erect	Dry soil; urban; white flowers; black fruits; hedge plant.
<i>Lonicera x bella</i> "Candida"	White Belle Honey suckle	Upright Mounded	Dry soil; white flowers; red fruits; may become weedy, pest problem.
<i>Lonicera tatarica zabelii</i>	Zabel Honeysuckle	Rounded	Dry soil; urban; red flowers; dense, red fruits; may become weedy, pest or disease problem, may be sold as <i>L. korolkowii zabelii</i> .
<i>Magnolia stellata</i>	Star Magnolia	Rounded	Rich soil; white flowers; orange fruits; finest textured magnolia.
* <i>Physocarpus opulifolius</i>	Eastern Ninebark	Vase	Dry soil; semi-shade; white flowers; red, capsular fruit; shredded bark; course.
<i>Prunus tomentosa</i>	Manchu Cherry	Rounded	Dry soil; sun; white flowers; edible, red fruits.
<i>Prunus triloba</i>	Double Flowering Plum	Rounded	Sun; double, pink flowers; no fruit.
<i>Rhamnus frangula</i> "Columnaris"	Tallhedge Glossy Buckthorn	Columnar	Moist soil; shade; red to black fruits; holds leaves late.
* <i>Rhus glabra</i>	Smooth Sumac	Suckering	Dry soil; sun; persistent red fruits; smooth stems; scarlet fall color.
<i>Rhus typhina</i>	Staghorn Sumac	Suckering	Dry soil; sun; persistent red fruits; felty stems; orange to red fall color.
<i>Rhus typhina</i> "Dissecta"	Shredleaf Staghorn Sumac	Picturesque	Dry soil; sun; red fruits; dissected leaves, orange to red in fall.
<i>Salix caprea</i>	Goat Willow or French Pussy Willow	Oval	Wet or dry soil; sun; large silver catkins in early spring.
<i>Shepherdia argentea</i>	Buffaloberry	Irregular	Dry soil; sun; yellowish flowers; dioecious; edible red fruits; silvery foliage.
* <i>Staphylea trifolia</i>	American Bladdernut	Upright	Moist soil; shade; whitish flowers; green to brown, bladder-like fruits; white-striped bark.
<i>Syringa x chinensis</i>	Chinese Lilac	Vase	Dry, alkaline soil; purple-lilac flowers; fine texture.
<i>Syringa x hyacinthiflora</i> cvs.	Hyacinth Lilacs	Upright	Sun; white, pink, lilac, purple flowers; early blooming.
<i>Syringa x prestoniae</i> cvs.	Preston Lilacs	Rounded	Sun; pink to purple flowers; late-blooming; coarse textured.
<i>Syringa reticulata</i>	Japanese Tree Lilac	Tree-like	Sun; white flowers in June; tan fruits; cherry-like bark; often sold as <i>S. amurensis japonica</i> .
<i>Syringa vulgaris</i> cvs	Common Lilac	Upright	Well-drained soil; sun; white, pink, lilac, purple, fragrant flowers; pest or disease problem may limit use.
<i>Tamarix ramosissima</i>	Tamarisk	Irregular	Dry soil; sun; tiny, pink flowers; very fine texture; often sold as <i>T. pentandra</i> .
<i>Viburnum dentatum</i>	Arrowwood Viburnum	Vase	Moist soil; shade; white flowers in June; blue fruits; maroon fall color.
<i>Viburnum lantana</i>	Wayfaringtree Viburnum	Upright	Dry soil; shade; white flowers; red to black fruits; late maroon fall color.
* <i>Viburnum lentago</i>	Nannyberry Viburnum	Upright	Moist or dry soil; sun or shade; white flowers; black fruits; leggy; maroon fall color; pest or disease problem.
* <i>Viburnum prunifolium</i>	Blackhaw Viburnum	Spreading	Dry soil; shade; white flowers; black fruits; single or multi-trunked; maroon fall color.
<i>Viburnum sieboldii</i>	Siebold Viburnum	Tree-like	Rich soil; white flowers; red to black fruits; large, coarse leaves.
<i>Viburnum trilobum</i>	American Cranberrybush Viburnum	Upright	Moist soil; shade; lacy, white flowers; persistent, edible fruits.
KEY: *Wisconsin native			

Figure 195.871: Common Medium Deciduous Shrub Species (3 Points)

Botanical Name	Common Name	Form	Adaptation and Remarks
Medium Deciduous Shrubs (3 Points)			
<i>Aronia arbutifolia</i>	Red Chokeberry	Erect	Wet soil; shade; tolerates poor drainage; white flowers; red fruits; red fall color.
<i>Cornus alba</i> "Argenteomarginata"	Creamedge Dogwood	Mounded	Moist soil; white flowers; white fruit; variegated foliage.
* <i>Corylus americana</i>	American Filbert or Hazelnut	Rounded	Dry soil; shade; catkins in March; orange fall color.
<i>Cotoneaster divaricatus</i>	Spreading Cotoneaster	Mounded	Dry alkaline soil; red fruits; fine texture; late maroon fall color; not fully hardy in zone indicated—needs a special site or ideal conditions.
<i>Cotoneaster lucidus</i>	Hedge Cotoneaster	Upright	Dry soil; shade; black fruits; orange to maroon fall color; good hedge plant; <i>C. acutifolius</i> is similar.
<i>Euonymus alatus</i> "Compacta"	Dwarf Winged Euonymus	Spreading	Sun or shade; pink and orange fruits; red fall color.
<i>Forsythia x intermedia cvs.</i>	Border Forsythia	Vase	Sun; urban; large, pale to yellow flowers; flower buds may be injured or killed at temperatures lower than -14°F.
<i>Forsythia ovata</i>	Early Forsythia	Mounded	Sun; urban; smaller, earlier, yellow flowers; flower buds may be injured or killed at temperatures lower than -25°F.
<i>Forsythia suspensa</i>	Weeping Forsythia	Mounded	Sun; urban; yellow flowers; slender, drooping twigs; flower buds may be injured or killed at temperatures lower than -15°F.
* <i>Ilex verticillata</i>	Winterberry	Upright	Wet, acid soil; tolerates poor drainage; dioecious; red fruits.
<i>Ligustrum obtusifolium regelianum</i>	Regel's Border Privet	Spreading	Dry soil; shade; white flowers; blue-black fruits; late, purple fall color.
<i>Malus sargentii</i> "Tina"	Sargent Crabapple	Spreading	Disease resistant; 5' mature height.
<i>Myrica pensylvanica</i>	Bayberry	Upright	Dry soil; sun; gray, fragrant fruits; dioecious; semi- evergreen; suckering.
<i>Philadelphus x virginialis</i> "Glacier"	Glacier Mockorange	Rounded	Sun; double, white, fragrant flowers.
<i>Prunus x cistena</i>	Purple-leaved Sand Cherry	Rounded	Dry soil; sun; white flowers; purple foliage all season.
<i>Rhodotypos scandens</i>	Jetbead	Spreading	Dry soil; shade; white flowers; sparse red fruits; fine texture.
<i>Rosa hugonis</i>	Father Hugo Rose	Vase	Poor soil; sun; yellow flowers; sparse red fruits; fine texture.
<i>Rosa rugosa cvs.</i>	Rugosa Rose	Rounded	Dry soil; sun; white, yellow, pink, or red flowers; large edible red fruits; fall color; wrinkled leaves; tolerant of salt.
* <i>Rosa setigera</i>	Prairie Rose	Sprawling-mounded	Sun; pink flowers in July; red fruits; orange fall color; can be used as a climber.
<i>Spiraea prunifolia</i>	Bridalwreath Spirea	Upright	Sun; double, white flowers; orange to red fall color.
<i>Spiraea thunbergii</i>	Thunberg Spirea	Vase	Sun; white flowers; yellow to orange fall color; fine-textured.
<i>Spiraea x vanhouttei</i>	Vanhoutte Spirea	Vase	Sun; white flowers; arching branches.
<i>Syringa meyeri</i> "Palibin"	Palibin Lilac	Rounded	Sun; purple flowers; dense; fine-textured; good informal hedge plant often sold as <i>S. palibiniana</i> .
<i>Viburnum carlesii</i>	Koreanspice Viburnum	Rounded	Shade; urban; pink to white, fragrant flowers; blue- black fruits; red fall color.
* <i>Viburnum cassinoides</i>	Witherod Viburnum	Rounded	Wet, acid soil; tolerates poor drainage; white flowers; pink to red to blue fruits; red fall color.
<i>Weigela florida</i>	Old-fashioned Weigela	Spreading	Well-drained soil; pink, funnel-shaped flowers.
<i>Weigela x 'Vanicekii'</i>	Vanicek Weigela	Spreading	Well-drained soil; red flowers.
KEY: *Wisconsin native			

Figure 195.87J: Common Low Deciduous Shrub Species (1 Points)

Botanical Name	Common Name	Form	Adaptation and Remarks
Small Deciduous Shrubs (1 Points)			
<i>Acanthopanax sieboldianus</i>	Fiveleaf Aralia	Upright	Dry soil; shade; urban; leaves palmately compound; thorny.
* <i>Amelanchier stolonifera</i>	Running Serviceberry	Suckering	Dry soil; shade; white flowers; edible fruits; orange fall color.
* <i>Aronia melanocarpa</i>	Black Chokeberry	Suckering	Wet soil; shade; white flowers; black fruits; red fall color.
<i>Berberis thunbergii</i>	Japanese Barberry	Mounded	Dry soil; shade; red fruits; orange fall color; thorns; good hedge plant.
“Atropurpurea”	Redleaf Japanese Barberry		Sun; red summer foliage.
“Crimson Pygmy”	Crimson Japanese Barberry	Low-mound	Sun; red summer foliage; 2' tall.
<i>Buxus microphylla koreana</i>	Korean Littleleaf Box	Rounded	Shade; broadleaf evergreen; good hedge plant.
<i>Chaenomeles japonica alpina</i>	Dwarf Japanese Floweringquince	Spreading	Dry soil; urban; orange flowers; yellow, edible fruits; dense; 1' tall; flower buds may be injured or killed during some winters.
<i>Cotoneaster apiculatus</i>	Cranberry Cotoneaster	Mounded	Dry soil; red fruits; red fall color.
<i>Deutzia x lemoinei</i>	Compact Lemoine	Rounded	Well-drained soil; white flowers.
“Compacta”	<i>Deutzia</i>		
* <i>Diervilla lonicera</i>	Dwarf Bushhoney suckle	Mounded	Dry soil; shade; yellow flowers; good bank cover.
<i>Forsythia viridissima</i> “Bronxensis”	Bronx Forsythia	Low-mound	Sun; small yellow flowers; fine texture; purple fall color.
<i>Hydrangea arborescens</i>	Annabelle Hydrangea	Mounded	Moist soil; shade; white, clustered flowers; dense; blooms on new wood.
	Snowhill Hydrangea	Mounded	Smaller flower clusters and less dense than
* <i>Hypericum kalmianum</i>	Kalm's St. Johnswort	Rounded	Dry soil; sun; yellow flowers; shiny brown twigs.
<i>Lonicera x xylosteoides</i> “Clavey's Dwarf”	Clavey's Dwarf Honey suckle	Rounded	Dense growth; good hedge or screening plant.
<i>Lonicera xylosteum</i> “Nanum”	Emerald Mound Honeysuckle	Mounded	Lower growing than preceding; 2'-3'.
<i>Mahonia aquifolium</i> “Mayhan”	Mayhan Oregongrape	Suckering	Shade; urban; yellow flowers; blue fruits; holly-like evergreen foliage; not fully hardy in zone - need special site or ideal conditions.
<i>Philadelphus coronarius</i> “Aureus”	Golden Mockorange	Rounded	Sun; white flowers; yellow summer foliage.
<i>Philadelphus x lemoinei</i> “Mont Blanc”	Mont Blanc Mockorange	Mounded	Sun; single; white, fragrant flowers; dense.
<i>Physocarpus opulifolius</i> “Nanus”	Dwarf Common Ninebark	Rounded	Dry soil; shade; creamy-white flowers; red capsular fruits; shredded bark.
* <i>Potentilla fruticosa</i> cvs.	Bush Cinquefoil	Mounded	Dry soil; sun; yellow and white flowers; blooms all summer.
<i>Prunus glandulosa</i> “Sinensis”	Pink Dwarf Floweringalmond	Rounded	Sun; light soil; double, pink flowers; no fruits; narrow leaves.
<i>Rhododendron x kosteranum</i>	Mollis Hybrid Azaleas	Spreading	Moist, acid soil; pink flowers; red fall color.
<i>Rhododendron x</i> “PJM Hybrid”	PJM Hybrid Rhododendron	Rounded	Moist, acid soil; shade; lavender flowers; evergreen leaves turn purple in autumn.
* <i>Rhus aromatica</i>	Fragrant Sumac		Dry soil; sun; red fruits; fragrant foliage; turns orange-maroon in fall.
“Gro-Low”	Gro-low Fragrant Sumac	Mounded	Uniform 2 1/2' height; glossy leaves.
KEY: *Wisconsin native			

Figure 195.87J (CONTINUED): Common Low Deciduous Shrub Species (1 Points)

Botanical Name	Common Name	Form	Adaptation and Remarks
Small Deciduous Shrubs (1 Points)			
<i>Ribes alpinum</i>	Alpine Currant	Rounded	Shade; urban; good hedge plant.
<i>Rosa virginiana</i>	Virginia Rose	Suckering	Dry soil; pink flowers; red fruits; red stems; good bank cover.
<i>Salix repens argentea</i>	Silver Creeping Willow	Spreading	Moist soil; sun; silvery foliage.
<i>Spiraea x arguta</i> "Compacta"	Compact Garland Spirea	Mounded	Sun; white flowers; fine texture.
<i>Spiraea x billiardii</i>	Billiard Spirea	Upright	Sun; pink flowers, in July and August.
<i>Spiraea x bumalda</i> "Anthony Waterer"	Anthony Waterer Spirea	Rounded	Dry soil; sun; raspberry red flowers; unattractive fruits.
<i>Spiraea x bumalda</i> "Froebelii"	Froebel Spirea	Rounded	Dry soil; sun; raspberry red flowers; orange to maroon fall color.
<i>Spiraea japonica alpina</i>	Daphne Spirea	Low-mound	Sun; pale pink flowers in July; 10" height.
<i>Spiraea nipponica</i> "Snowmound"	Snowmound Spirea	Mounded	Sun; white flowers; blue-green foliage; possible disease problem.
<i>Symphoricarpos rivularis</i>	Snowberry	Vase	Dry soil; shade; tiny pink flowers; showy white fruits; often sold as <i>S. albus laevigatus</i> .
<i>Symphoricarpos orbiculatus</i>	Indiancurrant Coralberry	Suckering	Dry soil; shade; pink fruits; good bank cover.
<i>Viburnum opulus</i> "Compactum"	Compact European Cranberrybush Viburnum	Rounded	Shade; white flowers; persistent, red fruit; dense habit.
<i>Viburnum opulus</i> "Nanum"	Dwarf European Cranberrybush Viburnum	Globe	Shade; no flowers or fruits; twiggy.
KEY: *Wisconsin native			

Figure 195.87K: Common Medium Evergreen Shrub Species (5 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Medium Evergreen Shrubs (5 Points)				
<i>Juniperus chinensis</i>				
"Ames"	Ames Juniper	9'	Pyramid	Sun; bluish green foliage.
"Blaauw"	Blaauw Juniper	4'	Upright, bushy	Sun; grayish blue foliage.
"Herzii"	Herz Blue Juniper	15'	Spreading	Sun; silvery blue foliage.
"Maney"	Maney Juniper	6'	Upright, bushy	Sun; bluish green foliage.
"Old Gold"	Old Gold Juniper	4'	Spreading	Sun; green with gold tips.
"Pfitzerana"	Pfitzer Juniper	6'	Wide-spreading	Sun; green foliage; no fruits.
"Pfitzerana Glauca"	Blue Pfitzer Juniper	5'	Spreading	Sun; blue-gray foliage.
* <i>Juniperus communis depressa</i>	Oldfield Common Juniper	4'	Spreading	Dry soil; sun; light green; brownish in winter.
<i>Juniperus sabina</i> "Von Ehren"	Von Ehren Savin Juniper	4'	Spreading	Dry soil; sun; light green; brownish in winter.
<i>Juniperus squamata</i> "Meyeri"	Meyer Singleseed Juniper	5'	Picturesque	Sun; blue foliage.
<i>Picea glauca</i> "Conica" _{RF}	Dwarf Alberta Spruce	7'	Pyramidal	Shelter from winter sun; light green foliage.
KEY: *Wisconsin native				

Figure 195.87K (CONTINUED): Common Medium Evergreen Shrub Species (5 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Medium Evergreen Shrubs (5 Points)				
<i>Pinus mugo</i>	Mugo Pine	4'	Mounded	Dry soil; sun; green foliage.
<i>Taxus cuspidata</i> "Expansa"	Spreading Japanese Yew	6'	Spreading	Shade; urban; dark green foliage; needs ideal conditions.
<i>Taxus cuspidata</i> "Nana"	Dwarf Japanese Yew	4'	Mounded	Shade; urban very dark green foliage; needs ideal conditions.
<i>Taxus x hunnewelliana</i>	Hunnewell Yew	6'	Spreading	Shade; green
<i>Taxus x media cvs.</i>	Anglojapanese Yew	1-10'	Upright	Shade; very dark green; needs ideal conditions.
<i>Thuja occidentalis</i> RF	Ware American Arborvitae	8'	Broad Pyramid	Wet soil; half-shade; dark green foliage. Often sold as <i>T.o.</i> "Wareana"
	Woodward Globe American Arborvitae	6'	Globe	Wet soil; half-shade; bright green.
KEY: *Wisconsin native				

Figure 195.87L: Common Low Evergreen Shrub Species (3 Points)

Botanical Name	Common Name	Growth Rate	Form	Adaptation and Remarks
Low Evergreen Shrubs (3 Points)				
<i>Juniperus chinensis procumbens</i>	Japanese Garden Juniper	2'	Creeping	Sun; blue-green, year-round foliage.
<i>Juniperus chinensis sargentii</i>	Sargent Juniper	1'	Creeping	Sun; green; or blue-green in cv. "Glauca"
* <i>Juniperus horizontalis</i>	Creeping Juniper	1'	Creeping	Dry soil; sun; variable color-brown in winter.
"Bar Harbor"	Bar Harbor Juniper	8"	Creeping	Dry soil; sun; bluish green foliage; salty in winter.
"Douglasii"	Waukegan Juniper	18"	Creeping	Dry soil; sun; steel blue; purplish in winter.
"Plumosa"	Andorra Juniper	18"	Radial-creeping	Dry soil; sun; gray-green; purplish in winter.
"Prince of Wales"	Prince of Wales Juniper	4-6"	Prostrate	Dry soil; sun; bright green; bronzed in winter.
"Wiltonii"	Blue Rug Juniper	4-6"	Flat-trailing	Dry soil; sun; silvery blue.
"Youngstown"	Youngstown Juniper	18"	Radial-creeping	Dry soil; sun; gray-green; purplish in winter.
<i>Juniperus sabina</i>				
"Arcadia"	Arcadia Savin Juniper	18"	Low-spreading	Sun; green.
"Broadmoor"	Broadmoor Savin Juniper	2'	Mounded	Sun; soft grayish green; fine textured.
"Skandia"	Skandia Savin Juniper	12"	Low-spreading	Sun; grayish blue.
"Tamariscifolia"	Tamarix Savin Juniper	2'	Dense, spreading	Sun; bluish green; pest or disease problem.
KEY: *Wisconsin native				

Figure 195.87M: Common Non-Contributing Species (0 Points)

Botanical Name	Common Name	Adaptation and Remarks
Non-Contributing Species (0 Points)		
	Crown Vetch	Invasive ground cover; aggressive.
<i>Crataegus crus-galli</i>	Cockspur Hawthorn	Urban; sun; persistent, brick red fruits; orange to red fall color; evil thorns.
* <i>Gleditsia triacanthos</i> RF	Common Honeylocust	Urban; tolerates poor drainage; salt tolerant; dioecious, females produce pods; fine- textured foliage; wicked thorns; yellow fall color; pest or disease problems may limit use.
<i>Lonicera x bella</i>	Belle Honeysuckle	Dry soil, white flowers; red fruits; <i>may become weedy</i> , pest problem.
<i>Lonicera tatarica</i>	Tatarian Honeysuckle	Dry soil; urban, pink to white flowers; dense, red fruits; <i>may become weedy</i> , pest or disease problem.
<i>Lonicera morrowi</i>	Morrow Honeysuckle	Urban, dense, white flowers, pest and disease problem, <i>weedy</i> .
	Purple Loosestrife	Perennial, common marsh plant, may choke out native plants.