CHAPTER 10 LANDSCAPING AND FENCING

Landscaping and Screening

Intent and Purpose

The purpose of this article is to minimize the adverse effects of certain land uses and outdoor activities upon their surroundings and to improve the appearance of parking areas and street frontages within the community. It is further intended to preserve and enhance the aesthetic qualities, character, privacy, and land values within City of Cadillac. The standards of this article are intended to help achieve a number of functional and environmental objectives such as:

Reduce the physical impact between adjacent land uses by requiring complementary landscape treatments and providing a transitional area adjacent to natural areas.

Reduce air temperatures within the community.

Screen headlights to reduce glare and incidental pollution.

Control soil erosion by slowing the effects of erosive winds and water.

Provide reasonable standards to bring developed sites, which existed prior to the adoption of these standards, into compliance with the requirements contained in this article.

Recognize and preserve the aesthetic value of natural areas such as woodlands, wetlands, and floodplains within and adjacent to a development site.

General Landscaping Requirements

Applicability.

Minor Site Plan Approval. All single-family homes or a single duplex building on one lot which require minor site plan approval, shall require the planting of one tree and six (6) plants or shrubs in the front yard. All areas outside of formal planting areas must have a lawn (lawn to be established by the first growing season following occupancy of the dwelling). The zoning administrator may also approve an area to be left in a natural state. A site plan showing the proposed landscaping shall be submitted along with the building permit application and must be approved by the zoning administrator. If an area to be retained in a natural state is being proposed photos of the natural area shall be included with the site plan.

Major Site Plan Approval. All new developments or expansions to existing developments which are required to go through a major site plan review are required to submit a landscape plan with their site plan submittal. This will normally include: multiple-family residential, commercial, institutional, and industrial developments.

Installation. Required landscaping shall be installed before occupancy or establishment of the use, unless the City authorizes occupancy or establishment of the use prior to complete

landscape installation, based on unforeseen weather conditions or the timing of construction as it relates to the planting season.

Zoning Districts. Landscaping requirements shall apply to all developments within all zoning districts

Plant Materials.

Hardiness. All plant material shall be hardy to Wexford County (generally zones 4a and 4b from the USDA Plan Hardiness Zone Map). All plants shall be free of disease and insects.

Suggested Plant Materials:

Evergreen Trees (minimum height of 3 feet)

Douglas Fir*

Fir

Hemlock

Juniper

Pine (red or white)

Spruce*

White Fir*

Narrow Evergreens (minimum height of 3 feet)

Blue Columnar Chinese Juniper

Douglas

Arbor-Vitae

Irish Yew

Juniper

Pyramidal

Red-Cedar

<u>Deciduous Trees</u> (minimum height of 8 feet)

Beech*

Birch

Ginkgo

Hackberry

Honeylocust

Horse Chestnut

Linden

Little Leaf Linden*

Maple (Hard/Sugar)*

Modesto Ash*

Oak*

Red Maple

Sycamore

Sycamore (London Plane)*

Tree-Like Shrubs (minimum height of 3 feet)

Dogwood Flowering Crab Hawthorn Mountain Ash Redbud

Rose of Sharon

Large Deciduous Shrubs (minimum height of 6 feet)

Arrowwood Viburnum*

Cotoneaster

Euonymus

Forsythia

French Hybrid Lilac*

Hazelnut

Lilac

Mock-Orange

Ninebark

Viburnum

Small Shrubs (minimum height of 3 feet)

Burning Bush

Junipers

Spirea

Yews

Recommended for hardiness and maintenance.

Trees Not Permitted

Box Elder

Elms

Poplars

Willows

Horse Chestnut (nut bearing)

Tree of Heaven

Catalpa

Jack Pine Scotch Pine Silver Maple Walnut

Number.

Substitution. No substitution of plant species or sizes shall be allowed after the approval of a site plan unless approved by the Zoning Administrator. The zoning administrator may also approve a minor reduction in the number plants or trees if such deduction does not have affect

Variety. No one (1) tree species can exceed 50 percent of the total proposed.

Rounding. Where this article requires landscaping based on a distance measured in feet along a property boundary and a dimension results in a fraction of the given requirement, the number shall be rounded down to a whole number.

Size.

Minimum Installation Size. When landscaping is required, it shall be installed at the minimum sizes included in Table XX. Tree widths are measured at the diameter at breast height (DBH), which is four and a half (4 $\frac{1}{2}$) feet above the ground.

Table XX Landscaping Minimum Installation Size				
Туре	Minimum Size			
Deciduous Canopy Tree	2.5 inch caliper			
Deciduous Ornamental Tree	2 inch caliper			
Evergreen Tree	6 feet height			
Shrub	24 inches in height			

Credit for Existing Trees. When landscaping is required and existing trees within front yards or designated buffer areas can be preserved, healthy and desirable trees may be counted to satisfy the requirements of this article. Sizes of existing material must meet the requirements for newly installed trees and shrubs to qualify (Table XX). However, larger trees may count for two (2) required trees if the minimum sizes of Table XX are met.

Table XX Credit for Existing Trees						
Туре	Minimum Size	Credits				
Canopy Tree	Eight (8) inches DBH or greater	Two (2)				

Evergreen Tree	12 feet high or greater	Two (2)

Placement and Maintenance.

Setback. Trees and plants shall not be placed closer than four (4) feet to any fence or property line. Where shrubs such as arborvitae are being used for screening purposes, they shall be setback from a property line a minimum of half the distance of the average mature width of the shrub species.

Placement. All landscaped areas shall be arranged to simulate a natural setting. Planting beds should achieve some balance across the site. Tree planting may be grouped for a stronger aesthetic effect. Planting beds shall have a well-maintained edge.

Utilities. All plant material shall be installed in a manner that will not cause damage or interfere with utility lines (above or below ground).

Drainage. All plant material shall be installed in a manner that does not alter or interfere with drainage patterns on-site or on adjacent properties.

Planting Beds. All planting beds shall be mulched, or comparably treated, and those areas not containing landscaping be planted with ground cover.

Berms. The maximum slope for a berm shall be one (1) foot vertical to three (3) feet horizontal with a crest area at least two (2) feet wide. If berms are to be created they must be comprised of soils which can sustain tree and plant life.

Sight Lines. Landscaping shall be installed such that, when mature, it does not obscure traffic signs, fire hydrants, lighting, or obstruct vision for safety of ingress or egress.

Planting Soil. Planting Soil (approximately 1/3 topsoil, 1/3 peat, 1/3 excavation material) shall be placed around all plantings as required and within planting beds to a depth of eight (8) to 12 inches

Topsoil. Topsoil (loam soil free of stones, sticks, weeds, or debris) shall be placed to a depth of four (4) to six (6) inches for lawn areas.

Maintenance. All landscaping shall be maintained in a healthy, neat and orderly state free from refuse and debris.

Required trees and shrubs that are determined by the Zoning Administrator to be diseased, dead, or dying shall be replaced within one (1) growing season.

Lawn. For all development, areas outside of formal planting areas or areas approved to be left in their natural state must be landscaped with lawn.

Performance Guarantee. In cases where required landscaping has to be postponed due to growing season, the Planning Commission may require a performance guarantee to ensure the installation of all required landscaping.

Reductions to Required Landscaping

Circumstances. The approval authority may vary the landscaping requirements of this Article only under one of the following circumstances.

When existing natural or topographic features render compliance with the requirements unnecessarily difficult;

When adherence to the requirements result in the loss of significant natural or cultural features;

Where a variation clearly results in a superior landscape that could not be achieved under the requirements of this article;

When existing vegetation can be preserved to meet the intent of the screening and buffering intent of this article.

Landscape Plans

Landscape Plans. Landscape plans shall be professionally prepared. Landscape plans shall include the following materials:

A separate plan sheet shall be drawn at the same scale as the required site plan. To ensure that landscaping is not affected by, nor interferes with utilities, the plans shall indicate all existing or proposed utilities and easements. At the discretion of the Zoning Administrator, for simple site plans, plantings may be shown directly on site plans.

Provide existing and proposed contours at intervals not to exceed two (2) vertical feet.

Plans shall show all landscaped areas and plants listed in a table by common and scientific name, including quantities, and size at installation. Anticipated mature height shall be indicated and the crown spread shall be shown on the plan with circles indicating anticipated plant size at maturity. Plans shall illustrate the location, spacing, species, and size of proposed plant material.

Text shall accompany the landscape plan that provides calculations for the proposed landscaping and describes how the plan complies with the regulations of this article. Required trees or materials cannot be double-counted.

Existing natural and man-made landscape features and proposed buildings and structures, as required for the overall site plan, shall be clearly indicated.

Landscape plans shall show all existing trees eight (8) inch caliper or greater for deciduous and 12 feet or taller for evergreen, located in portions of the site that will be built upon or otherwise altered. Trees shall be labeled "To Be Removed" or "To Be Saved" on the plan.

Limits of grading shall be indicated and measures to protect existing trees to be saved shall be noted on the plans, including but not limited to protective fencing. When protective fencing is

proposed, plans shall include the following statement: "Protective fencing shall be installed prior to site disturbance." Tree preservation fencing shall be established at the drip line of the tree and a detail of the fence shall be provided.

Provide planting details to ensure proper installation and establishment of proposed plant material.

Identify grass areas and other methods of ground cover.

Include a description of irrigation methods for landscaped areas.

Identify a landscape maintenance program including a statement that all diseased, damaged or dead materials shall be replaced in accordance with standards of this article.

Right-of-way Landscaping

The area between the street paving or curb line and the property line or sidewalk, with the exception of driveways and walkways, shall be used exclusively and maintained as landscaped area with grass, trees, and other plants.

Required Landscaping between Land Uses and Yards Fronting on Public or Private Streets.

Landscape Treatment Requirements

All developments must provide landscaping according to the following chart. The proposed development use is found in the first column. The landscape treatment required on each side of the property is determined by the uses in the remaining columns.

Landscape Treatments

	Industrial	Heavy	Retail	Office	Multiple-	Institutional	Single	Street-	Street
		Commercial			Family		Family	Front	Other
								Yard	Yards
Industrial	Н	Н	С	В	A-1 or A-2	В	A-1 or	D	E
							A-2		
Heavy	Н	Н	F	F	F	F	F	D	E
Commercial									
Retail	Н	Н	None	None	E	Н	G	- 1	- 1
Office	Н	Н	None	Н	E	Н	E	- 1	- 1
Multiple-	Н	Н	Н	Н	Н	Н	E	E	K
Family									
Institutional	Н	Н	Н	Н	E	Н	E	E	К
Single-	None	None	None	None	None	None	None	J	L
Family									

Landscape Treatment Key

A-1 A six-foot privacy fence near the property line with deciduous trees behind the fence with spacing of 40 feet on center

- A-2 Evergreen trees or shrubs planted with spacing whi9ch will achieve full obscurity to a height of 6 feet.

 Trees and shrubs may be planted at ground level or on a berm of up to 3 feet in height.
- B Evergreen trees planted at 40 feet on center.
- C Evergreen or deciduous trees planted 40 feet on center.
- D One evergreen or deciduous tree for every 30 feet of frontage (may be grouped or spaced), plus 10 plants or shrubs.
- E One evergreen or deciduous tree for every 40 feet of frontage (may be grouped or spaced).
- F Evergreen trees spaced at 40 feet on center.
- G A six-foot-high privacy fence or equivalent with plants or shrubs.
- H Required setback areas to be maintained in lawn.
- One evergreen or deciduous tree for every 40 feet of frontage- may be grouped or spaced. Parking lots must be screened by a continuous decorative metal fence, wall or shrubs to a height of between 2.5 and 3 feet.
- J One evergreen or deciduous tree plus six shrubs.
- K One evergreen or deciduous tree for every 50 feet of frontage-may be grouped or spaced.
- L One tree and required setback maintained in lawn.

General Notes:

The zoning administrator may waive some or all of these landscape requirements where unique circumstances exist such as existing development pattern, need to have property ingress/egress from walk doors and overhead doors, tight spaces, existing natural vegetation etc.

Landscape adjacencies will apply whether the adjacent use shares a property line or is located across a public or private right-of-way.

Landscaping for Parking Lots

Purpose. To provide shade and to break up the visual appearance of large paved areas, parking lot canopy trees are required. This requirement does not apply to paved outdoor vehicle sales areas.

Canopy Trees. Off-street parking areas containing five (5) or more parking spaces shall be provided with one (1) canopy tree and 100 square feet of landscaped area per 12 spaces, or fraction thereof.

Location. A minimum of one-half (1/2) of the required trees shall be placed within the interior of the parking area, within islands, peninsulas, or corners. The remaining trees shall be placed within 10 feet surrounding the parking lot.

Dimensions. Islands or peninsulas containing canopy trees shall be a minimum of nine (9) feet wide and shall have no more than one (1) tree per 15 feet of length.

Protection. Landscape areas shall be protected by raised curbs (with or without cuts), parking blocks, or other similar methods to prevent damage. Notwithstanding this requirement, alternative Low Impact Design solutions shall be encouraged, such as areas for stormwater infiltration, with incorporation of methods to prevent damage.

Design and Placement. Trees shall be planted at least three (3) feet from curbs or the edge of pavement.

Additional Landscape Design Considerations

In developing landscape plans, applicants may consider design alternatives that promote environmentally friendly and aesthetically attractive options such as:

- 1. Rain gardens and vegetated bioswales for stormwater management
- 2. Permeable pavement
- 3. Plant buffers along shorelines as natural habitat for wildlife