



PLANNING COMMISSION AGENDA
September 14, 2016, 7:00 p.m.
Multipurpose Room/Council Chamber
Burien City Hall, 400 SW 152nd Street
Burien, Washington 98166

This meeting can be watched live on Burien Cable Channel 21 or on www.burienmedia.org

1. ROLL CALL

2. AGENDA CONFIRMATION

3. APPROVAL OF MINUTES

A. August 24, 2016

4. PUBLIC COMMENT

Public comment will be accepted on topics not scheduled for a public hearing.

5. PUBLIC HEARING

A. Low Impact Development (LID) Zoning Code Amendments

6. NEW BUSINESS

7. OLD BUSINESS

A. Low Impact Development (LID) Zoning Code Amendments – Discussion and Recommendation

8. ELECTION OF OFFICERS

9. PLANNING COMMISSION COMMUNICATIONS

10. DIRECTOR’S REPORT

11. ADJOURNMENT

Future Agendas (Tentative)

September 28, 2016

- Short Course In Local Planning

October 12, 2016

- Comprehensive Plan Amendments and Rezone Request – Introduction and Discussion
- Minor Zoning Code Amendments – Introduction

Planning Commission meetings are accessible to people with disabilities. Please phone (206) 248-5517 at least 48 hours prior to the meeting to request assistance. American Sign Language (ASL) interpretation and assisted listening devices are available upon request.

Planning Commissioners

Curtis Olsen (Chair)

Kim Davis
Anna Markee

Amy Rosenfield (Vice-Chair)
Kaelene Nobis

Butch Henderson
Douglas Weber

City of Burien

BURIEN PLANNING COMMISSION
August 24, 2016
7:00 p.m.
Multipurpose Room/Council Chambers
MINUTES

To hear the Planning Commission's full discussion of a specific topic or the complete meeting, the following resources are available:

- Watch the video-stream available on the City website, www.burienwa.gov
- Check out a DVD of the Council Meeting from the Burien Library
- Order a DVD of the meeting from the City Clerk, (206) 241-4647

CALL TO ORDER

Chair pro tem Butch Henderson called the August 24, 2016, meeting of the Burien Planning Commission to order at 7:05 p.m.

ROLL CALL

Present: Kim Davis, Butch Henderson, Kaelene Nobis, and Douglas Weber

Absent: Anna Markee and Amy Rosenfield, excused; Curtis Olsen, unexcused

Administrative staff present: Chip Davis, Community Development director

AGENDA CONFIRMATION

Direction/Action

Motion was made by Commissioner Nobis and seconded by Commissioner Weber to confirm the agenda. Motion passed 5-0.

APPROVAL OF MINUTES

Direction/Action

Motion was made by Commissioner Davis, seconded by Commissioner Nobis, and passed 5-0 to approve the minutes of the August 10, 2016, meeting.

PUBLIC COMMENT

None.

NEW BUSINESS

A. Low Impact Development (LID) Zoning Code Amendments

Chip Davis, Community Development Department director, gave a brief introduction to the proposed low impact development (LID) amendments to the Burien Zoning Code. These amendments, he explained, would incorporate LID principles into the Zoning Code in conformance with Burien's National Pollutant Discharge Elimination Systems (NPDES) Western Washington Phase II Municipal Stormwater Permit. The amendments are required by law to maintain Burien's permit to discharge stormwater. He noted that the Planning Commission will be conducting a public hearing at its September 14th meeting.

He introduced Trista Kobluskie of Otak, the consulting firm that is working with Burien's Public Works Department to develop the various necessary amendments. She explained that Low Impact

Development is a set of site development principles that help to minimize the creation of impervious surface in the development process, maintain native vegetation, and manage stormwater runoff close to where the precipitation falls. She cited rain gardens and permeable pavement as examples.

Ms. Kobluskie explained that the city has permit from the state Department of Ecology permitting the discharge of storm water from the municipal stormwater system into receiving waters in exchange for meeting a number of requirements in the permit. She said the most important requirement in the current permit cycle is to revise development codes to incorporate these low-impact development principles and to adopt the 2016 King County Surface Water Design Manual. She said the mandate of the permit is to make low-impact development the preferred and commonly use approach to site development in the City of Burien. She went on to explain how development affects the natural water cycle in a detrimental way. Low-impact development creates an urban landscape that functions like the natural water cycle, she noted.

Ms. Kobluskie said her firm worked with Burien's Community Development and Public Works departments, the fire marshal, and the city attorney to identify potential changes to Burien's codes to incorporate LID, including Title 19 Zoning, Title 17 Subdivisions, Title 13 Surface Water Management, 2008 Road Design and Construction Standards, and the Comprehensive Plan. She said they also had a developer roundtable and two open houses to gather input from the public.

Ms. Kobluskie then briefly reviewed the proposed changes to Title 13 and the Road Design and Construction Standards.

In the Zoning Code, Ms. Kobluskie said, a number of definitions will be updated or added in Chapter 19.10 Definitions, and amendments are proposed to chapters 19.20 Parking and Circulation and 19.25 Tree Retention and Landscaping. In addition, she offered additional guidance on the tree retention codes that currently are being updated by city staff.

She then answered a number of questions about drainage ditches and impervious surface coverage.

OLD BUSINESS

None.

PLANNING COMMISSION COMMUNICATIONS

None.

DIRECTOR'S REPORT

Mr. Davis reviewed the upcoming meeting topics and reminded the commissioners that the meeting on September 28th is the Short Course on Local Planning.

ADJOURNMENT

Direction/Action

Commissioner Weber moved for adjournment; Commissioner Davis seconded. Motion carried unanimously. The meeting adjourned at 8:03 p.m.

APPROVED: _____

Curtis Olsen, chair
Planning Commission

CITY OF BURIEN, WASHINGTON MEMORANDUM

DATE: September 7, 2016

TO: Burien Planning Commission

FROM: Charles W. “Chip” Davis, AICP, Community Development Director

SUBJECT: Public Hearing on Proposed Amendments to BMC Chapters 19.10, Definitions, 19.20 Parking and Circulation and 19.25 Tree Retention and Landscaping Related to Low Impact Development

PURPOSE

At this meeting the Commission will conduct a Public Hearing on proposed amendments to BMC Title 19, Burien Zoning Code, to incorporate low impact development (LID) principles in conformance with Burien’s National Pollutant Discharge Elimination Systems (NPDES) Western Washington Phase II Municipal Stormwater Permit.

Following the Public Hearing the Planning Commission is scheduled to discuss and make a recommendation on the proposed amendments to the Burien City Council for consideration at their October 3rd meeting.

BACKGROUND

Permit Condition S5.C.4.f of the Western Washington Phase II Municipal Permit, requires permittees to incorporate and require low impact development (LID) principles and BMPs in local development-related codes, rules, and standards by December 31, 2016. The Permit requires permittees to engage in a process of review and revision of local codes similar to the process outlined in *Integrating LID into Local Codes: A Guidebook for Local Governments* (Puget Sound Partnership, 2012).

In 2014, the consulting firm Otak was retained to facilitate the code review and revision process and in September 2014, they issued a detailed investigation of the barriers or gaps in implementation of LID in Burien’s development codes. In August 2015, Otak and City staff initiated the public involvement process for code revision to incorporate LID principles. In October 2015, Otak issued a report providing City decision-makers with basic concepts for code updates and requesting direction for going forward with those updates. Consultant recommendations are focused on:

- Measures to encourage reduction of impervious surfaces on development sites.
- Measures to encourage restoration of soils in landscaped areas.
- Measures to ensure that Burien’s development codes do not prohibit or restrict the use of LID on development sites.

Otak’s comprehensive evaluation of Burien’s development regulations included a review of the 2008 Burien Road Design and Construction Standards, BMC Title 17 Subdivisions, BMC Title 13 Waters and Sewer, Burien Comprehensive Plan and BMC Title 19 Burien Zoning Code. The

primary focus for Planning Commission consideration will be on Otak's recommended amendments to the Zoning Code to incorporate LID concepts in the development review process.

At the August 24th Commission meeting, Trista Kobluskie, Stormwater Planner with Otak made a presentation outlining the proposed LID amendments and explaining how the proposed amendments, in conjunction with proposed changes to other development regulations, will encourage the use of low impact development techniques in future developments.

Attachment 1 to this staff report is a copy of the published notice for this Public Hearing and Attachment 2 is a summary of the proposed Low Impact Development amendments to BMC Chapter 19.

ACTION

Staff is requesting that the Planning Commission conduct a Public Hearing on the proposed amendments to BMC Chapters 19.10, Definitions, 19.20 Parking and Circulation and 19.25 Tree Retention and Landscaping relating to low impact development.

No action is necessary this evening, however if the Commission wishes to make a recommendation staff suggests the following motion language:

Motion to Approve: *I move the Planning Commission recommend to the City Council approval of proposed zoning code amendments for low impact development as set forth in the September 7, 2016 staff memo and associated attachments.*

Motion to Deny: *I move the Planning Commission not recommend to the City Council proposed zoning code amendments for low impact development as set forth in the September 7, 2016 staff memo and associated attachments.*

Attachments:

1. Published Public Hearing Notice, Dated August 31, 2016
2. Proposed Amendments to BMC Title 19 Relating to Low Impact Development



Public Hearing Notice

City of Burien

400 SW 152nd St, Suite 300

Burien, Washington 98166

Hearing Information

The City of Burien Planning Commission will hold a public hearing on **September 14, 2016**, at **7:00 p.m.** at Burien City Hall, 400 SW 152nd St, to receive public comments on proposed amendments to zoning code regulations pertaining to Low Impact Development (LID). The proposed amendments will establish low impact development land use regulations in coordination with Burien Road Standards and King County Surface Water Design Manual.

Applicant

City of Burien

Proposal

Amendments are proposed to the Burien Zoning Code (BMC Title 19) to incorporate low impact development (LID) principles in the development review process in conformance with Burien's National Pollution Discharge Elimination Systems (NPDES) Western Washington Phase II Municipal Stormwater Permit. The proposed amendments are designed to minimize impervious surfaces, native vegetation loss and stormwater runoff in all types of development situations.

File No.

2016 Low Impact Development Zoning Code Amendments

A summary of the proposed zoning regulations and the project file are available for viewing at Burien City Hall during regular business hours.

How to Comment

Any person may submit written or oral comments or testimony at the public hearing, or may submit written comments prior to the hearing. Written comments may be submitted in person, via mail, e-mail or by facsimile. All documents submitted or requested as part of this application are available for review at City Hall during regular business hours.

Project Planner (for submittal of written comments or for more information)

Charles W. "Chip" Davis, AICP
Community Development Director
City of Burien
400 SW 152nd St, Suite 300
Burien, WA 98166

Phone: (206) 248-5501
E-Mail: chipd@burienwa.gov

Published in the Seattle Times

Date of Notice: August 31, 2016

cc: Burien City Council
Burien City Staff
Burien Library
B-Town Blog
Discover Burien

Westside Weekly
Seahurst Post Office
Web site: www.burienwa.gov
White Center Now

Proposed Amendments to BMC 19.10 Definitions

Amended BMC 19.10.285 Impervious surface coverage

The percentage of the area of a *lot* that is covered by *impervious surface*, including a building with a green roof, or a permeable pavement.

New BMC 19.10.038.9 Bioretention facility

A Low Impact Development BMP consisting of a shallow landscaped depression designed in accordance with BMC Title 13 to temporarily store and infiltrate stormwater runoff.

New BMC 19.10.329.1 Low Impact Development best management practice (LID BMP)

A small scale drainage facility or feature designed in accordance with BMC Title 13 that is part of a development site strategy to use processes such as infiltration, dispersion, storage, evaporation, transpiration, forest retention, and reduced impervious surface footprint to mimic pre-developed hydrology and minimize stormwater runoff.

New BMC 19.10.394.6 Paved Surface

An impervious pavement, a permeable pavement or a compacted gravel surface.

New BMC 19.10.396.1 Permeable Pavement

An area of pavement constructed of pervious concrete, porous asphalt, permeable interlocking pavers, pervious vegetated grids or other forms of porous or pervious paving material intended to allow passage of water through the pavement section.

Amended BMC 19.10.525 Structure

Anything permanently constructed in or on the ground, or over the water; excluding *fences* less than six feet in height, decks less than 18 inches above grade, bioretention facilities with wall height less than four feet from the top of footing to the top of the wall, and paved areas.

Proposed Amendments to BMC 19.20 Parking and Circulation

Amended BMC 19.20.100 Off-street parking plan design standards.

1. Parking Area Location: Off-*street* parking shall be located on the same *site* as the development served by the parking. The *Director* may approve off-*site* parking for *uses* located in zones other than RS or RM, if
 - A. The *applicant* provides an acceptable alternative plan in the event that the off-*site* parking does not work, and
 - B. Appropriate legal documents establishing the off-site parking area are submitted for Director approval pursuant to BMC 19.20.050, and
 - C. Off-street parking for a use must be located in a zone that allows that use. For example, off-street parking for a retail use is not allowed in an RS zone.
2. Driveway Location, Design and Construction. Access between off-street parking areas and abutting public streets shall be designed, located and constructed in accordance with City of Burien development standards.
3. Dead End Alley Access to Parking. No dead-end alley may provide access to more than eight required off-street parking spaces.
4. Driveways and Parking Areas in *Setbacks*.
 - A. Driveways and parking areas for *single detached dwelling units* and *townhouse or apartment dwelling units* with individual garages or carports shall not exceed 20 feet in width in any required *setback*, except if:
 - i. The driveway/parking area serves a 3-car or larger garage; and
 - ii. No more than 15 percent of the required *setback* area is displaced by the driveway.
 - B. Driveways for all other developments may cross required *setbacks* or landscaped areas abutting a public *right-of-way* in order to provide access between the off-*street* parking areas and the *street*. Maximum width within the *setback* or landscaped area is 12 feet for one-way traffic and 24 feet for two-way traffic. A wider encroachment may be allowed, provided no more than 20 percent of the required *landscaping* or *setback* area is displaced by the driveway.
5. Minimum Parking Space and Parking Lot Aisle Dimensions. The minimum *parking space* and *parking lot aisle* dimensions for the most common parking angles are shown on Table 19.20-1. For parking angles other than those shown on the chart, the minimum *parking space* and *parking lot aisle* dimensions shall be determined by the Director.
6. Compact Parking Spaces. In any development containing more than 20 *parking spaces*, up to 50 percent of the total number of required *parking spaces* may be sized to

accommodate compact cars. In any development containing more than 80 parking spaces, at least 20 percent of the total number of parking spaces provided shall be sized to accommodate compact cars. Each space shall be clearly identified as a compact car space by painting the word “COMPACT” in capital letters, a minimum of eight inches high, on the pavement at the base of the *parking space* and centered between the striping.

7. Landscaping Requirements. Parking lots shall be landscaped in accordance with BMC 19.25.070.
8. Additional Width Abutting Landscaped Area. Any *parking spaces* abutting a landscaped area on the driver or passenger side of the vehicle shall provide an additional 18 inches above the minimum space width requirement to provide a place to step other than in the landscaped area.
9. Reduction of Parking Space Depth. The *parking space* depth may be reduced up to 18 inches when vehicles overhang a walkway if the remaining walkway provides a minimum of 60 inches of unimpeded passageway for pedestrians.
10. Parking for Single Detached Dwelling Units.
 - A. *Dwelling units* may have tandem or end to end *parking spaces* for each *dwelling unit* but shall not combine parking for separate *dwelling units* in tandem parking areas.
 - B. All vehicle parking and storage must be in a garage, carport or on an approved paved surface impervious surface. Any paved surface impervious surface used for vehicle parking or storage must have direct and unobstructed driveway access. *Parking spaces* for a *single detached dwelling unit* shall be adequately sized and located to accommodate a standard-sized vehicle without the vehicle extending into the public *right-of-way* or *vehicular access easement or tract*.
11. Vanpool and Carpool Parking Design Standards. Vanpool/carpool parking areas shall meet the following minimum design standards:
 - A. A minimum vertical clearance of 7 feet 3 inches shall be provided to accommodate van vehicles if designated vanpool/carpool *parking spaces* are located in a parking structure; and
 - B. A minimum turning radius of 26 feet 4 inches with a minimum turning diameter (curb to curb) of 52 feet 5 inches shall be provided from *parking lot aisles* to adjacent carpool/vanpool *parking spaces*.
12. Parking Area Lighting. Lighting shall be provided for safety of traffic and pedestrian circulation on the *site*, as required by the Uniform Building Code. It shall be designed to minimize direct illumination of abutting properties and adjacent *streets*. The *Director* shall have the authority to waive the requirement to provide lighting.

Amended BMC 19.20.110 Off-street parking construction standards.

1. Surfacing. Off-*street* parking areas shall have dust-free, all-weather surfacing. Off-*street* parking areas shall conform to City of Burien development standards.
2. Grading. *Grading* work for access and parking areas shall comply with City of Burien development standards.
3. Drainage. Drainage and erosion/sedimentation control facilities shall be provided in accordance with City of Burien development standards.
4. Parking Space Markings. Asphalt or concrete surfaced parking areas shall have *parking spaces* marked by surface paint lines or suitable substitute traffic marking material in accordance with the Washington State Department of Transportation Standards. Wheel stops or curbing are required where a parked vehicle would encroach on adjacent property, pedestrian access or circulation areas, *right-of-way* or landscaped areas.
5. Curbing. All access and parking areas shall be enclosed with cast in place vertical curbs or functionally equivalent structural barriers. Curbs may be cut to allow surface water runoff to enter low impact development best management practices (LID BMPs).
6. Bicycle Parking. Where bicycle parking is provided, locate the bicycle parking over a permeable pavement where allowed in accordance with BMC Title 13.

Amended BMC 19.20.130 Maintenance.

The property owner shall maintain all off-*street* access and parking areas. Maintenance shall include removal and replacement of dead and dying trees, grass and shrubs, removal of trash and weeds, and repair and maintenance of traffic control devices, *parking space* striping, signs, light standards, *fences*, walls, surfacing materials, curbs, railings and *landscaping*. Parking area stormwater facilities, including permeable pavements, shall be maintained in accordance with BMC Title 13.

TABLE 19.20-1

MINIMUM PARKING SPACE DIMENSIONS

A	B	C	D		E	
Parking Space Angle	Minimum Parking Space Width	Minimum Parking Space Length	Minimum Parking Lot Aisle Width		Minimum Unit Width	
			1-Way	2-Way	1-Way	2-Way
0	Compact 7.5	18.0	10.0	20.0	25.0	35.0
	Standard 8.5	24.0	12.0	20.0	29.0	37.0
30	Compact 7.5	15.0	10.0	20.0	38.0	48.0

A	B	C	D		E	
Parking Space Angle	Minimum Parking Space Width	Minimum Parking Space Length	Minimum Parking Lot Aisle Width		Minimum Unit Width	
			1-Way	2-Way	1-Way	2-Way
	Standard 8.5	16.5	10.0	20.0	42.0	52.0
45	Compact 7.5	15.0	11.0	20.0	42.82	51.82
	Standard 8.5	19.0	13.0	20.0	51.88	58.88
60	Compact 7.5	15.0	13.0	20.0	46.48	53.48
	Standard 8.5	19.0	17.5	20.0	58.9	61.4
75	Compact 7.5	15.0	16.5	20.0	49.36	52.86
	Standard 8.5	19.0	20.0	20.0	61.1	61.1
90	Compact 7.5	15.0	20.0	20.0	50.0	50.0
	Standard 8.5	19.0 18.0	24.0 23.0	24.0	62.0 59.0	62.0 60.0

Proposed Amendments to BMC 19.25 Tree Retention and Landscaping

Amended BMC 19.25.050 Landscaping – Types and description.

3. Type III *Landscaping*.

A. Type III *landscaping* is a “see-through screen” that functions as a partial visual separator to soften the appearance of parking areas and *building* elevations.

B. Type III *landscaping* shall consist of:

- i. A mix of *evergreen* and *deciduous* trees spaced to create a continuous canopy;
- ii. At least 70 percent *deciduous* trees;
- iii. *Evergreen* trees spaced no more than 25 feet on center;
- iv. *Deciduous* trees spaced no more than 30 feet on center;
- v. Shrubs, that do not exceed a height of four feet, spaced no more than four feet apart; and
- vi. *Ground cover* pursuant to BMC 19.25.070;

C. Type III landscaping areas may contain *bioretention facilities* where feasible in accordance with BMC Title 13. Where a *bioretention facility* is proposed to meet all or part of the Type III landscaping area:

i. The *bioretention facility* shall be landscaped in accordance with BMC Title 13; and

ii. The total Type III landscaping areas on the site shall be planted with at least 90% of the total number of required trees as calculated above.

4. Type IV *Landscaping*.

A. Type IV *landscaping* is “parking area *landscaping*” and “building facade *landscaping*” that provides shade and visual relief while maintaining clear sight lines within parking areas;

B. Type IV *landscaping* shall consist of:

i. Canopy-type *deciduous* trees spaced no more than 30 feet on center, or *evergreen* trees spaced no more than 25 feet on-center. At least 70 percent of the trees shall be *deciduous*.

ii. Shrubs that do not exceed a height of four feet;

iii. Plantings contained in planting islands or strips having an area of at least 75 square feet and with a narrow dimension of no less than four feet;

iv. *Ground cover* pursuant to BMC 19.25.090.

C. Type IV landscaping areas may contain *bioretention facilities* where feasible in accordance with BMC Title 13. Where a *bioretention facility* is proposed to meet all or part of the Type IV landscaping area:

i. The *bioretention facility* shall be landscaped in accordance with BMC Title 13; and

ii. The total Type IV landscaping areas on the site shall be planted with 100% of the total number of required trees as calculated above.

Amended BMC 19.25.060 Landscaping – Street Frontages.

Perimeter *landscaping* along *street frontages* shall be provided as follows:

1. For single detached subdivisions:

A. Trees shall be planted at the rate of one tree for every:

i. Fifty feet of *frontage* along a neighborhood collector *street*; and

ii. Forty feet of *frontage* along an *arterial street*.

- B. The trees shall be:
- i. Located within the *right-of-way* if permitted by the custodial state or local agency;
 - ii. No more than 20 feet from the *right-of-way* line when located within a *lot*;
 - iii. Maintained by the adjacent landowner unless part of a city maintenance program; and
 - iv. A species approved by the city.
- C. The trees may be spaced at irregular intervals in order to accommodate sight distance requirements for driveways and intersections.

D. Mature and healthy native trees retained within the right-of-way or no more than 20 feet from the right-of-way line within a lot may substitute for the required street trees at a one-to-one ratio and may be spaced at irregular intervals.

Amended BMC 19.25.070 Landscaping – Surface Parking Areas.

1. Where feasible in accordance with BMC Title 13, perimeter and interior landscaping areas shall contain *bioretention facilities* to manage on-site stormwater runoff. A conceptual illustration is shown in Figure XXX.

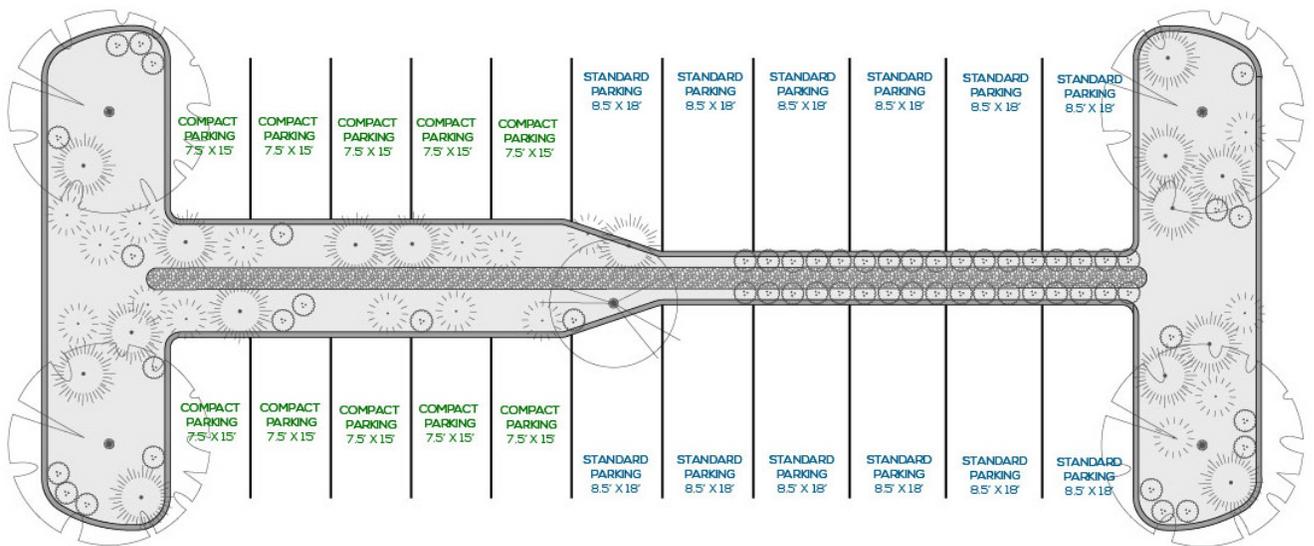


Figure XXX

2. Perimeter Landscaping. A minimum 5' wide Type IV landscape strip shall be provided on private property along the perimeter of a parking area. The width of the landscape strip shall be increased to 7' if vehicle overhangs into the landscape strip are allowed.

Where bioretention is used, the facility shall be landscaped in accordance with BMC Title 13.

23. Interior *Landscaping*. The following requirements apply to any surface parking area with 10 or more parking stalls. The interior landscape requirement is in addition to the perimeter landscape area required in BMC 19.25.070.~~42~~, and the *landscaping* required by BMC 19.25.040.
- A. *Uses* requiring landscape category B shall provide interior planting areas at the rate of 20 square feet per parking stall;
 - B. *Uses* requiring landscape category C, D or F shall provide interior planting areas at a rate of:
 - i. Twenty square feet per parking stall when 10 to 30 parking stalls are provided; and
 - ii. Twenty-five square feet per parking stall when 31 or more parking stalls are provided;
 - C. Each interior planting area shall contain at least 75 square feet, with a narrow dimension of no less than four feet (six feet if vehicles are allowed to overhang into the landscaped area);
 - D. *Evergreen* or canopy-type *deciduous* trees shall be provided and distributed throughout the parking area at a rate of:
 - i. One tree for every 10 parking stalls for a *use* requiring landscape category C, D or F; or
 - ii. One tree for every five parking stalls for a *use* requiring landscape category B.
 - E. *Groundcover* shall be provided pursuant to BMC 19.25.080.
 - F. *Landscaping* islands shall be provided at the ends of each row of parking, except ends of rows that abut required perimeter *landscaping*.
 - G. The maximum distance between any parking stall and required interior parking area *landscaping* shall be no more than 65 feet.
 - H. Where bioretention is used to meet the interior landscaping requirement, the facility shall be landscaped in accordance with BMC Title 13 and the total interior landscaping areas on the site shall achieve at least 90% of the total number of trees required as calculated in 19.25.070(3)(D).

Amended BMC 19.25.080 Landscaping – General requirements.

1. A *landscaping* and irrigation plan shall be submitted for review and approval by the *Director*. Written requirements for the *landscaping* and irrigation plan shall be established by the *Director*. The *landscaping* and irrigation plan shall be prepared by a Washington State registered landscape architect, Washington Certified Nurseryman/Landscaper, or other qualified landscape designer as authorized by the *Director*. The irrigation plan may be prepared by a certified irrigation designer.
2. New *landscaping* materials shall include species native to the Pacific Northwest or non-native noninvasive species that have adapted to the climatic conditions of the coastal region of the Pacific Northwest in the following minimum amounts:
 - A. Seventy-five percent of *groundcover* and shrubs, and
 - B. Fifty percent of trees;
3. At least 60 percent of new *landscaping* materials shall consist of drought-tolerant species, except where *site* conditions within the required landscape areas assure adequate moisture for growth;
4. With approval of the Director, species and spacing requirements may be relaxed when Existing native vegetation may be used to augment~~s~~ new plantings to meet the standards of this chapter;
5. *Deciduous* trees shall have a caliper of at least 1.75 inches at the time of planting. The caliper may be averaged, but no individual tree shall have a caliper of less than 1.5 inches;
6. *Evergreen* trees shall be at least six feet in height measured from treetop to the ground at the time of planting;
7. When the width of any landscape strip is 20 feet or greater, the required trees shall be staggered in two or more rows;
8. Shrubs shall be:
 - A. Two-gallon size at time of planting in Type II, III and IV *landscaping*,
 - B. At least 24 inches in height at the time of planting for Type I *landscaping*, and
 - C. Maintained at a height not exceeding four feet when located in Type III or IV *landscaping*;
9. *Groundcovers* shall be planted and spaced to result in total coverage of the required landscape area within three years as follows:
 - A. Four-inch pots at 18 inches on center, or
 - B. One-gallon or greater sized containers at 24 inches on center;

10. Turf grass may be used as *groundcover* only in Type III and IV landscape areas provided that the grass area:
 - A. Constitutes no more than 30 percent of such landscape areas; and
 - B. Is at least five feet wide at the smallest dimension;
11. Turf grass and *groundcover* areas shall contain at least two inches of composted organic material at finish grade;
12. All fences shall be placed on the inward side of any required perimeter landscaping.
13. Berms shall not exceed a slope of two horizontal feet to one vertical foot (2:1);
14. Existing soils shall be augmented as follows:
 - A. For sites subject to drainage review in accordance with BMC Title 13, soil amendments shall follow the standards for restoring the soil moisture holding capacity of BMC Title 13, or
 - B. For sites not subject to drainage review in accordance with BMC Title 13, amend existing soils with a two-inch layer of fully composted organic material rototilled a minimum of six inches deep;
15. Landscape areas shall be covered with ~~at least two inches of~~ mulch to minimize evaporation as follows:
 - A. For sites subject to drainage review in accordance with BMC Title 13, mulching shall follow the standards for restoring the soil moisture holding capacity of BMC Title 13, or
 - B. For sites not subject to drainage review in accordance with BMC Title 13, ~~M~~a minimum two-inch layer of mulch shall consist of materials such as yard waste, sawdust and/or manure that is fully composted;
16. Drought-tolerant and nondrought-tolerant species shall be grouped separately and be served by separate irrigation systems, zones or controls;
17. Permanent cast in place concrete curbs, concrete wheel stops, or structural barriers shall be provided to protect landscape areas from damage by vehicles. [Ord. 293 § 1, 2000]