

ARTICLE IV. CITY-WIDE SITE DESIGN REGULATIONS

SECTION 4.01 UTILITY SERVICE REGULATIONS

The city requires municipal utility service connections for development on any parcel.

SECTION 4.02 INTERSECTION VISIBILITY REGULATIONS

(A) APPLICABILITY

This section's intersection visibility regulations apply to all districts except U-CO and U-DT. They do not apply to structures permitted within the right-of-way by the government, such as traffic signs or utility structures.

(B) VISIBILITY TRIANGLES ESTABLISHED

The city establishes an imaginary visibility triangle at all streets' intersections. No property owner may erect, place, plant, or allow anything to grow taller than 4.0 feet above the elevation of the center point of the street intersection within the defined visibility triangle.

(C) VISIBILITY TRIANGLES DEFINED

The city forms intersection visibility triangles by creating two lines that begin at the point of intersection of the subject lot's street lot lines. These lines extend 10 feet along each street lot line away from the point of intersection. A third connecting line completes the triangle.

SECTION 4.03 SIGN REGULATIONS

(A) PURPOSE AND INTENT

This section provides sign regulations that preserve the right of free speech and expression; avoid excessive levels of visual clutter or distraction that are potentially harmful to traffic and pedestrian safety, property values, business opportunities, and community appearance; and ensure that signs are well-constructed, maintained, and expressive of the identity of individual activities and the community.

(B) COMPLIANCE

No person shall locate, erect, move, reconstruct, extend, enlarge, convert, or structurally alter any sign without conforming to the provisions of this Section and a sign permit, unless exempted from sign permit requirements under (C) or (G).

(C) EXEMPTIONS

The city exempts the following signs from the regulations contained in this Ordinance.

- (1) A sign posted by a governmental agency.
- (2) A sign integrated into or on an automatic teller machine, coin-operated machine, or vending machine.
- (3) Fuel price signs on lots occupied by fueling stations, as required by *WIS. STATS. § 100.18(8)*.
- (4) Street addresses and numbers.
- (5) Murals and other works of art not related by logo, pictorial depiction, or other means to the advertisement of any product or service or the identification of any business. See *SECTION 4.09*.
- (6) Holiday lights and decorations containing no commercial message and displayed during the appropriate time of year.
- (7) Flags, up to a maximum of three per parcel. The length of the hoist side of any flag shall not exceed 20% of the vertical height of the pole. Property owners must fly U.S. flags under protocol established by the U.S. Congress. The City considers any flag that does not meet these requirements a sign subject to the requirements of this Ordinance.

(D) ABANDONED SIGNS

Property owners shall remove all signs, sign messages, and supporting structures, as applicable, when the related use concludes or it is dilapidated beyond repair under the provisions of *WIS. STATS. § 66.0413*.

(E) CONSTRUCTION AND MAINTENANCE

(I) WIND PRESSURE AND DEAD LOAD REQUIREMENTS

Property owners shall design and construct all signs and supporting structures to withstand wind pressure of not less than 40 pounds per square foot of area [1,916.74 Pa] and to receive dead loads as required in the Building Code.

(II) PROTECTION OF THE PUBLIC.

The City permits temporary occupancy of a sidewalk, street, or other public property during the construction, removal, repair, alteration, or maintenance of a sign, provided the applicant ropes off or isolates the temporarily occupied space.

(III) MAINTENANCE

The owner of any sign shall keep the sign and supporting structure in good maintenance and repair, which includes restoring, repainting, or replacing worn or damaged legally existing signage to its original permitted condition. Property owners shall maintain clean, sanitary, and inoffensive conditions, free and clear of all obnoxious substances, rubbish, and weeds.

(IV) CONSTRUCTION

Property owners shall construct all sign elements in materials resistant to rust, rot, or other degradation. They shall also attach all sign elements to support structures or adjacent buildings using methods approved by the Building Inspector.

(V) PROHIBITED ATTACHMENT AREAS

No property owner may attach, fasten, or anchor any sign element to any fire escape, ladder, or standpipe. No sign element may hinder or prevent ingress or egress through any door, window, or fire escape, or hinder or prevent the Fire Department from raising or placing ladders against a building.

(VI) ELECTRICAL PERMITS

Signs with electrical wiring require a separate electrical permit from the Building Inspector. No property owner may serve any sign with electricity via overhead electrical wiring.

(VII) UNMOVABLE BASE

If the Community Development Director approves a sign with external illumination, the property owner shall mount the illumination fixture on a permanent, unmovable base to prevent the fixture from tampering redirection from its permitted configuration.

(F) GENERAL PROVISIONS

(I) SIGNS RESEMBLING OTHER SIGNS

No sign shall resemble, imitate, or approximate the shape, size, form, or color of railroad or traffic signs, signals, or devices, and shall not obstruct or interfere with the effectiveness of railroad or traffic signs, signals, or devices.

(II) OBSTRUCTING SIGNS

No property owner shall locate a sign that obstructs or interferes with traffic visibility, nor illuminate it in a way that causes glare or impairs driver visibility upon public ways.

(III) ILLUMINATED SIGNS

Property owners may illuminate signs provided they, other than public traffic control signs, have no elements that flash, blink, rotate, or pulsate. All illuminated signage must meet [SECTION 5.08](#). The City shall not consider signs that include changeable copy reader boards and Electronic Message Boards (EMBs) flashing or pulsating signs, provided they comply with all other applicable ordinances.

(G) SIGNS PERMITTED WITHOUT A PERMIT

The City permits the following signs without a permit.

(I) SALE, LEASE, OR RENT SIGNAGE

The City permits temporary freestanding or wall signs on properties or buildings for sale, lease, or rent not exceeding 24 square feet in area and nine feet in height. Such signs shall meet the minimum accessory structure setbacks or nine

feet, whichever is less. No person shall place a temporary sign in a public right-of-way. The property owner shall remove all sale, lease, or rent signage within 10 days after selling, leasing, or renting the property.

(II) CONSTRUCTION SIGNAGE

When it is subject to an active building permit, each property may contain up to 32 square feet of temporary signage. Building permit placards and other government-ordered signage do not count towards this allowance.

(III) UNIVERSAL TEMPORARY SIGNAGE

The City permits one temporary freestanding sign, not exceeding six square feet for R-3 uses or 32 square feet for all other uses, provided that no such signs exceed four feet in height or lie within a public right-of-way. The City limits universal temporary signage to no more than 30 days, three times in any calendar year. Common examples of temporary signage include yard sales, congratulatory postings, or notices of gatherings. The City regulates commercial sandwich boards within (H)(IV).

(IV) SMALL PERMANENT WALL SIGNAGE

The City permits small permanent wall signage that is mounted flush against a building and does not exceed two square feet in area.

(V) INTERIOR AND WINDOW SIGNAGE

The City permits interior and inside-window signs for viewing from inside or outside the building, provided that such signs cover or obscure no more than 40% of the window's area.

(VI) RECOGNITION OF HISTORIC STRUCTURES, SITES, AND DISTRICTS

When a historic structure, site, or district has been properly designated, the commission, in cooperation with the property owner, may prepare and erect, at city expense, a suitable plaque declaring that such property is a historic structure, site, or district.

(VII) ELECTION CAMPAIGN SIGNS

As provided in *WIS. STATS. § 12.04*, the City permits election campaign signs subject to the following requirements:

- (1) No person may erect an election campaign sign before the first day of the election campaign period as defined in the Wisconsin Statutes. The property owner shall remove any election campaign sign within 10 days following the election.
- (2) Election campaign signs shall not exceed 11 square feet in area unless the person affixes the sign to a permanent structure, does not extend beyond the perimeter of the structure, and does not obstruct a window, door, fire escape, ventilation shaft, or other area required by the City to remain unobstructed.

- (3) No person shall place any election campaign sign within a public right-of-way nor so close to a pedestrian way as to hinder or endanger safe passage.

(H) SIGNS PERMITTED WITH A PERMIT

Table IV-1 Sign Regulations

Sign Type	Number Allowed	Sign Area (Maximum)	Sign Height (Maximum, feet)	Where Allowed
Ground	1 per street yard	1 square foot per linear foot of lot frontage	10	Street yard
Wall	No maximum so long as the total square feet of signage per façade does not exceed 1 square foot per linear foot of building façade		N/A	Street-facing building façade
Projecting	1 per business	12 square feet	N/A	Within 6 feet of entrance
Wayfinding	No limit	6 square feet	5	No limit
Sandwich Board	1 per building, business, or tenant space as applicable	12 square feet	4	Street yard or public sidewalk within 10 feet of business entrance

(I) GROUND SIGNS

1) SETBACKS

Property owners must set ground signs back from the right-of-way a distance equal to their height.

2) GROUPING OF USES

Property owners may group multiple uses within a single property on a single sign.

(II) WALL SIGNS

1) PROJECTIONS ABOVE THE ROOF LINE

Wall signs may not project above the roof line or eaves.

2) PARKING AREA

A façade that faces a customer parking area counts as a street-facing building façade.

(III) PROJECTING SIGNS

1) EXTENSION DISTANCE

Projecting signs may project no more than six feet into the public right-of-way or beyond the face of the street curb, whichever is less.

2) VERTICAL CLEARANCE

Projecting signs must have a minimum vertical clearance of at least eight feet above the ground surface.

(IV) SANDWICH BOARD SIGNS

Property owners must remove sandwich board signs from any sidewalk by 2:30 AM.

(I) SIGNS PROHIBITED IN ANY DISTRICT

The City prohibits the following signs.

- (1) Abandoned Signs
- (2) A vehicle or trailer used exclusively as a sign or advertising device. No person shall park any such vehicle or trailer on a public right-of-way, public property, or private property to be visible from a public right-of-way. This provision does not prohibit vehicle signs customarily attached, lettered, or painted on a vehicle or trailer to identify the ownership or function of the vehicle.
- (3) Signs whose content violates any laws or regulations, including but not limited to the obscenity provisions of Chapter 944 of the Wisconsin Statutes.
- (4) Signs painted, attached, or affixed to trees or other living vegetation.
- (5) Permanent corrugated plastic signs and other materials intended for interior use.

(J) SIGN MEASUREMENTS

(I) SIGNABLE AREA

The city designates a building's signable area as the facade area up to the roof line, free of windows and doors or major architectural details on which people may display signs. In computing the signable area, a person may utilize any facade that faces or abuts a public right-of-way. Calculations may include parapet walls, but shall exclude door and window openings.

(II) MEASURING SIGN FACE

1) AREA OF COPY

In calculating the area of a sign to determine whether it meets the requirement of this Ordinance, the Community Development Director shall include the sign copy and any border or frame surrounding that copy, but shall exclude supporting posts or foundations from the area calculation.

2) IRREGULAR SHAPES

The Community Development Director shall determine the area of irregularly shaped signs or signs containing two or more detached elements by measuring the area of the smallest regular polygon that will encompass all elements of the sign.

3) MULTI-SIDED SIGNS

The Community Development Director shall use the area of only one side of a multi-sided sign if the sides are less than or equal to 30° from parallel to each other. If the sides are greater than 30° from parallel, the Community Development Director shall count all sign faces towards the total sign area.

(III) MEASURING SIGN HEIGHT

The Community Development Director shall calculate sign height by measuring the vertical distance from the normal grade at the base to the highest point of the sign structure. The Community Development Director shall set the normal grade as the lowest of:

- (1) The existing grade before construction;
- (2) The newly established grade after construction, excluding any filling, berms, mounds, or excavating solely for locating the sign;
- (3) The average elevation of the property within 100 feet of the sign location; and
- (4) The average between the sign elevation and the centerline elevation of an adjacent public right-of-way within 100 feet of the sign location.

SECTION 4.04 ARCHITECTURAL REGULATIONS

(A) PURPOSE AND SCOPE

The city intends for this section to implement the urban design recommendations of the comprehensive plan by preserving and enhancing the historical and visual aesthetic qualities of the city, and by achieving a consistent, visually pleasing image for various portions of the city. This section governs the site design and appearance of development within the city, ensuring consistency with sound land use, urban design, and economic development principles. These regulations apply to all uses except R-3 uses.

(B) BUILDING FAÇADES

(I) HORIZONTAL EMPHASIS

Architects may combine building wall materials on each façade only horizontally, with the heavier materials placed below the lighter ones. Architects may apply materials vertically to delineate corners, differentiate tenants, monument entrances, or other similar limited applications if the total square feet of the vertical material on upper stories does not exceed the total linear feet of building façade.

(II) REQUIRED MATERIALS

Architects must utilize the following materials to finish an exterior façade: brick masonry; stone or cast stone; concrete; cementitious siding; wood siding; vinyl siding, in Suburban districts only; glass, not including spandrel or covered glass products which prohibit all light from entering the building; architectural metal panels; or stucco, not including EIFS or other faux stucco products.

(III) ACCESSORY BUILDING MATCHING

Accessory buildings visible from a public right-of-way must match the architectural style and major building materials of the principal building.

(IV) URBAN DISTRICT DESIGN REGULATIONS

Architects shall design buildings in urban districts to match the historical and aesthetic design of urban buildings by incorporating features such as recessed door openings, first-floor glass storefronts with knee walls, dimensional fenestrations and finishes, cornices, transom areas, and proportional upper-story windows.

(C) ALTERNATIVE COMPLIANCE

Architects may apply for alternative compliance from the regulations of this section per [SECTION 4.09](#).

SECTION 4.05 HISTORIC PRESERVATION REGULATIONS

(A) PURPOSE AND INTENT

The city declares that the protection, enhancement, perpetuation, and use of improvements or sites of special character, architectural interest, historic interest, or value is a public necessity. The city requires it in the interest of the people's health, prosperity, safety, and welfare. This section's purpose includes the protection, enhancement, and preservation of such improvements, sites, and districts which represent or reflect elements of the city's cultural, social, economic, political, and architectural history; safeguarding the city's historic, prehistoric, and cultural heritage, as embodied and reflected in such historic structures, sites, and districts; stabilizing and improving property values; enhancing the visual and aesthetic character of the city; and protecting and enhancing the city's attractions to residents, tourists, and visitors, and serve as a support and stimulus to business industry.

(B) HISTORIC STRUCTURE, HISTORIC SITE, AND HISTORIC DISTRICT DESIGNATION CRITERIA

The city may designate a historic structure, historic site, or historic district on any site, natural or improved, including any building, improvement, or structure located thereon, or any area of particular historic architectural, archeological, or cultural significance to the city, such as historic structures, sites, or districts that exemplify or reflect the broad cultural, political, economic or social history of the nation, state or community; are identified with historic

personages or with important events in national, state or local history; embody the distinguishing characteristics of an architectural type or specimen inherently valuable for a study of a period, style, method of construction, or of indigenous materials or craftsmanship; represent the notable work of a master builder, designer, or architect who influenced their age; or yielded, or may be likely to yield, information important to prehistory or history.

(C) CERTIFICATE OF APPROPRIATENESS REQUIRED

No person shall reconstruct, alter, demolish, or improve any exterior part of a historic structure, site, or district unless the Historic Preservation Commission grants a Certificate of Appropriateness for that work. The building inspector shall not permit such work without a Certificate of Appropriateness.

(D) ORDINARY MAINTENANCE AND REPAIRS

People may undertake ordinary maintenance and repairs without a Certificate of Appropriateness provided that the work repairs existing features of a historic structure or site or replaces elements of a structure with pieces identical in appearance, does not change the exterior appearance of the structure or site, and does not require the issuance of a building permit.

SECTION 4.06 PARKING AND ACCESS REGULATIONS

(A) PURPOSE

The regulations of this section help protect the public health, safety, and general welfare by promoting economically viable and beneficial land use and providing flexible methods of responding to the transportation and access demands of various land uses in different areas of the City.

(B) APPLICABILITY

The regulations of this section apply to all zoning districts and uses, including new uses and development, changes of use, and building enlargements or enhancements.

(C) BICYCLE PARKING

(I) GENERAL DESIGN

1) LOCATION

Property owners must locate bicycle parking spaces in areas readily visible by the public or building users, except for long-term spaces in secure areas accessible only to employees, staff, or residents.

2) ACCESSIBILITY

Property owners must locate bicycle parking spaces in areas accessible without climbing stairs, going up or down a slope of more than 12%, and via a route on the property designed to minimize conflicts with motor vehicles and pedestrians.

3) CLEARANCE

Property owners must locate bicycle parking spaces in areas with at least two feet of clearance surrounding the spaces.

4) SIZE

Property owners must provide bicycle parking spaces with a minimum dimensioned area of two feet wide by six feet long, with at least seven feet of overhead clearance.

(II) SHORT-TERM BICYCLE PARKING

1) AMOUNT

All uses that employ or house more than 100 people on the same parcel shall provide two short-term bicycle parking spaces plus one additional space for every 20,000 square feet of building floor area.

2) PUBLIC PARKING CREDIT

Property owners shall count existing publicly accessible bicycle parking spaces within 500 feet of the property towards the mandatory parking ratios.

3) LOCATION

Property owners must locate short-term bicycle parking spaces on private property within 75 feet of a building entrance accessible to the public. The Community Development Director may approve locations within the public right-of-way.

(D) SIDEWALKS

Property owners must provide pedestrian accommodations, such as sidewalks or multi-use pathways, along all sides abutting a public street unless specifically prohibited, in writing, by the Wisconsin Department of Transportation or Sheboygan County on roadways under their jurisdiction.

(E) INTERNAL PEDESTRIAN CIRCULATION

Property owners must provide an internal circulation system for pedestrian and nonmotorized travel on all lots except those solely occupied by R-3 uses.

(I) CONNECTION TO PUBLIC SIDEWALKS

The internal pedestrian circulation system must connect the main building entrance to all sidewalks along street frontages abutting the site. Required connections must follow a direct route and not involve significant out-of-direction travel.

(II) INTERNAL CONNECTIONS

The internal pedestrian circulation system must connect all primary buildings on the site and provide connections to other areas used by pedestrians and nonmotorized travel, such as parking areas, bicycle parking, usable open spaces, recreation areas, and similar amenity features.

(III) DESIGN

1) ADA-COMPLIANCE

The internal pedestrian circulation system must comply with The Americans with Disabilities Act.

2) DRIVE-AISLE CROSSINGS

Property owners must clearly differentiate when the internal pedestrian circulation system crosses drive aisles by elevation changes, different paving material, or other equally effective methods of safely accommodating nonmotorized travel, as approved by the Community Development Director. Striping alone does not meet this requirement.

3) PARALLEL DESIGN

Property owners must raise the internal pedestrian circulation system at least six inches above the vehicle travel lane surface when it is parallel and adjacent to a motor vehicle travel lane. Alternatively, property owners may separate the system from the vehicle travel lane by a raised curb, bollards, landscaping, or another physical barrier.

(F) ACCESSIBLE PARKING

Property owners must provide accessible parking facilities for persons with disabilities per all applicable state and federal regulations.

(G) USE OF MOTOR VEHICLE PARKING AREAS

Property owners may only park licensed, operable motor vehicles in outdoor off-street motor vehicle parking spaces. They may not work on any motor in any outdoor motor vehicle parking space. They may not use any motor vehicle parking spaces for storing, displaying, or selling any goods or materials unless specifically approved by the Community Development Director.

(H) PARKING AREA RATIOS

(I) AMOUNT

Property owners shall provide motor vehicle parking spaces in accordance with the following ratios.

Table IV-2 Minimum Vehicle Parking Spaces Required

Uses	Minimum Parking Spaces Required
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R Uses	1.0 per unit
B, E, F, H, I, S Uses	1.0 per 1,000 square feet of building area
A, M Uses	2.0 per 1,000 square feet of building area
H0, 0, U Uses	No minimum

(II) PARKING CALCULATIONS

1) ON-STREET PARKING CREDIT

Property owners shall count abutting on-street parking spaces towards the mandatory parking ratios.

2) LONG-TERM BICYCLE PARKING CREDIT

Property owners shall count each six long-term bicycle parking spaces as one motor vehicle parking space towards the mandatory parking ratios.

3) PUBLIC PARKING CREDIT

Property owners shall subtract one mandatory parking space per every four spaces provided in a public parking lot or garage within 1,000 feet of the subject property.

4) OFF-SITE PARKING

Property owners may count private off-site parking spaces owned or rented by the property owner towards the mandatory parking requirements so long as the private parking lies within 1,000 feet of the subject property, is in a zone that permits 0-3 uses, and provides the Community Development Director legal proof authorizing use of the off-site parking spaces.

5) SHARED PARKING

On parcels of land with multiple uses, the property owner shall divide the sum of the total for each use required in (i) by the following ratio to calculate the minimum number of required parking spaces.

Table IV-3 Shared Parking Ratios

	R Uses	B, E, F, H, I, S Uses	A, M Uses	H0, 0, U Uses
R Uses	1.0	1.6	1.4	1.0
B, E, F, H, I, S Uses	1.6	1.0	1.4	1.0
A, M Uses	1.4	1.4	1.0	1.0
H0, 0, U Uses	1.0	1.0	1.0	1.0

(I) PARKING AREA LAYOUT AND DESIGN

Property owners shall design and lay out all off-street motor vehicle parking areas and drive aisles per this subsection.

(I) LOCATION

Property owners shall place all off-street motor vehicle parking areas behind buildings where possible. The City prohibits parking lots larger than 12 spaces between buildings and the street. Where alley access is impossible, property owners may place parking lots to the side of the primary structure.

(II) INGRESS AND EGRESS

Property owners must design all areas serving all uses, except R-3 uses on a local street, to allow vehicles to enter and exit streets and cross public sidewalks in a forward motion.

(III) ALLEY ACCESS

Property owners shall access all parking areas from an alley if the lot has legal access to an alley. Where alley access is impossible, property owners shall prioritize vehicular access to sites from local streets.

(IV) PARKING DIMENSIONS

Property owners shall design all parking spaces to the following dimensions.

Table IV-4: Parking Stall Dimensions

Stall Type	Width (ft)	Length (ft)	Aisle Width (ft)
Standard 90°	9	18	20 (one-way) 24 (two-way)
Angled 45°, 60°	9	18	16 (one-way)
Compact	7.5	15	See Standard or Angled
Accessible (Standard)	8 + 5 side aisle	18	See Standard or Angled
Accessible (Van)	11 + 5 side aisle	18	See Standard or Angled
Parallel	8 measured from curb edge	22	10 (one-way) 20 (two-way)
Oversized	12	30	See Standard or Angled

(V) OVERSIZED AND COMPACT SPACES

Property owners may provide oversized or compact spaces with modified sizes as approved by the Community Development Director, so long as the total number of spaces is not greater than 50% of the total number of off-street motor vehicle parking spaces.

(VI) DRIVEWAY WIDTH

The maximum width of driveways at the point of connection to the street is 24 feet for two-way travel and 12 feet for one-way travel.

(VII) NUMBER OF ACCESS POINTS

The City restricts each property to one vehicular access point except where, in the written opinion of a licensed traffic engineer or the Fire Chief, life safety requires separate ingress and egress or when the use meets the threshold to require a traffic impact analysis per [SECTION 4.06\(L\)](#).

(VIII) VERTICAL CLEARANCE

Property owners shall provide at least seven feet of vertical clearance above all parking spaces.

(IX) SURFACING

Property owners shall surface all areas with asphalt, concrete, or other hard, dust-free surfaces approved by the Community Development Director.

(X) TANDEM AND STACKED PARKING

Property owners may utilize tandem or stacked parking areas when they assign those spaces to the same dwelling unit.

(XI) CURBS AND BARRIERS

Property owners must provide six-inch curbs and gutters, wheel stops, or other physical barriers for all areas abutting setbacks, landscaped areas, and adjoining property lines. They shall locate all barriers parallel to the protected area and perpendicular to the parking angle at least two feet from the edge of the protected area.

(J) R USE HEAVY VEHICLE PARKING LIMITATIONS

Property owners may only park vehicles over 14,000 pounds gross vehicle weight rating on lots occupied by R uses in a completely enclosed building.

(K) STACKING SPACES

(I) NUMBER REQUIRED

For uses including drive-throughs, property owners must provide at least five stacking spaces before the first service window, one stacking space at each service window and two stacking spaces after the last window.

(II) DIMENSIONS

Stacking spaces must meet the Parallel dimensions of [\(I\)\(IV\)](#).

(III) BYPASS LANE

Drive-throughs must include a minimum nine-foot-wide bypass lane to allow vehicles to circumvent or leave the stacking lane without waiting for other queued vehicles to exit.

(IV) LOCATION

Property owners must enclose all stacking spaces completely within the subject property. They may not locate them within areas that interfere with access to parking areas, areas that provide ingress and egress to the street, or between the principal building and the street.

(V) PEDESTRIAN ACCESS

Property owners shall design stacking lanes to not obstruct any sidewalk or internal pedestrian circulation system.

(L) TRAFFIC IMPACT ANALYSES

Property owners must provide a traffic impact analysis prepared by a licensed traffic engineer for any proposed development that includes a drive-through lane or would result in more than 100 trips during peak traffic hours (PHT). The City shall base these counts on the latest Institute of Transportation Engineers (ITE) Trip Generation Manual version.

(M) LOADING AREAS

Property owners must locate all loading areas designed to receive deliveries, materials, or merchandise on private property unless approved by the Community Development Director.

(I) ALTERNATIVE COMPLIANCE

Property owners may apply for alternative compliance from the regulations of this section per [SECTION 4.10](#).

SECTION 4.07 LANDSCAPING AND SCREENING REGULATIONS

(A) LANDSCAPING

(I) PURPOSE

The City intends the landscaping and screening sections of this section to maintain and enhance the City's appearance; mitigate adverse impacts of different abutting uses; reduce noise and glare; improve air quality; reduce the negative impacts of stormwater runoff; moderate heat; encourage the preservation of existing landscaping elements; and reestablish plant species native to the City.

(II) APPLICABILITY

These regulations apply to all zones when a property owner adds a new, expands and existing, or reconstructs an existing vehicular use area, outdoor storage area, work area, or trash, recycling, and mechanical equipment area. Reconstruction expressly includes repaving activities that remove and replace; apply an additional surface course; or pulverize and stabilize asphalt paved areas.

(III) EXEMPT USES

The City exempts landscaping areas related to lots occupied by only R-3 uses from these landscaping requirements.

(IV) VEHICULAR USE AREAS

1) STREET FRONTAGE SCREENING

Property owners must screen street frontages using one of the options in [TABLE IV-5](#) from vehicular use areas located outside of a public right-of-way and within 50 feet [15.2 m] of any publicly accessible right-of-way, trail, or pedestrian walkway. The requirements do not apply if there are buildings or other site features that effectively block views of such vehicular use areas.

Table IV-5: Vehicular Use Area Street Frontage Screening Options

Regulation	Option A	Option B	Option C
Minimum width of landscaped area (ft)	10	5	-
Minimum number of Trees and Shrubs per 50 ft	2	2	1
Flowers and Grasses	Remaining landscaped area		
Screening required	-	Ornamental metal fence	Masonry wall
Screening height	Must install and maintain maximum allowed per (b)(ii)1		

2) SIDE AND REAR SCREENING

Property owners must screen side and rear property lines using one of the options of [TABLE IV-6](#) from vehicular use areas located within 25 feet of the side or rear of an adjacent property line. The requirements do not apply if there are buildings or other site features that effectively block views of such vehicular use areas.

Table IV-6: Vehicular Use Area Side and Rear Screening Options

Regulation	Option A	Option B	Option C
Minimum width of landscaped area (ft)	10	5	-
Minimum number of Trees and Shrubs per 50 feet	10	5	-
Flowers and Grasses	Remaining landscaped area		
Screening required	-	Opaque fence or wall	Masonry wall
Screening height	Must install and maintain maximum allowed per (b)(ii)1		

(V) OUTDOOR STORAGE AND WORK AREAS

Property owners must screen outdoor storage and work areas using one of the options of **TABLE IV-7** when such areas are visible from any publicly accessible right-of-way, trail, pedestrian walkway, or adjacent property. The requirements do not apply if there are buildings or other site features that effectively block views of such outdoor storage and work areas.

Table IV-7: Outdoor Storage and Work Area Screening Options

Regulation	Option A	Option B	Option C
Minimum width of landscaped area (ft)	20	10	5
Minimum number of Trees and Shrubs per 50 feet	10	5	0
Flowers and Grasses	Remaining landscaped area		
Screening required	-	Opaque fence or wall	Masonry wall
Screening height (ft)	Must install and maintain maximum allowed per (b)(ii)1		

(VI) TRASH, RECYCLING, AND MECHANICAL EQUIPMENT AREAS

A) WHEN REQUIRED

Property owners must screen trash, recycling, and mechanical equipment areas using one of the options of **TABLE IV-8** that are visible from any publicly accessible right-of-way, trail, pedestrian walkway, or adjacent property. The requirements do not apply if there are buildings or other site features that effectively block views of such trash, recycling, or mechanical equipment areas.

Table IV-8: Trash, Recycling, and Mechanical Equipment Area Screening Options

Regulation	Option A	Option B	Option C
Minimum width of landscaped area (ft)	10	5	-
Minimum number of Trees and Shrubs per 50 linear feet	10	5	-
Flowers and Grasses	Remaining landscaped area		
Screening required	-	Opaque fence or wall	Masonry wall
Screening height (ft)	Must install and maintain maximum allowed per (b)(ii)1		

(VII) INTERIOR PARKING LOT LANDSCAPING

1) TREES AND LANDSCAPE AREAS REQUIRED

Property owners must install at least one canopy tree and 100 ft² of landscape area for every four motor vehicle parking spaces or fraction thereof. Trees and

landscaped areas used to meet the screening requirements of this section count towards the interior parking lot landscaping requirements.

2) LOCATION AND DISTRIBUTION

Property owners must locate all trees, landscaped areas, and green infrastructure used to meet the requirements of this section within 50 ft of the subject parking area. No portion of a parking area may lie more than 100 ft from a landscaped area or tree.

(VIII) LANDSCAPE AND SCREENING ELEMENTS

1) LANDSCAPED AREAS

Property owners must plant landscaped areas only with the plants listed under [13\)](#).

2) MULCH AND ROCK

Property owners may not fill landscaped areas with more than 25% mulch or decorative rock.

3) LAWNS

No mandatory landscaped area may contain non-native lawn grasses.

4) SEED MIXES

Property owners may utilize seed mixes containing species listed under [13\)](#); however, those mixes may not contain species not listed.

5) NATIVE HYBRIDS

The Community Development Director may approve hybrids of listed native species; but may not approve hybrids of native and non-native species except in circumstances of hybrids to provide disease resistance and only with documentation from a licensed landscape architect or arborist.

6) MANDATORY TREES

The trees listed as mandatory were the predominant species within the City under pre-settlement conditions. Property owners must utilize the species listed as mandatory under [13\)](#) for at least 50% of all trees and shrubs required by this section.

7) PLANTING DIVERSITY

No single species may comprise more than 30% of the plantings used to meet the requirements of this section.

8) PLANTING SOIL

Landscaped areas must have healthy noncompact planting soil at least 1.5 ft deep.

9) BERMS

Property owners may use berms in addition to the landscaping and screening elements required by this section, but may not use them in place of any of the required elements.

10) LOCATION WITH FENCES AND WALLS

Property owners must place any fence or wall in the interior-most area of the required landscaping area so that the adjacent property or public views landscaping and then fencing.

11) LOCATION WITH STRUCTURES

Property owners may not place any landscaping elements within five feet of any structure unless otherwise specifically required by this section.

12) PLANT SIZE AT TIME OF PLANTING

Plant type	Minimum Container Size at Time of Planting (gal)	Minimum Height at Time of Planting (ft)	Minimum Caliper Size at Time of Planting (in)
Flowers and grasses	1	1	-
Low shrubs	3	1.5	-
Tall shrubs	3	4	-
Deciduous trees	-	6	2.5
Coniferous trees	-	6	-

13) NATIVE SPECIES LIST

See [Section 5.01](#).

(IX) INSTALLATION AND MAINTENANCE

1) INSTALLATION

Property owners must install all landscaping and screening elements in accordance with an approved landscaping plan and sound nursery practices.

2) PROTECTION FROM VEHICLES

Property owners must protect all landscaped areas perpendicular to vehicular use areas with curbs or wheel stops.

3) ENCROACHMENT INTO RIGHT-OF-WAY

No property owner may place landscaping elements within any public right-of-way or public property without the express permission from the Common Council.

4) MAINTENANCE

Property owners must continuously maintain all landscape areas including necessary watering; weeding; pruning; pest control; litter and debris cleanup; and replacement of dead, diseased, or damaged plant material.

(X) LANDSCAPE PLANS

Property owners shall submit any change to a property's landscaping triggered by this section within a landscaping plan stamped by a landscape architect licensed to practice in the State of Wisconsin. The plan shall describe each individual landscape area and the calculations used for each area to meet the requirements of this section. The plan shall also include a species list, installation instructions, and maintenance standards prescribed by the landscape architect of record.

(XI) ALTERNATIVE COMPLIANCE

Landscape architects may apply for alternative compliance from the regulations of this section per [SECTION 4.09](#).

(B) SCREENING

These regulations apply to all fences, walls, and similar structures intended to screen property or limit access.

(I) PROHIBITED LOCATIONS

Property owners may build screening structures up to the property line, but they may not encroach upon public property or rights-of-way.

(II) GENERAL REGULATIONS

1) MAXIMUM HEIGHT

Yard			Maximum height (ft)	
Zone	[Insert final residentially-focused zones]		[Insert final commercial and industrial zones]	
Street	4		4	
Side and Rear	6		9	

2) SIDES

Property owners shall erect fences so the more aesthetically pleasing side faces the adjacent neighbor, public right-of-way, or City-approved private drive.

(III) MATERIALS

1) REQUIRED MATERIALS

Property owners may construct screening structures of masonry, stone, metal, wood, vinyl, composite material, chain link, or gabions filled with stone material. The Community Development Director may approve the use of alternative

materials provided that the materials are equivalent in suitability, strength, and durability.

A) MASONRY

Property owners must construct masonry walls of attractive, high-quality, durable-finish materials such as brick, cast stone, decorative block, or stucco over standard concrete masonry blocks. The color, texture, and type of materials used on masonry walls must match or complement the materials used on the principal building on the subject lot.

B) ORNAMENTAL METAL FENCE

Ornamental metal fences must have decorative metal pickets at least 0.75 in wide spaced no farther apart than an average six in on center. Ornamental metal fences may include masonry, stone, or wood piers.

C) OPAQUE FENCES

Opaque fences shall completely obscure the view of the screened area. Property owners may construct an opaque fence of masonry, stone, metal, wood, vinyl or composite material, gabions filled with stone material, chain link with privacy slats, or a combination of such materials.

2) HAZARDOUS MATERIALS

No property owner may install any electrified, barbed wire, razor wire, or any other type of material designed to cause bodily harm except in an [insert final industrial zone designations] zone.

3) BATTERY-POWERED, ALARMED ELECTRIC SECURITY FENCES

Property owners may install battery-powered, alarmed electric security fences per *WIS. STATS. § 66.0440*.

(IV) HEIGHT MEASUREMENT

The City measures the height of screening structures as the vertical distance from the average finished grade on the inside of the fence to the top of the fence or wall. The City measures fences atop walls or landscape features from the average finished grade at the base of the wall or landscape feature. Fence posts, supporting structures, and ornamentation may extend up to 1.0 ft above the maximum fence height limits.

(V) ALTERNATIVE COMPLIANCE

Architects may apply for alternative compliance from the regulations of this section per *SECTION 4.10*.

SECTION 4.08 OUTDOOR LIGHTING REGULATIONS

(A) PREFACE

(I) PURPOSE

The City adopted these outdoor lighting regulations to protect the health and welfare of all residents within the City, enhance its character and quality of life, prevent inappropriate and poorly installed outdoor lighting, reduce lighting conflicts between property owners, prevent the increase of potentially harmful sky glow, and preserve the naturally dark sky for the benefit of residents, visitors, wildlife, and the environment.

(II) APPLICABILITY

This section applies to all sources of outdoor lighting installed or replaced within the City after this ordinance's enactment date. This includes, newly permitted development and construction projects involving homes, dwellings, roadways, public right-of-way, signage, billboards, buildings, facilities, properties, landscape, parking lots, hardscape, non-habitable structures, and monuments.

Existing outdoor lighting lawfully installed prior to this ordinance's enactment date not meeting its requirements are legal and repairable but non-conforming. Property owners may continue to use and maintain all non-conforming Luminaires until one of the following occurs:

- (1) A determination by the Community Development Director that an outdoor light source constitutes a hazard to public safety or constitutes a nuisance;
- (2) The property is vacant with no continuous underlying use for more than one year;
- (3) The property owner voluntarily replaces the luminaires; or
- (4) The property owner modifies the underlying site or structure beyond normal maintenance activities.

(III) EXEMPTIONS

1) LAWFUL

Lighting requirements mandated by a legal jurisdiction with broader authority (e.g., federal or state) than the City, including but not limited to:

- (1) Navigational lighting systems regulated by the Federal Aviation Administration and the US Coast Guard.
- (2) Any contradictory building code or Department of Transportation illumination requirements.
- (3) Lighting for worker safety as mandated by the Occupational Safety and Health Administration.

2) SAFETY

Luminaires installed for the benefit of public safety, including but not limited to:

- (1) Security Lighting as determined by the Community Development Director.

- (2) Temporary lighting used by authorized first responders during emergency procedures.

3) HISTORIC

Luminaires replicating historical character and lighting effect protected by historical registration, or otherwise permitted by an authority having jurisdiction.

4) PERMITTED

Temporary and semi-permanent lighting approved by municipal permit for special events, festivals, and community benefit, provided the permitted lighting still meets light trespass requirements and does not add further disruption to ecological migration or habitat.

(IV) PROHIBITIONS

- (1) The City prohibits any lighting that distracts or disables the vision of a motor vehicle operator (e.g., excessively bright, or rapid blinking, flashing, and/or motion video) or contributes to traffic control confusion (e.g., sources resembling or imitating traffic or railroad signals).
- (2) Beacons and searchlights, except for emergency use by authorized first responders.

(B) OUTDOOR LIGHTING REQUIREMENTS

(I) GENERAL

1) DISTRIBUTION

Unless otherwise specified in this ordinance, property owners shall fully shield all luminaires emitting more than 1,000 lumens. Those luminaires shall emit no more than 5% of their total lumen output above 80 degrees from nadir. Exceptions are:

- (1) Festoon string lighting where no individual lamp emits more than 50 lumens, and the lumen density of the string is no greater than 25 lumens per foot.

2) TRESPASS

Unless otherwise specified in this ordinance, light trespass shall meet the following:

- (1) Luminaire light sources shall not be visible from federal or state designated wilderness, natural area, habitat, or reserves, and light trespass shall measure no greater than 0.1 lux.
- (2) Light trespass onto waters of the United States or the State of Wisconsin shall measure no greater than 1 lux.
- (3) Light trespass onto residential use property shall measure no greater than 1 lux.

- (4) Light trespass onto all other property and public rights-of-way shall measure no greater than 3 lux.

3) CURFEW

Property owners shall extinguish non-essential outdoor lighting, including but not limited to landscape and decorative lighting elements, during nighttime hours.

4) CONTROLS

Luminaires activated by motion detection shall automatically turn off or return to their dimmed state no more than five minutes after they no longer detect activity.

5) SPECTRUM

Unless otherwise specified in this ordinance, the maximum allowable correlated color temperature (CCT) for outdoor luminaires is 3000 K.

(II) SPORTS LIGHTING

The following requirements supplement (i) and shall further regulate outdoor lighting for sports and recreational areas:

- (1) 85% of the lumens generated by sports lighting luminaires shall be confined to within 33 feet or one pole height, whichever is greater, of the playing field or the spectator track or bleacher area, whichever is greater.
- (2) Lighting installations for aerial sports are allowed a maximum of 8% of the total lumen output to be emitted above 80 degrees from nadir.
- (3) When the recommended sports field light level is higher than 100 lux, installed lighting shall not exceed 10% more than the Light Level recommended by the applicable ANSI/IES lighting standard, or a state approved alternate.
- (4) The maximum CCT for outdoor sports lighting should be the lowest possible for the sport, class of play, and viewing audience as defined by the relevant ANSI/IES lighting standard, or state approved alternative, but never exceeding 5,700 K.
- (5) The maximum luminous intensity from any luminaire lighting a sports field shall not exceed 10,000 candelas (cd) as measured along a perimeter that is 150 feet from the edge of the field, at 5 feet above grade.

(III) ILLUMINATED SIGNAGE

The following requirements supplement (i) and shall further regulate outdoor illuminated signage.

- (1) On-premise signage larger than 20 square feet may only be illuminated while the associated business or activity is taking place, and must otherwise extinguish during nighttime hours.
- (2) Illumination for off-premise signage (e.g., advertising billboard) is prohibited.

- (3) The maximum luminous or illuminated surface area of an individual sign must not exceed 300 square feet.
- (4) Static signage may be illuminated externally, internally, or backlit, provided the light source itself is not directly visible from the public right-of-way or adjacent property.
- (5) External illumination of static signage shall be mounted above the sign and directed downward.
- (6) Illuminated signs shall not exceed a luminance of 100 nits (100 candelas per square meter, cd/m²).
- (7) Electronic signs shall have automatic dimming controls to properly adjust the sign luminance according to ambient conditions, including nighttime. Should an electronic problem prevent normal function, the sign shall default to night-mode or remain unlit.
- (8) Excluding trademark logos, electronic messages shall be positive-contrast (i.e., light-colored fonts and features on a dark background) and shall contain no more than 35% white area within the displayed image.
- (9) Unless otherwise allowed by law or specified within this section, electronic messages shall not change more often than every 8 seconds. Video and motion effects are prohibited.

(C) ADMINISTRATIVE REQUIREMENTS

(I) PERMIT APPLICATION

1) SUBMITTAL

Any site plan submitted for review or any building permit application must contain outdoor lighting plans meeting the following requirements.

A) SCHEDULE METHOD

For renovation and residential use lighting, the outdoor lighting plans shall include a spreadsheet listing the luminaire identifications (i.e., manufacturer, model number, type), luminaire quantities, installation locations, and lumen outputs for each.

B) CALCULATION METHOD

For all project types, but required for sports lighting, the applicant shall submit an outdoor lighting plan, prepared by a certified lighting professional or licensed professional engineer, using lighting design software and luminaire .ies files. This outdoor lighting plan shall include:

- (1) Luminaire identification (model number), installation locations, mounting heights, targeted directions, buildings, and other physical objects within the site that could affect the lighting outcome.
- (2) Site plan and illuminance calculation plots demonstrating conformance with this ordinance, including the sports lighting luminous-intensity light trespass limit.

(A) PURPOSE

This sections purpose is to encourage and regulate the installation of public art to enhance the character and enrich the civic life of the city. The city acknowledges the complex interplay between art, culture, and first-amendment rights, and specifically encourages public artwork intended to bring the community together through beautifying public spaces.

(B) APPLICABILITY

This section applies to all public art within the City, whether installed on public or private property. This section does not relate to installations with commercial messages intended for advertisement regulated by [SECTION 4.03](#).

(C) NO ENDORSEMENT

The city does not endorse the content of any public art.

(D) PERMIT REQUIRED

No person shall install any public art without first obtaining approval from the Plan Commission and a permit from the Community Development Director under this section.

(E) PERMIT APPLICATION MATERIALS

An applicant for a public art permit shall submit the following materials with their application:

- (1) The applicant's name, contact information, studio or place of business, and examples of previous work.
- (2) A site plan showing the location of the proposed artwork with adjacent property lines, buildings, and rights-of-way.
- (3) Graphic representations of the proposed artwork that denote materials, dimensions, and colors.
- (4) A written description of the artwork, including its title, fabrication methods, and thematic intent.
- (5) A written statement of how the proposed artwork complies with the review criteria.
- (6) Evidence of property owner consent.
- (7) Structural documentation by a licensed engineer for any structural or elevated artworks.
- (8) An estimated budget for the fabrication of the artwork.
- (9) A schedule of installation.
- (10) A maintenance plan.

(F) REVIEW CRITERIA

(I) COMPATIBILITY

The proposed artwork should complement the installation site and not dominate the adjacent architecture or streetscape.

(II) SAFETY

The proposed artwork must not create safety hazards, block entrances or pedestrian pathways, create blind spots, or cause any other obstruction to normal public travel.

(III) AESTHETIC VALUE

The proposed artwork should reflect community values, cultural heritage, history, and local identity.

(IV) OUTDOOR LIGHTING

The artwork shall comply with all outdoor lighting regulations of [SECTION 4.08](#).

(V) CONTENT RESTRICTIONS

The proposed artwork may not contain obscene, pornographic, illicit, defamatory, libelous, or otherwise unlawful imagery contrary to city, state, or federal law. The artwork may not contain advertising, corporate logos, or explicit commercial branding, except for sponsor recognition no larger than two square feet.

(VI) DURABILITY

The proposed artwork must be able to withstand weathering, including corrosion, fire safety, vandalism resistance, and structural stability for its intended duration.

SECTION 4.10 ALTERNATIVE COMPLIANCE REGULATIONS

(A) PURPOSE

To accommodate creativity in architectural design and to allow for flexibility in addressing site-specific challenges, the Community Development Director may approve alternative compliance plans sealed by an architect, landscape architect, or professional engineer licensed to practice in the State of Wisconsin.

(B) LIMITATIONS

The Community Development Director may only approve alternative compliance plans when the zoning chapter identifies.

(C) REQUIRED ALTERNATIVE COMPLIANCE CONDITIONS

To approve alternative compliance, the Community Development Director must find that one or more of the following conditions or opportunities are present:

- (1) The subject site has space limitations, an unusual shape or other factors that make strict compliance with applicable architectural regulations impossible or impractical;
- (2) Physical conditions on or next to the site, such as topography, soils, vegetation or existing structures or utilities, are such that strict compliance is impossible, impractical or of no value in terms of advancing the general purposes of this division;
- (3) Safety considerations, such as intersection visibility, utility locations, etc., make alternative compliance necessary; or
- (4) Alternative architectural plans will provide an equal or better means of meeting the intent of this division's regulations.

(D) REQUIRED ALTERNATIVE COMPLIANCE ELEMENTS

To approve alternative compliance the Community Development Director must find that the plan includes at least three of the following:

- (1) The inclusion of permeable paving, rain gardens, bioswales, or other sustainable stormwater management practices found in the National Association of City Transportation Officials Urban Street Stormwater Guide or other designs from nationally recognized organizations;
- (2) The inclusion of site amenities that, paired with scoring sheets and applications, qualify for sustainable development certifications from national recognized organizations such as the International Code Council, the U.S. Green Building Council, the International Living Future Institute, the U.S. Green Building Initiative or SITES;
- (3) The inclusion of safety-focused street design elements such as those found within the National Association of City Transportation Officials Urban Street Design Guide;
- (4) The development of the parcel meets economic development objectives set by the city in Tax Incremental Financing District Project Plans or other formally adopted policies;
- (5) The plans include a unique design from a renowned architect which the Plan Commission believes will generate tourism from the architectural design itself, not the underlying use; or
- (6) The inclusion of amenities specifically referenced in an element of the Comprehensive Plan or other city-adopted development plan.

ARTICLE V. APPENDICES

SECTION 5.01 NATIVE SPECIES LIST

Common Name	Scientific name	Type	Mandatory or Optional
American Beech	Fagus grandifolia	Trees and Shrubs	Mandatory
Sugar Maple	Acer saccharum	Trees and Shrubs	Mandatory

Basswood	<i>Tilia americana</i>	Trees and Shrubs	Mandatory
Northern Red Oak	<i>Quercus rubra</i>	Trees and Shrubs	Mandatory
White Oak	<i>Quercus alba</i>	Trees and Shrubs	Mandatory
Black Oak	<i>Quercus velutina</i>	Trees and Shrubs	Mandatory
Missouri River Willow	<i>Salix eriocephala</i>	Trees and Shrubs	Optional
Canadian plum	<i>Prunus nigra</i>	Trees and Shrubs	Optional
Chokecherry	<i>Prunus virginiana</i> var. <i>virginiana</i>	Trees and Shrubs	Optional
Pin cherry	<i>Prunus pensylvanica</i> var. <i>pensylvanica</i>	Trees and Shrubs	Optional
Bog birch	<i>Betula pumila</i>	Trees and Shrubs	Optional
Paper birch	<i>Betula papyrifera</i>	Trees and Shrubs	Optional
Yellow birch	<i>Betula alleghaniensis</i>	Trees and Shrubs	Optional
Boxelder	<i>Acer negundo</i>	Trees and Shrubs	Optional
Boxelder	<i>Acer negundo</i> var. <i>negundo</i>	Trees and Shrubs	Optional
Boxelder	<i>Acer negundo</i> var. <i>violaceum</i>	Trees and Shrubs	Optional
Mountain maple	<i>Acer spicatum</i>	Trees and Shrubs	Optional
Red maple	<i>Acer rubrum</i>	Trees and Shrubs	Optional
Prairie crab apple	<i>Malus ioensis</i> var. <i>ioensis</i>	Trees and Shrubs	Optional
Cranberry	<i>Vaccinium macrocarpon</i>	Trees and Shrubs	Optional
Lowbush blueberry	<i>Vaccinium angustifolium</i>	Trees and Shrubs	Optional
Velvetleaf huckleberry	<i>Vaccinium myrtilloides</i>	Trees and Shrubs	Optional
Grey alder	<i>Alnus incana</i>	Trees and Shrubs	Optional
Speckled alder	<i>Alnus incana</i> subsp. <i>rugosa</i>	Trees and Shrubs	Optional

Eastern white pine	<i>Pinus strobus</i>	Trees and Shrubs	Optional
Jack pine	<i>Pinus banksiana</i>	Trees and Shrubs	Optional
Bitternut hickory	<i>Carya cordiformis</i>	Trees and Shrubs	Optional
Shagbark hickory	<i>Carya ovata</i>	Trees and Shrubs	Optional
American elm	<i>Ulmus americana</i>	Trees and Shrubs	Optional
Rock elm	<i>Ulmus thomasii</i>	Trees and Shrubs	Optional
Bigfruit hawthorn	<i>Crataegus macrosperma</i>	Trees and Shrubs	Optional
Cockspur hawthorn	<i>Crataegus crus-galli</i>	Trees and Shrubs	Optional
Dodge's hawthorn	<i>Crataegus dodgei</i>	Trees and Shrubs	Optional
Dotted hawthorn	<i>Crataegus punctata</i>	Trees and Shrubs	Optional
Downy hawthorn	<i>Crataegus mollis</i>	Trees and Shrubs	Optional
Dunbar's hawthorn	<i>Crataegus beata</i>	Trees and Shrubs	Optional
Fanleaf hawthorn	<i>Crataegus flabellata</i>	Trees and Shrubs	Optional
Fireberry hawthorn	<i>Crataegus chrysocarpa</i>	Trees and Shrubs	Optional
Fleshy hawthorn	<i>Crataegus succulenta</i>	Trees and Shrubs	Optional
Fort Sheridan hawthorn	<i>Crataegus apiomorpha</i>	Trees and Shrubs	Optional
Fuller's hawthorn	<i>Crataegus fulleriana</i>	Trees and Shrubs	Optional
Grove hawthorn	<i>Crataegus lucorum</i>	Trees and Shrubs	Optional
Holmes' hawthorn	<i>Crataegus holmesiana</i>	Trees and Shrubs	Optional
Kansas hawthorn	<i>Crataegus coccinioides</i>	Trees and Shrubs	Optional
Pear hawthorn	<i>Crataegus calpodendron</i>	Trees and Shrubs	Optional
Quebec hawthorn	<i>Crataegus submollis</i>	Trees and Shrubs	Optional

Red haw	<i>Crataegus chrysocarpa</i> var. <i>chrysocarpa</i>	Trees and Shrubs	Optional
Rough hawthorn	<i>Crataegus scabrida</i>	Trees and Shrubs	Optional
Roundleaf hawthorn	<i>Crataegus lumarina</i>	Trees and Shrubs	Optional
Scarlet hawthorn	<i>Crataegus pedicellata</i>	Trees and Shrubs	Optional
Shchuette's hawthorn	<i>Crataegus schuettei</i>	Trees and Shrubs	Optional
Shiningbranch hawthorn	<i>Crataegus corusca</i>	Trees and Shrubs	Optional
Waxyfruit hawthorn	<i>Crataegus pruinosa</i>	Trees and Shrubs	Optional
Dwarf red blackberry	<i>Rubus pubescens</i> var. <i>pubescens</i>	Trees and Shrubs	Optional
American basswood	<i>Tilia americana</i>	Trees and Shrubs	Optional
Black ash	<i>Fraxinus nigra</i>	Trees and Shrubs	Optional
Green ash	<i>Fraxinus pennsylvanica</i>	Trees and Shrubs	Optional
White ash	<i>Fraxinus americana</i>	Trees and Shrubs	Optional
White spruce	<i>Picea glauca</i>	Trees and Shrubs	Optional
American hazelnut	<i>Corylus americana</i>	Trees and Shrubs	Optional
Beaked hazelnut	<i>Corylus cornuta</i>	Trees and Shrubs	Optional
Black walnut	<i>Juglans nigra</i>	Trees and Shrubs	Optional
Alternateleaf dogwood	<i>Cornus alternifolia</i>	Trees and Shrubs	Optional
Gray dogwood	<i>Cornus racemosa</i>	Trees and Shrubs	Optional
Roundleaf dogwood	<i>Cornus rugosa</i>	Trees and Shrubs	Optional
Silky dogwood	<i>Cornus obliqua</i>	Trees and Shrubs	Optional
Allegheny serviceberry	<i>Amelanchier laevis</i>	Trees and Shrubs	Optional
Roundleaf serviceberry	<i>Amelanchier sanguinea</i>	Trees and Shrubs	Optional

Running serviceberry	Amelanchier stolonifera	Trees and Shrubs	Optional
Tamarack	Larix laricina	Trees and Shrubs	Optional
American cranberrybush	Viburnum opulus var. americanum	Trees and Shrubs	Optional
Blackhaw	Viburnum prunifolium	Trees and Shrubs	Optional
Downy arrowwood	Viburnum rafinesqueanum	Trees and Shrubs	Optional
Mapleleaf viburnum	Viburnum acerifolium	Trees and Shrubs	Optional
Eastern hemlock	Tsuga canadensis	Trees and Shrubs	Optional
Hophornbeam	Ostrya virginiana	Trees and Shrubs	Optional
American hornbeam	Carpinus caroliniana	Trees and Shrubs	Optional
Fox grape	Vitis labrusca	Trees and Shrubs	Optional
Riverbank grape	Vitis riparia	Trees and Shrubs	Optional
American witchhazel	Hamamelis virginiana	Trees and Shrubs	Optional
Common hackberry	Celtis occidentalis	Trees and Shrubs	Optional
New Jersey tea	Ceanothus americanus	Trees and Shrubs	Optional
Arborvitae	Thuja occidentalis	Trees and Shrubs	Optional
Black huckleberry	Gaylussacia baccata	Trees and Shrubs	Optional
American black elderberry	Sambucus nigra subsp. canadensis	Trees and Shrubs	Optional
Red elderberry	Sambucus racemosa var. racemosa	Trees and Shrubs	Optional
Atlantic ninebark	Physocarpus opulifolius var. intermedius	Trees and Shrubs	Optional
American fly honeysuckle	Lonicera canadensis	Trees and Shrubs	Optional
Limber honeysuckle	Lonicera dioica	Trees and Shrubs	Optional
Swamp fly honeysuckle	Lonicera oblongifolia	Trees and Shrubs	Optional

Catberry	<i>Ilex mucronata</i>	Trees and Shrubs	Optional
Ohio buckeye	<i>Aesculus glabra</i>	Trees and Shrubs	Optional
Common juniper	<i>Juniperus communis</i> var. <i>depressa</i>	Trees and Shrubs	Optional
Eastern redcedar	<i>Juniperus virginiana</i> var. <i>virginiana</i>	Trees and Shrubs	Optional
Common snowberry	<i>Symphoricarpos albus</i> var. <i>albus</i>	Trees and Shrubs	Optional
Coralberry	<i>Symphoricarpos orbiculatus</i>	Trees and Shrubs	Optional
Russet buffaloberry	<i>Shepherdia canadensis</i>	Trees and Shrubs	Optional
Common buttonbush	<i>Cephalanthus occidentalis</i>	Trees and Shrubs	Optional
Leatherleaf	<i>Chamaedaphne calyculata</i>	Trees and Shrubs	Optional
Burningbush	<i>Euonymus atropurpureus</i>	Trees and Shrubs	Optional
Eastern wahoo	<i>Euonymus atropurpureus</i> var. <i>atropurpureus</i>	Trees and Shrubs	Optional
Blue Ridge carrionflower	<i>Smilax lasioneura</i>	Trees and Shrubs	Optional
Bristly greenbrier	<i>Smilax tamnoides</i>	Trees and Shrubs	Optional
Bog rosemary	<i>Andromeda polifolia</i>	Trees and Shrubs	Optional
American bittersweet	<i>Celastrus scandens</i>	Trees and Shrubs	Optional
Canada yew	<i>Taxus canadensis</i>	Trees and Shrubs	Optional
Common hoptree	<i>Ptelea trifoliata</i> var. <i>trifoliata</i>	Trees and Shrubs	Optional
Kentucky coffeetree	<i>Gymnocladus dioicus</i>	Trees and Shrubs	Optional
Northern bush honeysuckle	<i>Diervilla lonicera</i>	Trees and Shrubs	Optional
Eastern leatherwood	<i>Dirca palustris</i>	Trees and Shrubs	Optional
Creeping snowberry	<i>Gaultheria hispidula</i>	Trees and Shrubs	Optional
Eastern teaberry	<i>Gaultheria procumbens</i>	Trees and Shrubs	Optional

early goldenrod	<i>Solidago juncea</i>	Flowers and Grasses	Optional
giant goldenrod	<i>Solidago gigantea</i>	Flowers and Grasses	Optional
gray goldenrod	<i>Solidago nemoralis</i> var. <i>nemoralis</i>	Flowers and Grasses	Optional
Missouri goldenrod	<i>Solidago missouriensis</i> var. <i>fasciculata</i>	Flowers and Grasses	Optional
showy goldenrod	<i>Solidago speciosa</i> var. <i>speciosa</i>	Flowers and Grasses	Optional
zigzag goldenrod	<i>Solidago flexicaulis</i>	Flowers and Grasses	Optional
Virginia strawberry	<i>Fragaria virginiana</i> subsp. <i>virginiana</i>	Flowers and Grasses	Optional
woodland strawberry	<i>Fragaria vesca</i>	Flowers and Grasses	Optional
woodland strawberry	<i>Fragaria vesca</i> subsp. <i>americana</i>	Flowers and Grasses	Optional
cheerful sunflower	<i>Helianthus</i> × <i>laetiflorus</i> [<i>pauciflorus</i> × <i>tuberosus</i>]	Flowers and Grasses	Optional
fewleaf sunflower	<i>Helianthus occidentalis</i>	Flowers and Grasses	Optional
fewleaf sunflower	<i>Helianthus occidentalis</i> subsp. <i>occidentalis</i>	Flowers and Grasses	Optional
giant sunflower	<i>Helianthus giganteus</i>	Flowers and Grasses	Optional
Maximilian sunflower	<i>Helianthus maximiliani</i>	Flowers and Grasses	Optional
paleleaf woodland sunflower	<i>Helianthus strumosus</i>	Flowers and Grasses	Optional
sawtooth sunflower	<i>Helianthus grosseserratus</i>	Flowers and Grasses	Optional
stiff sunflower	<i>Helianthus pauciflorus</i>	Flowers and Grasses	Optional
stiff sunflower	<i>Helianthus pauciflorus</i> subsp. <i>pauciflorus</i>	Flowers and Grasses	Optional
stiff sunflower	<i>Helianthus pauciflorus</i> subsp. <i>subrhomboideus</i>	Flowers and Grasses	Optional
thinleaf sunflower	<i>Helianthus decapetalus</i>	Flowers and Grasses	Optional
alpine violet	<i>Viola labradorica</i>	Flowers and Grasses	Optional
arrowleaf violet	<i>Viola sagittata</i>	Flowers and Grasses	Optional

arrowleaf violet	<i>Viola sagittata</i> var. <i>sagittata</i>	Flowers and Grasses	Optional
birdfoot violet	<i>Viola pedata</i>	Flowers and Grasses	Optional
common blue violet	<i>Viola sororia</i>	Flowers and Grasses	Optional
downy yellow violet	<i>Viola pubescens</i>	Flowers and Grasses	Optional
downy yellow violet	<i>Viola pubescens</i> var. <i>pubescens</i>	Flowers and Grasses	Optional
downy yellow violet	<i>Viola pubescens</i> var. <i>scabriuscula</i>	Flowers and Grasses	Optional
longspur violet	<i>Viola rostrata</i>	Flowers and Grasses	Optional
marsh blue violet	<i>Viola cucullata</i>	Flowers and Grasses	Optional
prairie violet	<i>Viola pedatifida</i>	Flowers and Grasses	Optional
sand violet	<i>Viola affinis</i>	Flowers and Grasses	Optional
small white violet	<i>Viola macloskeyi</i>	Flowers and Grasses	Optional
smooth white violet	<i>Viola macloskeyi</i> subsp. <i>pallens</i>	Flowers and Grasses	Optional
sweet white violet	<i>Viola blanda</i>	Flowers and Grasses	Optional
sweet white violet	<i>Viola blanda</i> var. <i>palustriformis</i>	Flowers and Grasses	Optional
common boneset	<i>Eupatorium perfoliatum</i>	Flowers and Grasses	Optional
common boneset	<i>Eupatorium perfoliatum</i> var. <i>perfoliatum</i>	Flowers and Grasses	Optional
lateflowering thoroughwort	<i>Eupatorium serotinum</i>	Flowers and Grasses	Optional
leadplant	<i>Amorpha canescens</i>	Flowers and Grasses	Optional
Bicknell's cranesbill	<i>Geranium bicknellii</i>	Flowers and Grasses	Optional
fall panicgrass	<i>Panicum dichotomiflorum</i> var. <i>dichotomiflorum</i>	Flowers and Grasses	Optional
switchgrass	<i>Panicum virgatum</i> var. <i>virgatum</i>	Flowers and Grasses	Optional
hemlock waterparsnip	<i>Sium suave</i>	Flowers and Grasses	Optional

bog willowherb	<i>Epilobium leptophyllum</i>	Flowers and Grasses	Optional
downy willowherb	<i>Epilobium strictum</i>	Flowers and Grasses	Optional
fringed willowherb	<i>Epilobium ciliatum</i> subsp. <i>ciliatum</i>	Flowers and Grasses	Optional
purpleleaf willowherb	<i>Epilobium coloratum</i>	Flowers and Grasses	Optional
eastern daisy fleabane	<i>Erigeron annuus</i>	Flowers and Grasses	Optional
Philadelphia fleabane	<i>Erigeron philadelphicus</i>	Flowers and Grasses	Optional
Philadelphia fleabane	<i>Erigeron philadelphicus</i> var. <i>philadelphicus</i>	Flowers and Grasses	Optional
prairie fleabane	<i>Erigeron strigosus</i> var. <i>septentrionalis</i>	Flowers and Grasses	Optional
prairie fleabane	<i>Erigeron strigosus</i> var. <i>strigosus</i>	Flowers and Grasses	Optional
robin's plantain	<i>Erigeron pulchellus</i>	Flowers and Grasses	Optional
robin's plantain	<i>Erigeron pulchellus</i> var. <i>pulchellus</i>	Flowers and Grasses	Optional
prairie ironweed	<i>Vernonia fasciculata</i>	Flowers and Grasses	Optional
prairie ironweed	<i>Vernonia fasciculata</i> subsp. <i>fasciculata</i>	Flowers and Grasses	Optional
great St. Johnswort	<i>Hypericum ascyron</i>	Flowers and Grasses	Optional
spotted St. Johnswort	<i>Hypericum punctatum</i>	Flowers and Grasses	Optional
parasol whitetop	<i>Doellingeria umbellata</i>	Flowers and Grasses	Optional
parasol whitetop	<i>Doellingeria umbellata</i> var. <i>umbellata</i>	Flowers and Grasses	Optional
arctic brome	<i>Bromus kalmii</i>	Flowers and Grasses	Optional
earlyleaf brome	<i>Bromus latiglumis</i>	Flowers and Grasses	Optional
fringed brome	<i>Bromus ciliatus</i>	Flowers and Grasses	Optional
fringed brome	<i>Bromus ciliatus</i> var. <i>ciliatus</i>	Flowers and Grasses	Optional
hairy woodland brome	<i>Bromus pubescens</i>	Flowers and Grasses	Optional

hairy evening primrose	Oenothera villosa subsp. villosa	Flowers and Grasses	Optional
little evening primrose	Oenothera perennis	Flowers and Grasses	Optional
meadow evening primrose	Oenothera pilosella subsp. pilosella	Flowers and Grasses	Optional
northern evening primrose	Oenothera parviflora	Flowers and Grasses	Optional
Oakes' evening primrose	Oenothera oakesiana	Flowers and Grasses	Optional
American vetch	Vicia americana subsp. americana	Flowers and Grasses	Optional
Carolina vetch	Vicia caroliniana	Flowers and Grasses	Optional
western brackenfern	Pteridium aquilinum var. latiusculum	Flowers and Grasses	Optional
hybrid cattail	Typha xglauca [angustifolia or domingensis x latifolia]	Flowers and Grasses	Optional
narrowleaf cattail	Typha angustifolia	Flowers and Grasses	Optional
wild quinine	Parthenium integrifolium var. integrifolium	Flowers and Grasses	Optional
largeleaf wild indigo	Baptisia alba var. macrophylla	Flowers and Grasses	Optional
longbract wild indigo	Baptisia bracteata	Flowers and Grasses	Optional
longbract wild indigo	Baptisia bracteata var. leucophaea	Flowers and Grasses	Optional
white wild indigo	Baptisia alba	Flowers and Grasses	Optional
waxyleaf meadow-rue	Thalictrum revolutum	Flowers and Grasses	Optional
Canadian milkvetch	Astragalus canadensis	Flowers and Grasses	Optional
Canadian milkvetch	Astragalus canadensis var. canadensis	Flowers and Grasses	Optional
Cooper's milkvetch	Astragalus neglectus	Flowers and Grasses	Optional
big bluestem	Andropogon gerardii	Flowers and Grasses	Optional
Norwegian cinquefoil	Potentilla norvegica subsp. monspeliensis	Flowers and Grasses	Optional
tall cinquefoil	Potentilla arguta subsp. arguta	Flowers and Grasses	Optional

dwarf lake iris	<i>Iris lacustris</i>	Flowers and Grasses	Optional
Shreve's iris	<i>Iris virginica</i> var. <i>shrevei</i>	Flowers and Grasses	Optional
Virginia iris	<i>Iris virginica</i>	Flowers and Grasses	Optional
prairie cordgrass	<i>Spartina pectinata</i>	Flowers and Grasses	Optional
wingstem	<i>Verbesina alternifolia</i>	Flowers and Grasses	Optional
American mannagrass	<i>Glyceria grandis</i> var. <i>grandis</i>	Flowers and Grasses	Optional
floating mannagrass	<i>Glyceria septentrionalis</i>	Flowers and Grasses	Optional
rattlesnake mannagrass	<i>Glyceria canadensis</i>	Flowers and Grasses	Optional
butterfly milkweed	<i>Asclepias tuberosa</i>	Flowers and Grasses	Optional
butterfly milkweed	<i>Asclepias tuberosa</i> subsp. <i>interior</i>	Flowers and Grasses	Optional
common milkweed	<i>Asclepias syriaca</i>	Flowers and Grasses	Optional
green comet milkweed	<i>Asclepias viridiflora</i>	Flowers and Grasses	Optional
oval-leaf milkweed	<i>Asclepias ovalifolia</i>	Flowers and Grasses	Optional
poke milkweed	<i>Asclepias exaltata</i>	Flowers and Grasses	Optional
purple milkweed	<i>Asclepias purpurascens</i>	Flowers and Grasses	Optional
swamp milkweed	<i>Asclepias incarnata</i>	Flowers and Grasses	Optional
swamp milkweed	<i>Asclepias incarnata</i> subsp. <i>incarnata</i>	Flowers and Grasses	Optional
biennial wormwood	<i>Artemisia biennis</i>	Flowers and Grasses	Optional
field sagewort	<i>Artemisia campestris</i>	Flowers and Grasses	Optional
field sagewort	<i>Artemisia campestris</i> subsp. <i>caudata</i>	Flowers and Grasses	Optional
white sagebrush	<i>Artemisia ludoviciana</i> subsp. <i>ludoviciana</i>	Flowers and Grasses	Optional
red columbine	<i>Aquilegia canadensis</i>	Flowers and Grasses	Optional

hoary verbena	Verbena stricta	Flowers and Grasses	Optional
narrowleaf vervain	Verbena simplex	Flowers and Grasses	Optional
vervain	Verbena xengelmannii [hastata x urticifolia]	Flowers and Grasses	Optional
white vervain	Verbena urticifolia	Flowers and Grasses	Optional
white vervain	Verbena urticifolia var. leiocarpa	Flowers and Grasses	Optional
white vervain	Verbena urticifolia var. urticifolia	Flowers and Grasses	Optional
foxglove beardtongue	Penstemon digitalis	Flowers and Grasses	Optional
hairy beardtongue	Penstemon hirsutus	Flowers and Grasses	Optional
marsh hedgenettle	Stachys palustris	Flowers and Grasses	Optional
smooth hedgenettle	Stachys tenuifolia	Flowers and Grasses	Optional
flowering spurge	Euphorbia corollata	Flowers and Grasses	Optional
bottomland aster	Symphotrichum ontarionis	Flowers and Grasses	Optional
calico aster	Symphotrichum lateriflorum var. lateriflorum	Flowers and Grasses	Optional
common blue wood aster	Symphotrichum cordifolium	Flowers and Grasses	Optional
crookedstem aster	Symphotrichum prenanthoides	Flowers and Grasses	Optional
Drummond's aster	Symphotrichum drummondii var. drummondii	Flowers and Grasses	Optional
hairy white oldfield aster	Symphotrichum pilosum var. pilosum	Flowers and Grasses	Optional
Lindley's aster	Symphotrichum ciliolatum	Flowers and Grasses	Optional
New England aster	Symphotrichum novae-angliae	Flowers and Grasses	Optional
northern bog aster	Symphotrichum boreale	Flowers and Grasses	Optional
Pringle's aster	Symphotrichum pilosum var. pringlei	Flowers and Grasses	Optional
purplestem aster	Symphotrichum puniceum var. puniceum	Flowers and Grasses	Optional

rayless alkali aster	<i>Symphotrichum ciliatum</i>	Flowers and Grasses	Optional
Short's aster	<i>Symphotrichum shortii</i>	Flowers and Grasses	Optional
skyblue aster	<i>Symphotrichum oolentangiense</i> var. <i>oolentangiense</i>	Flowers and Grasses	Optional
smooth blue aster	<i>Symphotrichum laeve</i> var. <i>laeve</i>	Flowers and Grasses	Optional
western silver aster	<i>Symphotrichum sericeum</i>	Flowers and Grasses	Optional
white heath aster	<i>Symphotrichum ericoides</i> var. <i>ericoides</i>	Flowers and Grasses	Optional
white panicle aster	<i>Symphotrichum lanceolatum</i> var. <i>lanceolatum</i>	Flowers and Grasses	Optional
nodding fescue	<i>Festuca subverticillata</i>	Flowers and Grasses	Optional
red fescue	<i>Festuca rubra</i>	Flowers and Grasses	Optional
red fescue	<i>Festuca rubra</i> subsp. <i>rubra</i>	Flowers and Grasses	Optional
downy phlox	<i>Phlox pilosa</i> subsp. <i>fulgida</i>	Flowers and Grasses	Optional
Lapham's phlox	<i>Phlox divaricata</i> subsp. <i>laphamii</i>	Flowers and Grasses	Optional
common sneezeweed	<i>Helenium autumnale</i>	Flowers and Grasses	Optional
common sneezeweed	<i>Helenium autumnale</i> var. <i>autumnale</i>	Flowers and Grasses	Optional
bulblet-bearing water hemlock	<i>Cicuta bulbifera</i>	Flowers and Grasses	Optional
American white waterlily	<i>Nymphaea odorata</i> subsp. <i>tuberosa</i>	Flowers and Grasses	Optional
panicled bulrush	<i>Scirpus microcarpus</i>	Flowers and Grasses	Optional
rufous bulrush	<i>Scirpus pendulus</i>	Flowers and Grasses	Optional
woolgrass	<i>Scirpus cyperinus</i>	Flowers and Grasses	Optional
broadfruit bur-reed	<i>Sparganium eurycarpum</i>	Flowers and Grasses	Optional
clammy groundcherry	<i>Physalis heterophylla</i> var. <i>heterophylla</i>	Flowers and Grasses	Optional
longleaf groundcherry	<i>Physalis longifolia</i> var. <i>longifolia</i>	Flowers and Grasses	Optional

longleaf groundcherry	<i>Physalis longifolia</i> var. <i>subglabrata</i>	Flowers and Grasses	Optional
Virginia groundcherry	<i>Physalis virginiana</i> var. <i>virginiana</i>	Flowers and Grasses	Optional
Michigan lily	<i>Lilium michiganense</i>	Flowers and Grasses	Optional
wood lily	<i>Lilium philadelphicum</i> var. <i>andinum</i>	Flowers and Grasses	Optional
variegated yellow pond-lily	<i>Nuphar lutea</i> subsp. <i>variegata</i>	Flowers and Grasses	Optional
prairie rosinweed	<i>Silphium terebinthinaceum</i> var. <i>terebinthinaceum</i>	Flowers and Grasses	Optional
wholeleaf rosinweed	<i>Silphium integrifolium</i> var. <i>integrifolium</i>	Flowers and Grasses	Optional
arctic rush	<i>Juncus arcticus</i>	Flowers and Grasses	Optional
Dudley's rush	<i>Juncus dudleyi</i>	Flowers and Grasses	Optional
knotted rush	<i>Juncus nodosus</i>	Flowers and Grasses	Optional
knotted rush	<i>Juncus nodosus</i> var. <i>nodosus</i>	Flowers and Grasses	Optional
mountain rush	<i>Juncus arcticus</i> subsp. <i>littoralis</i>	Flowers and Grasses	Optional
northern green rush	<i>Juncus alpinoarticulatus</i>	Flowers and Grasses	Optional
northern green rush	<i>Juncus alpinoarticulatus</i> subsp. <i>nodulosus</i>	Flowers and Grasses	Optional
saltmeadow rush	<i>Juncus gerardii</i>	Flowers and Grasses	Optional
saltmeadow rush	<i>Juncus gerardii</i> var. <i>gerardii</i>	Flowers and Grasses	Optional
triangle orache	<i>Atriplex prostrata</i>	Flowers and Grasses	Optional
brightblue speedwell	<i>Veronica serpyllifolia</i> subsp. <i>humifusa</i>	Flowers and Grasses	Optional
neckweed	<i>Veronica peregrina</i> subsp. <i>peregrina</i>	Flowers and Grasses	Optional
nodding chickweed	<i>Cerastium nutans</i>	Flowers and Grasses	Optional
nodding chickweed	<i>Cerastium nutans</i> var. <i>nutans</i>	Flowers and Grasses	Optional
cinnamon fern	<i>Osmunda cinnamomea</i> var. <i>cinnamomea</i>	Flowers and Grasses	Optional

flat-top goldentop	Euthamia graminifolia	Flowers and Grasses	Optional
flat-top goldentop	Euthamia graminifolia var. graminifolia	Flowers and Grasses	Optional
flatstem pondweed	Potamogeton zosteriformis	Flowers and Grasses	Optional
leafy pondweed	Potamogeton foliosus subsp. foliosus	Flowers and Grasses	Optional
longleaf pondweed	Potamogeton nodosus	Flowers and Grasses	Optional
ribbonleaf pondweed	Potamogeton epihydrus	Flowers and Grasses	Optional
small pondweed	Potamogeton pusillus subsp. pusillus	Flowers and Grasses	Optional
golden tickseed	Coreopsis tinctoria var. tinctoria	Flowers and Grasses	Optional
lanceleaf tickseed	Coreopsis lanceolata	Flowers and Grasses	Optional
fourflower yellow loosestrife	Lysimachia quadriflora	Flowers and Grasses	Optional
tufted loosestrife	Lysimachia thyrsoiflora	Flowers and Grasses	Optional
bulbous bittercress	Cardamine bulbosa	Flowers and Grasses	Optional
crinkleroot	Cardamine diphylla	Flowers and Grasses	Optional
cuckoo flower	Cardamine pratensis	Flowers and Grasses	Optional
cuckoo flower	Cardamine pratensis var. pratensis	Flowers and Grasses	Optional
cutleaf toothwort	Cardamine concatenata	Flowers and Grasses	Optional
limestone bittercress	Cardamine douglassii	Flowers and Grasses	Optional
Pennsylvania bittercress	Cardamine pennsylvanica	Flowers and Grasses	Optional
great Indian plantain	Arnoglossum reniforme	Flowers and Grasses	Optional
groovestem Indian plantain	Arnoglossum plantagineum	Flowers and Grasses	Optional
pale Indian plantain	Arnoglossum atriplicifolium	Flowers and Grasses	Optional
widowsfrill	Silene stellata	Flowers and Grasses	Optional

common cowparsnip	<i>Heracleum maximum</i>	Flowers and Grasses	Optional
largeflower yellow false foxglove	<i>Aureolaria grandiflora</i>	Flowers and Grasses	Optional
largeflower yellow false foxglove	<i>Aureolaria grandiflora</i> var. <i>pulchra</i>	Flowers and Grasses	Optional
bluejoint	<i>Calamagrostis canadensis</i>	Flowers and Grasses	Optional
bluejoint	<i>Calamagrostis canadensis</i> var. <i>canadensis</i>	Flowers and Grasses	Optional
lanceleaf figwort	<i>Scrophularia lanceolata</i>	Flowers and Grasses	Optional
fireweed	<i>Chamerion angustifolium</i>	Flowers and Grasses	Optional
fireweed	<i>Chamerion angustifolium</i> subsp. <i>circumvagum</i>	Flowers and Grasses	Optional
little bluestem	<i>Schizachyrium scoparium</i> var. <i>scoparium</i>	Flowers and Grasses	Optional
Allegheny monkeyflower	<i>Mimulus ringens</i> var. <i>ringens</i>	Flowers and Grasses	Optional
creamflower rockcress	<i>Arabis hirsuta</i> var. <i>pycnocarpa</i>	Flowers and Grasses	Optional
hairy rockcress	<i>Arabis hirsuta</i>	Flowers and Grasses	Optional
lyrate rockcress	<i>Arabis lyrata</i>	Flowers and Grasses	Optional
Short's rockcress	<i>Arabis shortii</i>	Flowers and Grasses	Optional
sicklepod	<i>Arabis canadensis</i>	Flowers and Grasses	Optional
smooth rockcress	<i>Arabis laevigata</i>	Flowers and Grasses	Optional
smooth rockcress	<i>Arabis laevigata</i> var. <i>laevigata</i>	Flowers and Grasses	Optional
tower rockcress	<i>Arabis glabra</i>	Flowers and Grasses	Optional
white turtlehead	<i>Chelone glabra</i>	Flowers and Grasses	Optional
Great Plains flatsedge	<i>Cyperus lupulinus</i>	Flowers and Grasses	Optional
Great Plains flatsedge	<i>Cyperus lupulinus</i> subsp. <i>macilentus</i>	Flowers and Grasses	Optional
redroot flatsedge	<i>Cyperus erythrorhizos</i>	Flowers and Grasses	Optional

Schweinitz's flatsedge	Cyperus schweinitzii	Flowers and Grasses	Optional
slender flatsedge	Cyperus bipartitus	Flowers and Grasses	Optional
strawcolored flatsedge	Cyperus strigosus	Flowers and Grasses	Optional
umbrella flatsedge	Cyperus diandrus	Flowers and Grasses	Optional
purplestem angelica	Angelica atropurpurea	Flowers and Grasses	Optional
old man's whiskers	Geum triflorum	Flowers and Grasses	Optional
old man's whiskers	Geum triflorum var. triflorum	Flowers and Grasses	Optional
purple avens	Geum rivale	Flowers and Grasses	Optional
white avens	Geum canadense	Flowers and Grasses	Optional
white avens	Geum canadense var. canadense	Flowers and Grasses	Optional
yellow avens	Geum aleppicum	Flowers and Grasses	Optional
bastard toadflax	Comandra umbellata subsp. umbellata	Flowers and Grasses	Optional
longflower beeblossom	Gaura longiflora	Flowers and Grasses	Optional
common threeseed mercury	Acalypha rhomboidea	Flowers and Grasses	Optional
purple false foxglove	Agalinis purpurea	Flowers and Grasses	Optional
roundstem false foxglove	Agalinis gattingeri	Flowers and Grasses	Optional
slenderleaf false foxglove	Agalinis tenuifolia	Flowers and Grasses	Optional
Texas croton	Croton texensis	Flowers and Grasses	Optional
Texas croton	Croton texensis var. texensis	Flowers and Grasses	Optional
Virginia tephrosia	Tephrosia virginiana	Flowers and Grasses	Optional
feverwort	Triosteum perfoliatum	Flowers and Grasses	Optional
orangefruit horse-gentian	Triosteum aurantiacum	Flowers and Grasses	Optional

orange-fruit horse-gentian	<i>Triosteum aurantiacum</i> var. <i>aurantiacum</i>	Flowers and Grasses	Optional
cardinalflower	<i>Lobelia cardinalis</i>	Flowers and Grasses	Optional
Ontario lobelia	<i>Lobelia kalmii</i>	Flowers and Grasses	Optional
pale-spike lobelia	<i>Lobelia spicata</i> var. <i>spicata</i>	Flowers and Grasses	Optional
Canadian lousewort	<i>Pedicularis canadensis</i> subsp. <i>canadensis</i>	Flowers and Grasses	Optional
swamp lousewort	<i>Pedicularis lanceolata</i>	Flowers and Grasses	Optional
eastern marsh fern	<i>Thelypteris palustris</i>	Flowers and Grasses	Optional
eastern marsh fern	<i>Thelypteris palustris</i> var. <i>pubescens</i>	Flowers and Grasses	Optional
golden zizia	<i>Zizia aurea</i>	Flowers and Grasses	Optional
meadow zizia	<i>Zizia aptera</i>	Flowers and Grasses	Optional
northern purple pitcherplant	<i>Sarracenia purpurea</i> var. <i>purpurea</i>	Flowers and Grasses	Optional
bald spikerush	<i>Eleocharis erythropoda</i>	Flowers and Grasses	Optional
flat-stem spikerush	<i>Eleocharis compressa</i>	Flowers and Grasses	Optional
flat-stem spikerush	<i>Eleocharis compressa</i> var. <i>compressa</i>	Flowers and Grasses	Optional
needle spikerush	<i>Eleocharis acicularis</i> var. <i>acicularis</i>	Flowers and Grasses	Optional
annual wildrice	<i>Zizania aquatica</i>	Flowers and Grasses	Optional
annual wildrice	<i>Zizania aquatica</i> var. <i>aquatica</i>	Flowers and Grasses	Optional
northern wildrice	<i>Zizania palustris</i>	Flowers and Grasses	Optional
northern wildrice	<i>Zizania palustris</i> var. <i>palustris</i>	Flowers and Grasses	Optional
side-oats grama	<i>Bouteloua curtipendula</i>	Flowers and Grasses	Optional
side-oats grama	<i>Bouteloua curtipendula</i> var. <i>curtipendula</i>	Flowers and Grasses	Optional
Canadian clearweed	<i>Pilea pumila</i> var. <i>pumila</i>	Flowers and Grasses	Optional

blue cohosh	Caulophyllum thalictroides	Flowers and Grasses	Optional
slender cottongrass	Eriophorum gracile	Flowers and Grasses	Optional
slender cottongrass	Eriophorum gracile var. gracile	Flowers and Grasses	Optional
tall cottongrass	Eriophorum angustifolium	Flowers and Grasses	Optional
tall cottongrass	Eriophorum angustifolium subsp. angustifolium	Flowers and Grasses	Optional
thinleaf cottonsedge	Eriophorum viridicarinarum	Flowers and Grasses	Optional
tussock cottongrass	Eriophorum vaginatum	Flowers and Grasses	Optional
tussock cottongrass	Eriophorum vaginatum var. spissum	Flowers and Grasses	Optional
Culver's root	Veronicastrum virginicum	Flowers and Grasses	Optional
composite dropseed	Sporobolus compositus var. compositus	Flowers and Grasses	Optional
poverty dropseed	Sporobolus vaginiflorus var. vaginiflorus	Flowers and Grasses	Optional
false boneset	Brickellia eupatorioides	Flowers and Grasses	Optional
false boneset	Brickellia eupatorioides var. corymbulosa	Flowers and Grasses	Optional
marsh seedbox	Ludwigia palustris	Flowers and Grasses	Optional
hairy four o'clock	Mirabilis hirsuta	Flowers and Grasses	Optional
curlycup gumweed	Grindelia squarrosa var. serrulata	Flowers and Grasses	Optional
curlycup gumweed	Grindelia squarrosa var. squarrosa	Flowers and Grasses	Optional
American hogpeanut	Amphicarpaea bracteata	Flowers and Grasses	Optional
scarlet Indian paintbrush	Castilleja coccinea	Flowers and Grasses	Optional
Canada mayflower	Maianthemum canadense	Flowers and Grasses	Optional
threeleaf false lily of the valley	Maianthemum trifolium	Flowers and Grasses	Optional
poverty oatgrass	Danthonia spicata	Flowers and Grasses	Optional

yellow pimpernel	Taenidia integerrima	Flowers and Grasses	Optional
golden ragwort	Packera aurea	Flowers and Grasses	Optional
button eryngo	Eryngium yuccifolium	Flowers and Grasses	Optional
button eryngo	Eryngium yuccifolium var. yuccifolium	Flowers and Grasses	Optional
shrubby cinquefoil	Dasiphora fruticosa	Flowers and Grasses	Optional
shrubby cinquefoil	Dasiphora fruticosa subsp. floribunda	Flowers and Grasses	Optional
white snakeroot	Ageratina altissima	Flowers and Grasses	Optional
white snakeroot	Ageratina altissima var. altissima	Flowers and Grasses	Optional
crested woodfern	Dryopteris cristata	Flowers and Grasses	Optional
Goldie's woodfern	Dryopteris goldieana	Flowers and Grasses	Optional
intermediate woodfern	Dryopteris intermedia	Flowers and Grasses	Optional
Canadian anemone	Anemone canadensis	Flowers and Grasses	Optional
candle anemone	Anemone cylindrica	Flowers and Grasses	Optional
common threesquare	Schoenoplectus pungens var. pungens	Flowers and Grasses	Optional
wild comfrey	Cynoglossum virginianum	Flowers and Grasses	Optional
wild comfrey	Cynoglossum virginianum var. boreale	Flowers and Grasses	Optional
goosefoot cornsalad	Valerianella chenopodiifolia	Flowers and Grasses	Optional
stiff cowbane	Oxypolis rigidior	Flowers and Grasses	Optional
American eelgrass	Vallisneria americana	Flowers and Grasses	Optional
low false bindweed	Calystegia spithamea	Flowers and Grasses	Optional
shortawn foxtail	Alopecurus aequalis	Flowers and Grasses	Optional
shortawn foxtail	Alopecurus aequalis var. aequalis	Flowers and Grasses	Optional

hoary frostweed	<i>Helianthemum bicknellii</i>	Flowers and Grasses	Optional
longbranch frostweed	<i>Helianthemum canadense</i>	Flowers and Grasses	Optional
Ohio goldenrod	<i>Oligoneuron ohioense</i>	Flowers and Grasses	Optional
prairie goldenrod	<i>Oligoneuron album</i>	Flowers and Grasses	Optional
Riddell's goldenrod	<i>Oligoneuron riddellii</i>	Flowers and Grasses	Optional
stiff goldenrod	<i>Oligoneuron rigidum</i> var. <i>rigidum</i>	Flowers and Grasses	Optional
purple giant hyssop	<i>Agastache scrophulariifolia</i>	Flowers and Grasses	Optional
common ladyfern	<i>Athyrium filix-femina</i>	Flowers and Grasses	Optional
subarctic ladyfern	<i>Athyrium filix-femina</i> subsp. <i>angustum</i>	Flowers and Grasses	Optional
softhair marbleseed	<i>Onosmodium bejariense</i> var. <i>hispidissimum</i>	Flowers and Grasses	Optional
Fraser's marsh St. Johnswort	<i>Triadenum fraseri</i>	Flowers and Grasses	Optional
Mexican muhly	<i>Muhlenbergia mexicana</i>	Flowers and Grasses	Optional
scratchgrass	<i>Muhlenbergia asperifolia</i>	Flowers and Grasses	Optional
slimflower muhly	<i>Muhlenbergia tenuiflora</i>	Flowers and Grasses	Optional
spiked muhly	<i>Muhlenbergia glomerata</i>	Flowers and Grasses	Optional
ostrich fern	<i>Matteuccia struthiopteris</i>	Flowers and Grasses	Optional
white prairie clover	<i>Dalea candida</i>	Flowers and Grasses	Optional
white prairie clover	<i>Dalea candida</i> var. <i>candida</i>	Flowers and Grasses	Optional
field pussytoes	<i>Antennaria neglecta</i>	Flowers and Grasses	Optional
Parlin's pussytoes	<i>Antennaria parlinii</i>	Flowers and Grasses	Optional
Parlin's pussytoes	<i>Antennaria parlinii</i> subsp. <i>fallax</i>	Flowers and Grasses	Optional
spotted joe pye weed	<i>Eutrochium maculatum</i>	Flowers and Grasses	Optional

spotted joe pye weed	Eutrochium maculatum var. maculatum	Flowers and Grasses	Optional
sweetscented joe pye weed	Eutrochium purpureum	Flowers and Grasses	Optional
rabbit-tobacco	Pseudognaphalium obtusifolium subsp. obtusifolium	Flowers and Grasses	Optional
prairie sandreed	Calamovilfa longifolia	Flowers and Grasses	Optional
prairie sandreed	Calamovilfa longifolia var. magna	Flowers and Grasses	Optional
American searocket	Cakile edentula	Flowers and Grasses	Optional
American searocket	Cakile edentula subsp. edentula	Flowers and Grasses	Optional
American searocket	Cakile edentula var. lacustris	Flowers and Grasses	Optional
skunk cabbage	Symplocarpus foetidus	Flowers and Grasses	Optional
smooth oxeye	Heliopsis helianthoides	Flowers and Grasses	Optional
smooth oxeye	Heliopsis helianthoides var. scabra	Flowers and Grasses	Optional
bluejacket	Tradescantia ohiensis	Flowers and Grasses	Optional
Clayton's sweetroot	Osmorhiza claytonii	Flowers and Grasses	Optional
longstyle sweetroot	Osmorhiza longistylis	Flowers and Grasses	Optional
bloody butcher	Trillium recurvatum	Flowers and Grasses	Optional
nodding wakerobin	Trillium flexipes	Flowers and Grasses	Optional
snow trillium	Trillium nivale	Flowers and Grasses	Optional
whip-poor-will flower	Trillium cernuum	Flowers and Grasses	Optional
Canada wildrye	Elymus canadensis	Flowers and Grasses	Optional
eastern bottlebrush grass	Elymus hystrix	Flowers and Grasses	Optional
eastern bottlebrush grass	Elymus hystrix var. bigeloviana	Flowers and Grasses	Optional
eastern bottlebrush grass	Elymus hystrix var. hystrix	Flowers and Grasses	Optional

hairy wildrye	<i>Elymus villosus</i>	Flowers and Grasses	Optional
slender wheatgrass	<i>Elymus trachycaulus</i> subsp. <i>trachycaulus</i>	Flowers and Grasses	Optional
Virginia wildrye	<i>Elymus virginicus</i>	Flowers and Grasses	Optional
Virginia wildrye	<i>Elymus virginicus</i> var. <i>virginicus</i>	Flowers and Grasses	Optional
Richardson's alumroot	<i>Heuchera richardsonii</i>	Flowers and Grasses	Optional
bluebell bellflower	<i>Campanula rotundifolia</i>	Flowers and Grasses	Optional
marsh bellflower	<i>Campanula aparinoides</i>	Flowers and Grasses	Optional
largeflower bellwort	<i>Uvularia grandiflora</i>	Flowers and Grasses	Optional
common bladderwort	<i>Utricularia macrorhiza</i>	Flowers and Grasses	Optional
bloodroot	<i>Sanguinaria canadensis</i>	Flowers and Grasses	Optional
California poppy	<i>Eschscholzia californica</i>	Flowers and Grasses	Optional
California poppy	<i>Eschscholzia californica</i> subsp. <i>californica</i>	Flowers and Grasses	Optional
American spikenard	<i>Aralia racemosa</i>	Flowers and Grasses	Optional
American spikenard	<i>Aralia racemosa</i> subsp. <i>racemosa</i>	Flowers and Grasses	Optional
wild sarsaparilla	<i>Aralia nudicaulis</i>	Flowers and Grasses	Optional
false melic	<i>Schizachne purpurascens</i>	Flowers and Grasses	Optional
tarweed fiddleneck	<i>Amsinckia lycopsoides</i>	Flowers and Grasses	Optional
closed bottle gentian	<i>Gentiana andrewsii</i>	Flowers and Grasses	Optional
closed bottle gentian	<i>Gentiana andrewsii</i> var. <i>andrewsii</i>	Flowers and Grasses	Optional
plain gentian	<i>Gentiana alba</i>	Flowers and Grasses	Optional
coon's tail	<i>Ceratophyllum demersum</i>	Flowers and Grasses	Optional
dwarf scouringrush	<i>Equisetum scirpoides</i>	Flowers and Grasses	Optional

meadow horsetail	<i>Equisetum pratense</i>	Flowers and Grasses	Optional
scouringrush horsetail	<i>Equisetum hyemale</i>	Flowers and Grasses	Optional
scouringrush horsetail	<i>Equisetum hyemale</i> var. <i>affine</i>	Flowers and Grasses	Optional
smooth horsetail	<i>Equisetum laevigatum</i>	Flowers and Grasses	Optional
variegated scouringrush	<i>Equisetum variegatum</i>	Flowers and Grasses	Optional
variegated scouringrush	<i>Equisetum variegatum</i> var. <i>variegatum</i>	Flowers and Grasses	Optional
water horsetail	<i>Equisetum fluviatile</i>	Flowers and Grasses	Optional
green dragon	<i>Arisaema dracontium</i>	Flowers and Grasses	Optional
Jack in the pulpit	<i>Arisaema triphyllum</i>	Flowers and Grasses	Optional
Jack in the pulpit	<i>Arisaema triphyllum</i> subsp. <i>triphyllum</i>	Flowers and Grasses	Optional
greater yellow lady's slipper	<i>Cypripedium parviflorum</i> var. <i>makasin</i>	Flowers and Grasses	Optional
greater yellow lady's slipper	<i>Cypripedium parviflorum</i> var. <i>pubescens</i>	Flowers and Grasses	Optional
moccasin flower	<i>Cypripedium acaule</i>	Flowers and Grasses	Optional
ram's head lady's slipper	<i>Cypripedium arietinum</i>	Flowers and Grasses	Optional
showy lady's slipper	<i>Cypripedium reginae</i>	Flowers and Grasses	Optional
white lady's slipper	<i>Cypripedium candidum</i>	Flowers and Grasses	Optional
Mexican lovegrass	<i>Eragrostis mexicana</i>	Flowers and Grasses	Optional
Mexican lovegrass	<i>Eragrostis mexicana</i> subsp. <i>mexicana</i>	Flowers and Grasses	Optional
purple lovegrass	<i>Eragrostis spectabilis</i>	Flowers and Grasses	Optional
sandbar lovegrass	<i>Eragrostis frankii</i>	Flowers and Grasses	Optional
teal lovegrass	<i>Eragrostis hypnoides</i>	Flowers and Grasses	Optional
tufted lovegrass	<i>Eragrostis pectinacea</i> var. <i>pectinacea</i>	Flowers and Grasses	Optional

Carolina mosquitofern	<i>Azolla caroliniana</i>	Flowers and Grasses	Optional
Mexican Mosquito Fern	<i>Azolla microphylla</i>	Flowers and Grasses	Optional
whip nutrush	<i>Scleria triglomerata</i>	Flowers and Grasses	Optional
eastern purple coneflower	<i>Echinacea purpurea</i>	Flowers and Grasses	Optional
eastern swamp saxifrage	<i>Saxifraga pensylvanica</i>	Flowers and Grasses	Optional
walking fern	<i>Asplenium rhizophyllum</i>	Flowers and Grasses	Optional
bearded sprangletop	<i>Leptochloa fusca</i> subsp. <i>fascicularis</i>	Flowers and Grasses	Optional
Malabar sprangletop	<i>Leptochloa fusca</i>	Flowers and Grasses	Optional
roundleaf sundew	<i>Drosera rotundifolia</i> var. <i>rotundifolia</i>	Flowers and Grasses	Optional
tobacco root	<i>Valeriana edulis</i>	Flowers and Grasses	Optional
tobacco root	<i>Valeriana edulis</i> var. <i>ciliata</i>	Flowers and Grasses	Optional
American water plantain	<i>Alisma subcordatum</i>	Flowers and Grasses	Optional
northern water plantain	<i>Alisma triviale</i>	Flowers and Grasses	Optional
eastern waterleaf	<i>Hydrophyllum virginianum</i>	Flowers and Grasses	Optional
eastern waterleaf	<i>Hydrophyllum virginianum</i> var. <i>virginianum</i>	Flowers and Grasses	Optional
Canadian waterweed	<i>Elodea canadensis</i>	Flowers and Grasses	Optional
liverleaf wintergreen	<i>Pyrola asarifolia</i> subsp. <i>asarifolia</i>	Flowers and Grasses	Optional
waxflower shinleaf	<i>Pyrola elliptica</i>	Flowers and Grasses	Optional
light poppymallow	<i>Callirhoe alcaeoides</i>	Flowers and Grasses	Optional