# **GREENING THE EDGE**

# MILWAUKEE LANDSCAPE CODE

APA Upper Midwest Planning Conference October 5, 2019

**Kyle Gast** 



# **MILWAUKEE ZONING CODE**

Chapter 295 of the Milwaukee Code of Ordinances

# Milwaukee.gov/ZoningCode

# LANDSCAPING AND SCREENING

Section 295-405 of the Milwaukee Code of Ordinances

- → Milwaukee Code of Ordinances
  - → MCO Chapter 295: Zoning Code
    - → Subchapter 4: General Provisions
      - → 295-405: Landscaping and Screening

- On March 26, 2019 Milwaukee's Common Council repealed and recreated Section 295-405 of the Code.
- The new landscape code went into effect on April 12, 2019.

# **CUSTOMER SERVICE GOALS**

- Simplify the landscape code, and make landscape requirements more practical and user-friendly.
- Build flexibility into the code, allowing a broad range of options for planting borders, buffers, and islands
- Provide solutions for retrofits of existing sites that are unable to comply with the code.
- Develop a "landscape pattern book" that shows acceptable strategies for landscaping





### **Local Business Action Team**

Activities, Findings and Recommendations

Final Report August, 2015

Report by the Legislative Reference Bureau conveying the activities, findings and recommendations of the City of Milwaukee Local Business Action Team.

# **URBAN DESIGN GOALS**

- Ensure a safe, well-defined and pedestrian friendly public realm.
- Protect and enhance the aesthetic quality of the city.
- Screen unsightly uses and utilitarian features from public streets.
- Provide buffers between incompatible uses.
- Require existing sites to be brought up to current standards.





# **ENVIRONMENTAL GOALS**

- Increase the amount of trees in the city.
- Reduce the amount of impervious pavement in the city.
- Encourage the use of green infrastructure.
- Ensure long term health and maintenance of plants.
- Require existing sites to be brought up to current standards.





# from former landscape code...

### Table 295-405-1-a

### PERIMETER LANDSCAPING AND EDGE TREATMENT REQUIREMENTS BY USE AND ZONING DISTRICT

### Key:

required - this is the minimum landscaping/edge treatment requirement for this land use in the specified zoning district

allowed - this landscaping/edge treatment type may be used as an alternative to the "required" type for this land use in specified zoning district not permitted - this landscaping/edge treatment type cannot be used for this particular use in the specified zoning district

use not permitted - this land use is not permitted in this zoning district; therefore, no required landscaping type is specified

Type of use	Light Mo	tor Vehicle Park	ing; Vehicle	Motor Vehicle	Heavy Moto	or Vehicle Parking; S	torage Yards;	Mechanical	Lt. Motor Veh.
		Operating Area	a	Sales Lot	Contractors' Yards; Outdoor Salvage			Equipment,	Parking Next
					Operations			etc.	to Res. Use
	Type A	Type B	Type C	Type D	Type E	Type F	Type I	Type G	Туре Н
Zoning District									
NS2, LB2, RB2	not permitted	required	allowed	required	not permitted	required	allowed*	required	required
LB3	not permitted	required**	allowed	required	not permitted	required	allowed*	required	required
NS1, LB1, RB1, CS	required	allowed	not permitted	required	required	allowed	allowed*	required	required
C9A-C9H	not permitted	required	allowed	use not permitted	not permitted	required	allowed*	required	required
IM, IC	not permitted	required	allowed	required	not permitted	required	allowed*	required	required
102, IL2	not permitted	required	allowed	required	required	allowed	allowed*	required	required
IO1, IL1	required	allowed	allowed	required	required	allowed	allowed*	required	required
IH	required	allowed	allowed	required	not permitted	required	allowed*	required	required
PK, TL	required	allowed	allowed	use not permitted	use not permitted	use not permitted	use not permitted	required	required
RM5-RM7, R02	not permitted	required	allowed	use not permitted	use not permitted	use not permitted	use not permitted	required	required
RT3-RT4, RM3- RM4	not permitted	required	allowed	use not permitted	use not permitted	use not permitted	use not permitted	required	required
RS1-RS6, RT1- RT2, RM1-RM2, ROI	required	allowed	not permitted	use not permitted	use not permitted	use not permitted	use not permitted	required	required
	*N	ot permitted for	_	except heavy moto asonry piers require		loor storage) or outd 295-405-1-c.	oor salvage op	erations.	

# from former landscape code...

	Table 295-405-1-c FENCE/WALL AND LANDSCAPING REQUIREMENTS FOR LANDSCAPING TYPES									
		Type A Landscaping	Type B Landscaping	Type C Landscaping	Type D Landscaping	Type E Landscaping	Type F Landscaping	Type G Landscaping	Type H Landscaping	Type I Landscaping
	Fence or wall required?	optional	yes ; if located in LB3, masonry piers required	yes	yes if located in LB2 or LB3	yes	yes	optional	yes	yes
Wall	Fence/wall height requirements	fence optional; see below	3 ft. min.; 6 ft. max.	6 ft.	if provided, 3 ft. min.; 6 ft. max.	6 ft. min.; 9 ft. max.	6 ft. min.; 9 ft. max.	to top of object plus one ft. (min.); 9 ft. max	6 ft.; shall be reduced to 3.5 ft. when adjacent to a residential front yard	6 ft. min,; 9 ft. max.
Required Fence/Wall	Fence/wall materials required	fence not required	masonry or decorative metal; if located in LB3, masonry piers required	combination masonry/decor ative metal	if LB2 or LB3, masonry or decorative metal; other districts, fences are optional	any opaque fence type	any opaque fence type	any opaque fence type	any opaque fence type	masonry or decorative metal
	Fence/wall opacity	fence not required	no opacity standard	solid in lower 3 ft.	no opacity standard	100%	100%	100%	100%	no opacity standard
	Fence/wall location in landscaped area	if provided, adjacent to parking	anywhere within landscaped area	anywhere within landscaped area	anywhere within landscaped area	behind landscaping	behind landscaping	between object being screened and area of visibility	adjacent to residential property line	Anywhere within land- scaped area
	Masonry wall	up to 6 ft. high	up to 6 ft. high	up to 6 ft. high	up to 4 ft. high	up to 9 ft. high	up to 9 ft. high	up to 9 ft. high	up to 9 ft. high	up to 9 ft. high
=	Decorative metal fence	up to 6 ft. high	up to 6 ft. high	up to 6 ft. high; lowest 3 ft. shall be solid wall	up to 6 ft. high	not permitted	not permitted	allowed, but a second row of shrubs shall be required	up to 9 ft. high	Up to 9 ft. high
Fence/Wall	Wood fence, open	up to 4 ft. high	not permitted	not permitted	if not in LB2, up to 3.5 ft. high	not permitted	not permitted	not permitted	not permitted	not permitted
Allowable	Wood fence, opaque	up to 4 ft. high	not permitted	not permitted	if not in LB2, up to 3.5 ft. high	up to 9 ft. high	up to 9 ft. high	up to 9 ft. high	up to 9 ft. high	not permitted
	Chain link fence (coated wire only)	up to 6 ft. high	not permitted	not permitted	not permitted	optional if fence has slats or mesh screening; up to 6 ft. high	optional if fence has slats or mesh screening; up to 6 ft. high	optional if fence has slats or mesh screening; up to 6 ft. high	not permitted with or without slats or mesh screening	not permitted
	Minimum landscaped area width	5 ft.	5 ft.	sufficient for wall, trees and optional shrubs	5 ft.	15 ft.	5 ft.; 15 ft. if a chain-link fence is present	sufficient to accommodate required plantings; 15 ft. if a chain-link fence is present	sufficient to accommodate fence/wall and optional trees/shrubs	10 ft.
& Allowed	street-type trees	25 ft.	minimum 1 every 25 ft.	25 ft.	25 ft.	25 ft.	25 ft.	allowed but not required unless a loading dock is present	1 every 25 feet or where required by s. 295-405-1-b-8	minimum 1 every 25 feet.
rees and Shrubs Required & Allowed	option	20 ft. if landscaped area is at least 10 ft. wide	minimum 1 every 20 ft. if landscaped area is at least 10 ft. wide	optional	20 ft. if landscaped area is at least 10 ft. wide	minimum 1 every 20 ft. if landscaped area is at least 10 ft. wide	minimum 1 every 20 ft. if landscaped area is at least 10 ft. wide	minimum 1 every 20 ft. if landscaped area is at least 10 ft. wide	minimum 1 every 20 ft. if landscaped area is at least 10 ft. wide	minimum 1 every 20 feet if landscaped area is at least 10 ft. wide
Trees and Si	Shrub spacing requirement	2 staggered rows with plants a max. of 4 ft. on center in each row; if a 4-ft. opaque fence is sprovided, only one row shall be planted, max. 3ft	2 staggered rows with plants a max. of 4 ft. on center in each row; if a 4-ft. opaque fence is provided, only one row shall be planted, max. 3ft	low-level shrubs, plantings and grasses are allowed and encouraged, but not required due to wall requirement	if light motor vehicle display: one row with plants a max. of 3 ft. on center; if heavy motor vehicle display, 2 staggered rows with plants a max. of 4 ft. on center in each row	one row with plants a max. of 3 ft. on center; if chain-link fence is provided, 2 staggered rows with plants a max. of 4 ft. on center in each row	one row with plants a max. of 3 ft. on center; if chain-link fence is provided, 2 staggered rows with plants a max. of 4 ft. on center in each row	2 staggered rows with plants a max. of 4 ft. on center in each row; if a 4-ft. opaque fence is provided, only one row shall be planted, max. 3ft	option or, where required by s. 295-405-1-b-8, one row with plants a max. of 8 ft. on center	one row with a max. of 4 ft. on center, if a masonry wall is provided, shrubs are optional
frees and Shrubs Required & Allowed	Shrub size, min, (at time of planting)	2 ft. in diameter	2 ft. in diameter	2 ft. in diameter	if light motor vehicle display, 1.5 ft. in diameter; if heavy motor vehicle display, 2 ft. in diameter	2 ft. in diameter	2 ft. in diameter	2 ft. in diameter	2 ft. in diameter	2 ft. in diameter
Shrubs Requ	Shrub height, min, (at time of planting)	2 ft.	2 ft.	2 ft.	if light motor vehicle display, 2 ft.; if heavy motor vehicle display, 3 ft.	6 ft.	6 ft.	6 ft.	2 ft.	6 ft.
Trees and	Shrub height, max. (at maturity)	3.5 ft.	3.5 ft.	3.5 ft.	if light motor vehicle display, 3.5 ft.; if heavy motor vehicle display, 4.5 ft.	no limit	no limit	no limit	no limit	no limit

# from NEW Landscape Code

# Table 295-405-3-a OPTIONS FOR SCREENING PARKING LOTS AND VEHICLE OPERATING AREAS FROM STREETS

	Option A	Option B	Option C
Minimum width of landscaped area	10 ft.	5 ft.	none
Type and minimum number of plants required in landscaped area	nts required in landscaped perennials/ornamental perennials/ornamenta		none
Minimum number of canopy trees required	1 canopy tree per 20 linear ft.	1 canopy tree per 20 linear ft.	1 tree per 40 linear ft.
Fence/wall required	none	ornamental metal fence	masonry wall
Minimum fence/wall height	none	3 ft.	3 ft.
Fence/wall opacity requirement	Portions above 4 ft. shall be at least 50% open	Portions above 4 ft. shall be at least 50% open	Portions below 3 ft. shall be at least 50% opaque; portions above 4 ft. shall be at least 50% open

# **3 REQUIREMENTS FOR PARKING LOTS**



A. Screening from Public Streets



**B. Screening from Residential Districts** 



**C.** Landscaping and Green Infrastructure



# **Purpose:**

To ensure a well-defined and pedestrian-friendly public realm and to protect the aesthetic quality of the city of Milwaukee

# When Required:

When a parking lot is less than 20 feet from a street property line.

### **OPTIONS FOR SCREENING PARKING LOTS FROM STREETS**

	OPTION A	OPTION B	OPTION C
Minimum width of landscape area	10 feet	5 feet	none
Low-level plants required	low shrubs, perennials and/or ornamental grasses	low shrubs, perennials and/or ornamental grasses	none
Canopy trees required	1 tree per 20 linear feet	1 tree per 20 linear feet	1 tree per 40 linear feet
Fence/wall required	none	3-foot tall ornamental metal fence	3-foot tall masonry wall

The minimum number of low-level plants required is describe on page 32.

### OPTIONS FOR SCREENING PARKING LOTS FROM STREETS

# OPTION A

10 ft. wide landscape area low shrubs, perennials and/or ornamental grasses 1 tree per 20 feet.



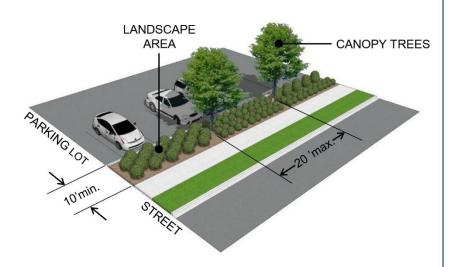
3 ft. tall ornamental metal fence low shrubs, perennials and/or ornamental grasses 1 tree per 20 feet.



3 ft. tall masonry wall 1 tree per 40 feet.

### **OPTION A**

A continuous 10-foot wide landscape area between the parking lot and the street filled with closely spaced low shrubs, perennials and/or ornamental grasses and one canopy tree per 20 linear feet.













### **OPTION B**

A continuous 5-foot wide landscape area between the parking lot and the street filled with closely spaced low shrubs, perennials and/or ornamental grasses, an ornamental metal fence at least 3 feet in height and one canopy tree per 20 linear feet.



### **OPTION C**

A 3 -foot tall masonry wall between the parking lot and the street property line and one canopy tree per 40 linear feet.









# SCREENING FROM RESIDENTIAL DISTRICTS



# **Purpose:**

To mitigate the visual impact of parking lots in neighborhoods, and to protect residential properties from the potential negative effects of excessive light, noise or dust.

# When Required:

when a parking lot is less than 20 feet from an adjacent property in a residential zoning district

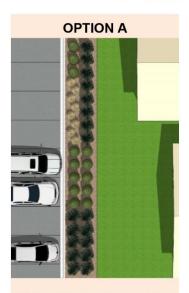
### **OPTIONS FOR SCREENING FROM RESIDENTIAL DISTRICTS**

	OPTION A	OPTION B	OPTION C
Minimum width of landscape area	10 feet	5 feet	none
Eye-level plants required	evergreen trees and/or tall shrubs*	evergreen trees and/or tall shrubs*	none
Fence/wall required	none	4-foot tall solid fence or wall*	4-foot tall masonry wall*

<sup>\*</sup> Where a parking lot is adjacent to a residential front yard, the height of fences or walls may be reduced to 3 feet and tall shrubs or evergreen trees should be replaced with low shrubs, perennials and/or ornamental grasses.

The minimum number of eye-level plants required is describe on page 40.

### **OPTIONS FOR SCREENING FROM RESIDENTIAL DISTRICTS**



10 ft. wide landscape area evergreen trees and/or tall shrubs



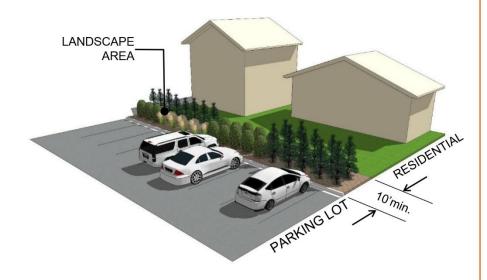
5 ft. wide landscape area 4 ft. tall solid fence or wall evergreen trees and/or tall shrubs



4 ft. tall masonry wall

# SCREENING FROM RESIDENTIAL DISTRICTS OPTION A

A continuous 10-foot wide landscape area between the parking lot and the common property line filled with closely spaced evergreen trees and/or tall shrubs.









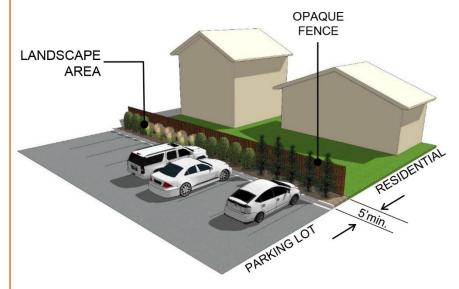






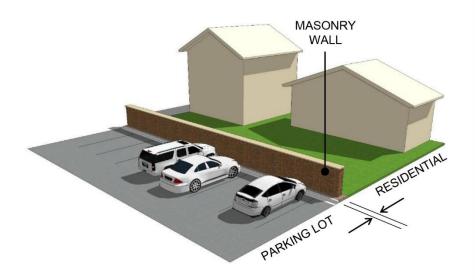
# SCREENING FROM RESIDENTIAL DISTRICTS OPTION B

A continuous 5-foot wide landscape area between the parking lot and the common property line filled with closely spaced evergreen trees and/or tall shrubs and a continuous opaque fence or wall at least 4 feet in height.



# SCREENING FROM RESIDENTIAL DISTRICTS OPTION C

A continuous opaque masonry wall at least 4 feet in height.









# LANDSCAPING / GREEN INFRASTRUCTURE



# **Purpose:**

To increase the urban tree canopy, reduce heat build-up by providing shade for paved areas, reduce the impact of storm water runoff on the city's storm sewers, and improve water quality in streams, rivers and Lake Michigan.

# When Required:

At any site with 5 or more off-street surface parking spaces.

# PARKING LOT LANDSCAPING



# **PARKING LOT LANDSCAPING**

# **Amount Required**

1 canopy tree and 100 sq. ft. of landscaped area for every 4 parking spaces.

### Location

Within 50 feet of the parking lot. Perimeter landscape areas are included.

### **Green Infrastructure**

The amount of trees and landscaped areas required may be reduced if green infrastructure features are provided.





# **GREEN INFRASTRUCTURE**



# **Permeable Paving**

100 square feet of permeable paving may be substituted for 1 tree and 100 square feet of landscaped area.



### **Rain Gardens**

100 square feet of rain garden with a rain water catchment area of at least 1,000 square feet may be substituted for 1 tree and 100 square feet of landscaped area.



### **Bioswales**

50 cubic feet (375 gallons) of bio-retention capacity with a rain water catchment area of at least 1,000 square feet may be substituted for 1 tree and 100 square feet of landscaped area.

### **CANOPY TREES**





### PLANTING AREAS FOR TREES

Planting areas for trees must have a minimum surface area of 100 square feet per tree.

### TREE SIZE

Trees must be at least 2.5 inches in diameter

2 trees at least 1.5 inches in diameter may be substituted for 1 tree of 2.5 inches in diameter

### CREDIT FOR EXISTING CANOPY TREES

An existing tree may be counted if it meets the standards and if no soil within 5 feet of the tree is disturbed

A tree greater than 12 inches in diameter may be counted as 2 trees if no soil within 10 feet of the tree is disturbed

A tree greater than 18 inches in diameter may be counted as 3 trees if no soil within 15 feet of the tree is disturbed



Armstrong Maple Acer x freemanii 'Amstrong'



State Street Miyabe Maple Acer miyabei 'Morton'



Musclewood Carpinus caroliniana



Hackberry Celtis occidentalis



Eastern Red Bud Cercis canadensis



Ginkgo (Male) Ginkgo biloba



Swamp White Oak Quercus bicolor



Baldcypress Taxodium distichum

### LIST OF RECOMMENDED CANOPY TREES

BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD		SUN		АТТ	RIBU	TES
Acer x freemanii spp. *	Freeman Maple	50'	30-40'	0		N			
Acer x freemanii 'Armstrong'	Armstrong Maple	50-60'	15-20'	0		N			
Acer x freemanii 'Autumn Blaze'	Autumn Blaze Maple	50'	40'	0					
Acer miyabei 'Morton'	State Street Miyabe Maple	50'	40'	0					s
Acer saccharum 'Barrett Cole'	Apollo Sugar Maple	30'	10'	0	•	N			
Acer truncatum x A. platanoides *	SunsetMaple	35'	25'	0	•				s
Alnus glutinosa	Black Alder	40-60'	20-40'	0	•				
Amelanchier arborea	Downy Serviceberry	25'	15'	0	•				
Alemanchier laevis	Allegheny Serviceberry	25'	15'		•				
Amelanchier x grandiflora *	Apple Serviceberry	25-30'	25-30'	0	•	N		D	s
Betula nigra *	River Birch	40-70'	40-60'	0		N	R		s
Carpinus betulus 'Fastigiata'	Upright European Hornbeam	35'	20-30'	0	•				

O Full Sun	•	Part Sun	Full Shade			
N=Native to Wisc	onsin	R=Rain	Garden/Bioswale	D=Drought Tolerant	S=Salt Tolerant	P=Pet Urine Tolerant
* Choose improve	ed cultiv	ars (cv.) or s	traight species (spp.)	** Male cultivars or	nly	

### LOW-LEVEL PLANTS

Low Shrubs, Perennials and Ornamental Grasses

Low-level plants help to define spaces while allowing for natural surveillance of public areas. They should be used along street frontages and in interior landscape areas.

Low-level plants should generally be kept below 3 feet in height. Plants taller than 4 feet in height are prohibited along streets.

Landscape areas used for planting shrubs, perennials and ornamental grasses should consist of healthy noncompact planting soil at least 18 inches in depth.

MINIMUM PLANT SIZE	
Low Shrubs	1.5 feet tall 3 gallon container size
Ornamental Grasses	1 foot tall 1 gallon container size

MINIMUM NUMBER OF P	PLANTS REQUIRED
(Option A): Street edge	4 low shrubs or 8
landscape area without	perennials/ornamental
fence	grasses per 10 linear feet
(Option B): Street edge	4 low shrubs or 8
landscape area with	perennials/ornamental
ornamental metal fence	grasses per 20 linear feet
Interior landscape area	4 low shrubs or 8 perennials/ornamental grasses per 100 square feet

# Dwarf Bush-honeysuckle





Annabelle Hydrangea Hydrangea arborescens 'Annabelle'

Little Devil Ninebark Physocarpus opulifolius 'Donna May'

PERENNIALS



Coronation Gold Yarrow Achillea x 'Coronation Gold'



Pardon Me Daylily Hemerocallis x 'Pardon Me'



Denim & Lace Russian Sage Perovskia atriplicifolia 'Denim & Lace'

ORNAMENTAL GRASSES



Karl Forester Feather Reed Grass Calamagrostis acutiflora 'Karl Foerster'



Prairie Blues Little Bluestem Schizachyrium scoparium 'Prairie Blues'



Prairie Dropseed Sporobolus heterolepsis

### LIST OF RECOMMENDED LOW SHRUBS

BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	SUN		АТТ	RIBU	TES	
Buxus spp. *	Boxwood	2-4'	2-5'	00					
Ceanothus americanus	New Jersey Tea	2-3'	2-4'	00	N	R	D		
Cotoneaster apiculatus *	Cranberry Cotoneaster	2-3'	3-6'	0			D	s	P
Deutzia gracillis *	Deutzia	2'	4'	00					
Diervilla spp.*	Dwarf Bush-honeysuckle	3-4'	4-5'	00	N		D		
Forsythia spp. *	Forsythia	2-3'	3-5'	0			D	s	Р
Fothergilla gardenii *	Fothergilla	2-4'	3-4'	00					
Hydrangea spp. *	Hydrangea	3-5'	3-5'	000	)			s	
Hypericum kalmianum *	St. John's Wort	2-4'	2-4'	00	N	R	D	s	
Juniperus spp. **	Juniper	1-3'	4-8'	0			D	s	Р
Microbiota decussata	Siberian Cypress	1'	5-8'	00					
Physocarpus opulifolius *	Ninebark	3-4'	3-4'	00	N	R	D		

O Full Sun	Part Sun Full Shade			
N=Native to Wisconsin	R=Rain Garden/Bioswale	D=Drought Tolerant S	S=Salt Tolerant	P=Pet Urine Tolerant
* Choose improved cultiva	ars (cv.) or straight species (spp.)	** Short cultivars only	/ *** Tall (	cultivars only





# **APPLICABILITY**

- New Construction
- Additions or Expansions
- Repaving or Reconstruction
- Change in Use
- Substantial Improvement









# **EXISTING SITES "RETROFITS"**

Reduced standards are permitted applicable due to a...

- repaving or reconstruction, a
- change in the use being screened, or a
- substantial improvement to an existing building.



Options A & B: The minimum width of landscape area may be reduced by up to 50%

Option C: An ornamental metal fence with masonry piers may be used rather than a masonry wall.



Landscaping: 1 tree and 100 square feet of landscape area per 8 parking spaces. This may be further reduced through the use of green infrastructure.

# PARKING LOT BEAUTIFICATION GRANTS

Up to \$8,000 per property awarded for landscaping and green infrastructure

MAXIMUM REIMBURSEMENT RATES							
Trees (minimum 2.5" diameter)	\$150 / tree						
Shrubs and Bushes (minimum 3 gallon container, 1.5 ft. tall)	\$25 / bush						
Top soil native flowers, small plants and grasses	\$0.70 / sq. ft.						
De-Paving (Asphalt or concrete removal)	\$2 /sq. ft.						



# Parking Lot Retrofit at 1701 West North Avenue



# **CONTACT:**

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# **WEB LINKS:**

Milwaukee Zoning Code: Milwaukee.gov/ZoningCode

Landscape Design Guide: Milwaukee.gov/LandscapeCode

Parking Lot Beautification Grants: Milwaukee.gov/GreenLots