

## Article 8. Landscape & Screening

### 50-8.1 Intent.

*This Article specifies the landscape and screening requirement, including techniques for installation and maintenance. Specifically, this Article will:*

*A. Promote public health, safety, and general welfare by reducing noise, air and visual pollution, air temperature, and light glare.*

*B. Align with the Community Sustainability Plan goals, including increasing the City's tree canopy coverage, reducing the urban heat island effect, increase the use of green stormwater infrastructure, and achieving biodiversity goals.*

*C. Support the Nature Features Protection goals in the current Master Plan and align with 50-6.2, including the use of plant species native to southern Michigan.*

*D. Improve the appearance and environmental impact of paved spaces, such as parking lots.*

*F. Align with the Street Design Manual and Chapter 42 Tree Ordinance to create a comfortable and safe pedestrian network and increase the tree canopy.*

### 50-8.2 Applicability.

*A. Applicability. Unless otherwise stated, these requirements apply to all properties in Kalamazoo.*

*B. Nonconforming Landscape and Screening. When site landscaping does not meet the standards in this Article the following apply:*

*(1) Landscaping and screening that do not conform to the standards of this Article are considered non-conforming site characteristics, refer to 50-1.4B for additional information.*

*(2) When adding landscaping to a site to bring it closer to current Ordinance standards, the following priorities are to be considered.*

*(a) Landscape buffer between a right-of-way and parking lot is the highest priority.*

*(b) Landscaping between adjacent land uses is the second priority.*

*(c) Landscaping around buildings and general site landscaping are the third priority.*

### 50-8.3 General Provisions.

The following general provisions for landscaping and screening apply.

*A. Landscape Plan. A landscape plan, detailing the required landscaping and how it will be maintained, including watering during initial installation and long term care, will be required with Site Plan Review.*

*(1) Delay of Installation. City Planner or their designee may authorize a delay in installation of trees and vegetation due to adverse weather until no later than the following June 30th.*

*(a) A bond or letter of credit or other guarantee of such installation may be required.*

*(b) A temporary certificate of occupancy may be issued by the Building Official or their designee until the landscaping is complete..*

*B. Plant Materials. The following shall be considered when selecting plant materials:*

*(1) Maximum Percentage of A Single Species. Except for plantings used for screening, no one (1) species of tree or shrub may make up more than thirty-three (33) percent of the total amount of landscape plantings.*

*(2) Plant Materials. The use of vegetation native to southern Michigan and the use of a mixture of vegetation from the same species association is encouraged and the following shall apply:*

*(a) All required plant material shall be hardy to the area, free of disease and insect infestation, and conform to the American Standard for Nursery Stock of the American Association of Nurserymen.*

*(b) A minimum of fifty (50) percent of plant material used to meet the landscape and screening requirements of this Article shall be natives or nativars.*

*(3) Prohibited Plant Materials. Plantings listed in Table 6.2-6 Prohibited Plant List are not to be utilized in any landscape or screening area required by this Article.*

*(4) Plant Material Spacing. Plant materials shall be spaced to support plant health. Specifically the following applies:*

*(a) Plants shall be spaced not less than seventy-five (75) percent of their mature size.*

*(b) Naturalized planting layouts are permitted and when used are the exception to 50-8.3B(4)(a).*

*(c) Refer to Chapter 42 Tree Ordinance for spacing of right-of-way plantings.*

*C. Planting Locations. Trees and vegetation shall be installed considering the following on both private and public property:*

(1) *Sight Visibility.* In order to support sight visibility for motorists and clearance for pedestrians, cyclists, and vehicles, plantings within the clear view zone may not be taller than three (3) feet at maturity. Refer to Figure 8.3-1 Clear View Zone.

(2) *Around Hydrants.* Landscaping planted within a ten (10) foot radius around a fire hydrant shall be no taller than six (6) inches at maturity.

(3) *Proximity to Property Line.* Trees and large shrubs shall not be placed closer than three (3) feet from the fence line or property line unless otherwise noted in 50-8.4 Required Landscaping. In no case shall trees and shrubs impede access on an adjacent sidewalk.

(4) *Right-of-Way Landscaping.* All planting and removal of trees in the City's right-of-way shall be in accordance with Chapter 42 Tree Ordinance and may require approval of the City's Tree Committee.

*E. Protection of Trees During Construction. The following shall be considered during construction:*

(1) *Construction Fencing.* The Critical Root Zone (CRZ) of Protected Trees shall be protected following the standards of 50-6.2J(8) Protection During Construction.

(2) *Preservation of Existing Trees During Construction.* The preservation of quality, mature trees can earn credits toward the required landscaping requirements for a site. Refer to Table 8.3-4 Tree Preservation Credits

(a) *Properties located in the Natural Features Protection Overlay Zone are not eligible for this credit.*

Table 8.3-4 Tree Preservation Credits

Preserved Trees (Caliper Inches at DBH)	Number of Trees Credited
12" or more	3
8" to 11.9"	2
2 1/2" to 7.9"	1

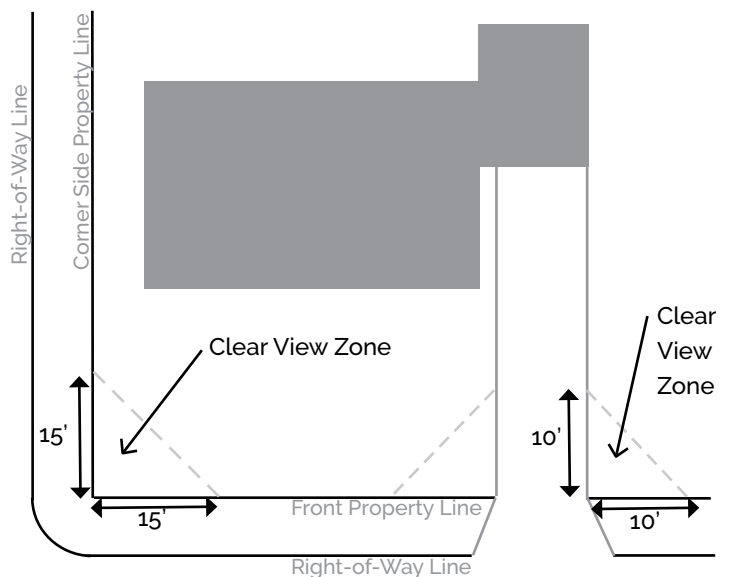


Figure 8.3-1 Clear View Zone.

(b) Preservation credits can be earned when the following criteria are met:

[1] Trees shall be in healthy and good condition.

[2] Trees shall be at least two and half (2 1/2) inches at DBH (refer to 50-1.3K).

[3] Trees cannot be listed in the [Midwest Invasive Species Information Network \(MISIN\)](#)

(c) Trees to be preserved shall be noted on the Site Plan, including protection method during construction, species, size, health, and proposed credits.

(d) Credit for preserved trees shall be applied to the landscaping requirements in the amounts detailed in Table 8.3-4 Tree Preservation Credits.

(e) If a preserved tree for which credit is given is lost to damage or disease within two (2) years of the final certificate of occupancy, the property owner is required to plant trees equal to the credit received.

F. Maintenance. All required landscaping and landscaped areas (refer to 50-8.4) shall be maintained in good health and kept free from refuse and debris.

(1) If any required landscaping dies or becomes diseased, it shall be replaced by the property owner.

(2) The City Planner or their designee is authorized to cite property owners if required plantings die or become diseased and are not replaced by the property owner.

(3) Tree stakes, guy wires and tree wrap are to be removed within one (1) year of planting.

#### 50-8.4 Required Landscaping

A. Incorporating Existing Vegetation and Trees. Existing tree and vegetation in good condition and located in a required setbacks or in areas outside of the development areas should be used as part of any required landscaping required in this section.

B. Tree Canopy Requirement. All projects requiring Site Plan Review and with the construction of any new single family and duplex units must install trees on-site as follows.

(1) For a single-family and a duplex units, a minimum of one (1) tree shall be installed.

(2) For all other uses, trees shall be installed as follows:

(a) Up to One Acre. A minimum of one (1) tree shall be installed for sites up to one (1) acre in area

(b) Greater than an Acre. One tree per acre or fraction thereof beyond the first acre shall be installed.

(3) When a property meets the minimum street tree requirements, this can be applied to meet the Tree Canopy Requirement in the Live Work 1, (LW1), Live Work 2 (LW2), and Neighborhood Node (Nhood Node) Districts.

(4) Downtown (D) Districts are exempt from this requirement.

(5) Trees planted to meet other required landscape and screening requirements may be applied to meet the Tree Canopy Requirement.

*C. Parking & Loading Perimeter Landscaping. Refer to Figure 8.4-1 Parking & Loading Area Required Landscaping All surface parking, both stand alone and on-site with a building, shall be screened from view of public and private streets; pedestrian-only passages and spaces; bicycle facilities; and trails and Residential Districts as follows:*

*(1) Directly adjoining or facing a public and private street; pedestrian-only passages and spaces; bicycle facilities; and trail, the following is required:*

*(a) Landscape area shall be a minimum of five (5) feet in width.*

*(b) Fencing. Fencing up to forty-two (42) inches in height is required in the landscape buffer and shall be located adjacent to the parking area, with the required trees, shrubs, and other landscaping adjacent to the street; pedestrian-only passages and spaces; bicycle facilities; and trail. Refer 50-8.5 Fences, Walls, and Screening for more info on fences.*

*(c) Tree Requirement. One (1) tree is required for at least every thirty-five (35) feet of frontage and shall be installed at a consistent spacing at a distance that supports the selected species tree health.*

*(d) Shrub Requirement. At least one (1) shrub is required for every six (6) feet of frontage.*

*(2) Additional Options for Set Back Parking & Loading Areas. When a parking area is set back more than ten (10) feet from a public and private street; pedestrian-only passages and spaces; bicycle facilities; or trail, a berm or an opaque fence are also permitted options.*

*(3) Directly adjoining or facing a Residential Zoning District. Landscaping and screening is required to provide at least seventy-five (75) percent opacity one (1) year after installation. This area may include all of the screening options (fencing, opaque walls, berms, trees, and other vegetation) noted in this section (50-8.4E).*

*D. Interior Parking Lot Landscaping. Parking areas having more than thirty (30) parking spaces shall include interior lot landscaping as follows. Refer to Figure 8.4-2.*

*(1) Minimum Area. A minimum of five (5) percent of the entire parking lot area shall be provided as a landscaped area.*

(2) *Ground Cover.* Landscaping of interior islands cannot include stone mulch; planting materials and bark mulch are permitted.

(3) *Trees.* One (1) tree shall be provided for each three hundred (300) square feet of internal landscaped area. Trees are required to be planted in any of the following methods.

(a) *Open soil landscape islands.*

[1] *Minimum area of two hundred fifty (250) square feet.*

[2] *Minimum of seven (7) feet wide.*

(b) *Covered soil landscape areas specially designed to accommodate tree root growth are permitted with engineered design methods including structural soil, sidewalk support, and soil cells.*

[1] *Minimum tree opening of three (3) feet by three (3) feet is required.*

[2] *Minimum soil volume shall be as follows.*

[a] *Small trees: 600 cubic feet.*

[b] *Medium trees: 1,000 cubic feet.*

[c] *Large trees: 1,500 cubic feet.*

*Figures 8.4-2 Interior Parking Lot Landscaping..*

*(c) Open soil and covered soil planting hybrids connected to green space with root paths.*

*[1] Minimum soil volume shall be as follows.*

*[a] Small trees: 600 cubic feet.*

*[b] Medium trees: 1,000 cubic feet.*

*[c] Large trees: 1,500 cubic feet..*

*[2] Green space area shall be included in soil volume calculations.*

*[3] Root paths may be used to connect to other covered soil landscape areas.*

*(3) Maximize Shade. If three (3) or more trees are to be planted in a parking area, they should be dispersed to maximize the shade created from their canopy at maturity.*

*(4) Curbs. Landscaped areas shall be curbed unless also being used for stormwater management.*

*E. Side and Rear Yard Landscape Screening. Landscape screening between uses is required in the side and rear yards as follows.*

*(1) Location. Side and rear landscape screening shall be located as follows:*

*(a) When located adjacent to residential uses, open space, park, or preserve, the following shall provide a landscape screen on their property:*

*[1] Non-residential driveway and drive-through facility.*

*[2] Commercial and Mixed use.*

*[3] Civic and Institutional use.*

*[4] Industrial use.*

*[5] Residential buildings with more than eight (8) units.*

*[6] Parking area (stand-alone lot or on a property with a building).*

*(b) Manufacturing uses will provide a landscape screen when adjacent any other non-manufacturing use.*

*(2) Screening Requirements.*

*(a) Width. The side and rear landscape screen shall be ten (10) feet in width, measured from the shared property line, with the following exceptions:*

*[1] Twenty (20) feet is required for manufacturing uses adjacent to any residential, park, open space, or preserve.*

*[2] Fifteen (15) feet is required for manufacturing uses adjacent to all other use.*

*(b) Existing Vegetation. The preservation of existing, high quality trees and vegetation is strongly encouraged and may be considered as a screening option or incorporated into proposed landscape screening to meet the requirements.*

*(c) Screening Options. Trees, opaque walls, berms, and fences can be used to create the screen in an amount of*

seventy-five (75) percent opacity by one (1) year after installation as follows:

[1] A row of six (6) foot tall evergreen trees planted parallel to the property line at a spacing of no more than six (6) feet apart.

[2] Opaque wall, berm, or fence with a height of six (6) feet.

(3) Exceptions. In the Live Work 1 (LW1), Live Work 2 (LW2), Neighborhood Node, and Community Commercial 2 (CC2) and Downtown (D) Districts, the side yard landscape buffers are not required between residential uses and commercial, mixed use, civic, and institutional uses.

### 50-8.5 Fences, Walls, & Screening

#### A. General Provisions.

(1) *Applicability.* These standards apply to the installation of fences in all locations, unless otherwise stated.

(2) *Fence Construction.*

(a) Fences shall be installed entirely within a parcel's property lines.

(b) Fences shall be installed with the finished side (i.e. the side with fewer or no visible structural framing or bracing elements) faces outward from the lot on which it is installed.

(c) Unless otherwise noted fences or walls located in front or corner side yards shall not have an opacity of more than seventy-five (75) percent.

(d) Fence height is calculated by measuring a fence panel from the average grade at the base to the top of the tallest part of the panel. Fence posts between panels may be taller.

(3) *Prohibited Materials.* The following materials are not permitted.

(a) Chain-link fencing is not permitted in the front or corner side yards in any District.

(b) Plywood, woven plastic, and metal slat fences are not permitted in any yard, unless otherwise stated.

(c) Fences and wall constructed of debris, junk, or waste materials shall not be installed unless such materials have been recycled and reprocessed to resembling new building materials.

(d) Barbed wire and razor wire on fencing shall comply with Chapter 22-14.

*B. Fence and Wall Standards for Residential Uses.* Fences and walls installed on residentially used properties shall adhere to the following requirements.:



- (1) In a front yard, the maximum permitted height is four (4) feet.*
- (2) In a corner side yard, the maximum permitted height is four (4) feet when the fence is located in the build-to zone or within the required setback and within twenty (20) feet from the corner side property line.*
- (3) In side and rear yards, including when fronting an alley, the maximum permitted height is seven (7) feet.*
- (4) Fences may be located on top of walls provided that the overall structure meets the height requirement for its location.*
- (5) Transparent or nearly transparent mesh or similar plastic woven materials are permitted on top of fences or walls or around gardens or planting areas as seasonal garden, orchard, or yard protection from wildlife.*

*C. Fence and Wall Standards for Non-residential Uses. Fences and walls installed on non-residentially used properties shall adhere to the following requirement:*

- (1) Height. Fence height is as follows.
  - (a) In front and corner side yards up to six (6) feet is permitted.*
  - (b) In side and rear yards, up to eight (8) feet is permitted.**
- (2) Clear View Zone. Fences or walls in the front and corner side yards over four (4) feet in height and with opacity of more than seventy-five (75) percent are not permitted in the clear view zones. Refer to Figure 8.3-1 Clear View Zone.*

*D. Screening of Mechanical Equipment and Waste Receptacles. Screening of mechanical equipment and waste receptacles from view of adjacent rights-of-way and uses is required as follows. Refer to Figures 8.5-1 Screening of Mechanical Equipment and 8.5-2 Screening of Waste Receptacles.*

- (1) When a property has three (3) or more street facing yards, the City Planner can determine which may be appropriate for placement of mechanicals or receptacles.*
- (2) All roof mounted or ground mounted mechanical equipment shall be screened from view as follows.
  - (a) Roof Mounted Equipment. Screening shall consist of an opaque screening or parapet wall.*
  - (b) Ground Mounted Equipment. Ground mounted equipment for residential uses over twelve (12) units and non residential uses shall be located and screened as follows:
    - [1] Ground mounted equipment is not permitted in front and corner side yards.*
    - [2] Screening shall consist of fencing, walls, and/or vegetation to create a complete opaque screen,***
- (3) All waste receptacles larger than two (2) cubic yards, and all waste receptacles for nonresidential uses shall be located and screened as follows.*

- (a) Waste receptacles are not permitted in front and corner side yards.
- (b) Screening enclosures shall consist of a fence or wall six (6) to eight (8) feet in height to create a complete opaque screen,
- (c) Screening enclosure shall have an opaque gate and wheel stops when located in a parking area.

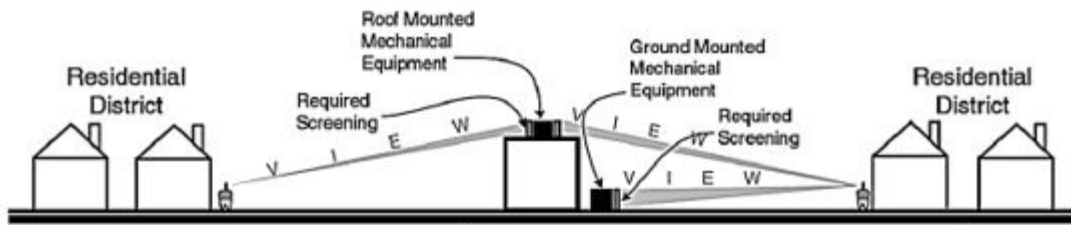


Figure 8.5-1 Screening of Mechanical Equipment

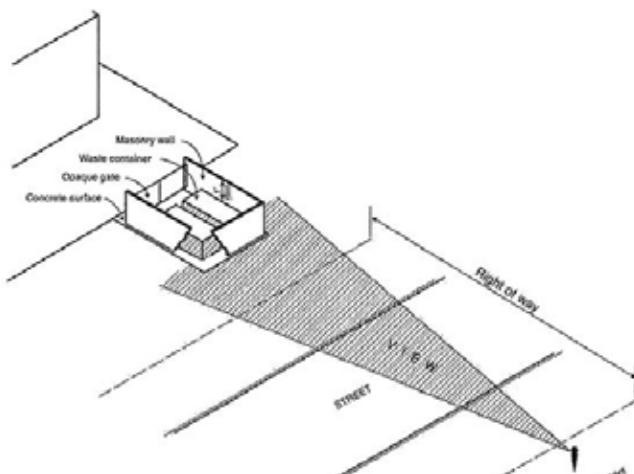


Figure 8.5-2 Screening of Waste Receptacles