Worksheets for Landscaping and Bufferyards
Village of East Troy, Wisconsin

Version: March 27, 2018

Village of East Troy
2015 Energy Drive
East Troy, WI 53120

Part I: General Landscaping

Description: The Village of East Troy has adopted landscaping standards to ensure there is an adequate amount of landscaping along public streets, within parking lots, around the foundation of buildings, and within remaining yard areas. These requirements apply to all new development, with the exception of single-family residences and agricultural uses. For more information please refer to Article XIV of Chapter 510 of the Municipal Code.

Step One. Find the zoning district in the left column of this table and circle the entire row. The point values are used in the next step.

Zoning District		Landscaping Standard (Points per Unit)			
		Foundation Plantings [2]	**Street Plantings** [3]	**Paved Area Plantings** [4]	**Other Yard Plantings** [5]
RH-35	Rural Holding [1]	20	20	40	10
SR-3	Estate Residential [1]	40	40	80	20
SR-4	Suburban Residential [1]	40	40	80	20
SR-5	Neighborhood Residential [1]	40	40	80	20
SR-6	Traditional-Front Residential [1]	40	40	80	20
SR-7	Traditional-Front Residential [1]	40	40	80	20
TR-8	Two-Family Residential [1]	45	45	90	20
AR-9	Attached Residential [1]	50	50	95	25
MR-10	Multi-Family Residential [1]	60	60	100	30
MHR-7	Mobile Home Residential [1]	40	40	80	29
NB	Neighborhood Business	40	40	80	20
HB	Highway Business	40	40	80	20
CB	Central Business	0	0	80	0
BP	Business Park	25	40	80	10
LI	Light Industrial	20	20	40	5
GI	General Industrial	20	20	40	5

Notes:

[1] Landscaping is not required for single-family or agricultural uses

[2] Points per 100 feet of building foundation

[3] Points per 100 feet of street frontage

[4] Points per 20 parking stalls or 10,000 square feet of paved area, whichever is greater (i.e., more landscaping)

[5] Points per 1,000 square feet of total building footprints

Step Two. Use the proposed site plan to calculate the surface area of the parking area(s), the perimeter of the building(s), the length of street frontage(s), and the gross floor area of the building(s). Put these values in the second column. For each type of planting, transfer the corresponding value from the table in Step 1 into the fourth column.

To calculate the total points that are required (Column 5), divide the value in the second column by the value in the third column and then multiply that quotient by the value in the fourth column ((column 2 divided by column 3) times column 4 = column 5). Multiple rows are provided in each category in case there is more than one street frontage, building, or parking area.

Column 1	Column 2	Column 3	Column 4	Column 5
Street Plantings	**Frontage in Feet**	**Conversion Factor**	**Points per 100 LF**	**Total Points Required**
Street 1		100		
Street 2		100		
Total	--	--	--	
Foundation Plantings	**Building Perimeter in Feet**	**Conversion Factor**	**Points per 100 LF**	**Total Points Required**
Building 1		100		
Building 2		100		
Total	--	--	--	
Paved Area Plantings	**Paved Area In Sq. Ft.** [1]	**Conversion Factor**	**Points per 10,000 SF**	**Total Points Required**
Area 1		10,000 [1]		
Area 2		10,000 [1]		
Area 3		10,000 [1]		
Total	--	--	--	
Other Yard Plantings	**Gross Floor Area in Sq. Ft.**	**Conversion Factor**	**Points 1,000 SF**	**Total Points Required**
Building 1		1,000		
Building 2		1,000		
Total	--	--	--	

Notes:

[1] or 20 stalls whichever yields the most landscaping

Step Three. For each of the four types of plantings, determine which plant species will be used and how many of each. Multiply the number of plants by the corresponding point value and put the product into the corresponding cell. If a cell is shaded, that type of plant may not be used to meet the planting requirement. The total points for each of the planting types should equal or exceed the required number of points.

Climax Trees		Point Value	Street Plantings [1,2]	Foundation Plantings [3]	Paved Area Plantings [4,5]	Other Yard Plantings
Acer saccharum	Sugar Maple	75		-		
Ginkgo biloba	Ginkgo	75		-		
Quercus spp	Oak: Pin, Red, White	75		-		
Tall Deciduous						
Acer spp	Maple: Red, Silver, Norway	30		-		
Gleditsia	Honey Locust	30		-		
Populus	Bigtooth Aspen	30		-		
Tilla spp.	Linden: Basswood, Littleleaf, Redmond	30		-		
Medium Deciduous						
Betual spp.	Birch: River, Paper	15				
Prunus spp.	Cherry: Choke, Pin	15				
Salix spp.	Willow	15				
Low Deciduous						
Amelanchier spp.	Serviceberry	10				
Crataegus spp.	Hawthorn: Cockspur, Downy, Washington	10				
Malus spp.	Crab apple spp.	10				
Tall Evergreen Tree						
Abies concolor	White Fir	40				
Pinus spp.	Pine: Red, White, Scots	40				
Tsuga Canadensis	Canada Hemlock	40				
Medium Evergreen Tree						
Thuja occidnetalis	American Arborvitae	20				
Low Evergreen Tree						
Juniper spp.	Juniper: Mountbatten, Red Cedar	12				
Thuja spp	Arborvitae: Pyramidal, Techny	12				
Tall Deciduous Shrubs						
Cornus spp.	Dogwood: Grey, Pagoda	5	-			
Syringa spp.	Lilac: Chinese, Hyancinth	5	-			
Viburnum spp.	Viburnum: Arrowwood, Nannyberry	5	-			
Medium Deciduous Shrubs						
Corylus Americana	American Filbert, Hazelnut	3	-			
Cotoneaster spp.	Cotoneaster	3	-			
Forsythia spp.	Forsythia: Border, Early, Weeping	3	-			
Rosa spp.	Rose: Virginia, Rugosa	3	-			
Low Deciduous Shrubs						
Berberis thungergii	Japanese Barberry	1	-			
Spirea spp.	Spirea: Fostbel, Snowmound	1	-			
Medium Evergreen Shrubs						
Juniperus chinensis	Juniper: Pfitzer	5	-			
Taxus spp.	Yew: Japanese	5	-			
Low Evergreen Shrubs						
Juniperus	Juniper: Sargent, Creeping, Andorra	3	-			
	Total Points					
	Required Points					

Notes:

[1] At least 50 percent of the total points shall be used for climax trees and 30 percent for medium trees.
[2] The plants must be located within 10 feet of the public right-of-way
[3] The plant's dripline at maturity must be located within 10 feet of the building foundation.
[4] At least 30 percent of the total points shall be used for climax and/or tall trees and at least 40 percent for shrubs.
[5] The plants must be located within landscape islands or within 10 feet of the paved area

Part II: Bufferyards

General Description: If a property abuts a parcel in a different zoning district, then a bufferyard may be required. And if a bufferyard is required, you can select the type of landscaping that fits your needs from a menu of options. Be aware that certain land uses, conditional uses, and planned development projects may have more stringent bufferyard requirements.

Step One. Use the table below to determine if a bufferyard is required, and if so, the opacity level. In the left column, find the zoning classification of the subject property and move across the row to the zoning district of the abutting property, circle that value. For example, if the property is HP and adjoins a property in MR-10, an opacity of 0.3 is required.

			Adjacent Property's Zoning District															
			RH-35	SR-3	SR-4	SR-5	SR-6	SR-7	TR-8	AR-9	MR-10	MHR-7	NB	HB	CB	BP	LI	GI
Subject Property's Zoning District	RH-35	Rural Holding																
	SR-3	Estate Residential	*															
	SR-4	Suburban Residential	*	0														
	SR-5	Neighborhood Residential	*	0	0													
	SR-6	Traditional-Front Residential	*	0	0	0												
	SR-7	Traditional-Front Residential	*	0	0	0	0											
	TR-8	Two-Family Residential	*	.2	.2	.2	.2	.2										
	AR-9	Attached Residential	*	.3	.3	.3	.3	.3	.2									
	MR-10	Multi-Family Residential	*	.4	.4	.4	.4	.4	.3	.2								
	MHR-7	Mobile Home Residential	*	.4	.4	.4	.4	.4	.4	.4	.4							
	NB	Neighborhood Business	*	.5	.5	.5	.5	.5	.4	.3	.2	.2						
	HB	Highway Business	*	.6	.6	.6	.6	.6	.5	.4	.3	.2	.1					
	CB	Central Business	*	.6	.6	.6	.6	.6	.5	.4	.3	.2	.1	.1				
	BP	Business Park	*	.6	.6	.6	.6	.6	.5	.4	.3	.2	.1	.1	.1			
	LI	Light Industrial	*	.6	.6	.6	.6	.6	.5	.4	.3	.2	.1	.1	.1	.1		
	GI	General Industrial	*	.6	.6	.6	.6	.6	.6	.6	.6	.6	.4	.4	.4	.4	.2	

*Note: Refer to future land use map of the Village's comprehensive plan for the most likely future zoning district.

Step Two. If a bufferyard is required (i.e., an opacity value of 0.1 or more), review the options for that opacity level in the table below. The options are based on three factors – the number of required landscaping points, the width of the bufferyard that is set aside for this purpose, and landscape features such as fencing and berms.

Opacity	Option	Landscaping Points per 100 feet	Bufferyard Width (feet)	Required Structure
0.10	A-1	00	10+	Minimum 44 inch picket fence*
	A-2	38	10+	Minimum 4 foot wood rail fence*
	A-3	91	10	N/A
	A-4	80	15	N/A
	A-5	73	20	N/A
	A-6	68	25	N/A
	A-7	65	30	N/A
	A-8	62	35+	N/A
	A-9	00	35+	Minimum 4 foot berm
0.20	B-1	00	10+	Minimum 6 foot solid fence*
	B-2	84	10+	Minimum 44 inch picket fence*
	B-3	133	15+	Minimum 4 foot wood rail fence*
	B-4	198	15	N/A

Opacity	Option	Landscaping Points per 100 feet	Bufferyard Width (feet)	Required Structure
	B-5	173	20	N/A
	B-6	158	25	N/A
	B-7	149	30	N/A
	B-8	140	35	N/A
	B-9	10	35+	Minimum 4 foot berm
	B-10	135	40+	N/A
	B-11	00	40+	Minimum 5 foot berm
	C-1	00	10+	Minimum 6 foot solid fence*
	C-2	198	15+	Minimum 44 inch picket fence*
0.30	C-3	320	20	N/A
	C-4	240	20+	Minimum 4 foot wood rail fence*
	C-5	276	25	N/A
	C-6	252	30	N/A
	C-7	235	35	N/A
	C-8	104	35+	Minimum 4 foot berm
	C-9	223	40	N/A
0.30	C-10	44	40+	Minimum 5 foot berm
	C-11	215	45	N/A
	C-12	209	50+	N/A
	C-13	00	50+	Minimum 6 foot berm
	D-1	53	10+	Minimum 6 foot solid fence*
	D-2	330	20+	Minimum 44 inch picket fence*
	D-3	440	25	N/A
	D-4	362	25+	Minimum 4 foot wood rail fence*
	D-5	385	30	N/A
0.40	D-6	349	35	N/A
	D-7	208	35+	Minimum 4foot berm
	D-8	327	40	N/A
	D-9	148	40+	Minimum 5 foot berm
	D-10	310	45	N/A
	D-11	299	50+	N/A
	D-12	56	50+	Minimum 6 foot berm
	E-1	135	15+	Minimum 6 foot solid fence*
	E-2	564	30	N/A
	E-3	405	30+	Minimum 44 inch picket fence*
	E-4	492	30+	Minimum 4 foot wood rail fence*
	E-5	499	35	N/A
	E-6	319	35+	Minimum 4 foot berm
0.50	E-7	454	40	N/A
	E-8	261	40+	Minimum 5 foot berm
	E-9	422	45	N/A
	E-10	405	50	N/A
	E-11	160	50+	Minimum 6 foot berm
	E-12	388	55	N/A
	E-13	374	60+	N/A
0.60	F-1	221	20+	Minimum 6 foot solid fence*

Opacity	Option	Landscaping Points per 100 feet	Bufferyard Width (feet)	Required Structure
	F-2	433	35+	Minimum 4 foot berm
	F-3	541	35+	Minimum 44 inch picket fence*
	F-4	630	35+	Minimum 4 foot wood rail fence*
0.60	F-5	626	40	N/A
	F-6	379	40+	Minimum 5 foot berm
	F-7	570	45	N/A
	F-8	525	50	N/A
	F-9	270	50+	Minimum 6 foot berm
	F-10	500	55	N/A
	F-11	480	60+	N/A

Notes: *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. A building wall which does not contain doors (except those used for emergency exit) may be used to satisfy the required fence portions of the bufferyard requirements.

Step Three. Complete this next table with information obtained in the two previous steps and based on the design depicted on the site plan. Depending on the number of abutting properties and the distance the different districts abut, you can divide the bufferyard into different segments so that you can take full advantage of the different landscaping options. Be sure to show and label the different segments on the landscaping plan and the selected opacity option.

	Segment 1	Segment 2	Segment 3	Segment 4
a. Zoning district [1]				
b. Required opacity value [2]				
c. Opacity option [3]				
d. Width of bufferyard [4]				
e. Points per 100 feet [4]				
f. Required structure, if any [4]				
g. Conversion factor [5]				
h. Length of segment (feet) [6]				
i. Required landscaping points [7]				

Notes:

[1] From Step 1 or the zoning map; for example “MR-10”

[2] From Step 1 of this part; for example “0.3”

[3] From Step 2 of this part; for example “C-4”

[4] From Step 2 of this part and corresponding to the selected Opacity Option

[5] Divide “e” by 100.

[6] This value is derived from your site plan and landscaping plan

[7] Multiply “h” by “g”

Step Four. For each segment, determine the type and number of plants that will meet the minimum number of required landscaping points. Multiply the number of plants by the corresponding point value and put the product into the corresponding cell. The total points for each of the planting types should equal or exceed the required number of points.

Climax Trees		Point Value	Segment 1	Segment 2	Segment 3	Segment 4	Segment 5
Acer saccharum	Sugar Maple	75					
Ginkgo biloba	Ginkgo	75					
Quercus spp	Oak: Pin, Red, White	75					
Tall Deciduous							
Acer spp	Maple: Red, Silver, Norway	30					
Gleditsia	Honey Locust	30					
Populus	Bigtooth Aspen	30					
Tilla spp.	Linden: Basswood, Littleleaf, Redmond	30					
Medium Deciduous							
Betual spp.	Birch: River, Paper	15					
Prunus spp.	Cherry: Choke, Pin	15					
Salix spp.	Willow	15					
Low Deciduous							
Amelanchier spp.	Serviceberry	10					
Crataegus spp.	Hawthorn: Cockspur, Downy, Washington	10					
Malus spp.	Crab apple spp.	10					
Tall Evergreen Tree							
Abies concolor	White Fir	40					
Pinus spp.	Pine: Red, White, Scots	40					
Tsuga Canadensis	Canada Hemlock	40					
Medium Evergreen Tree							
Thuja occidnetalis	American Arborvitae	20					
Low Evergreen Tree							
Juniper spp.	Juniper: Mountbatten, Red Cedar	12					
Thuja spp	Arborvitae: Pyramidal, Techny	12					
Tall Deciduous Shrubs							
Cornus spp.	Dogwood: Grey, Pagoda	5					
Syringa spp.	Lilac: Chinese, Hyancinth	5					
Viburnum spp.	Viburnum: Arrowwood, Nannyberry	5					
Medium Deciduous Shrubs							
Corylus americana	American Filbert, Hazelnut	3					
Cotoneaster spp.	Cotoneaster	3					
Forsythia spp.	Forsythia: Border, Early, Weeping	3					
Rosa spp.	Rose: Virginia, Rugosa	3					
Low Deciduous Shrubs							
Berberis thungergii	Japanese Barberry	1					
Spirea spp.	Spirea: Fostbel, Snowmound	1					
Medium Evergreen Shrubs							
Juniperus chinensis	Juniper: Pfitzer	5					
Taxus spp.	Yew: Japanese	5					
Low Evergreen Shrubs							
Juniperus	Juniper: Sargent, Creeping, Andorra	3					
	Total Points						
	Required Points						