

ARTICLE 22

LANDSCAPING AND BUFFERYARDS

DIVISION 1

GENERAL PROVISIONS

35.2200

Legislative findings

The Common Council makes the following legislative findings:

- (1)

A healthy environment is an indication of a healthy community.
- (2)

Landscaping helps to maintain and increase property values, which helps to protect public and private investment in a community.
- (3)

Landscaping provides lasting social, economic, environmental, and aesthetic benefits to the community.
- (4)

Landscaping helps to reduce the "heat-island" effect by shading parking lots, streets, and other hard-surfaced areas.
- (5)

Flexible standards allow alternative design options that may better fit the needs of the landowner and that may be needed to address unique site characteristics.
- (6)

Landscaped bufferyards are needed between parcels of incompatible land uses, and as the degree of incompatibility increases, the amount of buffering (width and landscaping) should increase.
- (7)

A variety of landscape plants is needed to ensure that the effect of a single disease (e.g. Dutch elm disease) or pest (e.g. emerald ash borer) on landscape plants is minimized.

35.2201

Purpose

This article is established to promote the public health, safety, and welfare and is intended to accomplish the following purposes:

- (1)

make Manitowoc more attractive and aesthetically pleasing;
- (2)

provide flexible standards where possible, rather than overly prescriptive requirements;
- (3)

promote and improve public health and safety through the abatement of noise, the glare of lights, dust, and air pollution;
- (4)

buffer incompatible uses from each other;
- (5)

mitigate the environmental and aesthetic impacts associated with building and paving activities;
- (6)

promote economic development by providing a high quality of life;
- (7)

enhance ambient environmental conditions by providing shade, air purification, oxygen regeneration, groundwater recharge, storm water runoff control, and noise, glare, and heat abatement; and
- (8)

encourage the preservation, expansion, protection, and proper maintenance of the urban tree canopy.

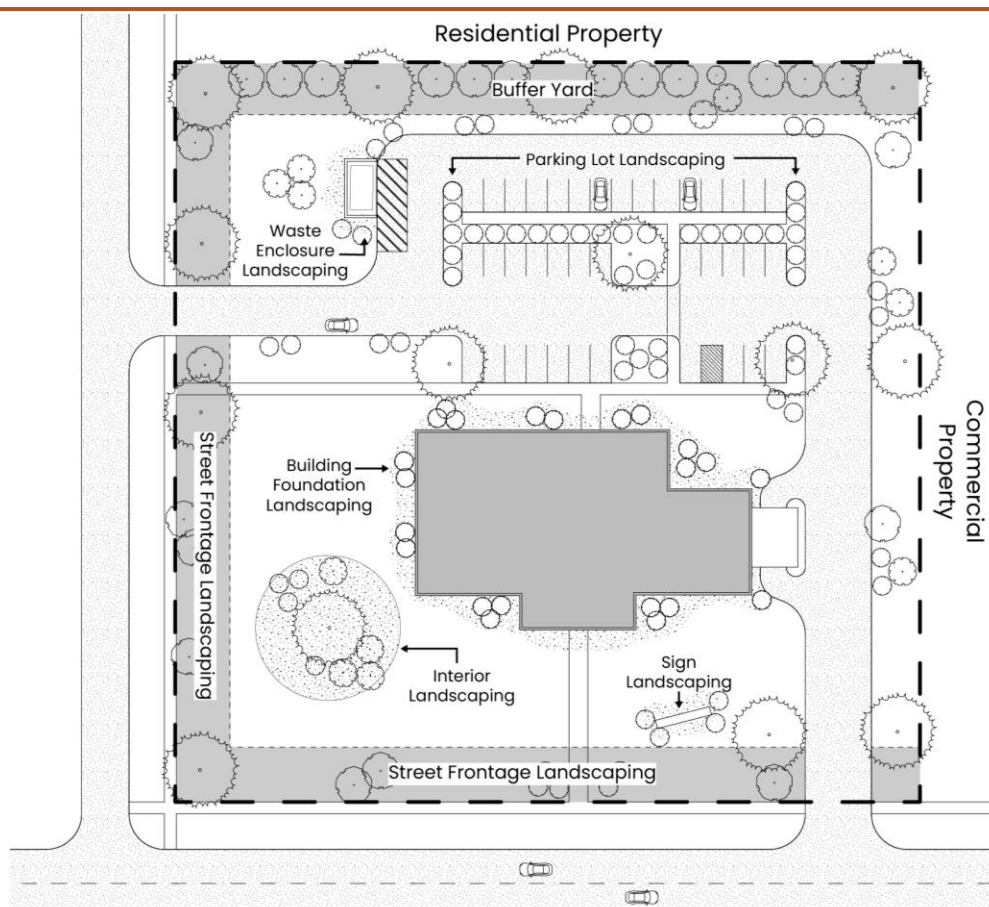
Divisions
1. General provisions
2. Bufferyards
3. Landscaping

35.2202 Applicability

A. Generally. Landscape plans are required as part of the site plan review requirement for non-residential developments and all residential developments with 5 or more dwelling units in a single building. The provisions of this article outline several required forms of landscaping which apply to different areas of a parcel as generally depicted in Exhibit 22-1. The precise location of these forms are specified within their respective sections of this article. The forms of landscaping are as follows;

- (1) Bufferyard Landscaping
- (2) Building Foundation Landscaping
- (3) Parking Lot Landscaping
- (4) Interior Landscaping
- (5) Signage Landscaping
- (6) Refuse and Ground Mounted Mechanical Structure Screening

Exhibit 22-1. General applicability of landscape and bufferyard requirements



35.2203 Landscape plan

A landscape plan is a scaled plan view drawing that shows the location of all required plantings. It must use the same scale as the site plan.

35.2204 Description of landscaping and screening options and classification of plant species

- A. **Generally.** Multiple options are provided to achieve the required landscaping and screening on a property. These options vary by area, width, frequency of plantings, materials, height, or other physical attributes to provide flexibility in achieving the intent of this article.
- B. **Plant species catalog.** Appendix D provides plant species acceptable for use in meeting the requirements of this article. Species generally suitable for use in Wisconsin are listed, and those native to the state, are denoted.
- C. **Plants not listed.** The species listed in Appendix D are not meant to be exhaustive. The zoning administrator will review proposals for, and the applicability of, species not contained in this list, and may determine appropriate similar species using "A guide to selecting landscape plants for Wisconsin" as a guide.^[1]
- D. **Prohibited plants.** Plants specifically designated as invasive by the Wisconsin Department of Natural Resources or other state agency may not be planted and may not be used to meet the requirements of this article.
- E. **Plant hardiness.** Plants must be suitable for the local climate. The City of Manitowoc is in USDA Hardiness Zone 5b, according to the 2023 Wisconsin Plant Hardiness Map.

Editorial notes:

- [1] University of Wisconsin-Extension. n.d. *A Guide to Selecting Landscape Plants for Wisconsin*. University of Wisconsin Board of Regents. <https://hort.extension.wisc.edu/articles/guide-selecting-landscape-plants-wisconsin/>.

35.2205 Specifications for landscaping materials

- A. **Generally.** All plant material must be healthy, vigorous, and free of disease and insects.
- B. **Minimum planting size.** Trees and shrubs must meet the minimum planting size established in Table 22-1. Additionally, trees and shrubs must meet the specifications contained in the most current edition of *American Standard for Nursery Stock* for the corresponding planting size.^[1]
- C. **Exception.** Up to 40 percent of planted trees and shrubs may be substituted for saplings/tree whips/seedlings of the same species in three times the required quantity.
- D. **Turf.** Turf areas must be sodded or seeded. In areas subject to erosion, sod must be used. Sod must be commercially grown and clean and free of weeds, noxious pests, and diseases. Alternatively, a seed mix suitable for erosion control may be installed to prevent erosion along with a maintenance agreement to ensure proper establishment and performance of the plantings for erosion control. The seed mix must be established with 70 percent coverage within the first year and 90 percent coverage within the second year, and invasive species control must be conducted for at least the first 2 years or as determined by the zoning administrator.
- E. **Mulch.** Where mulch is used as a ground treatment, it must be at least 2 inches thick but not more than 4 inches. A landscape fabric may be placed between the soil and mulch to impede weed growth.

Editorial notes:

- [1] Commentary: This publication is published by the American Nursery & Landscape Association and is an approved American national standard (ANSI Z60.1-2004).

Table 22-1. Minimum planting size

Plant category	Minimum planting size
Tree	
Tall deciduous tree	2" caliper
Medium deciduous tree	2" caliper
Low deciduous tree	¾" caliper
Tall evergreen tree	5' tall
Medium evergreen tree	4' tall
Low evergreen tree	3' tall
Shrub	
Tall deciduous shrub	36" tall
Medium deciduous shrub	24" tall
Low deciduous shrub	18" tall
Tall evergreen shrub	24" tall
Medium evergreen shrub	18" tall
Low evergreen shrub	12" tall

35.2206 Credit for preserving existing trees and shrubs

- A. **Generally.** Landscape plantings as required by this article may be satisfied in whole, or in part, by preserving existing trees and shrubs on the subject property.
- B. **Allocation of credits.** An existing tree shall be credited based on its size as shown in Table 22-2. An existing shrub shall be credited on a one-for-one basis regardless of size.

- C. **Location of trees and shrubs.** A tree eligible for credit must be located within 10 feet of a required bufferyard or parking lot to which the credit is to be applied. A shrub eligible for credit must be located within the area to which the credit is to be applied.
- D. **Condition of trees to be used as credit.** In order to use an existing tree or shrub as credit, the following conditions must be satisfied:
- (1) The area within the drip line must be preserved in its natural state or covered with pervious landscape material and must be retained at original grade with no trenching, cutting of any roots, or compaction of soil, including from construction activities.
 - (2) Prior to the commencement of any land-disturbing activity and during the life of the construction project, a temporary barrier must be placed around the tree at the drip line or 6 feet away from the tree trunk, whichever is greater. Such barrier may consist of a plastic mesh or snow fence with poles not more than 15 feet apart.
 - (3) The existing stock shall not be damaged from skinning, barking, and the like.
 - (4) The existing stock must be healthy and free from disease, damage, and active insect infestation potentially lethal to the tree.
 - (5) The species is one of the plant species listed in Appendix D or otherwise approved by the zoning administrator, and the species is not identified as a prohibited plant in § 35. [REDACTED].

Table 22-2. Allowable tree credits

Caliper of existing tree	Number of trees credited
2 inches up to 6 inches	1
6 inches up to 12 inches	2
12 inches and greater	3

Table 22-3. Minimum separation from specified objects

	Tree	Shrub
Driveway	10'	6'
Fire hydrant	8'	6'
Utility pole/light pole	20'	6'
Utility cabinet and pedestal	8'	6'
Street intersection	30'	30'

35.2207 General design and placement guidelines

- A. **Planting beds.** Where required, shrubs must be placed in planting beds with mulch or decorative stone.
- B. **Proximity to specified features.** Trees and shrubs must be separated from driveways, fire hydrants, utility poles, and utility pedestals and cabinets as listed in Table 22-3.
- C. **Proximity to overhead utility lines and the like.** Trees and shrubs shall not be placed where they will require frequent pruning in order to avoid interference with overhead utility lines, buildings, or other structures.
- D. **Landscaping within vision triangle.** Landscaping within a vision triangle must be consistent with the standards in § 35. [REDACTED].
- E. **Integration with natural amenities.** When a site abuts a natural amenity such as a stream, park, or other open space, the landscape plan must integrate with and respect the natural integrity of the amenity.
- F. **Integration with stormwater facilities.** Detention and retention ponds must be designed to be physically, functionally, and visually integrated into adjacent landscape areas.
- G. **Snow storage.** Landscape plants should not be located in areas reserved for snow storage, except when such plants are salt-tolerant and will not be otherwise damaged.

Exhibit 22-2. An example of where not to plant a tree or install a light pole

35.2208 Adjustments to landscaping requirements

The zoning administrator, in their discretion, may authorize adjustments to the requirements in this article where literal compliance with the specifications and standards under this article would make the parking lot landscaping ineffective or unnecessary. Existing land use conditions, topographic constraints, existing vegetation, traffic safety, or compliance with fire or other public safety requirements may necessitate adjustments. Further, if the zoning administrator determines that the location of landscape materials within the landscape area is not appropriate or feasible, the City Planning Department may require that at least an equivalent area of landscape treatment be added elsewhere on the site.

35.2209 Plant diversity

- A. **Tree species.** The maximum number of required trees in the same genus must comply with the proportions established in Table 22-4. For example, if three tree species are required, a species in three different genera must be used (e.g., *Quercus* - oaks, *Acer* - maples, *Pinus* - pines).
- B. **Shrub species.** It is recommended that the proportion of required shrubs and ground cover follow the standards established in Table 22-4, except that different species within the same genus may be used.

Table 22-4. Plant diversity requirements and recommendations

Required number of plants	Maximum proportion of tree species in same genus	Recommended proportion of same species for shrubs
11 to 20	50%	25%
21 to 30	40%	20%
31 to 40	30%	15%
41 and more	20%	10%

35.2210 Maintenance

- A. **Generally.** All landscaping must be maintained in good condition so as to present a healthy, neat, and orderly appearance, free from refuse, weeds, and debris.
- B. **Responsibilities.** The current landowner is responsible for maintaining the vegetation, screening devices, and other landscape components as may be required by this article.
- C. **Maintenance practices.** Maintenance consists of regular and normal horticultural practices including watering, weeding, fertilizing, pruning, and mowing. Plant materials that exhibit significant levels of insects, pests, diseases, or damage must be treated as appropriate.
- D. **Replacement, generally.** Plant materials that were installed to meet the requirements of this article, or that were preexisting and used to satisfy those requirements, and that die must be removed and replaced with compliant plant materials, consistent with the approved landscape plan or as required by this article.
- E. **Replacement following a natural disaster.** Plant materials that were installed to meet the requirements of this article, or that were preexisting and used to satisfy those requirements, and that die or are irreparably damaged due to a natural disaster—such as area-wide flooding or high winds—must be removed and replaced with compliant plant materials, consistent with the approved landscape plan or the provisions of this article, within two years of the event. With just cause, the Common Council may, on a case-by-case basis, grant an extension of up to two additional years upon written request, or may adopt a resolution providing a blanket extension for all affected properties within the city.
- F. **Staking.** It is recommended that stakes and cables used to support a tree be removed within 24 months of planting.

35.2211 Berms

- A. **Maximum slope and form.** In order to facilitate maintenance and efficient irrigation water usage, a berm shall not exceed a slope of 3:1 (i.e., for every 3 feet of horizontal run the vertical height is one foot). A berm must be graded to appear as a curvilinear, naturalistic form.
- B. **Construction.** A berm must be compacted during the construction process so as to minimize settling.
- C. **Stabilization.** A berm must be covered with natural prairie, turf, or mulch along with required plant materials.

- D. **Effect on stormwater flow.** A berm may not be designed or placed so as to divert the normal flow of stormwater to the detriment of surrounding properties.
- E. **Placement within vision triangle.** A berm located within a vision triangle must comply with the standards in § 35. .

35.2712 through 35.2749 reserved

DIVISION 2 BUFFERYARDS

35.2750 General description

A bufferyard consists of a strip of undeveloped land with landscaping or other visual screening and is intended to provide a physical and visual separation between different zoning districts and the adjacent streets.

35.2751 Applicability

- A. **Generally.** A bufferyard is required at the time of development when it abuts another lot in a different zoning district as required by Exhibit 22-3, or when it abuts a street as required by Exhibit 22-5.
- B. **Additional requirements per use.** Certain uses may include additional bufferyard requirements. Developers should always review proposed use standards for additional landscaping requirements.
- C. **Zero setback.** In the case of a building with no setback between the building perimeter and the lot line, no bufferyard landscaping is required.
- D. **Multiple bufferyards.** In the case of corner lots, instances of two separate streets abutting a property, or cases of multiple differently zoned properties abutting the property, the developer shall meet the required standards for each of the bufferyards as required by Exhibits 22-3 and 22-5. In the case that two abutting streets, differently zoned properties, or combination thereof result in multiple bufferyards overlapping the same area, the bufferyard with the highest intensity of plantings shall take precedence over the other bufferyards.

35.2752 General provisions

- A. **Bufferyard location.** Bufferyard landscaping shall be located along the lot lines of the lot being developed. Plants required by this section shall be located within the street yard setback. In no instance shall such landscaping be located within a public right-of-way.
- B. **Relationship of fencing and plantings.** When a fence or berm is used in conjunction with plantings, at least one-half of the required plantings must be planted between the fence or berm and the property line.
- C. **Use of bufferyard.** A bufferyard must be undeveloped, except that the zoning administrator may allow the following in a bufferyard:
 - (1) an unpaved fire lane,^[1]
 - (2) utility boxes and cabinets when necessary,
 - (3) a paved bicycle/pedestrian path or a paved sidewalk,
 - (4) a paved vehicular access between the adjoining parcels provided it is located in the least intrusive location and is located generally perpendicular to the property boundary line,
 - (5) stormwater management facilities, and
 - (6) other structures and features deemed compatible by the administrator.

If a utility easement is located along the property boundary line where a bufferyard is also required, the width of the easement may be used to satisfy the width requirement of the bufferyard, in whole or in part, provided none of the required landscaping and/or fencing is located within the utility easement.

- D. **Multi-use developments and mixed use.** For multi-use developments on a single lot, any use-specific landscape and screening requirements are required in addition to the base zoning district and street bufferyard requirements for the use nearest the property line for that area. For mixed uses (two or more uses in the same structure), any use-specific landscaping and screening requirements for the higher intensity use apply in addition to the base zoning and street bufferyard requirement.

Editorial notes:

- [1] Commentary: A number of products have been introduced in recent years that allow grass to grow in a plastic-type mesh that is capable of supporting a fire truck.

35.2753 Determination of required bufferyard

The determination of a bufferyard requirement is a two-step process as follows:

Step One – Identification of required bufferyard standard. The required bufferyard standard is determined using Exhibits 22-3 and 22-4.

- (1) For properties abutting lots in a different zoning district, a zoning bufferyard may be required. To determine the required zoning bufferyard, first identify the zoning of the subject property on the left column. Next, find the abutting zoning designation at the top of the table and then move down the column to the cell where the zoning designation of the other district intersects. If a bufferyard is required, a letter will be shown in that cell. If the parcel being developed adjoins land in an unincorporated area, that land's zoning classification that most closely corresponds to the city's zoning classification is used to determine bufferyard requirements. If a zoning bufferyard already exists in good condition on the abutting property of an equal or greater bufferyard standard than is required, the property owner may forgo a zoning bufferyard along that portion of the property abutting the existing bufferyard if the zoning administrator determines it is satisfactory to bufferyard between the adjacent district. In no case may an existing zoning bufferyard on an adjacent property that is below the minimum standard for a required zoning bufferyard can be used as credit towards a required bufferyard; in such cases, the subject property must install the full zoning bufferyard required.
- (2) For properties abutting streets, first determine what functional roadway classification the street is using Wisconsin Department of Transportation's Urban Functional Classification. Next, find that classification in Exhibit 22-4 and follow the row right to the cell where the zoning designation intersects. If a bufferyard is required, a letter will be shown in that cell.

The remainder of this page left intentionally blank.

Exhibit 22-3. Standards for landscaping between different zoning districts

Zoning district	RR-1	RR-2	RR-3	RR-4	RR-8	RR-9	CC-1	CC-2	B-1	B-2	B-3	I-1	I-2	I-3	INST	P-1	AE	CPE	RLRD	UT
RR-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RR-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RR-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RR-4	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RR-8	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RR-9	D	D	D	D	D	-	D	D	C	C	C	B	B	C	C	C	-	-	-	-
CC-1	B	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CC-2	C	C	A	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-1	C	C	B	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B-2	C	C	B	A	B	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-
B-3	D	D	D	D	D	D	C	B	B	-	-	-	-	-	-	-	-	-	-	-
I-1	E	E	E	E	E	E	D	D	C	C	C	-	-	C	-	-	-	-	-	-
I-2	E	E	E	E	E	E	E	E	D	C	C	B	-	C	-	-	-	-	-	-
I-3	C	C	C	B	C	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-
INST	C	C	C	C	C	C	B	A	A	-	-	-	-	-	-	-	-	-	-	-
P-1	B	B	B	B	B	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-
AE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CPE	D	D	D	D	D	D	D	D	D	C	C	-	-	-	-	-	-	-	-	-
RLRD	C	C	C	C	C	C	B	B	A	-	-	-	-	-	-	-	-	-	-	-
UT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Zoning Districts: **RR-1** Single-Family and Two-Family Suburban Residential; **RR-2** Single-Family and Two-Family Urban Residential; **RR-3** Urban Neighborhood; **RR-4** Multi-Family Residential; **RR-8** Planned Mixed Residential; **RR-9** Manufactured Home Neighborhood; **CC-1** City Center Transition; **CC-2** Central Business; **B-1** Neighborhood Business; **B-2** Community Business; **B-3** General Business; **I-1** Light Industrial; **I-2** Heavy Industrial; **I-3** Urban Industrial; **INST** Institutional; **P-1** Conservancy; **AE** Aviation Enterprise; **CPE** Commercial Port Enterprise; **RLRD** Railroad; **UT** Urban Transition

Notes:

- (1) A dash "-" means that a bufferyard is not required.
- (2) For A, B, C, D, and E see Exhibit 22-5 for the width of the bufferyard and related landscaping requirements.

Exhibit 22-4. Standards for landscaping between zoning districts and street functional classifications

Street designation	RR-1	RR-2	RR-3	RR-4	RR-8	RR-9	CC-1	CC-2	B-1	B-2	B-3	I-1	I-2	I-3	INST	P-1	RLRD	AE	CPE	UT
Principal or minor arterial	-	-	A	C	B	C	A	-	A	C	D	D	E	B	A	-	C	B	C	-
Collector	-	-	A	B	B	C	A	-	A	B	C	D	D	A	A	-	B	A	C	-
Local	-	-	-	A	A	C	-	-	A	C	D	D	E	A	-	-	C	A	C	-

Zoning Districts: **RR-1** Single-Family and Two-Family Suburban Residential; **RR-2** Single-Family and Two-Family Urban Residential; **RR-3** Urban Neighborhood; **RR-4** Multi-Family Residential; **RR-8** Planned Mixed Residential; **RR-9** Manufactured Home Neighborhood; **CC-1** City Center Transition; **CC-2** Central Business; **B-1** Neighborhood Business; **B-2** Community Business; **B-3** General Business; **I-1** Light Industrial; **I-2** Heavy Industrial; **I-3** Urban Industrial; **INST** Institutional; **P-1** Conservancy; **AE** Aviation Enterprise; **CPE** Commercial Port Enterprise; **RLRD** Railroad; **UT** Urban Transition

Notes:

- (1) A dash "-" means that a bufferyard is not required.
- (2) For A, B, C, D, and E see Exhibit 22-5 for the width of the bufferyard and related landscaping requirements.

Step Two – Identification of detailed bufferyard requirements. In the next step, the developer chooses how the required standard will be met. For each standard, a variety of width, landscaping quantities, berm, and fence combinations are possible as listed in Exhibit 22-4. The requirements must be provided for each 100 feet or fraction thereof rounded to the nearest whole number. Different landscaping options may be used along the length of a bufferyard provided each length of bufferyard satisfies the requirements for its respective standard.

Exhibit 22-5. Bufferyard and street frontage landscaping types and options

A	Width	Canopy Trees per 100 linear feet	Evergreen Trees per 100 linear feet	Ornamental Trees per 100 linear feet	Shrubs & (Evergreen shrubs) per 100 linear feet [1]	Required fence or berm [2]
A-1	8'	0.7	0	1.4	5.6	Fence [3,4,5]
A-2	10'	0.6	0.6	0.6	3.6	-
A-3	15'	0.5	0.9	0	2.3	-
A-4	20'	0	1.1	0	(4.9)	-
A-5	25'	0.5	0	0	2.5	-
B						
B-1	15'	1.7	0	3.4	13.6	Fence [3,4,5]
B-2	20'	2.3	2.3	2.3	13.5	-
B-3	25'	2.1	5.2	0	10.5	-
B-4	30'	0	5.9	0	(27.3)	-
B-5	30'	2.2	0	0	11	3' berm
C						
C-1	20'	2.3	0	4.6	18.4	Fence [3,4,5]
C-2	20'	3.4	3.4	3.4	20.4	-
C-3	25'	3.2	6.4	0	16	-
C-4	30'	0	9.2	0	(42.7)	-
C-5	35'	5.8	0	0	29	-
D						
D-1	25'	3	0	6	24	Fence [3,4,5]
D-2	25'	3.7	3.7	3.7	22.2	2' berm
D-3	30'	4.3	8.5	0	21.3	-
D-4	35'	0	12.3	0	(57.4)	-
D-5	40'	7.9	0	0	39.5	-
E						
E-1	25'	4.1	0	8.2	32.8	Fence [3,4,5]
E-2	30'	4.8	4.8	4.8	28.5	2' berm
E-3	35'	5.3	10.6	0	26.5	-
E-4	40'	0	15.6	0	(72.8)	-
E-5	40'	9	0	0	45	-

Notes:

[1] A plain number is the required number of shrubs, while a parenthesized number specifies evergreen shrubs.

[2] A dash "-" means not applicable.

[3] Maximum height allowed controlled by standards in Append B, [\(Reference to be verified\)](#)

[4] When a fence is used, at least 50 percent of the required plant materials shall be located on the exterior side (the side away from the center of the subject property) of the fence. If at the time of development, there is a fence on the adjoining property, this planting requirement does not apply.

[5] When a fence is used to enclose an activity or storage area, a fence may not be used in the bufferyard.

35.2754 through 35.2769 reserved**DIVISION 3
LANDSCAPING****35.2770 Applicability**

The provisions of this division apply to the following:

- (1) all uses except for single-family and two-family residences and agricultural buildings; (Verify)
- (2) expansion of a principal building that is subject to this division by 500 square feet or more;
- (3) construction of new parking areas; and
- (4) expansion or modification of a parking area which impacts five or more parking spaces.

35.2771 Building foundation landscape requirements

- A. Generally.** Landscaping shall be provided on building foundation perimeters on a prorated basis as described in this section. Building foundation landscape shall not apply to building perimeters where there is zero setback.
- B. Required Plantings.** Planting area must be at least 5 feet in width around the building foundation perimeter, plants beyond 8 feet are not be counted toward this requirement. The developer shall fill this area with plantings at a similar intensity and pattern as other landscaping required by this article. If no other landscaping is required, the foundation plantings must include at least the equivalent of a type A bufferyard based on the linear feet of the building perimeter that are majorly visible to the public. The plantings within the area shall also be chosen to complement the surrounding plantings. Alternatively, low water foundation landscapes, xeriscapes, or green stormwater infrastructure installations are permissible as foundation plantings.
- C. Placement on lot.** Plants used to satisfy the requirements of this section shall be placed according to the following requirements:
 - (1) At maturity, the dripline of each plant is to generally be located within 10 feet of the building foundation.
 - (2) Plantings must be located on all building faces majorly visible to the public right of way, publicly accessible areas such as parking lots and plazas, and neighboring residential properties, as well as continuing along 20 feet of the perimeter beyond the visible building face.
 - (3) Plantings must be located between the building and any sidewalks or walkways around the building perimeter. In no case shall a sidewalk or walkway be permitted immediately adjacent to the building perimeter except when connecting to building entrances or when no foundation plantings are required. Additional landscaping may be located opposite a sidewalk or walkway from a building perimeter.
 - (4) As a general rule, plants must be distributed evenly around the portions of perimeter required to be landscaped.
 - (5) Such landscaping shall not be required in those areas required for landscaping as street frontages.
- D. Anticipated future development.** Where an approved site plan depicts a future building extension, the foundation landscaping required need only be installed on the portions of the building perimeter that will not be affected by building extension. If this results in landscaping option requirements which are not met

Exhibit 22-6. An example of a foundation planting



through the initial planting, then such requirements must be met within 5 years of building permit issuance, or as extended in writing by the zoning administrator.

- E. Exceptions for secure facilities.** In the case a developer provides substantial evidence that a proposed building is vulnerable to significant security, health, or safety concerns and required building foundation landscaping will interfere with security or surveillance efforts or building operations, the zoning administrator can determine if alternatives to fulfilling the intent of this section; such as altering the required types of plantings or planting locations are appropriate.

35.2772 Parking lot landscape requirements

- A. Generally.** Paved areas shall be landscaped on the both the exterior perimeter of the paved area and within interior islands, peninsulas, and medians.
- B. Minimum exterior perimeter standards.** The developer may select one of the options in Exhibit 22-8 for the perimeter of paved area on a property. Different landscaping options may be used along the length of the paved area perimeter.
- C. Minimum interior standards.** All off-street surface parking lots with more than 10 spaces or more than one drive aisle must incorporate landscaped features on the interior of the parking lot.
- a. **Large field segmentation.** Large parking fields must be divided into areas of no more than 20,000 square feet each through the use of landscaped islands, peninsulas, and/or medians and connected solely by drive aisles.
 - b. **Terminal end islands.** Landscape islands are required at the terminal ends of freestanding rows of parking. Freestanding rows of parking are those not abutting the parking lot perimeter or building face, and may have a single or double row of parking.
 - c. **Row islands.** For rows of parking with more than 15 spaces, a landscape island is required to result in no more than 15 continuous parking spaces in a row without a landscape island.
 - d. **Island width.** The minimum width for an island is 6 feet, measured perpendicular to the adjacent parking space, and the depth of the island is equal to the depth of the adjacent parking space.
 - i. Islands 15 feet or less in width containing a required tree must utilize a suspended pavement system under any paved surface within a tree's critical root zone equal to 50 percent of the mature canopy diameter. (Verify) Diagram forthcoming.
 - e. **Island landscaping.** All interior islands must be landscaped with plantings complementary to the plants used to fulfill the perimeter landscaping requirements.
 - i. All islands shall be filled with mulch, stone aggregate, or other permeable material with a depth of no less than 4 inches. A screen may be used between the material and earth to prevent weed growth.
 - ii. At least one canopy tree island is required for every 20 parking spaces.
 - iii. Islands must be planted with perennials and/or ornamental grasses.
 - f. **Bioretention areas.** Bioretention areas that are used to treat stormwater runoff from parking areas may be integrated into landscape areas as may be required in this section.
 - g. **Placement on lot.** Exterior perimeter parking lot landscaping shall be located along the entire perimeter of all paved areas on a property, excluding sidewalks and other pedestrian only paths. Island landscaping shall be placed to occupy as much of the island surface area as possible.

Exhibit 22-7. An example of a masonry wall screening the parking area for a retail center



Landscaping required by this section is not required where it overlaps with the minimum areas requiring bufferyard landscaping or building foundation perimeter landscaping.

Exhibit 22-8. Minimum parking lot perimeter landscaping options

	Width of landscape area	Required fencing	Required plantings
Option A	2 feet	Decorative masonry wall, 32 to 38 inches above grade	None required
Option B	5 feet	Decorative metal fence or masonry wall, 32 to 38 inches above grade	1 canopy tree or tall shrub per 20 linear feet, and a dense mix of ornamental grass and perennials
Option C	8 feet	None required	1 canopy tree per 20 linear feet, 2 shrubs per 20 linear feet, and a dense mix of ornamental grass and perennials

35.2773 Street tree requirements

- A. Generally.** Street trees must be provided between the sidewalk and curb where at least 5 feet of soil exists at a ratio of 1 tree per 50 linear feet of street frontage. Where less than 5 feet exists between the sidewalk and curb, or where there is no sidewalk, or when otherwise deemed appropriate by the zoning administrator, street trees may be provided anywhere within 20 feet of the street curb. Existing trees already in the prescribed locations and equal or greater than the minimum size required may be counted towards the required number of street trees on a one-to-one basis. Street trees are the sole maintenance responsibility of the abutting property owner including watering, weeding, trimming, maintaining, and replanting – if necessary – said trees. Any tree that is damaged or destroyed must be promptly replanted with a new, similar tree by the abutting property owner at the property owner's expense. Where obstructions such as pavement, utility poles, fire hydrants, and driveways as listed in Table 22-3 interrupt the ability to plant street trees, the total quantity of street trees must be planted elsewhere in an acceptable location for street trees.
- B. Permit required.** A permit for planting landscaping in the City of Manitowoc right-of-way must be acquired prior to installation of landscaping materials including street trees.

35.2774 Interior landscape requirements

Interior landscaping is not required. However, if it is not possible to install some of the landscaping in the required places, those plantings may be installed as interior landscaping.

35.2775 Signage landscaping requirements

Landscaping must be provided to the perimeter of freestanding signs specified by Chapter 31 of the municipal code. The plantings must include a mix of perennials and ornamental grass which complement the surrounding landscaping of the property.

35.2776 Refuse and ground mounted mechanical structure screening

Landscaping and/or fencing must be provided to the perimeters of all refuse and utility areas which are visible from public streets, customer parking areas, and neighboring properties to fully conceal the refuse and utility area from view at the time of installation.

35.2777 through 35.2799 reserved