

## **SUBCHAPTER 23-6: LANDSCAPING AND BUFFERYARD REGULATIONS**

### **Section 23.601 Purpose**

The purpose of this Subchapter is to indicate the minimum requirements for the landscaping of foundations, developed lots, street frontages, paved areas, permanently protected green space areas, reforestation areas, and bufferyards.

### **Section 23.602 How to Use this Subchapter**

- (1) This Subchapter contains the standards which govern the amount, size, type, installation and maintenance of required landscaping. This Subchapter recognizes the important and diverse benefits which landscaping provides in terms of protecting the health, safety, and general welfare of the community, and implementing the Comprehensive Master Plan.
- (2) Each section of this Subchapter is oriented to a specific category of required landscaping. These include Landscaping Requirements for Foundations (Section 23.604), Landscaping Requirements for Developed Lots (Section 23.605) Landscaping Requirements for Street Frontages (Section 23.606), Landscaping Requirements for Paved Areas (Section 23.607), Landscaping Requirements for Permanently Protected Green Space Areas (Section 23.608), Landscaping Requirements for Reforestation (Section 23.609), and Landscaping Requirements for Bufferyards (Section 23.610).
- (3) In each instance, a "landscaping point" concept is used to provide a maximum amount of flexibility in terms of the selection of plant materials. Section 23.603 presents sample landscape point combination alternatives used by this Ordinance. At the end of this Subchapter, Section 23.611 provides a listing of plant species fitting into the "climax tree", "tall deciduous tree", "medium deciduous tree", "low deciduous tree", "tall evergreen tree", "medium evergreen tree", "low evergreen tree", "tall deciduous shrub", "medium deciduous shrub", "low deciduous shrub", "medium evergreen shrub", "low evergreen shrub", and "non-contributory plants" used by this Ordinance. Section 23.612 provides requirements for the installation and maintenance of required landscaping, and Section 23.613 describes the procedure for calculating landscaping requirements for this Subchapter.

**Section 23.603 Landscaping Points, Sample Landscaping Schemes and Measurement for Landscaping Requirements**

(1) All landscaping requirements are stated in terms of the number of landscaping points required. The required number of landscaping points is dependent upon the type of land use, the zoning district, and the size of the development. A different number of points is awarded for each plant, depending upon its typical growth rate, its mature height, and whether it is a deciduous or evergreen species. A minimum installation size is required for each of these plant categories. These requirements are as follows:

<b>TABLE 23.603: LANDSCAPING POINTS AND MINIMUM INSTALLATION SIZES</b>		
<b>Plant Category</b>	<b>Landscaping Points Per Plant</b>	<b>Minimum Permitted Installation Size</b>
Climax Tree	75	2" Caliper
Tall Deciduous Tree	30	1½" 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
Non-Contributory Plants	0	n/a

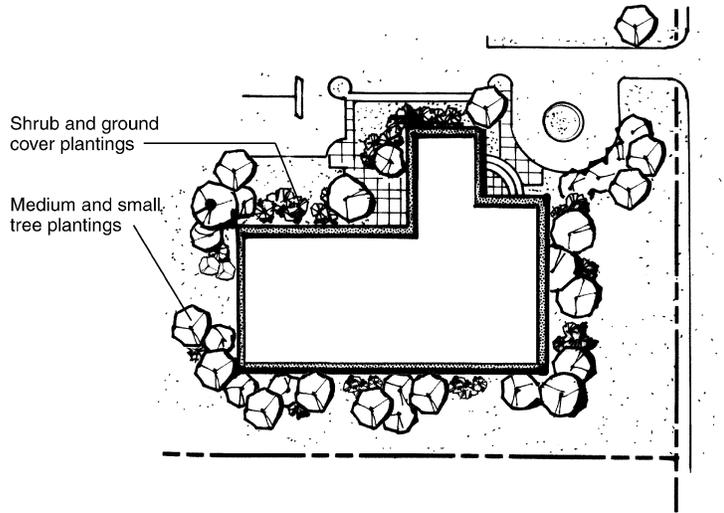
*Source: A Guide to Selecting Landscape Plants for Wisconsin, E.R. Hasselkus, UW-Extension Publication: A2865.*

(2) **Depiction of Sample Landscaping Schemes:** Illustration 23.603, shown on the following three pages, depicts sample landscaping schemes that may be used for building foundations, developed lots, street frontages, paved areas, reforestation, and bufferyards. In general, landscaping schemes similar to Alternative A are best for building foundations, landscaping schemes similar to Alternative B are best for developed lots, landscaping schemes similar to Alternative C are best for street frontages, landscaping schemes similar to Alternative D are best for paved areas (including parking lots, walkways and plazas), landscaping schemes similar to Alternative E are best for reforestation, and landscaping schemes similar to Alternative F are best for bufferyards. A detailed listing of which plant species fit each plant type is provided in Section 23.611.

**Alternative A:  
Best Suited for  
Building Foundations**

750 Landscaping Points:

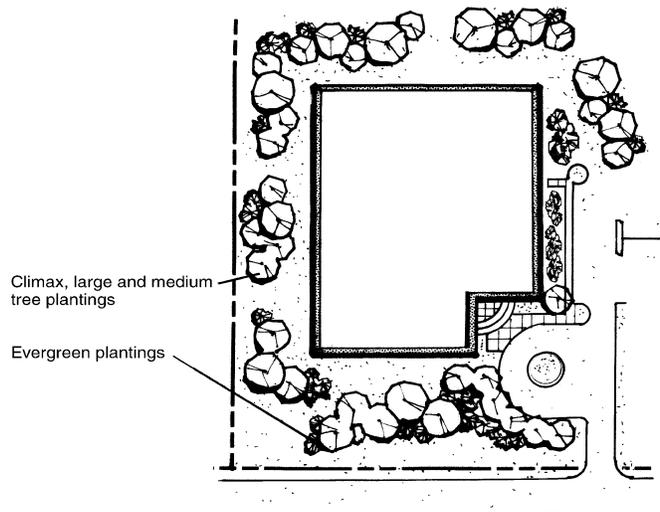
- 20 medium trees
- 15 small trees
- 60 shrubs



**Alternative B:  
Best Suited for  
Developed Lots**

1250 Landscaping Points:

- 6 climax trees
- 8 tall trees
- 20 medium trees
- 41 evergreen plantings



**Alternative C:  
Best Suited for  
Street Frontages**

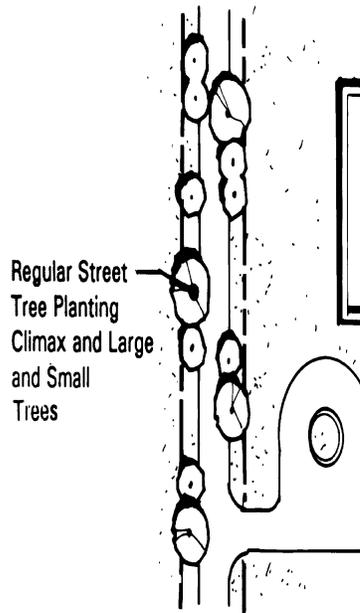
**Option 1**

280 Landscaping Points:  
2 climax trees  
2 tall trees  
8 small trees

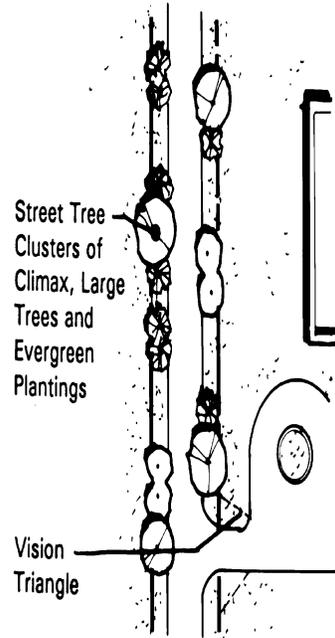
**Option 2**

280 Landscaping Points:  
2 climax trees  
2 tall trees  
4 small trees  
8 evergreen shrubs

**OPTION 1**



**OPTION 2**



**Alternative D:  
Best Suited for  
Paved Areas**

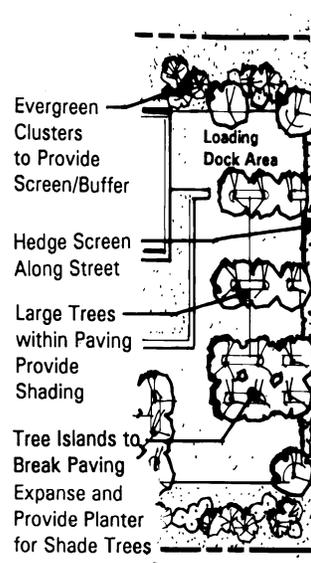
**Option 1**

880 Landscaping Points:  
2 climax trees  
13 tall trees  
68 evergreen shrubs

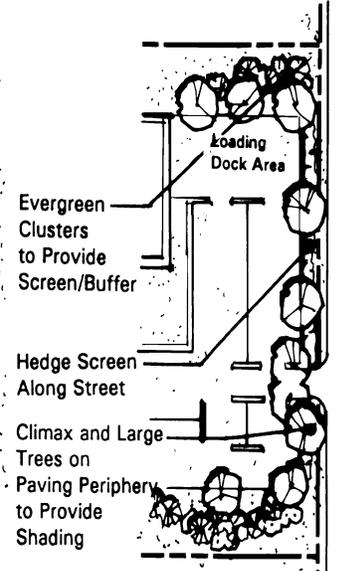
**Option 2**

880 Landscaping Points:  
5 climax trees  
6 tall trees  
68 evergreen shrubs

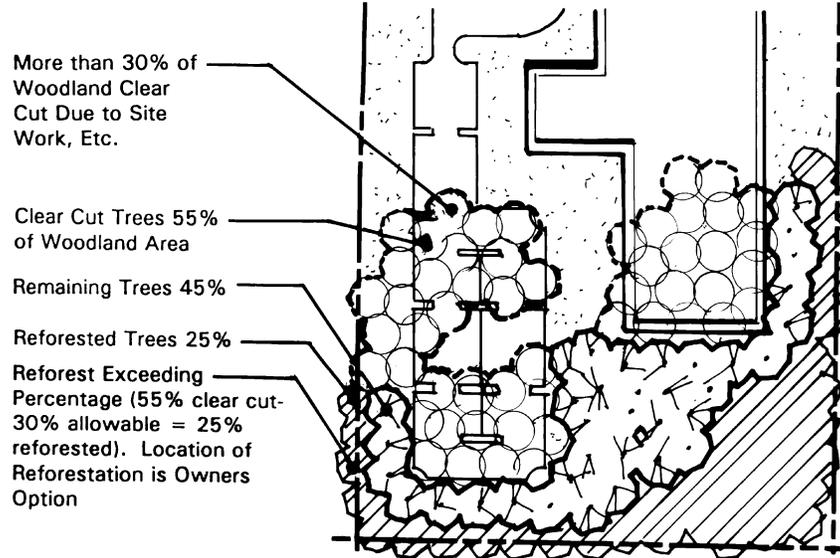
**OPTION 1**



**OPTION 2**



**Alternative E:  
Best Suited for  
Reforestation**



**Alternative F:  
Best Suited for  
Bufferyards**

**OPTION 1**

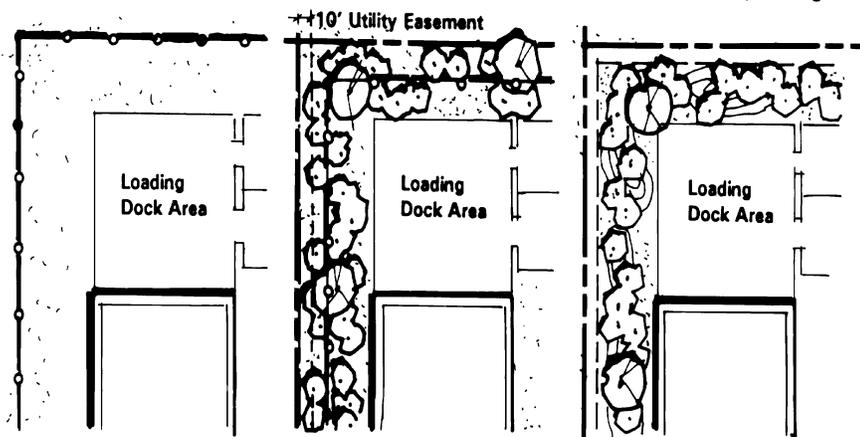
6' opaque fence on property line minimum 5' setback to paving. (No plants)

**OPTION 2**

4' transparent fence, 20' from property line. Stagger plants to both sides. (Stay out of 10' Utility Easement)

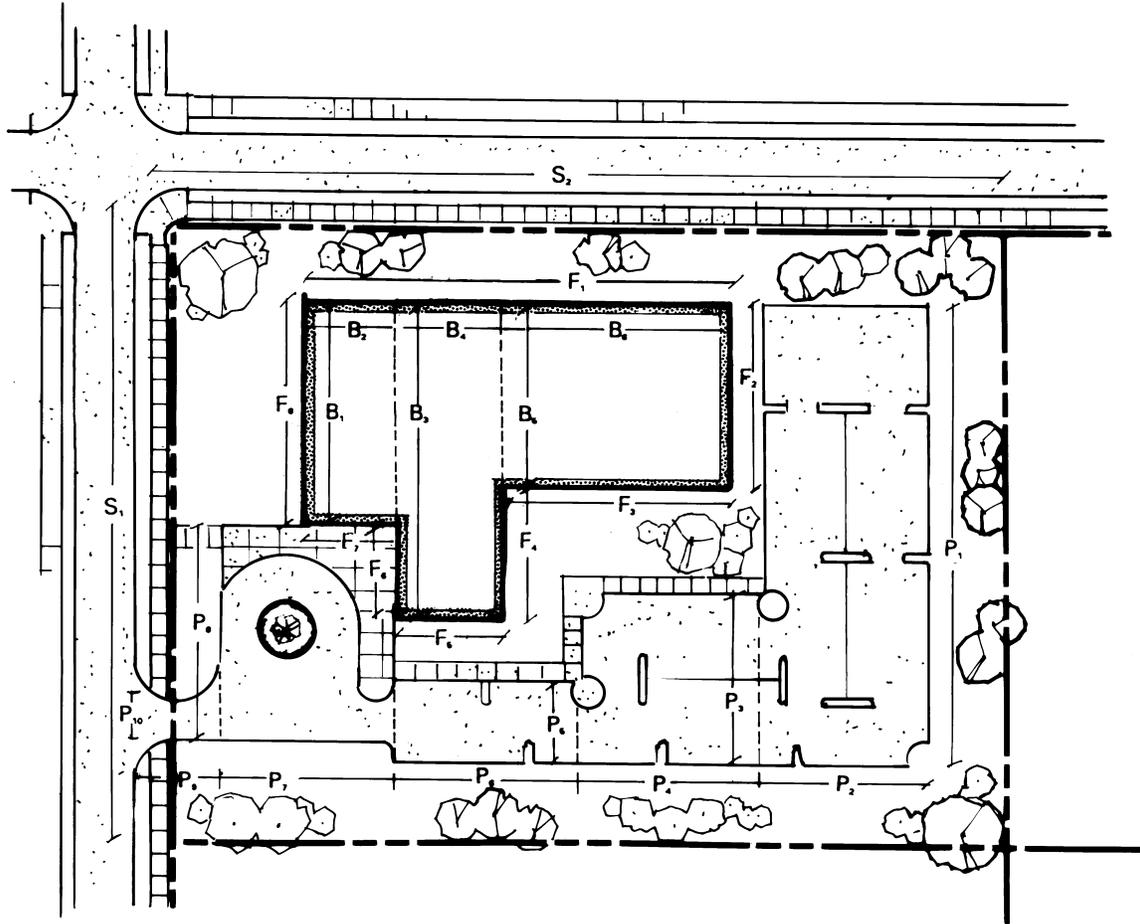
**OPTION 3**

10' zone with no plantings adjacent to property line. 10' wide berm minimum (1.5' height min.), and plantings.



**(3) Measurement for Landscaping Requirements:**

A minimum amount of landscaping points, based upon the zoning district, is required for the linear feet Building Foundations, the gross floor area of buildings on Developed Lots, the linear feet of Street Frontage, and the total combined area of Paved Areas. The following diagram illustrates the measurement techniques used to determine these requirements:



Landscaping Calculation Equations:

$$\text{Paved Area} = (P_1 \times P_2) + (P_3 \times P_4) + (P_5 \times P_6) + (P_7 \times P_8) + (P_9 \times P_{10})$$

$$\text{Street Frontage} = S_1 + S_2$$

$$\text{Building Perimeter} = F_1 + F_2 + F_3 + F_4 + F_5 + F_6 + F_7 + F_8$$

$$\text{Building Floor Area} = (B_1 \times B_2) + (B_3 \times B_4) + (B_5 \times B_6)$$

**Section 23.604 Landscaping Requirements for Building Foundations**

- (1) This Section requires that certain buildings constructed after the effective date of this Ordinance (See Section 21.011.) be accented by a minimum amount of landscaping placed near the building foundation.
- (2) Landscaping required by this Section shall be placed so that at maturity, the plant's drip line is located within 10 feet of the building foundation. Such landscaping shall not be located in those areas required for landscaping as street frontages, paved areas, protected green space areas, reforestation areas, or bufferyards, under Sections 23.605-23.609, of this Subchapter. See 23.603(2)(A) for a suggested scheme.
- (3) For each 100 feet of building foundation perimeter, the following number of landscaping points (per Section 23.603) shall be provided on a prorated basis, and installed and permanently maintained per the requirements of Section 23.612.
- (4) Climax trees and tall trees shall not be used to meet this requirement. The intent of this section is to require a visual break in the mass of buildings and to require a visual screen of a minimum of 6 feet in height for all exterior perimeter appurtenances (such as HVAC/utility boxes, standpipes, stormwater discharge pipes and other pipes.)

<b>TABLE 23.604: BUILDING FOUNDATION LANDSCAPING REQUIREMENTS</b>			
<b>Minimum Required Landscaping Points per 100 linear feet of Building Foundation</b>			
<b>Zoning District</b> ↓	<b>Land Use (see Section 23.206)</b>		
	<b>All Other Land Uses</b>	<b>Single-Family Residential (per 23.403(1)-(9))</b>	<b>Agricultural (per 23.206(2))</b>
<b>Rural Holding (RH-35ac)</b>	20	0	0
<b>Residential Estate (RE-5ac)</b>	50	0	0
<b>Residential Single-family-2 (RS-2)</b>	45	0	0
<b>Residential Single-family-3 (RS-3)</b>	40	0	0
<b>Residential Single-family-5 (RS-5)</b>	40	0	0
<b>Residential Mixed (RM-8)</b>	45	0	0
<b>Residential Multi-family (RM-12)</b>	50	0	0
<b>Office Neighborhood (ON)</b>	45	0	0
<b>Office Park (OP)</b>	40	0	0
<b>Business Neighborhood (BN)</b>	40	0	0
<b>Business Regional (BR)</b>	40	0	0
<b>Business Local (BL)</b>	20	0	0
<b>Business Central (BC)</b>	0	0	0
<b>Manufacturing Light (ML)</b>	40	0	0
<b>Manufacturing General (MG)</b>	20	0	0
<b>Manufacturing Heavy (MH)</b>	0	0	0

**Section 23.605 Landscaping Requirements for Developed Lots**

- (1) This Section requires that certain lots developed after the effective date of this Ordinance (See Section 21.011.) contain a minimum amount of landscaping.
- (2) 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, reforestation areas, or bufferyards, under Sections 23.605 through 23.610, of this Subchapter. See Section 23.603(2)(B) for a suggest landscaping scheme.
- (3) The following number of landscaping points (as described in Section 23.603) shall be provided on a prorated basis for every 1,000 square feet of gross floor area, and installed and maintained per the requirements of Section 23.612.
- (4) 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 appurtances (such as HVAC, utility boxes, standpipes, stormwater discharge pipes and other pipes.)

<b>TABLE 23.605: DEVELOPED LOT LANDSCAPING REQUIREMENTS</b>			
<b>Minimum Required Landscaping Points per 1,000 Square Feet of Gross Floor Area</b>			
<b>Zoning District</b> ↓	<b>Land Use (see Section 23.206)</b>		
	<b>All Other Land Uses</b>	<b>Single-Family Residential (per 23.403(1)-(9))</b>	<b>Agricultural (per 23.206(2))</b>
<b>Rural Holding (RH-35ac)</b>	10	0	0
<b>Residential Estate (RE-5ac)</b>	30	0	0
<b>Residential Single-family-2 (RS-2)</b>	25	0	0
<b>Residential Single-family-3 (RS-3)</b>	20	0	0
<b>Residential Single-family-5 (RS-5)</b>	20	0	0
<b>Residential Multi-family-8 (RM-8)</b>	20	0	0
<b>Residential Multi-family-12 (RM-12)</b>	20	0	0
<b>Office Neighborhood (ON)</b>	20	0	0
<b>Office Park (OP)</b>	15	0	0
<b>Business Neighborhood (BN)</b>	15	0	0
<b>Business Regional (BR)</b>	10	0	0
<b>Business Local (BL)</b>	5	0	0
<b>Business Commercial (BC)</b>	0	0	0
<b>Manufacturing Light (ML)</b>	10	0	0
<b>Manufacturing General (MG)</b>	5	0	0
<b>Manufacturing Heavy (MH)</b>	0	0	0

**Section 23.606 Landscaping Requirements for Street Frontages**

- (1) This Section requires that street frontages on certain lots developed after the effective date of this Ordinance (See Section 23.301.) contain a minimum amount of landscaping in those areas which abut the right-of-way of a public street.
- (2) All landscaping used to meet this requirement shall be located within 10 feet of the public right-of-way. In no instance shall such landscaping be located within a public right-of-way. See Section 23.603(2)(C) for a suggested landscaping scheme. Landscaping shall not impede vehicle or pedestrian visibility.
- (3) For every 100 linear feet of street frontage where a developed lot abuts a public street right-of-way, the following number of landscaping points (as described in Section 23.603) shall be provided on a prorated basis, and installed and maintained per the requirements of Section 23.612.
- (4) Shrubs and evergreens shall not be used to meet this requirement. A minimum of 50% of all points shall be devoted to climax and/or tall trees and a minimum of 30% of all points shall be devoted to medium trees.

<b>TABLE 23.606: STREET FRONTAGE LANDSCAPING REQUIREMENTS</b> Minimum Required Landscaping Points per 100 linear feet of Street Frontage			
Zoning District ↓	Land Use (see Section 23.206)		
	All Other Land Uses	Single-Family Residential (per 23.403(1)-(9))	Agricultural (per 23.206(2))
Rural Holding (RH-35ac)	20	0	0
Residential Estate (RE-5ac)	50	0	0
Residential Single-family-2 (RS-2)	45	0	0
Residential Single-family-3 (RS-3)	40	0	0
Residential Single-family-5 (RS-5)	40	0	0
Residential Multi-family-8 (RM-8)	45	0	0
Residential Multi-family-12 (RM-12)	50	0	0
Office Neighborhood (ON)	45	0	0
Office Park (OP)	40	0	0
Business Neighborhood (BN)	40	0	0
Business Regional (BR)	40	0	0
Business Local (BL)	20	0	0
Business Commercial (BC)	0	0	0
Manufacturing Light (ML)	40	0	0
Manufacturing General (MG)	20	0	0
Manufacturing Heavy (MH)	0	0	0

**Section 23.607 Landscaping Requirements for Paved Areas**

- (1) This Section requires that paved areas on certain lots developed after the effective date of this Ordinance contain a minimum amount of landscaping within, or within 10 feet of, the paved area. The intent is to require a continuous visual screen of parking areas from public rights-of-way at a minimum height of 40 inches.
- (2) A minimum of 360 square feet of landscaped area, which shall be located within 10 feet of the paved area, is required for the placement of every 100 landscaping points. Said area does not have to be provided in one contiguous area--sample configurations are depicted in Section 23.603, above. Plants used to fulfill this requirement shall visually screen parking, loading and circulation areas from view from public streets.
- (3) All landscaping areas located adjacent to paved areas shall be separated from the paved area by a continuous minimum 4 inch tall curb which is constructed of concrete, asphalt, timber or like material approved by the Director of Public Works.
- (4) For every 20 off-street parking stalls or 10,000 square feet of pavement (whichever yields the greater landscaping requirement) located in a development, the following number of landscaping points (as described in Section 23.603) shall be provided on a prorated basis, and installed and maintained per the requirements of Section 23.612. A minimum of 30% of all points shall be devoted to climax and/or tall trees and a minimum of 40% of all points shall be devoted to shrubs.

<b>TABLE 23.607: PAVED AREA LANDSCAPING REQUIREMENTS</b>			
<b>Minimum Required Landscaping Points per 10,000 square feet of Paved Area or 20 Parking Stalls</b>			
<b>Zoning District</b> ↓	<b>Land Use (see Section 23.206)</b>		
	<b>All Other Land Uses</b>	<b>Single-Family Residential (per 23.403(1)-(9))</b>	<b>Agricultural (per 23.206(2))</b>
<b>Rural Holding (RH-35ac)</b>	<b>40</b>	<b>0</b>	<b>0</b>
<b>Residential Estate (RE-5ac)</b>	<b>100</b>	<b>0</b>	<b>0</b>
<b>Residential Single-family-2 (RS-2)</b>	<b>90</b>	<b>0</b>	<b>0</b>
<b>Residential Single-family (RS-3)</b>	<b>80</b>	<b>0</b>	<b>0</b>
<b>Residential Single-family-5 (RS-5)</b>	<b>80</b>	<b>0</b>	<b>0</b>
<b>Residential Multi-family (RM-8)</b>	<b>90</b>	<b>0</b>	<b>0</b>
<b>Residential Multi-family (RM-12)</b>	<b>100</b>	<b>0</b>	<b>0</b>
<b>Office Neighborhood (ON)</b>	<b>95</b>	<b>0</b>	<b>0</b>
<b>Office Park (OP)</b>	<b>80</b>	<b>0</b>	<b>0</b>
<b>Business Neighborhood (BN)</b>	<b>80</b>	<b>0</b>	<b>0</b>
<b>Business Regional (BR)</b>	<b>80</b>	<b>0</b>	<b>0</b>
<b>Business Local (BL)</b>	<b>40</b>	<b>0</b>	<b>0</b>
<b>Business Commercial (BC)</b>	<b>20</b>	<b>0</b>	<b>0</b>
<b>Manufacturing Light (ML)</b>	<b>80</b>	<b>0</b>	<b>0</b>
<b>Manufacturing General (MG)</b>	<b>40</b>	<b>0</b>	<b>0</b>
<b>Manufacturing Heavy (MH)</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Section 23.608 Landscaping Requirements for Other Permanently Protected Green Spaces**

- (1) This Section requires that each acre of other permanently protected green space (See Section 23.204) approved after the effective date of this Ordinance (See Section 21.011) be planted with a minimum amount of landscaping.
- (2) For every one acre of other permanently protected green space in a development, two hundred landscaping points (as described in Section 23.603) shall be provided. In addition, adequate ground cover shall be provided to stabilize the soil.

**Section 23.609 Landscaping Requirements for Required Reforestation**

- (1) This Section requires that each area required to be reforested, be reforested and maintained in a manner appropriate to site conditions.
- (2) A detailed reforestation plan shall be submitted by the property owner and approved by the City prior to clear cutting. This plan shall be reviewed by a reforestation consultant chosen by the City, with funding for consulting services provided by the Petitioner to the City.  
Rationale: The provisions of this Section are designed to ensure that reforestation efforts required as part of woodland disruption mitigation standards result in the thorough and reasonably rapid replacement of the important and varied environmental functions which woodlands provide. (See Section 23.507.)

**Section 23.610 Landscaping Requirements for Bufferyards**

(1) **Purpose**

This Section provides the landscaping and width requirements for bufferyards on lots developed after the effective date of this Ordinance. (See Section 21.011.) 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 fencing, that are required to eliminate or reduce existing or potential nuisances. These nuisances can often occur between adjacent zoning districts. Such nuisances are dirt, litter, noise, glare of lights, signs, and incompatible land uses, buildings or parking areas.

Rationale: One of zoning's most important functions is the separation of land uses into districts which have similar character and contain compatible uses. The location of districts is supposed to provide protection, but in the City of Delavan, this is not the case since zoning districts permitting uses as diverse as single-family residential and industrial uses were located next to one another long before the effective date of this Ordinance. Bufferyards will operate to minimize the negative impact of any future use on neighboring uses.

(2) **Required Locations for Bufferyards**

Bufferyards shall be located along (and within) the outer perimeter of a lot wherever two different zoning districts abut one another. Bufferyards may be located in required setback areas. In such instances, the one-half of the bufferyard requirements of this Section shall be used instead of the street frontage landscaping required in Section 23.606, if such requirements of this Section are greater. (In such instances, the width of the right-of-way may be counted as contributing to the width requirements for a bufferyard, however, the minimum width required along the street frontage by Section 23.606 shall be provided in all cases.) Bufferyard plantings or structures shall not be located on any portion of any existing, dedicated, or officially mapped right-of-way.

3) **Determination of Required Bufferyard**

The determination of bufferyard requirements is a two-staged process. First, the required level of bufferyard opacity is determined using Table 23.610(4)(a). Opacity is a quantitatively-derived measure which indicates the degree to which a particular bufferyard screens the adjoining property. The required level of opacity indicated by this Table is directly related to the degree to which the potential character of development differs between different zoning districts. The provisions of this Subsection indicate the minimum requirements for bufferyards located along zoning district boundaries.

(a) **Identification of Required Level of Opacity**

Table 23.610(4)(a) shall be used to determine the minimum level of opacity for the required bufferyard. The required level of opacity is determined by the value given in the cell of the Table at which the column heading along the top row of the Table (representing the subject property's zoning district) intersects with the row heading along the left hand side of the Table (representing the adjacent property's zoning district). The value listed is the required level of opacity for the bufferyard on the subject property.

(b) **Identification of Detailed Bufferyard Requirements**

1. If a proposed use adjoins a parcel for which a bufferyard is required by the presence of a zoning district boundary, that use shall provide a bufferyard with the level of the opacity indicated in Table 23.610(4)(a).
2. For each level of opacity listed in Table 23.610(4)(a), a wide variety of width, landscaping point, berm, and structure combinations are possible. These are listed in Table 23.610(4)(b). The requirements listed in Table 23.610(4)(b) pertain to the number of landscaping points, the minimum bufferyard width, and the type of berm or fencing required within every 100 feet of required bufferyard. A variety of landscaping point options are available and may be mixed within distinct portions of the same bufferyard. Section 23.603 describes the various available landscaping point alternatives. Section 23.611 provides a listing of tree and shrub species which correspond the landscaping point descriptions.

(4) **Tables for Required Bufferyards:** See following pages for Tables 23.610(4)(a) and (b).

**Notes for Table 23.610(4)(a):** For properties zoned in the Rural Holding District (RA-35ac), refer to the Comprehensive Master Plan's Future Land Use Map to determine the proposed zoning district for said property. Bufferyard requirements shall be taken from this proposal.

**Caution:** The required opacity levels listed in Table 23.610(4)(a) are generally different on either side of any given zoning district boundary.

**TABLE 23.610(4)(a): REQUIRED BUFFERYARD OPACITY VALUES**

↓ Adjacent Property's Zoning District																
↓	Subject Property's Zoning District															
↓	RH-35 ac	RE-5 ac	RS-2	RS-3	RS-5	RM-8	RM-12	ON	OP	BR	BN	BL	BC	ML	MG	MH
RH-35ac		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
RE-5ac			.1	.1	.1	.2	.3	.3	.4	.4	.4	.5	.6	.5	.6	1.0
RS-2				.1	.1	.2	.3	.3	.4	.4	.4	.5	.6	.4	.5	1.0
RS-3						.2	.3	.3	.4	.4	.4	.5	.6	.4	.5	1.0
RS-5						.2	.3	.3	.4	.4	.4	.5	.6	.4	.5	1.0
RM-8							.2	.2	.3	.3	.3	.4	.5	.3	.4	1.0
RM-12								.1	.2	.2	.2	.3	.4	.2	.3	1.0
ON									.1	.2	.2	.3	.4	.2	.3	.6
OP										.1	.1	.2	.3	.1	.2	.6
BR																.6
BN																.6
BL																.6
BC																.6
ML																.6
MG																.5
MH																

\* For properties zoned in the Rural Holding District (RH-35ac), refer to the Comprehensive Master Plan's Future Land Use Map to determine the proposed zoning district for said property. Bufferyard requirements shall be taken from this proposal.

**TABLE 23.610(4)(b) DETAILED BUFFERYARD REQUIREMENTS**

<b>Opacity</b>	<b># Landscaping Points/100 feet</b>	<b>Width</b>	<b>Required Structure</b>
<b>0.05</b>	00	10'+	min. 44" picket fence*
	00	10'+	min. 4' wood rail fence*
	40	10'	-
	36	15'	-
	33	20'	-
	31	25'	-
	29	30'+	-
<b>0.10</b>	00	10'+	min. 44" picket fence*
	38	10'+	min. 4' wood rail fence*
	91	10'	-
	80	15'	-
	73	20'	-
	68	25'	-
	65	30'	-
	62	35'+	-
	00	35'+	min. 4' berm
<b>0.20</b>	00	10'+	min. 6' solid fence*
	84	10'+	min. 44" picket fence*
	133	15'+	min. 4' wood rail fence*
	198	15'	-
	173	20'	-
	158	25'	-
	149	30'	-
	140	35'	-
	10	35'+	min. 4' berm
	135	40'+	-
	00	40'+	min. 5' berm

Continued on the next page.

\* Fences contributing to landscaping requirements are not permitted along street frontages for nonresidential uses. Where used in combination with plant materials to meet bufferyard requirements, a minimum of 50% of all plant materials shall be located on the exterior side (the side away from the center of the subject property) of the fence.

**NOTE:** Opacity standards provided courtesy of Lane Kendig, Inc.

**TABLE 23.610(4)(b) DETAILED BUFFERYARD REQUIREMENTS**

<b>Opacity</b>	<b># Landscaping Points/100 feet</b>	<b>Width</b>	<b>Required Structure</b>
<b>0.30</b>	00	10'+	min. 6' solid fence*
	198	15'+	min. 44" picket fence*
	320	20'	-
	240	20'+	min. 4' wood rail fence*
	276	25'	-
	252	30'	-
	235	35'	-
	104	35'+	min. 4' berm
	223	40'	-
	44	40'+	min. 5' berm
	215	45'	-
	209	50'+	-
	00	50'+	min. 6' berm
<b>0.40</b>	53	10'+	min. 6' solid fence*
	330	20'+	min. 44" picket fence*
	440	25'	-
	362	25'+	min. 4' wood rail fence*
	385	30'	-
	349	35'	-
	208	35'+	min. 4' berm
	327	40'	-
	148	40'+	min 5' berm
	310	45'	-
	299	50'+	-
	56	50'+	min. 6' berm

Continued on the next page.

\* Fences contributing to landscaping requirements are not permitted along street frontages for nonresidential uses. Where used in combination with plant materials to meet bufferyard requirements, a minimum of 50% of all plant materials shall be located on the exterior side (the side away from the center of the subject property) of the fence.

NOTE: Opacity standards provided courtesy of Lane Kendig, Inc.

**TABLE 23.610(4)(b) DETAILED BUFFERYARD REQUIREMENTS**

<b>Opacity</b>	<b># Landscaping Points/100 feet</b>	<b>Width</b>	<b>Required Structure</b>
<b>.50</b>	135	15'+	min. 6' solid fence*
	564	30'	-
	405	30'+	min. 44" picket fence*
	492	30'+	min. 4' wood rail fence*
	499	35'	-
	319	35'+	min. 4' berm
	454	40'	-
	261	40'+	min. 5' berm
	422	45'	-
	405	50'	-
	160	50'+	min. 6' berm
	388	55'	-
	374	60'+	-
	<b>.60</b>	221	20'+
433		35'+	min. 4' berm
541		35'+	min. 44" picket fence*
630		35'+	min. 4' wood rail fence*
626		40'	-
379		40'+	min. 5' berm
570		45'	-
525		50'	-
270		50'+	min. 6' berm
500		55'	-
480		60'+	-

Continued on the next page.

\* Fences contributing to landscaping requirements are not permitted along street frontages for nonresidential uses. Where used in combination with plant materials to meet bufferyard requirements, a minimum of 50% of all plant materials shall be located on the exterior side (the side away from the center of the subject property) of the fence.

**NOTE:** Opacity standards provided courtesy of Lane Kendig, Inc.

**TABLE 23.610(4)(b) DETAILED BUFFERYARD REQUIREMENTS**

Opacity	# Landscaping Points/100 feet	Width	Required Structure
.080	415	30'+	min. 6' solid fence*
	655	40'+	min. 4' berm
	627	45'+	min. 5' berm
	873	45'+	min. 44" picket fence*
	910	50'	-
	505	50'+	min. 6' berm
	809	50'+	min. 4' wood rail fence*
	804	55'	-
	744	60'	-
	710	65'	-
	677	70'+	-
1.00	636	40'+	min. 6' solid fence*
	732	50'+	min. 6' berm
	751	50'+	min. 5' berm
	867	55'+	min. 4' berm
	1091	60'+	min. 44" picket fence*
	1136	60'+	min. 4' wood rail fence*
	1083	65'	-
	994	70'	-
	934	75'	-
	892	80'+	-

\* Fences contributing to landscaping requirements are not permitted along street frontages for nonresidential uses. Where used in combination with plant materials to meet bufferyard requirements, a minimum of 50% of all plant materials shall be located on the exterior side (the side away from the center of the subject property) of the fence.

**NOTE:** Opacity standards provided courtesy of Lane Kendig, Inc.

**Section 23.611 Classification of Plant Species**

For the purpose of this Ordinance, plant materials are classified into thirteen (13) groupings: "climax tree", "tall deciduous tree", "medium deciduous tree", "low deciduous tree", "tall evergreen tree", "medium evergreen tree", "low evergreen tree", "tall deciduous shrub", "medium deciduous shrub", "low deciduous shrub", "medium evergreen shrub", "low evergreen shrub", and non-contributory plants. Species suitable for landscaping use and compatible with Walworth County climate and soil factors are listed in Table 23.611, below. The Zoning Administrator (see Section 24.932) shall review proposals for, and the applicability of, species not contained in this list and is authorized to approve appropriate similar species.

See Appendix 1 for a very detailed listing of plant species and characteristics.

**TABLE 23.611: CLASSIFICATION OF PLANTS**

<p><b>Climax Trees (75 Landscaping Points)</b></p>		<p><b>Low Deciduous Trees (10 Landscaping Points)</b></p>	
<b>Botanical Name</b>	<b>Common Name</b>	<b>Botanical Name</b>	<b>Common Name</b>
<i>Acer saccharum</i>	Sugar Maple	<i>Amelanchier sp.</i>	Serviceberry
<i>Ginkgo biloba</i>	Ginko	<i>Crataegus sp.</i>	Hawthorn: Cockspur, Downy, Washington
<i>Quercus sp.</i>	Oak: Red, White, Pin	<i>Malus sp.</i>	Crabapple sp.
<p><b>Tall Deciduous Trees (30 Landscaping Points)</b></p>		<p><b>Tall Evergreen Trees (40 Landscaping Points)</b></p>	
<b>Botanical Name</b>	<b>Common Name</b>	<b>Botanical Name</b>	<b>Common Name</b>
<i>Acer sp.</i>	Maple: Red, Silver, Norway	<i>Abies concolor</i>	White Fir
<i>Fraxinus sp.</i>	Ash: White, Green	<i>Pinus sp.</i>	Pine: Red, White, Scots
<i>Gleditsia triacanthos</i>	Honeylocust	<i>Tsuga Canadensis</i>	Canada Hemlock
<i>Populus grandidentata</i>	Bigtooth Aspen		
<i>Tilia sp.</i>	Linden: Basswood, Littleleaf, Redmond		
<p><b>Medium Deciduous Trees (15 Landscaping Points)</b></p>		<p><b>Medium Evergreen Trees (20 Landscaping Points)</b></p>	
<b>Botanical Name</b>	<b>Common Name</b>	<b>Botanical Name</b>	<b>Common Name</b>
<i>Betula sp.</i>	Birch: River, Paper	<i>Thuja occidentalis</i>	American Arborvitae
<i>Prunus sp.</i>	Cherry: Choke, Pin		
<i>Salix sp.</i>	Willow		

<b>Low Evergreen Trees (12 Landscaping Points)</b>	
<b>Botanical Name</b>	<b>Common Name</b>
<i>Juniperus sp.</i>	Juniper: Mountbatten, Redcedar
<i>Thuja sp.</i>	Arborvitae: Pyramidal, Techny
<b>Tall Deciduous Shrubs (5 Landscaping Points)</b>	
<b>Botanical Name</b>	<b>Common Name</b>
<i>Cornus sp.</i>	Dogwood: Grey, Pagoda
<i>Syringa sp.</i>	Lilac: Chinese, Hyacinth
<i>Viburnum sp.</i>	Viburnum: Arrowwood, Wayfaringtree, Nannyberry
<b>Medium Deciduous Shrubs (3 Landscaping Points)</b>	
<b>Botanical Name</b>	<b>Common Name</b>
<i>Corylus Americana</i>	American Filbert, Hazelnut
<i>Cotoneaster sp.</i>	Cotoneaster
<i>Forsythia sp.</i>	Forsythia: Border, Early, Weeping
<i>Rosa sp.</i>	Rose: Virginia, Rugosa

<b>Low Deciduous Shrubs (1 Landscaping Point)</b>	
<b>Botanical Name</b>	<b>Common Name</b>
<i>Berberis thunbergii</i>	Japanese Barberry
<i>Spiraea sp.</i>	Spirea: Froebel, Snowmound
<b>Tall - Medium Evergreen Shrubs (5 Landscaping Pts.)</b>	
<b>Botanical Name</b>	<b>Common Name</b>
<i>Juniperus chinensis</i>	Juniper: Pfitzer,
<i>Taxus sp.</i>	Yew: Japanese
<b>Low Evergreen Shrubs (3 Landscaping Points)</b>	
<b>Botanical Name</b>	<b>Common Name</b>
<i>Juniperus sp.</i>	Juniper: Sargent, Creeping, Andorra

**Section 23.612 Requirements for the Installation, Maintenance and Use of Landscaped and Bufferyard Areas**

**(1) Installation**

(a) Any and all landscaping and bufferyard material required by the provisions of this Title shall be installed on the subject property, in accordance with the approved site plan (see Section 24.908) within 730 days of the issuance of an occupancy permit for any building on the subject property.

**(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 file, subject to approval by the Zoning Administrator, a bond, a certificate of deposit, an irrevocable letter of credit, or a certified check, in amount equal to 110% of the estimate of landscaping materials and installation cost. An enforceable contract, for all work on the subject property indicated on the detailed landscaping plan required under the provisions of this Subchapter, from a qualified contractor (valid for said 730 day period), shall be used to determine the amount of surety.

2. If a part of a plat of subdivision approved per the requirements of this Title, said amount may be split into amounts which are applicable to phases of the plat approved per the requirements of the City of Delavan Land Division Ordinance.
  3. Governmental units to which these bond and guarantee provisions apply, may, in lieu of said contract or instrument of guarantee, file a resolution or letter from officers authorized to act in its behalf, agreeing to comply with the provisions of this Subchapter.
- (c) Existing plant material which meets the requirements of Section 23.603 and which will be preserved on the subject property following the completion of development, may be counted as contributing to the landscaping requirements.
- (d) All landscaping and bufferyard areas shall be seeded with lawn or native ground cover unless such vegetation is already fully established.
- (e) The exact placement of required plants and structures shall be depicted on the required detailed landscaping plan per 24.908(3)(c) shall be the decision of each property owner within the requirements of this Subchapter, except that the following requirements shall be met:
1. Evergreen shrubs shall be planted in clusters in order to maximize their chance for survival.
  2. Where a combination of plant materials, and/or berming and/or 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 Office, that an adjacent property owner shall agree to provide a partial or full portion of the required bufferyard on an immediately adjacent portion of their land, thereby exempting the developer from providing all or a portion of the required bufferyard on his property.
  4. In no manner shall landscaping or bufferyard materials be selected and/or located in a manner which results in the creation of a safety or visibility hazard. (See Section 23.703.)
  5. The restrictions on types of plants listed in Sections 23.604-23.607 shall apply.

(2) **Maintenance**

The continued and continual maintenance of all required landscaping and bufferyard materials shall be a requirement of this Title and shall be the responsibility of the owner of the property on which said materials are required. This requirement shall run with the property and is binding upon all future property owners. Development of any and all property following the effective date of this Title shall constitute an agreement by the property owner to comply with the provisions of this Section. Upon failure to comply with these provisions, the City 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. Failure to comply with this requirement shall be considered a violation of this Title, and shall be subject to any and all applicable enforcement procedures and penalties. (See Section 24.936.)

(3) **Use of Required Bufferyard and Landscaped Areas**

Any and all required bufferyards or landscaped areas may be used for passive recreation activities. Said areas may contain pedestrian, bike or equestrian trails provided that: no required material is eliminated; the total width of the required bufferyard, or the total area of required landscaping, is maintained; and all other regulations of this Title are met. In no event, however, shall swimming pools, tennis courts, sports fields, golf courses, or other such active recreation used be permitted in such areas. Furthermore, in no instance shall any parking be permitted in such areas, nor shall any outdoor display of storage of materials be permitted in such areas. Paving in such areas shall be limited to that required for necessary access to, through, or across the subject property.

(4) **Utility Easements**

Landscaping materials, fences and berms which are located within a duly recorded utility easement and/or a pedestrian easement shall not count toward meeting a landscaping requirement. However, the width of such areas may be counted as part of a landscaping requirement.

**Section 23.613 Calculating Landscaping and Bufferyard Requirements**

In calculating the number of required landscaping points under the provisions of this Subchapter, all areas and distances on which required calculations are based shall be rounded up to the nearest whole number of square feet or linear feet. Any partial plant derived from the required calculations of this Subchapter (for example 23.3 canopy trees) shall be rounded up to the nearest whole plant (24 canopy trees).

**Section 23.614 Depiction on Required Site Plan**

Any and all proposed landscaping on the subject property, required to meet the standards of this Title, shall be clearly depicted and labeled as to its location and make-up on the site plan required for the development of the subject property. Refer to Section 24.908(3)(c).