

**CITY OF TIGARD, OREGON**  
**TIGARD CITY COUNCIL**  
**ORDINANCE NO. 12- 09**

AN ORDINANCE TO ADOPT DEVELOPMENT CODE AMENDMENT DCA 2011-00002) TO AMEND CHAPTERS 18.115, 18.120, 18.310, 18.350, 18.360, 18.370, 18.390, 18.610, 18.620, 18.630, 18.640, 18.715, 18.745, 18.775, 18.790 AND 18.798 OF THE COMMUNITY DEVELOPMENT CODE.

AS AMENDED BY THE TIGARD CITY COUNCIL ON  
NOVEMBER 27, 2012. SEE EXHIBIT B ATTACHED.

WHEREAS, on June 3, 2008 the Tigard City Council adopted an Urban Forest section as part of the Comprehensive Plan in order to establish broad goals and policies to guide the long-term management and enhancement of the urban forest; and

WHEREAS, on August 10, 2010 the Tigard City Council readopted the Urban Forest section as part of the Comprehensive Plan in order to provide more detailed findings to further support and explain the rationale for the city's urban forestry goals and policies; and

WHEREAS, Policy 2.2.1 of the Tigard Comprehensive Plan requires the city to periodically update policies, regulations and standards regarding the city's urban forestry program; and

WHEREAS, Policy 2.2.11 of the Tigard Comprehensive Plan requires the city to develop and implement a citywide Urban Forestry Master Plan to guide the update of the city's urban forestry program; and

WHEREAS, on November 10, 2009, the Tigard City Council adopted Resolution 09-69 accepting the City of Tigard's Urban Forestry Master Plan; and

WHEREAS, the accepted Urban Forestry Master Plan analyzed the past and present conditions of Tigard's Urban Forest, was developed through a public process, and sets forth a course of action for Tigard's urban forestry program through 2016; and

WHEREAS, the Urban Forestry Master Plan recommendations include updates to the city's urban forestry standards for development such as tree planting, preservation and removal requirements in Title 18, and the development of flexible and incentive based land use regulations in Title 18 for significant tree grove preservation, which require CPA2011-00004 to be adopted; and

WHEREAS, on February 16, 2010, the Tigard City Council directed staff to implement the Community Development Code related recommendations in the Urban Forestry Master Plan which include updates to the city's urban forestry standards for development such as tree planting, preservation and removal requirements in Title 18, and the development of flexible and incentive based land use regulations in Title 18 for significant tree grove preservation; and

WHEREAS, a public involvement plan was adopted by the city's Committee for Citizen Involvement in 2010 and implemented during the course of the Urban Forestry Code Revisions project to guide city staff and decision makers; and

WHEREAS, a council appointed Citizen Advisory Committee charged with advising project staff during the Urban Forestry Code Revisions project met 11 times between June 2010 and September 2011; and

Commentary

18.370.020 Adjustments

The existing adjustments to allow existing trees to be used as street trees, to modify the street tree planting requirements, and to allow setback adjustment for tree preservation have been struck.

The adjustment to use an existing tree as a street tree should be allowed without paying for an adjustment. Requiring someone to pay to preserve a tree is a disincentive to preservation. The criteria for using an existing tree as a street tree are included in Chapter 18.745.040.A.5.

Modification of street tree requirements is struck because the existing and proposed code allows wide flexibility to vary the placement of street trees to avoid safety conflicts and space constraints. In addition, staff cannot recall any cases where this adjustment has been used.

**Chapter 18.370  
VARIANCES AND ADJUSTMENTS**

**Sections:**

- 18.370.010**     **VariANCES**
- 18.370.020**     **Adjustments**

- 18.370.010**     **VariANCES**

[No change.]

- 18.370.020**     **Adjustments**

- A. [No change.]
- B. [No change.]
- C. Special adjustments.

- 1-5. [No change.]

- ~~6. Adjustments to landscaping requirements (Chapter 18.745).~~

- ~~a. Adjustment to use of existing trees as street trees. By means of a Type I procedure, as governed by Section 18.390.030, the Director shall approve, approve with conditions, or deny a request for the use of existing trees to meet the street tree requirements in Section 18.745.030 providing there has been no cutting and filling around the tree during construction which may lead to its loss, unless the following can be demonstrated:~~

- ~~(1) The ground within the drip line is altered merely for drainage purposes; and~~

- ~~(2) It can be shown that the cut or fill will not damage the roots and will not cause the tree to die.~~

- ~~b. Adjustment for street tree requirements. By means of a Type I procedure, as governed by Section 18.390.030, the Director shall approve, approve with conditions, or deny a request for the adjustments to the street tree requirements in Section 18.745.030, based on the following approval criteria:~~

- ~~(1) If the location of a proposed tree would cause potential problems with existing utility lines;~~

- ~~(2) If the tree would cause visual clearance problems; or~~

- ~~(3) If there is not adequate space in which to plant street trees.~~

Commentary

18.370.020 Adjustments

Section 18.790.050 (Flexible Standards for Planting and Preservation) allows for adjustments to setback requirements (and other development standards) to be reviewed concurrently with main land use review type. Requiring an additional process and payment of a fee to preserve a tree is a disincentive to preservation.

**Renumber 7-8**

~~9. Adjustments to setbacks to reduce tree removal (Chapter 18.790). By means of a Type I procedure, as governed by Section 18.390.030, the Director may grant a modification from applicable setback requirements of this Code for the purpose of preserving a tree or trees on the site of proposed development. Such modification may reduce the required setback by up to 50%, but shall not be more than is necessary for the preservation of trees on the site. The setback modification described in this section shall supersede any special setback requirements or exceptions set out elsewhere in this title, including but not limited to Chapter 18.730, except Section 18.730.040.~~

**Renumber 10-11**

Commentary

18.390.020 Description of Decision-Making Procedures

The following revisions to permit types are included in table 18.390.1 (Decision Making Procedures):

- Street tree adjustments are struck because they will be handled administratively through Chapter 18.745;
- Modifications to the urban forestry plan component of an approved land use permit will be allowed by Chapter 18.790 through a Type I process so reference is included in table 18.390.1;
- Tree removal permits are struck because they will be administered through Title 8; and
- Discretionary urban forestry plans that are alternatives to standard urban forestry plans will be allowed by Chapter 18.790 through a Type III process so reference is included in table 18.390.1.

## Chapter 18.390

## DECISION-MAKING PROCEDURES

## Sections:

18.390.010	Purpose
18.390.020	Description of Decision-Making Procedures
18.390.030	Type I Procedure
18.390.040	Type II Procedure
18.390.050	Type III Procedure
18.390.060	Type IV Procedure
18.390.070	Special Procedures
18.390.080	General Provisions

## 18.390.010 Purpose

[No change.]

## 18.390.020 Description of Decision-Making Procedures

A. [No change.]

B. [No change.]

C. Summary of permits by decision-making procedure type. Table 18.390.1 summarizes the various land use permits by the type of decision-making procedure.

**TABLE 18.390.1  
SUMMARY OF PERMITS BY TYPE OF DECISION-MAKING PROCEDURE**

Type	Permit/Land	Cross-Reference(s)
I (18.390.030)	Accessory Residential Units	18.710
	Development Adjustments	18.370.020.B.2
	Design Review Compliance Letter (Track 1)	18.610
	Home Occupation/Type I	18.742
	Landscaping Adjustments	
	<del>Existing Street Trees</del>	<del>18.370.020.C.4.a; 18.745</del>
	<del>New Street Trees</del>	<del>18.370.020.C.4.b; 18.745</del>
	Lot Line Adjustment	18.410.040
	Minimum Residential Density Adjustment	18.370.020.C.2; 18.430; 18.715

Commentary

18.390.020 Description of Decision-Making Procedures

Tree removal permit requirements are struck from Title 18 and included in the consolidated Title 8 provisions that address tree permit requirements when not associated with an urban forestry plan per Chapter 18.790.

A new Type I process is established for major modifications to the urban forestry plan component of an approved land use permit. Type I modifications are performed as a staff level decision and do not require notice of the surrounding neighbors.

The full process for a Modification to the Urban Forestry Plan Component of an Approved Land Use Permit is included in Section 18.790.070.

Code Amendments

	Nonconforming Use Confirmation	18.385.030.A; 18.760
	Parking Adjustments	
	- Reduction of Minimum Parking Ratios in Existing Developments/Transit Imp.	18.370.020.C.5.c; 18.765
	- Reduction in Stacking Lane Length	18.370.020.C.5.g; 18.765
	Signs	
	- New	18.780
	- Existing	18.780
	Site Development/Minor Modification	18.360.090
	Temporary Uses	
	- Emergency Uses	18.785
	- Seasonal/Special Uses	18.785
	- Temporary Building	18.785
	- Temporary Sales Office/Home	18.765
	<u>Urban Forestry Plan</u>	
	- <u>Modification to the Urban Forestry Plan Component of an Approved Land Use Permit</u>	<u>18.790.070</u>
	<u>Tree Removal</u>	
	<del>Removal Adjustment</del>	<del>18.370.020.C.7; 18.790</del>
	<del>Removal Permit</del>	<del>18.790</del>
	Wireless Communications Facilities -- Setback from Other Towers	18.370.040.C.8.b; 18.798
	Conditional Use/Minor Modification	18.330.030
<b>Type</b>	<b>Permit/Land</b>	<b>Cross-Reference(s)</b>
II (18.390.040)	Access/Egress Adjustment	18.370.020.C.3.b
	Downtown Design Administrative Review (Track 2)	18.610
	Historic Overlay	
	- Exterior Alternation	18.740
	- New Construction	18.740
	- Demolition	18.740
	Home Occupation/Type II	18.742

## Commentary

### 18.390.020 Description of Decision-Making Procedures

A new Type III process is established for a discretionary urban forestry plan review option as an alternative to meeting the clear and objective effective canopy requirements. Type III modifications require notice of the surrounding neighbors, and a hearing in front of Planning Commission or the hearings officer. This option could allow people to utilize green features such as green roofs, green streets, etc. as a substitute for the environmental benefits provided by trees. The full process for a discretionary urban forestry plan review option is included in Section 18.790.040.

The review body (Planning Commission or hearings officer) will depend on whether there is a concurrent Type III review. For example, if an applicant for a Planned Development (Type III Planning Commission review) chooses to request a discretionary urban forestry plan review, the review body will be the Planning Commission. However, if an applicant for a Conditional Use Permit (Type III hearings officer review) chooses to request a discretionary urban forestry plan review, the review body will be the hearings officer. Finally, if an applicant does not have a concurrent Type III review (e.g. Subdivision, Minor Land Partition, etc.), yet chooses to request a discretionary urban forestry plan review, the review body will be the hearings officer.

Type	Permit/Land	Code Amendments Cross-Reference(s)
	Land Partitions <sup>1</sup>	18.420.050
	Parking Adjustments	
	- Reduction in Minimum Parking Ratios	18.370.020.C.5.a; 18.765
	- Reduction of Minimum Parking Ratios in New Developments/Transit Imp	18.370.020.C.5.b; 18.765
	- Increase in Maximum Parking Ratios	18.370.020.C.5.d; 18.765
	- Reduction in Bicycle Parking	18.370.020.C.5.e; 18.765
	- Alternate Parking Garage Layout	18.370.020.C.5.f; 18.765
	Sensitive Lands Permits	
	- In 25%+ Slope	18.775
	- Within Drainageways	18.775
	- Within Wetlands <sup>1</sup>	18.775
	Sign Code Adjustment	18.370.020.C.6; 18.780
	Site Development Review	
	- New Construction	18.360.090
	- Major Modification	18.360.090
	Subdivision Without Planned Development <sup>1</sup>	18.430.070
	Variances	18.370.010.C
	Wireless Communication Facilities -- Adjustment to Setback from Residences	18.370.020.C.8.a; 18.798
	Appeals to Hearings Officer	18.390.040.G
IIIA (18.390.050) (Hearings Officer)	Conditional Use	
	- Initial	18.330.030
	- Major Modification	18.330.030
	Sensitive Lands	
	- Within 100-Year Floodplain	18.775
	- In 25%+ Slope <sup>1</sup>	18.775
	- Within Drainageways <sup>1</sup>	18.775
	- Within Wetlands <sup>1</sup>	18.775
	<u>Urban Forestry Plan</u>	
	- <u>Discretionary Urban Forestry Plan Review Option</u>	18.790.040

## Commentary

### 18.390.020 Description of Decision-Making Procedures

A new Type III process is established for a discretionary urban forestry plan review option as an alternative to meeting the clear and objective effective canopy requirements. Type III modifications require notice of the surrounding neighbors, and a hearing in front of Planning Commission or the hearings officer. This option could allow people to utilize green features such as green roofs, green streets, etc. as a substitute for the environmental benefits provided by trees. The full process for a discretionary urban forestry plan review option is included in Section 18.790.040.

The review body (Planning Commission or hearings officer) will depend on whether there is a concurrent Type III review. For example, if an applicant for a Planned Development (Type III Planning Commission review) chooses to request a discretionary urban forestry plan review, the review body will be the Planning Commission. However, if an applicant for a Conditional Use Permit (Type III hearings officer review) chooses to request a discretionary urban forestry plan review, the review body will be the hearings officer. Finally, if an applicant does not have a concurrent Type III review (e.g. Subdivision, Minor Land Partition, etc.), yet chooses to request a discretionary urban forestry plan review, the review body will be the hearings officer.

<b>Type</b>	<b>Permit/Land</b>	<b>Cross-Reference(s)</b>
IIIB (18.390.050) (Planning Comm.)	Historic Overlay	
	- District Overlay	18.385.010.A; 18.740
	- Removal of District Overlay	18.385.010.B; 18.740
	Planned Development	
	- With Subdivision	18.350.100; 18.430
	- Without Subdivision	18.350.100
	Zone Map/Text Change/Quasi-Judicial	18.380.030.B
	<u>Urban Forestry Plan</u>	
	- <u>Discretionary Urban Forestry Plan Review Option</u>	18.790.040
IIIC (18.390.050) (Design Review Board)	Downtown Design Review (Track 3)	18.610
IV (18.390.060)	Annexation	18.320
	Zone Map/Text Change/Legislative	18.380.020

<sup>1</sup>These may be processed as either Type II or III procedures, pursuant to Section 18.775.020.D and E. (Ord. 10-02 § 2; Ord. 09-13)

### **18.390.030 through 18.390.080**

[No change.]

Commentary

18.530 INDUSTRIAL ZONING DISTRICTS

A minor amendment is required to the chapter to correct a cross reference to street trees and caliper.

18.530.050 Additional Development Standards

The amendment corrects the cross reference to street trees and caliper.

Chapter 18.530

INDUSTRIAL ZONING DISTRICTS

Sections:

- 18.530.010 Purpose
- 18.530.020 List of Zoning Districts
- 18.530.030 Uses
- 18.530.040 Development Standards
- 18.530.050 Additional Development Standards

18.530.010 through 18.530.040

[No change.]

18.530.050 Additional Development Standards

- A. [No change.]
- B. Reduction of lot coverage requirements. Lot coverage may be increased from 75% to 80% as part of the site development review process, providing the following requirements are satisfied:
  - 1. The minimum landscaping requirement shall be 20% of the site.
  - 2. The applicant shall meet the following performance standards with regard to the landscaping plan approved as part of the site development review process:
    - a. Street trees, as required by Section 18.745.040, ~~AC.1 are to~~ shall be installed with a minimum caliper of three inches ~~rather than the two inches as measured at four feet in height;~~
    - b. The landscaping between a parking lot and street property line shall have a minimum width of 10 feet;
    - c. All applicable buffering, screening and setback requirements contained in Section 18.745.050 shall be satisfied;
    - d. The applicant shall provide documentation of an adequate on-going maintenance program to ensure appropriate irrigation and maintenance of the landscape area.
- C. [No change]

Commentary

18.610 TIGARD DOWNTOWN DISTRICT DEVELOPMENT AND DESIGN  
STANDARDS

For consistency purposes, minor amendments are made to this chapter to cross reference Chapter 18.790 (Urban Forestry Plan) in sections 18.610.010.F (Submittal Requirements) and 18.610.035 (Additional Standards).

**Chapter 18.610**  
**TIGARD DOWNTOWN DISTRICT DEVELOPMENT AND DESIGN**  
**STANDARDS**

**Sections:**

- 18.610.010 Purpose and Procedures**
- 18.610.015 Pre-Existing Uses and Developments within the Downtown District**
- 18.610.020 Building and Site Development Standards**
- 18.610.025 Street Connectivity**
- 18.610.030 Building and Site Design Standards**
- 18.610.035 Additional Standards**
- 18.610.040 Special Requirements for Development Bordering Urban Plaza**
- 18.610.045 Exceptions to Standards**
- 18.610.050 Building and Site Design Objectives (to be used with Track 3 Approval Process)**
- 18.610.055 Signs**
- 18.610.060 Off-Street Parking and Loading Requirements**
  
- 18.610.010 Purpose and Procedures**

A. through E. [No change.]

Commentary

18.610.010 Purpose and Procedures

Explicit reference to the urban forestry plan requirement is made in the submission requirement section.

18.610.015 -18.610.030

No changes are required to these sections as a result of the urban forestry code revisions.

F. Downtown design review submittal requirements.

1. General Submission Requirements. The applicant shall submit an application containing all of the general information required for a Type II procedure, as governed by Section 18.390.040, or for a Type III procedure, as governed by Section 18.390.050.
2. Additional Information. In addition to the submission requirements required in Chapter 18.390, Decision-Making Procedures, an application must include the following additional information in graphic, tabular and/or narrative form. The Director shall provide a list of the specific information to be included in each of the following:
  - a. An existing site conditions analysis;
  - b. A site plan;
  - c. A grading plan;
  - d. A landscape plan;
  - e. An urban forestry plan consistent with Chapter 18.790.
  - e.f. Architectural elevations of all structures; and
  - f.g. A copy of all existing and proposed restrictions or covenants.
3. All drawings submitted with applications for development using Tracks 2 and 3 shall be stamped by a registered architect. Applications for landscaping projects only may be stamped by a registered landscape architect. Applications that require engineering or transportation reports must be stamped by the appropriate specialist.

G. through K. [No change.]

**18.610.015 through 18.610.030**

[No change.]

Commentary

18.610.035 Additional Standards

The reference to “Tree Removal” has been changed to “Urban Forestry Plan” consistent with the name change to Chapter 18.790.

18.610 TIGARD DOWNTOWN DISTRICT DEVELOPMENT AND DESIGN STANDARDS

No changes to the standards in Sections 18.610.040 to 18.610.060.

**18.610.035 Additional Standards**

Applications must conform to all applicable standards in the following chapters:

A. through H.

[No change.]

I. ~~Tree Removal~~ Urban Forestry Plan (see Chapter 18.790).

J. through L.

[No change.]

**18.610.040 through 18.610.060**

[No change.]

Commentary

18.620 TIGARD TRIANGLE DESIGN STANDARDS

The Tigard Triangle has design standards that are in addition to the base standards in other chapters in the code. Among these are landscaping standards that specify additional size, species and location standards for the Tigard Triangle. Some of these standards are unclear, incomplete or inconsistent and the purpose of the revisions to this chapter is to clarify, correct and ensure consistency among the provisions.

**CHAPTER 18.620**

**TIGARD TRIANGLE DESIGN STANDARDS**

**Sections:**

- 18.620.010 Purpose and Applicability**
- 18.620.020 Street Connectivity**
- 18.620.030 Site Design Standards**
- 18.620.040 Building Design Standards**
- 18.620.050 Signs**
- 18.620.060 Entry Portals**
- 18.620.070 Landscaping and Screening**
- 18.620.080 Street and Accessway Standards**
- 18.620.090 Design Evaluation**

**18.620.010 and 18.620.020**

[No change.]

**18.620.030 Site Design Standards**

A. Compliance. All development must meet the following site design standards. If a parcel is one acre or larger a phased development plan must be approved demonstrating how these standards for the overall parcel can be met. Variance to these standards may be granted if the criteria found in Section 18.370.010.C.2, governing criteria for granting a variance, is satisfied.

1. through 5.

[No change.]

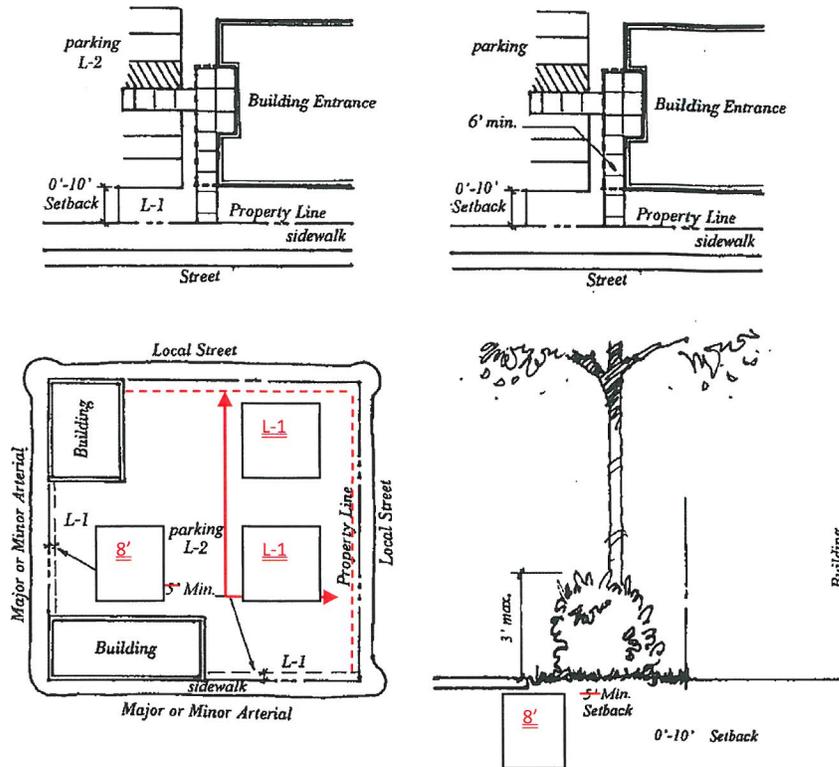
Commentary

18.620.030 Site Design Standards

The L-1 and L-2 standards in the design districts have been problematic because they are unclear. The amendments are intended to clarify the standards, provide additional space for tree growth, while retaining the original intent of the standards.

The landscape setback for parking lots from streets has been increased from 5 to 8 feet to allow parking lot trees to be planted in the setback (consistent with the requirements in Chapter 18.745 and Section 13 of the Urban Forestry Manual) and have additional soil volume in the design district. The Urban Forestry Manual consists of administrative rules to implement the details of the urban forestry related code provisions in Title 8, Title 18 and other applicable titles in the Tigard Municipal Code.

- Parking location and landscape design - Parking for buildings or phases adjacent to public street rights-of-way must be located to the side or rear of newly constructed buildings. If located on the side, parking is limited to 50% of the street frontage and must be behind a landscaped area constructed to an L-1 Landscape Standard. The minimum depth of the L-1 landscaped area is five eight feet or is equal to the building setback, whichever is greater. Interior side and rear yards shall be landscaped to an L-2 Landscape Standard, except where a side yard abuts a public street where it shall be landscaped to an L-1 Landscape Standard. See Diagram 2.



Tigard Triangle Street Plan – Diagram 2

18.620.040 Building Design Standards

[No change]

## Commentary

### 18.620.050 Signs

No change to Section 18.620.050.

### 18.620.060 Entry Portals

In the Landscape and Street Standards (at the end of the existing chapter), it specified that columnar trees were required near entry portals. The amendment reiterates this requirement in the entry portal design requirement.

### 18.620.070 Landscaping and Screening

The design districts have requirements that supersede the requirements in Chapter 18.745. These include the L-1 and L-2 requirements.

The L-1 requirement is essentially an enhanced screen of the parking lot from the street. Larger than average trees are required to provide an immediate screen effect. The language has been modified to make the purpose of the requirements more clear. The term “major or minor arterial” has been changed to “public street” because the other design districts require an L-1 screen from public streets, so for consistency L-1 screens should be required in the Tigard Triangle.

**18.620.050 Signs**

[No change.]

**18.620.060 Entry Portals**

- A. Required locations. Entry portals shall be required at the primary access points into the Tigard Triangle.
1. Location - Entry portals shall be located at the intersections of 99W and Dartmouth; 99W and 72nd; I-5 and Dartmouth; Hwy. 217 and 72nd; and at the Hwy. 217 Overcrossing and Dartmouth.
  2. Design - The overall design of entry portals shall relate in scale and detail to both the automobile and the pedestrian. A triangle motif and at least 2 trees according to the L-2 standard shall be incorporated into the design of entry portals.

**18.620.070 Landscaping and Screening**

- A. Applicable levels. Two levels of landscaping and screening standards are applicable to the Tigard Triangle. The locations where the landscaping or screening is required and the depth of the landscaping or screening are defined in other sub-sections of this section. These standards are minimum requirements. Higher standards may be substituted as long as all height limitations are met.
1. L-1 Low Parking Lot Screen ~~For general landscaping of landscaped and screened areas within parking lots and along local collectors and local streets, planting standards of Chapter 18.745 Landscaping and Screening, shall apply. The L-1 standard applies to setbacks on public streets major and minor arterials. Where The L-1 standard is in addition to other standards in other chapters of this title. The setback is shall be a minimum of 5 8 feet between the parking lot and a public street major or minor arterial, L-1 trees shall be considered parking lot trees and spaced between 30 and 40 feet on center within the setback. All L-1 trees shall be a minimum of planted at 3 1/2 inch caliper at the time of planting, at a maximum of 28 feet on center.~~ Shrubs shall be of a variety that will provided a 3 foot high screen and a 90% opacity within one year. Groundcover plants must fully cover the remainder of landscape area within two years. ~~Any tree planted in excess of a 2 inch caliper shall be eligible for full mitigation credit.~~

Commentary

18.620.070 Landscaping and Screening

The L-2 requirement is for all other required landscaping and requires larger than average trees to provide an immediate effect. The L-2 requirement is also intended to create cohesive tree designs for various locations in the district. In the landscape and street standards (at the end of the existing chapter), the various tree types and locations are specified. While the design elements have been retained, terminology has been revised to be consistent with the terminology used in the Urban Forestry Manual (small, medium, large, columnar trees), and the table has been moved closer to the L-2 code language to make cross referencing easier. The language has also been modified to make the purpose of the requirements more clear.

Table 18.620.1 L-2 Tree Standards

The design elements of the landscape and street standards table (at the end of the existing chapter) have been retained. The terminology has been revised to be consistent with the terminology used in the Urban Forestry Manual (small, medium, large, columnar trees), and the table has been moved closer to the L-2 code language to make cross referencing easier.

2. ~~L-2 General Landscaping - For general landscaping of landscaped and screened areas within parking lots, local collectors and local streets, planting standards of Chapter 18.745, Landscaping and Screening, shall apply. The L-2 standard applies to all other trees and shrubs required by this chapter and Chapter 18.745 (except those required for L-1 Parking Lot Screen). For trees and shrubs required by Chapter 18.745, the L-2 standard is an additional standard. L-2 trees that are also street trees, median trees, and trees required to frame entry portals shall be selected in conformance with Table 18.620.1 below. If conformance with Table 18.620.1 is precluded by physical constraints caused by public utilities or required public improvements, the Director may approve alternative selections. All L-2 trees shall be provided at a minimum of 2-1/2 inch caliper at the time of planting, at a maximum spacing of 28 feet. Shrubs shall be of a size and quality to achieve the required landscaping or screening effect within two years. Any tree planted in excess of a 2 inch caliper shall be eligible for full mitigation credit.~~

TABLE 18.620.1  
L-2 TREE STANDARDS

<u>General Tree Type<sup>1</sup></u>	<u>Location</u>	<u>Specific Tree Type<sup>2</sup></u>
<u>Street Tree</u>	<u>72<sup>nd</sup> Avenue</u>	<u>Large Stature Street Trees</u>
<u>Street Tree</u>	<u>Dartmouth Street</u>	<u>Large Stature Street Trees</u>
<u>Street Tree</u>	<u>68<sup>th</sup> Avenue</u>	<u>Columnar Trees</u>
<u>Street Tree</u>	<u>Atlanta Street</u>	<u>Columnar Trees</u>
<u>Street Tree</u>	<u>Hampton Street</u>	<u>Columnar Trees</u>
<u>Street Tree</u>	<u>66<sup>th</sup> Avenue</u>	<u>Large Stature Street Trees</u>
<u>Street Tree</u>	<u>Backage Road</u>	<u>Even Mix of Large, Medium, and Small Stature Street Trees</u>
<u>Street Tree</u>	<u>All other local streets</u>	<u>Medium Stature Street Trees</u>
<u>Median Tree</u>	<u>72<sup>nd</sup> Avenue</u>	<u>Large Stature Street Trees</u>
<u>Median Tree</u>	<u>68<sup>th</sup> Avenue</u>	<u>Large Stature Street Trees</u>
<u>Median Tree</u>	<u>Atlanta Street</u>	<u>Large Stature Street Trees</u>
<u>Median Tree</u>	<u>Hampton Street</u>	<u>Large Stature Street Trees</u>
<u>Portal Tree</u>	<u>All required portals</u>	<u>Columnar Trees</u>

**18.620.080 Street and Accessway Standards**

[Renumber Table 18.620.1 to Table 18.620.2]

**18.620.090 Design Evaluation**

[No change.]

<sup>1</sup> When these tree types are required by Chapter 18.620, 18.745, or 18.790, the L-2 Tree Standards apply.

<sup>2</sup> Additional specifications for species, planting, and spacing are in the Urban Forestry Manual.

## Commentary

### Landscape and Street Standards

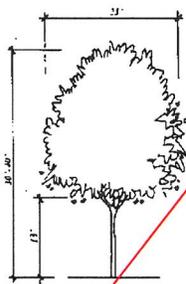
The design elements of the Landscape and Street Standards table have been retained and converted to table 18.620.1. The terminology has been revised to be consistent with the terminology used in the Urban Forestry Manual (small, medium, large, columnar trees), and the table has been moved closer to the L-2 code language to make cross referencing easier.

## Landscape and Street Standards

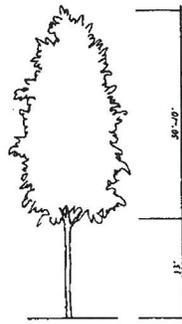
### Landscape Standards: Street Trees

Street Name	Street Tree type	Min. Spacing	Location <sup>1</sup>
72 <sup>nd</sup> Avenue	Broad-spreading Broad-spreading	27 feet o.c. 27 feet o.c.	Between sidewalk and street Center median
Dartmouth Street	Broad-spreading	27 feet o.c.	Between sidewalk and street
68 <sup>th</sup> Avenue	Columnar Broad-spreading	22 feet o.c. 22 feet o.c.	Between sidewalk and street Center median
Atlanta Street	Columnar Broad-spreading	22 feet o.c. 22 feet o.c.	Between sidewalk and street Center median
Hampton Street	Columnar Broad-spreading	22 feet o.c. 22 feet o.c.	Between sidewalk and street Center median
66 <sup>th</sup> Avenue	Broad-spreading	27 feet o.c.	Between sidewalk and street on the west side of the street.
Backage Road	Broad-spreading	27 feet o.c.	Between sidewalk and street. Plant trees random and in clumps along the south side of the street. Provide a variety of species.
Local Streets	Spreading to 25 feet	22 feet o.c.	Between sidewalk and street
Portals	Columnar	22 feet o.c.	Plant trees to frame portal features and architecture.
Parking lots	Broad-spreading Broad-spreading Columnar	1 per 7 spaces 27 feet o.c. 22 feet o.c.	In planter islands In setbacks In setbacks where building lines preclude broad-spreading trees.

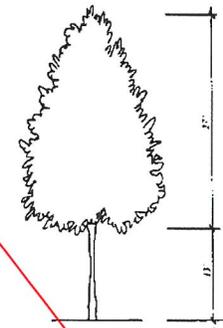
<sup>1</sup>All curb-side planting strips and medians shall be planted with lawn or groundcover. Planter strips between the sidewalk and street along 72<sup>nd</sup> Avenue shall be lawn except where paved areas extend to the curbline and tree grates are provided around trees. Medians on 68<sup>th</sup> Avenue, Atlanta and Hampton shall have consistent lawn or groundcover plantings for the entire length of the street with accents at intersections.



Broad-spreading Street Tree



Columnar Street Tree



Spreading Street Tree

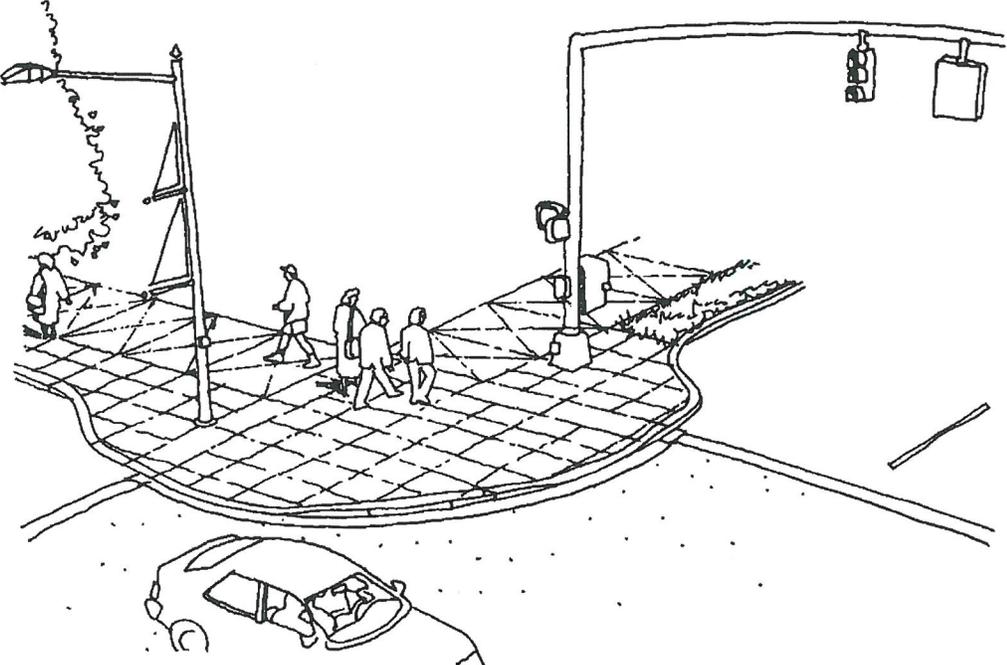
## Tigard Triangle Street Plan Details

Commentary

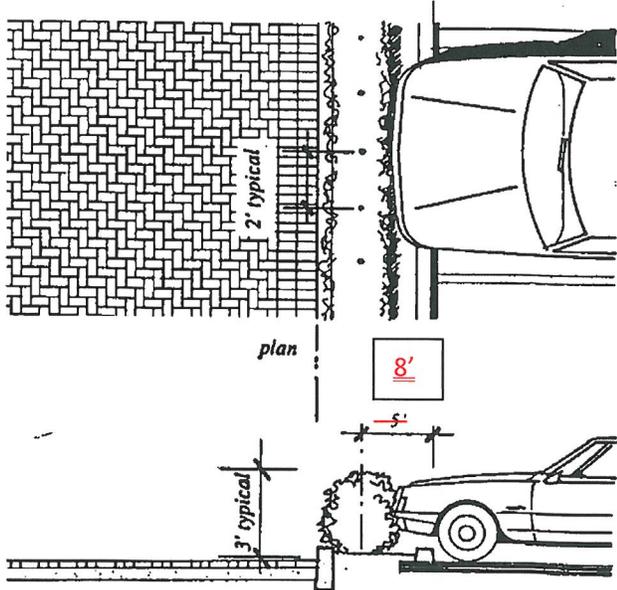
Tigard Triangle Street Plan

The parking lot setback requirement has been revised to show an 8 foot rather than a 5 foot setback per the revised L-1 standard.

Landscape and Street Standards



Curb extension and concrete intersection at intersections on Major and Minor Arterials.



Typical landscape and parking at minimum setback.

Tigard Triangle Street Plan  
Details

Commentary

18.630 WASHINGTON SQUARE REGIONAL CENTER DESIGN STANDARDS

The Washington Square Regional Center has design standards that are in addition to the base standards in other chapters in the code. Among these are landscaping standards that specify additional size, species and location standards for the Washington Square Regional Center. Some of these standards are unclear, incomplete or inconsistent and the purpose of the revisions to this chapter is to clarify, correct and ensure consistency among the provisions.

**Chapter 18.630**

**WASHINGTON SQUARE REGIONAL CENTER DESIGN STANDARDS**

**Sections:**

- 18.630.010 Purpose and Applicability**
- 18.630.020 Development Standards**
- 18.630.030 Pre-existing Uses**
- 18.630.040 Street Connectivity**
- 18.630.050 Site Design Standards**
- 18.630.060 Building Design Standards**
- 18.630.070 Signs**
- 18.630.080 Entry Portals**
- 18.630.090 Landscaping and Screening**
- 18.630.100 Street and Accessway Standards**
- 18.630.110 Design Evaluation**

**18.630.010 through 18.830.040**

[No change.]

Commentary

18.630.050 Site Design Standards

The L-1 and L-2 standards in the design districts have been problematic because they are unclear. The amendments are intended to clarify the standards, provide additional space for tree growth, while retaining the original intent of the standards.

The landscape setback for parking lots from streets has been increased from 5 to 8 feet to allow parking lot trees to be planted in the setback (consistent with the requirements in Chapter 18.745 and Section 13 of the Urban Forestry Manual) and have additional soil volume in the design district. The Urban Forestry Manual consists of administrative rules to implement the details of the urban forestry related code provisions in Title 8, Title 18 and other applicable titles in the Tigard Municipal Code.

**18.630.050 Site Design Standards**

A. Compliance. All development must meet the following site design standards. If a parcel is one acre or larger a phased development plan may be approved demonstrating how these standards for the overall parcel can be met. Variance to these standards may be granted if the criteria found in Section 18.370.010.C.2, governing criteria for granting a variance, is satisfied.

1. through 4.

[No change.]

5. Parking location and landscape design.

a. Purpose. The emphasis on pedestrian access and a high quality streetscape experience requires that private parking lots that abut public streets should not be the predominant street feature. Where parking does abut public streets, high quality landscaping should screen parking from adjacent pedestrian areas.

b. Standard. Parking for buildings or phases adjacent to public street rights-of-way must be located to the side or rear of newly constructed buildings. When buildings or phases are adjacent to more than one public street, primary street(s) shall be identified by the City where this requirement applies. In general, streets with higher functional classification will be identified as primary streets unless specific design or access factors favor another street. If located on the side, parking is limited to 50% of the primary street frontage and must be behind a landscaped area constructed to an L-1 landscape standard. The minimum depth of the L-1 landscaped area is ~~five~~ eight feet or is equal to the building setback, whichever is greater. Interior side and rear yards shall be landscaped to an an L-2 landscape standard, except where a side yard abuts a public street, where it shall be landscaped to an L-1 landscape standard.

Commentary

18.630.090 Landscaping and Screening

The design districts have requirements that supersede the requirements in Chapter 18.745. These include the L-1 and L-2 requirements.

The L-1 requirement is essentially an enhanced screen of the parking lot from the street. Larger than average trees are required to provide an immediate screen effect. The language has been modified to make the purpose of the requirements more clear.

The L-2 requirement essentially requires that any trees required to be planted in Washington Square Regional Center be 2 ½ caliper at planting to provide a more immediate effect. The language has been clarified to reflect this.

**18.630.060 through 18.630.080**

[No change.]

**18.630.090 Landscaping and Screening**

A. Applicable levels. Two levels of landscaping and screening standards are applicable. The locations where the landscaping or screening is required and the depth of the landscaping or screening are defined in other sub-sections of this section. These standards are minimum requirements. Higher standards may be substituted as long as all height limitations are met.

1. ~~L-1 Low Parking Lot Screen. For general landscaping of landscaped and screened areas within parking lots and along local collectors and local streets, planting standards of Chapter 18.745 Landscaping and Screening, shall apply. In addition the~~ The L-1 standard applies to setbacks on public streets, major and minor arterials, and where parking lots abut public streets. The L-1 standard is in addition to other standards in other chapters of this title. Where the setback is shall be a minimum of 5 8 feet between the parking lot and a public street, L-1 trees shall be considered parking lot trees and spaced between 30 and 40 feet on center within the setback. All L-1 trees shall be planted at a minimum of 3½ inch caliper at the time of planting, at a maximum of 28 feet on center. Shrubs shall be of a variety that will provide a 3 foot high screen and a 90% opacity within one year. Groundcover plants must fully cover the remainder of landscape area within two years.
2. ~~L-2 General Landscaping. For general landscaping of landscaped and screened areas within parking lots, and along local collectors and local streets, planting standards of Chapter 18.745, Landscaping and Screening, shall apply. The L-2 standard applies to all other trees and shrubs required by this chapter and Chapter 18.745 (except those required for the L-1 Parking Lot Screen). For trees and shrubs required by Chapter 18.745, the L-2 standard is an additional standard. In addition, trees shall be provided at a minimum All L-2 trees shall be 2½ inch caliper at the time of planting, at a maximum spacing of 28 feet.~~ Shrubs shall be of a size and quality to achieve the required landscaping or screening effect within two years.

**18.630.100 and 18.630.110**

[No change.]

Commentary

18.640 DURHAM QUARRY DESIGN STANDARDS

The Durham Quarry Design Standards generally apply to the area known as Bridgeport Village. The proposed amendments to the Durham Quarry Design Standards Chapter include:

Sections 18.640.700 and 800 have been retitled consistent with the updated applicable code sections for sensitive lands and urban forestry plan.

**Chapter 18.640  
DURHAM QUARRY DESIGN STANDARDS**

**Sections:**

- 18.640.010 Purpose
- 18.640.020 Permitted Uses
- 18.640.030 Conditional Uses
- 18.640.040 Applicability
- 18.640.050 Development Standards
- 18.640.060 Determining Net Acres
- 18.640.070 Signs
- 18.640.080 Reserved
- 18.640.090 Reserved
- 18.640.100 Access
- 18.640.200 Design Standards
- 18.640.300 Design Compatibility Standards
- 18.640.400 Landscaping and Screening
- 18.640.500 Off-Street Parking and Loading
- 18.640.600 Environmental Standards
- 18.640.700 ~~Floodplain District~~ Sensitive Lands
- 18.640.800 ~~Wetlands Protection District~~ Urban Forestry Plan

18.640.010 through 18.640.100

[No change.]

## Commentary

### 18.640.200 Site Design Standards

The landscape setback for parking lots from streets has been increased from 5 to 8 feet to allow parking lot trees to be planted in the setback (consistent with the requirements in Chapter 18.745 and Section 13 of the Urban Forestry Manual) and have additional soil volume in the design district. The Urban Forestry Manual consists of administrative rules to implement the details of the urban forestry related code provisions in Title 8, Title 18 and other applicable titles in the Tigard Municipal Code.

**18.640.200 Design Standards**

A. [No change.]

B. Site design standards. Development shall meet the following site design standards.

1. through 4.

[No change.]

5. Parking location and landscape design. Parking for buildings or phases adjacent to public street rights-of-way shall be located to the side or rear of newly constructed buildings. When buildings or phases are adjacent to more than one public street, primary street(s) shall be identified where this requirement applies. If located on the side, parking is limited to 50% of the street frontage and must be behind a landscaped area constructed to an L-1 Landscape Standard. The minimum depth of the L-1 landscaped area is ~~five~~ eight feet or is equal to the building setback, whichever is greater. Interior side and rear yards shall be landscaped to an L-2 Landscape Standard, except where a side yard abuts a public street, where it shall be landscaped to an L-1 Landscape Standard. See Section 18.640.200.D.

Commentary

18.640.200 Site Design Standards

The L-1 and L-2 standards in the design districts have been problematic because they are unclear.

The L-1 requirement is essentially an enhanced screen of the parking lot from the street. Larger than average trees are required to provide an immediate screen effect. The language has been modified to make the purpose of the requirements more clear.

The L-2 requirement essentially requires that any trees required to be planted in Bridgeport Village be 2 ½ caliper at planting to provide a more immediate effect. The language has been clarified to reflect this.

No changes to Sections 18.640.300 through 18.640.600.

18.640.700 Sensitive Lands, see Chapter 18.775

The revision reflects the existing chapter title to correct a scrivener's error.

18.640.800 Urban Forestry Plan, see Chapter 18.790

The revision reflects the revised chapter title.

C. [No change.]

D. Landscaping and screening.

1. Applicable levels. Two levels of landscaping and screening standards are applicable. The locations where the landscaping or screening is required and the depth of the landscaping or screening are defined in Section 18.640.400. These standards are minimum requirements. Higher standards may be substituted as long as all height limitations are met.
  - a. L-1 low parking lot screen. ~~For general landscaping of landscaped and screened areas within parking lots and along local collectors and local streets, planting standards in Chapter 18.745, Landscaping and Screening, shall apply. In addition the~~ The L-1 standard applies to setbacks on public streets, major and minor arterials. The L-1 standard is in addition to other standards in other chapters of this title. Where the ~~The setback is~~ shall be a minimum of ~~five~~ eight feet between the parking lot and a ~~public street, major or minor arterial, trees~~ L-1 trees shall be considered parking lot trees and spaced between 30 and 40 feet on center within the setback. All L-1 trees shall be planted at a minimum of 3 ½ inch caliper at the time of planting, at a maximum of 28 feet on center. Shrubs shall be of a variety that will provide a three-foot high screen and a 90% opacity within one year. Groundcover plants must fully cover the remainder of landscape area within two years.
  - b. L-2 general landscaping. ~~For general landscaping of landscaped and screened areas within parking lots, and along local collectors and local streets, planting standards in Chapter 18.745, Landscaping and Screening, shall apply. The L-2 standard applies to all other trees and shrubs required by this chapter and Chapter 18.745 (except those required for the L-1 parking lot screen). For trees and shrubs required by Chapter 18.745, the L-2 standard is an additional standard. In addition, All L-2 trees shall be provided at a minimum 2 ½ inch caliper at the time of planting, at a maximum spacing of 28 feet.~~ Shrubs shall be of a size and quality to achieve the required landscaping or screening effect within two years.

**18.640.300 through 18.640.600**

[No change.]

**18.640.700**     Sensitive Lands, see Chapter 18.775 Floodplain District, see Chapter 18.775

**18.640.800**     Urban Forestry Plan, see Chapter 18.790 Wetlands Protection District, see Chapter 18.775

Commentary

18.715 DENSITY COMPUTATIONS

Section 18.790.050.D.1 allows a reduction in minimum density for the preservation of a significant tree grove. This allowed reduction in minimum density is reflected in this chapter.

The term “gross acres” (and the corresponding explanation of what gross acres are) has been simplified with the term “total site acres”.

**Chapter 18.715**  
**DENSITY COMPUTATIONS**

**Sections:**

- 18.715.010 Purpose**
- 18.715.020 Density Calculation**
- 18.715.030 Residential Density Transfer**

**18.715.010 Purpose**

- A. Purpose. The purpose of this chapter is to implement the comprehensive plan by establishing the criteria for determining the number of dwelling units permitted.

**18.715.020 Density Calculation**

- A. Definition of net development area. Net development area, in acres, shall be determined by subtracting the following land area(s) from the total site gross acres, ~~which is all of the land included in the legal description of the property to be developed:~~

- 1. All sensitive land areas:
  - a. Land within the 100-year floodplain,
  - b. Land or slopes exceeding 25%,
  - c. Drainage ways, and
  - d. Wetlands,
  - e. Optional: Significant tree groves or habitat areas, as designated on the City of Tigard Significant Tree Grove Map” or “Significant Habitat Areas Map”;
- 2. through 5.

[No change.]

- B. and C.

[No change.]

**18.715.030**

[No change.]

## Commentary

### 18.745.010 Purpose

A scrivener's error has been corrected because the chapter is intended to enhance the aesthetic and environmental quality of the city.

Protection of existing street trees during new development is addressed through Chapter 18.790 and Section 10 of the Urban Forestry Manual. The Urban Forestry Manual consists of administrative rules to implement the details of the urban forestry related code provisions in Title 8, Title 18 and other applicable titles in the Tigard Municipal Code.

### 18.745.020 Applicability

The existing applicability section is too broad because it says it applies to all development.

The proposed applicability conforms to current practice by applying the standards to Type I Conditional Use and Site Development Review Minor Modifications, and Type II and III land use reviews. The new soil volume requirements would apply to a more limited list of Type II and III land use reviews outlined in Section 18.745.040.A.4 for street trees and Section 18.745.050.E for parking lot trees.

The section explicitly requires trees in 18.745 to be included and subject to all of the requirements of a concurrent urban forestry plan (per 18.790).

**Chapter 18.745**  
**LANDSCAPING AND SCREENING**

**Sections:**

- 18.745.010 Purpose**  
**18.745.020 Applicability**  
**18.745.030 General Provisions**  
**18.745.040 Street Trees**  
**18.745.050 Buffering and Screening**  
**18.745.060 Re-vegetation**

**18.745.010 Purpose**

A. Purpose. The purpose of this chapter is to establish standards for landscaping, buffering, and screening of land use within Tigard in order to enhance the aesthetic and environmental quality of the City:

1. By ~~protecting existing street trees and~~ requiring the planting of street trees in new developments;
2. through 4.

[No change.]

**18.745.020 Applicability**

A. Applicability. The provisions of this chapter shall apply to all development that requires a Type I Conditional Use Minor Modification, a Type I Site Development Review Minor Modification, any Type II land use review or any Type III land use review including the construction of new structures, remodeling of existing structures where the landscaping is nonconforming (Section 18.760.040.C), and to a change of use which results in the need for increased on site parking or loading requirements or which changes the access requirements unless otherwise specified in any of the sections below.

B. When urban forestry plan requirements concurrently apply. When the provisions of Chapter 18.790, Urban Forestry Plan, concurrently apply, any trees required by this chapter shall be included in the urban forestry plan and subject to all of the requirements in Chapter 18.790. When site development review does not apply. ~~Where the provisions of Chapter 18.360, Site Development Review, do not apply, the Director shall approve, approve with conditions, or deny a plan submitted under the provisions of this chapter by means of a Type I procedure, as governed by Section 18.390.030, using the applicable standards in this chapter.~~

Commentary

18.745.030 General Provisions

The general provisions are modified to clarify that applicable industry standards (including tree care industry standards) shall be used to determine what constitutes acceptable maintenance.

Throughout the chapter, the term “landscaping and screening” is used to refer to items required by Chapter 18.745, and the term “plants” is used to refer to trees, shrubs and groundcover.

- C. Site plan requirements. The applicant shall submit a site plan. The Director shall provide the applicant with detailed information about this submission requirement.

**18.745.030 General Provisions**

A. ~~Obligation to maintain Maintenance Responsibility.~~ Unless otherwise provided by the lease agreement, the owner, tenant and his agent, if any, shall be jointly and severally responsible for the ongoing maintenance of all landscaping and screening used to meet the requirements of this chapter according to applicable industry standards. ~~which shall be maintained in good condition so as to present a healthy, neat and orderly appearance, shall be replaced or repaired as necessary, and shall be kept free from refuse and debris.~~

B. ~~Pruning required.~~ All plant growth in landscaped areas of developments shall be controlled by pruning, trimming or otherwise so that:

- ~~— 1. It will not interfere with the maintenance or repair of any public utility;~~
- ~~— 2. It will not restrict pedestrian or vehicular access; and~~
- ~~— 3. It will not constitute a traffic hazard because of reduced visibility.~~

~~CB.~~ Installation requirements. The installation of all landscaping and screening required by this chapter shall be as follows:

- 1. All landscaping and screening shall be installed according to applicable industry standards ~~accepted planting procedures;~~
- 2. ~~The plant materials~~ All plants shall be of high grade, and shall meet the size and grading standards of the American Standards for ~~Nurberg Nursery~~ Nursery Stock (ANSI Z60, 1-1986~~2004~~, and any future revisions); and
- 3. All L-landscaping and screening shall be installed in accordance with the provisions of this title.

~~DC.~~ Certificate of occupancy. Certificates of occupancy shall not be issued unless the landscaping requirements of this chapter have been met or other arrangements have been made and approved by the City such as the posting of a bond.

~~ED.~~ Protection of existing plants ~~vegetation.~~ Existing vegetation plants on a site shall be protected as follows ~~much as possible:~~

- 1. The developer shall provide methods for the protection of existing vegetation plants to remain during the construction process; ~~and~~
- 2. The plants to remain ~~be saved~~ shall be noted on the landscape plans (e.g., i.e., areas plants not to be disturbed to remain can be shown as protected with fencing; and fenced, as in snow fencing which can be placed around individual trees.

## Commentary

### 18.745.030 General Provisions

While snow fencing, etc. may be used to preserve existing shrubs and groundcover, an explicit cross reference is made to the tree preservation requirements in Chapter 18.790.

A link is drawn between the regulations in Chapter 18.745, and other applicable rules in other chapters of the code. This includes regulations related to hazard trees, street trees, urban forestry plan requirements, etc.

### 18.745.040 Street Trees

In accordance with existing practice, street trees are required as part of the approval process for Conditional Use (Type III), Downtown Design Review (Type II and III), Minor Land Partition (Type II), Planned Development (Type III), Site Development Review (Type II) and Subdivision (Type II and III) permits.

The minimum number of street trees required is based on the project's street frontage and must conform to the planting requirements in Section 2 of the Urban Forestry Manual and the soil volume requirements in Section 12 of the Urban Forestry Manual.

The soil volume requirements outlined in Section 12 of the Urban Forestry Manual are based on the width of the non-street portion of the right of way. Soil volume requirements can be met through the use of engineered soil under pavement (covered soil volume) if designed, inspected and documented by a landscape architect. Otherwise, soil volume requirements can be met by planting trees in landscape areas with sufficient soil.

3. The tree protection provisions outlined in Chapter 18.790 and the Urban Forestry Manual shall apply to the land use review types identified in Section 18.790.020.A.

E. Ongoing tree related rules and regulations. Any trees used to meet the requirements of this chapter shall be subject to all applicable tree related rules and regulations in other chapters and titles of the Tigard Municipal Code and Tigard Development Code.

F. Care of landscaping along public rights of way. Appropriate methods for the care and maintenance of street trees and landscaping materials shall be provided by the owner of the property abutting the rights of way unless otherwise required for emergency conditions and the safety of the general public.

G. Conditions of approval of existing vegetation. The review procedures and standards for required landscaping and screening shall be specified in the conditions of approval during development review and in no instance shall be less than that required for conventional development.

H. Height restrictions abutting public rights of way. No trees, shrubs or plantings more than 18 inches in height shall be planted in the public right of way abutting roadways having no established curb and gutter.

#### **18.745.040 Street Trees**

##### A. Street Tree Standards.

1. Street trees shall be required as part of the approval process for Conditional Use (Type III), Downtown Design Review (Type II and III), Minor Land Partition (Type II), Planned Development (Type III), Site Development Review (Type II) and Subdivision (Type II and III) permits.
2. The minimum number of required street trees shall be determined by dividing the linear amount of street frontage within or adjacent to the site (in feet) by 40 feet. When the result is a fraction, the minimum number of required street trees shall be determined by rounding to the nearest whole number.
3. Street trees required by this section shall be planted according to the standards in Section 2 of the Urban Forestry Manual.
4. Street trees required by this section shall be provided adequate soil volumes according to the standards in Section 12 of the Urban Forestry Manual.
5. Street trees required by this section shall be planted within the right of way whenever practicable according to the standards in Section 2 of the Urban Forestry Manual. Street trees may be planted no more than 6 feet from the right of way according to the standards in Section 2 of the Urban Forestry Manual when planting within the right of way is not practicable.

## Commentary

### 18.745.040 Street Trees

Existing trees are allowed as street trees if they would be permitted as newly planted trees and they are adequately protected through the urban forestry plan requirements in Chapter 18.790. This would occur as a technical decision without requiring an adjustment permit in order to incentivize preservation of existing trees.

If the required number of street trees cannot be provided, a fee in lieu of planting option is available to cover the city's cost of planting.

The existing provisions for street trees will be replaced with the new provisions which are primarily in Sections 2 (street tree planting standards) and 12 (street tree soil volume standards) of the Urban Forestry Manual.

6. An existing tree may be used to meet the street tree standards provided that:
- a. The largest percentage of the tree trunk immediately above the trunk flare or root buttresses is either within the subject site or within the right of way immediately adjacent to the subject site;
  - b. The tree would be permitted as a street tree according to the standards in Sections 2 and 12 of the Urban Forestry Manual if it were newly planted; and
  - c. The tree is shown as preserved in the Tree Preservation and Removal site plan (per 18.790.030.A.2), Tree Canopy Cover site plan (per 18.790.030.A.3) and supplemental report (per 18.790.030.A.4) of a concurrent urban forestry plan and is eligible for credit towards the effective tree canopy cover of the site.

7. In cases where it is not practicable to provide the minimum number of required street trees, the Director may allow the applicant to remit payment into the Urban Forestry Fund for tree planting and early establishment in an amount equivalent to the City's cost to plant and maintain a street tree for three (3) years (per the standards in Section 2 of the Urban Forestry Manual) for each tree below the minimum required.

~~A. Protection of existing vegetation. All development projects fronting on a public street, private street or a private driveway more than 100 feet in length approved after the adoption of this title shall be required to plant street trees in accordance with the standards in Section 18.745.040.C.~~

~~B. Street tree planting list. Certain trees can severely damage utilities, streets and sidewalks or can cause personal injury. Approval of any planting list shall be subject to review by the Director.~~

~~C. Size and spacing of street trees:~~

~~1. Landscaping in the front and exterior side yards shall include trees with a minimum caliper of two inches at four feet in height as specified in the requirements stated in Section 18.745.040.C.2 below.~~

~~2. The specific spacing of street trees by size of tree shall be as follows:~~

~~a. Small or narrow stature trees under 25 feet tall and less than 16 feet wide branching at maturity shall be spaced no greater than 20 feet apart;~~

~~b. Medium sized trees 25 feet to 40 feet tall, 16 feet to 35 feet wide branching at maturity shall be spaced no greater than 30 feet apart;~~

Commentary

18.745.040 Street Trees

Strikethroughs of existing street tree provisions continued. The existing provisions for street trees will be replaced with the new provisions which are primarily in Sections 2 (street tree planting standards) and 12 (street tree soil volume standards) of the Urban Forestry Manual.

- ~~c. Large trees over 40 feet tall and more than 35 feet wide branching at maturity shall be spaced no greater than 40 feet apart;~~
- ~~d. Except for signalized intersections as provided in Section 18.745.040.H, trees shall not be planted closer than 20 feet from a street intersection, nor closer than two feet from private driveways (measured at the back edge of the sidewalk), fire hydrants or utility poles to maintain visual clearance;~~
- ~~e. No new utility pole location shall be established closer than five feet to any existing street tree;~~
- ~~f. Tree pits shall be located so as not to include utilities (e.g., water and gas meters) in the tree well;~~
- ~~g. On-premises utilities (e.g., water and gas meters) shall not be installed within existing tree well areas;~~
- ~~h. Street trees shall not be planted closer than 20 feet to light standards;~~
- ~~i. New light standards shall not be positioned closer than 20 feet to existing street trees except when public safety dictates, then they may be positioned no closer than 10 feet;~~
- ~~j. Where there are overhead power lines, the street tree species selected shall be of a type which, at full maturity, will not interfere with the lines;~~
- ~~k. Trees shall not be planted within two feet from the face of the curb; and~~
- ~~l. Trees shall not be planted within two feet of any permanent hard surface paving or walkway:
  - ~~(1) Space between the tree and the hard surface may be covered by a nonpermanent hard surface such as grates, bricks on sand, paver blocks and cobblestones; and~~
  - ~~(2) Sidewalk cuts in concrete for tree planting shall be at least four by four feet to allow for air and water into the root area.~~~~
- ~~D. Pruning requirements. Trees, as they grow, shall be pruned to provide at least eight feet of clearance above sidewalks and 13 feet above local street, 15 feet above collector street, and 18 feet above arterial street roadway surfaces.~~
- ~~E. Cut and fill around existing trees. Existing trees may be used as street trees if no cutting or filling takes place within the drip line of the tree unless an adjustment is approved by the Director by means of a Type I procedure, as governed by Section 18.390.030, using approval criteria in Section 18.370.020.C.4.a.~~

Commentary

18.745.050 Buffering and Screening

Buffers are required between incompatible land uses. Trees are required in the buffer, and the language and spacing requirements for buffer trees has been revised to be consistent with the requirements in the Urban Forestry Manual.

- ~~F. Replacement of street trees. Existing street trees removed by development projects or other construction shall be replaced by the developer with those types of trees approved by the Director. The replacement trees shall be of a size and species similar to the trees that are being removed unless lesser sized alternatives are approved by the Director.~~
- ~~G. Granting of adjustments. Adjustments to the street tree requirements may be granted by the Director by means of a Type I procedure, as regulated in Section 18.390.030, using approval criteria in Section 18.370.020.C.6.b.~~
- ~~H. Location of trees near signalized intersections. The Director may allow trees closer to specified intersections which are signalized, provided the provisions of Chapter 18.795, Visual Clearance, are satisfied. (Ord. 09-13)~~

**18.745.050      Buffering and Screening**

A. General provisions.

[No change.]

B. Buffering and screening requirements.

- 1. through 3.

[No change.]

Commentary

18.745.050 Buffering and Screening

Buffers are required between incompatible land uses. Trees are required in the buffer, and the language and spacing requirements for buffer trees has been revised to be consistent with the requirements in the Urban Forestry Manual.

4. The minimum improvements within a buffer area shall consist of combinations for landscaping and screening as specified in Table 18.745.1. In addition, improvements shall meet the following specifications:
  - a. At least one row of trees shall be planted. They shall be chosen from any of the tree lists in the Urban Forestry Manual (except the Nuisance Tree List) unless otherwise approved by the Director and have a minimum caliper of ~~two~~ 1½ inches ~~at four feet in height above grade~~ for deciduous trees and a minimum height of ~~five~~ six feet ~~high~~ for evergreen trees at the time of planting. Spacing for trees shall be as follows:
    - (1) Small stature or ~~narrow-stature~~ columnar trees, ~~under 25 feet tall or less than 16 feet wide at maturity~~ shall be spaced no less than 15 feet on center and no further greater than 15 20 feet on center ~~apart~~.
    - (2) Medium-sized stature trees ~~between 25 feet to 40 feet tall and with 16 feet to 35 feet wide branching at maturity~~ shall be spaced no less than 20 feet on center and no greater than 30 feet on center ~~apart~~.
    - (3) Large stature trees, ~~over 40 feet tall and with more than 35 feet wide branching at maturity~~, shall be spaced no less than 30 feet on center and no greater than 30 40 feet on center ~~apart~~.
  - b. In addition, at least 10 five-gallon shrubs or 20 one-gallon shrubs shall be planted for each 1,000 square feet of required buffer area.
  - c. The remaining area shall be planted in lawn or other living ground cover.

5. through 9.

[No change.]

C. and D.

[No change.]

Commentary

18.745.050 Buffering and Screening

Special screening standards require trees in parking lots. Language has been added to specify that non-conforming screening in parking lots shall not be allowed to become any less conforming (through a Type I land use permit for example). Screening in parking lots will be required to be brought into conformance when issuing major development permits (Type II and III).

The parking lot screening requirements have been revised to require 30 percent actual canopy cover (directly above the parking area) rather than one tree for every seven parking spaces. Requiring canopy more directly relates to the city's urban forestry goals, whereas requiring a certain number of trees per parking spaces can be met by deleting parking spaces (rather than planting trees). Section 13 of the Urban Forestry Manual is referenced for more detailed parking lot tree, soil volume and canopy plan requirements. Parking lot tree canopy plans are required to be designed, inspected and documented by a landscape architect unless an arborist can meet the requirements through a concurrent urban forestry plan per Chapter 18.790. Soil volume requirements can be met through the use of engineered soil under pavement (covered soil volume) if designed, inspected and documented by a landscape architect. Otherwise, soil volume requirements can be met by planting trees in landscape areas with sufficient soil.

E. Screening: special provisions.

1. Screening and landscaping of parking and loading areas:

a. Screening of parking and loading areas is required. In no cases shall nonconforming screening of parking and loading areas (i.e. nonconforming situation) be permitted to become any less conforming. Nonconforming screening of parking and loading areas shall be brought into conformance with the provisions of this chapter as part of the approval process for Condition Use (Type III), Downtown Design Review (Type II and III), Planned Development (Type III), and Site Development Review (Type II) permits only. The specifications for this screening are as follows:

- (1) Landscaped parking areas shall include special design features which effectively screen the parking lot areas from view. These design features may include the use of landscaped berms, decorative walls and raised planters;
- (2) Landscape planters may be used to define or screen the appearance of off-street parking areas from the public right-of-way;
- (3) Materials to be installed should achieve a balance between low lying and vertical shrubbery and trees;
- (4) All parking areas, including parking spaces and aisles, shall be required to achieve at least 30% tree canopy cover at maturity directly above the parking area in accordance with the Parking Lot Tree Canopy Standards in Section 13 of the Urban Forestry Manual. Trees shall be planted in landscaped islands in all parking areas, and shall be equally distributed and on the basis of one tree for each seven parking spaces in order to provide a canopy effect; and
- (5) ~~The minimum dimension of the landscape islands shall be three feet and the landscaping shall be protected from vehicular damage by some form of wheel guard or curb.~~

2. through 4.

[No change.]

F. Buffer Matrix

[No change.]

Commentary

18.745.060 Re-vegetation

For consistency, the term “landscaping and screening” is used to refer to the requirements in Chapter 18.745.

A cross reference has been added to require soil stockpiling consistent with an approved urban forestry plan per 18.790. When there is no urban forestry plan, soil stockpiling shall be outside the driplines of existing trees.

TABLE 18.745.1, BUFFER MATRIX

Table 18.745.1 is unchanged.

**18.745.060 Re-vegetation**

- A. When re-vegetation is required. Where natural vegetation has been removed through grading in areas not affected by the landscaping and screening requirements and that are not to be occupied by structures, such areas are to be replanted as set forth in this section to prevent erosion after construction activities are completed.
  
- B. Preparation for re-vegetation. Topsoil removed from the surface in preparation for grading and construction is to be stored on or near the sites and protected from erosion while grading operations are underway; and
  - 1. Such storage ~~shall may not~~ be located consistent with an approved urban forestry plan per Chapter 18.790 or outside the tree canopy driplines where it would cause suffocation of root systems of trees intended to be preserved in cases when there this is no approved urban forestry plan; and
  - 2. After completion of such grading, the topsoil is to be restored to exposed cut and fill embankments or building pads to provide a suitable base for seeding and planting.
  
- C. Methods of Re-vegetation

[No change.]

**TABLE 18.745.1  
BUFFER MATRIX**

[No Changes to this Table]

Commentary

Table 18.745.2, BUFFER COMBINATIONS FOR LANDSCAPING AND SCREENING [1]

Specific buffers are required based on the level of incompatibility of adjacent land uses by Table 18.745.1 (Buffer Matrix). The specifications for tree planting in Table 18.745.2 have been revised for compatibility with Section 18.745.050.B and the standards in the Urban Forestry Manual.

Footnote 2 provides a cross reference to the more detailed spacing standards in Section 18.745.050.B.4.

Existing footnote 2 has been struck because there is no adjustment process for buffer trees (scrivener's error).

TABLE 18.745.2

## BUFFER COMBINATIONS FOR LANDSCAPING AND SCREENING [1]

	Options	Width (feet)	Trees[2] (per linear feet of buffer)	Shrubs or Groundcover	Screening
A	--	10	--	Lawn/ living groundcover	--
B	--	10	<del>20</del> 15' min/30' 40' max spacing	Lawn/ living groundcover	--
C	1	10	15' min/30' 40' max spacing	Shrubs	4' hedges
	2	8		Shrubs	5' fence
	3	6		Shrubs	6' wall
D	1	20	40' 15' min/20' 40' max spacing	Shrubs	6' hedge
	2	15		Shrubs	6' fence
	3	10		Shrubs	6' wall
E	1	30	40' 15' min/20' 40' max spacing	Shrubs	6' hedge or fence
	2	25		Shrubs	5' earthen berm or wall
F	--	40	40' 15' min/20' 40' max spacing	Shrubs	6' hedge, fence, wall or berm

[1] Buffers are not required between abutting uses that are of a different type when the uses are separated by a street as specified in Section 18.745.050.A.2.

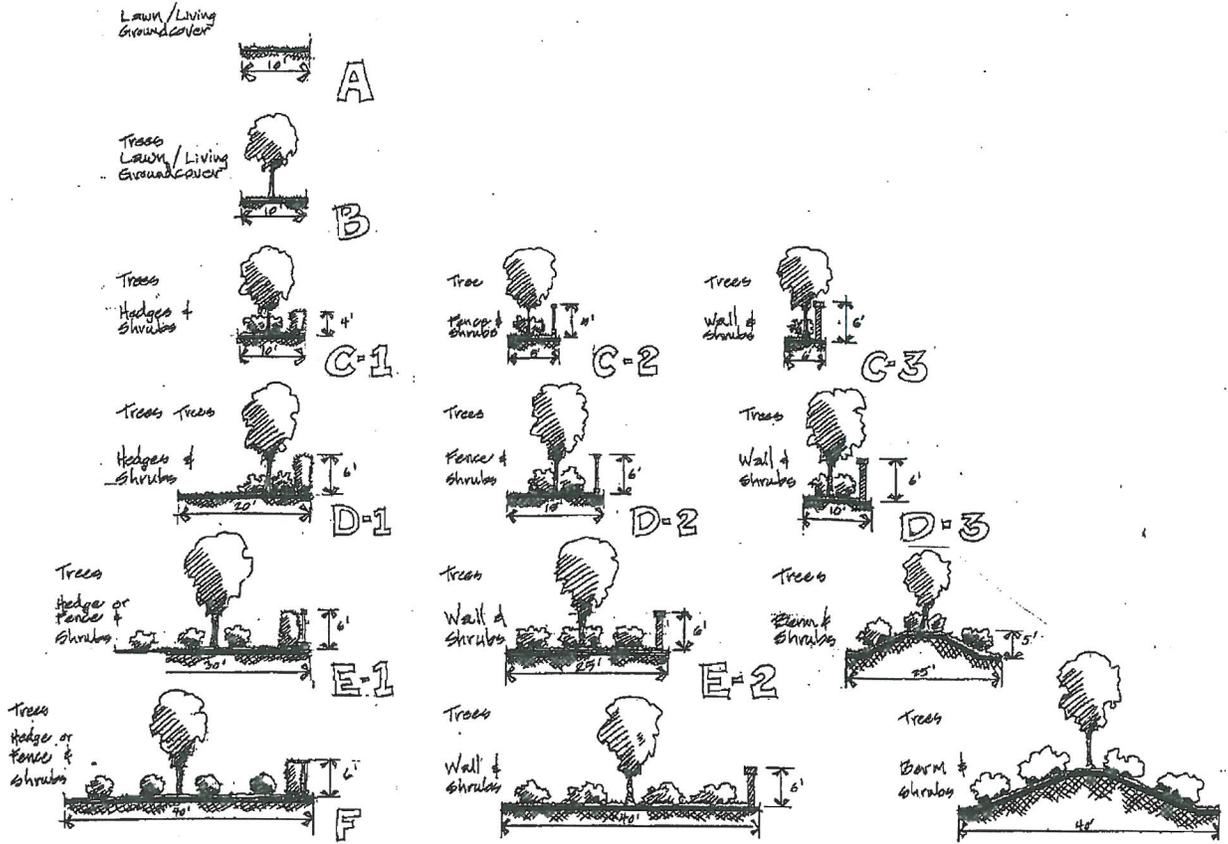
[2] Spacing of trees depends on stature; see Section 18.745.050.B.4.

[2] Adjustments from these requirements can be obtained; see Section 18.370.020.C.4.

Commentary

Table 18.745.2, BUFFER COMBINATIONS FOR LANDSCAPING AND SCREENING [2]

Illustrations left unchanged.



Commentary

18.775 Sensitive Lands

Chapter 18.790 specifies that urban forestry plans are required for Type II and III Sensitive Lands Reviews. After reviewing existing project types and conditions, it was determined that Type II and III Sensitive Lands Reviews have consistent and tangible impacts on trees.

Consistent with the approval criteria for other land use permits, reference to “compliance with all applicable requirements of this title” has been added to each of the approval criteria for each sensitive lands permit type. This cross reference provides a link back to chapter 18.790 to ensure the urban forestry plan standards are met for Type II and III Sensitive Lands Reviews.

**Chapter 18.775  
SENSITIVE LANDS**

**Sections:**

- 18.775.010 Purpose**
- 18.775.020 Applicability of Uses: Permitted, Prohibited, and Nonconforming**
- 18.775.030 Administrative Provisions**
- 18.775.040 General Provisions for Floodplain Areas**
- 18.775.050 General Provisions for Wetlands**
- 18.775.060 Expiration of Approval: Standards for Extension of Time**
- 18.775.070 Sensitive Land Permits**
- 18.775.080 Application Submission Requirements**
- 18.775.090 Special Provisions for Development within Locally Significant Wetlands and Along the Tualatin River, Fanno Creek, Ball Creek, and the South Fork of Ash Creek**
- 18.775.100 Adjustments to Underlying Zone Standards**
- 18.775.110 Density Transfer**
- 18.775.120 Variances to Section 18.775.090 Standards**
- 18.775.130 Plan Amendment Option**
- 18.775.140 Significant Habitat Areas Map Verification Procedures**

**18.775.010 through 18.775.060**

[No change.]

Commentary

18.775.070 Sensitive Lands Permits

Consistent with the approval criteria for other land use permits, reference to “compliance with all applicable requirements of this title” has been added to the approval criteria for sensitive lands permits within the 100-year floodplain. This cross reference provides a link back to chapter 18.790 to ensure the urban forestry plan standards are met for Type II and III Sensitive Lands Reviews within the 100-year floodplain.

Consistent with the approval criteria for other land use permits, reference to “compliance with all applicable requirements of this title” has been added to the approval criteria for sensitive lands permits on steep slopes. This cross reference provides a link back to chapter 18.790 to ensure the urban forestry plan standards are met for Type II and III Sensitive Lands Reviews on steep slopes.

Consistent with the approval criteria for other land use permits, reference to “compliance with all applicable requirements of this title” has been added to the approval criteria for sensitive lands permits within drainageways. This cross reference provides a link back to chapter 18.790 to ensure the urban forestry plan standards are met for Type II and III Sensitive Lands Reviews within drainageways.

Consistent with the approval criteria for other land use permits, reference to “compliance with all applicable requirements of this title” has been added to the approval criteria for sensitive lands permits within wetlands. This cross reference provides a link back to chapter 18.790 to ensure the urban forestry plan standards are met for Type II and III Sensitive Lands Reviews within wetlands.

**18.775.070 Sensitive Land Permits**

A. Permits required. An applicant, who wishes to develop within a sensitive area, as defined in Chapter 18.775, must obtain a permit in certain situations. Depending on the nature and intensity of the proposed activity within a sensitive area, either a Type II or Type III permit is required, as delineated in Sections 18.775.020.F and 18.775.020.G. The approval criteria for various kinds of sensitive areas, e.g., floodplain, are presented in Sections 18.775.070.B—18.775.070.E below.

B. Within the 100-year floodplain. The Hearings Officer shall approve, approve with conditions or deny an application request within the 100-year floodplain based upon findings that all of the following criteria have been satisfied:

1. Compliance with all of the applicable requirements of this title;

Renumber 1. through 7. as 2. through 8.

C. With steep slopes. The appropriate approval authority shall approve, approve with conditions or deny an application request for a sensitive lands permit on slopes of 25% or greater or unstable ground based upon findings that all of the following criteria have been satisfied:

1. Compliance with all of the applicable requirements of this title;

Renumber 1. through 4. as 2. through 5.

D. Within drainageways. The appropriate approval authority shall approve, approve with conditions or deny an application request for a sensitive lands permit within drainageways based upon findings that all of the following criteria have been satisfied:

1. Compliance with all of the applicable requirements of this title;

Renumber 1. through 7. as 2. through 8.

E. Within wetlands. The Director shall approve, approve with conditions or deny an application request for a sensitive lands permit within wetlands based upon findings that all of the following criteria have been satisfied:

1. Compliance with all of the applicable requirements of this title;

Renumber 1. through 8. as 2. through 9.

Commentary

18.775.080 Application Submission Requirements

Because the urban forestry plan standards are required to be met for Type II and III Sensitive Lands Reviews, an urban forestry plan is listed in the application submission requirements for Type II and III Sensitive Lands Reviews (18.775.020.F and G).

WHEREAS, the Citizen Advisory Committee reached consensus on the flexible and incentive based land use regulations for tree grove preservation in Section 18.790.050.D through a set of “tree grove preservation incentives guiding principles”; and

WHEREAS, the Citizen Advisory Committee reached consensus on the other land use regulations in Title 18 that support general urban forest enhancement activities such as tree planting and preservation when not associated with significant tree groves through a set of “urban forestry standards for development guiding principles”; and

WHEREAS, a Technical Advisory Committee comprised of city staff and agency representatives was concurrently convened to advise project staff on technical aspects during the Urban Forestry Code Revisions project met 14 times between June 2010 and November 2011; and

WHEREAS, the Technical Advisory Committee reached consensus on the technical feasibility of the flexible and incentive based land use regulations for tree grove preservation in Section 18.790.050.D; and

WHEREAS, the Technical Advisory Committee reached consensus on the technical feasibility of the other land use regulations in Title 18 that support general urban forest enhancement activities such as tree planting and preservation when not associated with significant tree groves; and

WHEREAS, the development of land use regulations in Title 18 that support general urban forest enhancement activities such as tree planting and preservation when not associated with significant tree groves, is not required to comply with Statewide Planning Goal 5 Rule requirements because these activities do not create or amend a resource list or land use regulation adopted in order to protect a Goal 5 resource; and

WHEREAS, the process for adopting land use regulations for the preservation of natural resources, including the flexible and incentive based land use regulations for tree grove preservation in Section 18.790.050.D, must comply with Statewide Planning Goal 5 Rule requirements; and

WHEREAS, project staff and consultants drafted flexible and incentive based land use regulations for tree grove preservation in Section 18.790.050.D including allowed reduction in minimum density, density transfer, increased building height, reduced setbacks, adjustments to Urban Forestry Plan requirements and adjustments to street and utility standards to facilitate the preservation of significant tree groves as part of the land development process; and

WHEREAS, project staff drafted other land use regulations in Title 18 that support general urban forest enhancement activities such as tree planting and preservation when not associated with significant tree groves, the main purpose of which are to create equitable, achievable and scientifically sound requirements for all major developments to plant or preserve a certain amount of tree canopy to support citywide tree canopy cover goals recommended in the Urban Forestry Master Plan as part of the land development process; and

WHEREAS, on January 13, 2012, prior to the legislative adoption phase of the Urban Forestry Code Revisions project, 14,225 public hearing notices were sent to all Tigard property owners consistent with Measure 56 requirements as further described in the findings of the staff report beginning on page 419 of Urban Forestry Code Revisions Volume II; and

WHEREAS, project staff and consultants held a citywide open house on December 8, 2011; and

WHEREAS, the public response at the citywide open house on December 8, 2011 and after the Measure 56 notices were sent on January 13, 2012, was generally supportive of the flexible and incentive based land use

ORDINANCE No. 12- 09

regulations for tree grove preservation in Section 18.790.050.D and the other land use regulations in Title 18 that support general urban forest enhancement activities such as tree planting and preservation when not associated with significant tree groves; and

WHEREAS, the Tigard Planning Commission reviewed at one workshop and four public hearings between January 2012 and May 2012 the flexible and incentive based land use regulations for tree grove preservation in Section 18.790.050.D and the other land use regulations in Title 18 that support general urban forest enhancement activities such as tree planting and preservation when not associated with significant tree groves; and

WHEREAS, the Tigard Planning Commission supported the amendment of land use regulations in Title 18; and

WHEREAS, the Tigard Planning Commission recommended four non substantive text amendments for correction and clarification purposes; and

WHEREAS, the Tigard Planning Commission recommended three substantive text amendments to increase flexibility in meeting Title 18 requirements which include lowering the per lot minimum tree canopy requirement in lower density residential districts, eliminating the per lot minimum tree canopy requirement in higher density residential and non residential districts and allowing landscape architects, in addition to arborists, to develop urban forestry plans; and

WHEREAS, on May 7, 2012 the Tigard Planning Commission made a unanimous recommendation to the City Council for approval of DCA 2011-00002 as amended by motion and unanimous vote; and

WHEREAS, as described in the findings of the staff report beginning on page 419 of Urban Forestry Code Revisions Volume II, the Planning Commission found the city complied with Statewide Planning Goal 5 Rule requirements throughout the development of flexible and incentive based land use regulations for tree grove preservation in Section 18.790.050.D, and complied with all applicable land use planning requirements when developing land use regulations in Title 18 that support general urban forest enhancement activities such as tree planting and preservation when not associated with significant tree groves; and

WHEREAS, on the following dates in 2012: July 24, August 14, September 11, October 23, November 13, and November 27, the Tigard City Council held a public hearing to consider the Commission's recommendation on DCA 2011-00002; and

WHEREAS, Tigard City Council finds it necessary to delay implementation of the Urban Forestry Code Revisions, which include DCA 2011-00002, until March 1, 2013, to ensure an orderly administrative transition to the new urban forestry regulations; and

WHEREAS sufficient time is needed for the City Manager to administratively adopt the Urban Forestry Manual pursuant to Chapter 2.04.050-070 (Administrative Rulemaking) and Section 8.02.030 (Administrative Rules - Urban Forestry Manual) prior to the adoption of Title 18 amendments which require the Urban Forestry Manual for implementation.

WHEREAS, Council's decision to adopt DCA 2011-00002 is based on the findings and conclusions found in the City of Tigard staff report dated November 20, 2012, and the associated record, which are incorporated herein by reference and are contained in land-use file DCA 2011-00002.

NOW, THEREFORE, THE CITY OF TIGARD ORDAINS AS FOLLOWS:

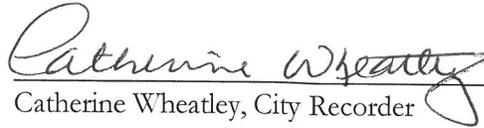
SECTION 1: Tigard Development Code (Title 18) is amended to include new text and to rescind existing text as shown in "EXHIBIT A - on odd numbered pages 5 through 183 of Urban Forestry Code Revisions Volume II".

SECTION 2: This ordinance shall be effective March 1, 2013.

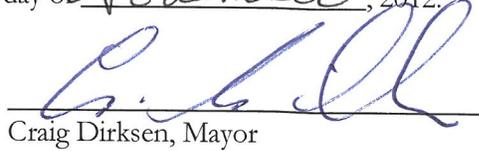
SECTION 3: Council adopts the findings recommended by the Planning Commission as described in the findings of the staff report dated November 20, 2012.

SECTION 4: Council further adopts the commentary in Exhibit A (on even numbered pages 4 through 182) as additional legislative intent for the corresponding code amendments.

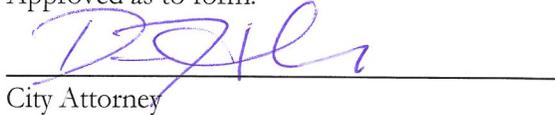
PASSED: By majority vote of all Council members present after being read by number and title only, this 27<sup>th</sup> day of November, 2012.

  
Catherine Wheatley, City Recorder

APPROVED: By Tigard City Council this 27<sup>th</sup> day of November, 2012.

  
Craig Dirksen, Mayor

Approved as to form:

  
City Attorney

11/27/12  
Date

## Community Development Code – Planning Commission Recommendation

### How to Read This Section

This section is organized by Community Development Code chapter number. Odd-numbered pages show the existing language with (proposed/recommended/adopted) amendments. Text that is (proposed/recommended) to be added to the code is shown with double underlines. Text that is (proposed/recommended) to be deleted is shown with strikethrough.

Even-numbered pages contain commentary on the amendments, which establish, in part, the legislative intent in adopting these amendments. Staff recommends focusing on the commentary to gain a better understanding of the purpose of the code amendments.

The Urban Forestry Manual consists of administrative rules that implement the details of the urban forestry related code provisions in Title 8, Title 18 and other applicable titles in the Tigard Municipal Code. Section 8.02.040 of the Tigard Municipal Code enables administrative rulemaking for the Urban Forestry Manual. The city manager is authorized to adopt and amend the Urban Forestry Manual according to the procedures in Chapter 2.04 after council adoption of Section 8.02.040. The Urban Forestry Manual is referenced as if it has already been adopted in order to demonstrate how it relates to the code.

### Table of Code Sections

Chapter (18.115) List of Terms.....	3
Chapter 18.120 Definitions .....	17
Chapter 18.310 Summary of Land Use Permits .....	29
Chapter 18.330 Conditional Use .....	39
Chapter 18.350 Planned Developments.....	47
Chapter 18.360 Site Development Review.....	53
Chapter 18.370 Variances and Adjustments .....	57
Chapter 18.390 Decision-Making Procedures .....	61
Chapter 18.530 Industrial Zoning.....	69
Chapter 18.610 Tigard Downtown District Development and Design Standards .....	71
Chapter 18.620 Tigard Triangle Design Standards .....	77
Chapter 18.630 Washington Square Regional Center Design Standards .....	89
Chapter 18.640 Durham Quarry Design Standards .....	95
Chapter 18.715 Density Computations .....	101
Chapter 18.745 Landscaping and Screening .....	103
Chapter 18.775 Sensitive Lands .....	125
Chapter 18.790 Urban Forestry Plan .....	131
Chapter 18.798 Wireless Communication Facilities .....	175

Commentary

18.115 List of Terms

Chapter 18.115 (List of Terms) is a newly codified chapter of the Tigard Development Code (TDC) that is provided for easy reference of defined terms in Chapter 18.120 (Definitions). New, revised and consolidated tree/urban forestry related definitions in Chapter 18.120 are listed in Chapter 18.115.

**Chapter (18.115)**  
**List of Terms**

The following terms are defined in Chapter 18.120, Definitions, unless indicated otherwise.

Abandoned Sign <i>See Chapter 18.780, Signs</i>	Alternative Access	Bay <i>See Design-Related Definitions</i>
Abut	Amendment	Belt Course <i>See Design-Related Definitions</i>
Abutting Lots	Amenity	Bench Sign <i>See Chapter 18.780, Signs</i>
Accept	Americans with Disabilities Act	Berm
Access	Annexation	Bike Lane
Accessory Building	Antenna <i>See also Chapter 18.798, Wireless Communication Facilities</i>	Bikeway
Accessory Dwelling Unit <i>See Dwelling-Related Definitions</i>	Apartment <i>See Dwelling-Related Definitions</i>	Billboard <i>See Chapter 18.780, Signs</i>
Accessory Structure	Appeal	Buildable Area
Acre	Applicant	Building
Active Use Facilities <i>See Open Space Facility-Related Definitions</i>	Application	Building Envelope
Addition	Approval Authority	Building, Primary
Adjacent Lots <i>See Abutting Lots</i>	Approved Plan	Building Height
Adjoining Lots <i>See Abutting Lots</i>	Arcade <i>See Design-Related Definitions</i>	Building Official; <i>See also Chapter 18.780, Signs</i>
Administrative Action	Archaeological Site	Building Permit
Adult Bookstore <i>See Adult Entertainment-Related Definitions</i>	Area <i>See Chapter 18.780, Signs</i>	Business <i>See Chapter 18.780, Signs</i>
Adult Entertainment-Related Definitions	Argument <i>See Section 18.390.080, General Provisions</i>	Caliper <i>See Tree Related Definitions</i>
• Adult Bookstore	Assessed Valuation	Canopy <i>See Design-Related Definitions</i>
• Adult Motion Picture Theater	Attached Dwelling <i>See Dwelling-Related Definitions</i>	<u>Certified Arborist <i>See Tree Related Definitions</i></u>
• Specified Anatomical Areas	Awning <i>See Design-Related Definitions</i>	<u>Certified Tree Risk Assessor <i>See Tree Related Definitions</i></u>
• Specified Sexual Activities	Awning Sign <i>See Chapter 18.780, Signs</i>	Canopy Cover <i>See Chapter 18.790, Tree Removal</i>
Adult Motion Picture Theater <i>See Adult Entertainment-Related Definitions</i>	Balloon <i>See Chapter 18.780, Signs</i>	Chamfer <i>See Design-Related Definitions</i>
‘A’-Frame Sign <i>See Chapter 18.780, Signs</i>	Band <i>See Design-Related Definitions</i>	Change of Use
Aisle	Banner <i>See Chapter 18.780, Signs</i>	City
Alley	Base Flood <i>See Flood-Related Definitions</i>	
Alteration, Structural	Basement	

Commentary

18.115 List of Terms

List of terms continued.

City Engineer	Cultural Institution	<u>Development Impact Area</u>
City of Tigard	Auxiliary Sign <i>See Chapter</i>	<i>Development Review See</i>
City Recorder	18.780, <i>Signs</i>	<i>Chapter 18.780, Signs</i>
Collocation <i>See Chapter</i>	Cutout <i>See Chapter 18.780,</i>	Development Site
18.798, <i>Wireless</i>	<i>Signs</i>	<u>Diameter at Breast Height</u>
<i>Communication Facilities</i>	Dedication	<i>(DBH) See Tree Related</i>
Column <i>See Design-Related</i>	Dedication, Fee In Lieu Of	<i>Definitions</i>
<i>Definitions</i>	Deed	Directional Sign <i>See Chapter</i>
Commercial Forestry <i>See</i>	Demolish	18.780, <i>Signs</i>
<i>Chapter 18.790, Tree</i>	Density	Director
<i>Removal</i>	Density Bonus	Display Surface <i>See Chapter</i>
Commission	Density Transfer	18.780, <i>Signs</i>
Common Wall	Design-Related Definitions	Drainage Way
Complete and Entire	• Arcade	<u>Dripline See Tree Related</u>
Complex	• Awning	<i>Definitions</i>
Comprehensive <i>See</i>	• Band	Drive-Through Facility
<i>Comprehensive Plan-Related</i>	• Bay	Driveway
<i>Definitions</i>	• Belt Course	Duplex <i>See Dwelling-Related</i>
Comprehensive Plan-	• Canopy	<i>Definitions</i>
Related Definitions	• Chamfer	Dwelling <i>See Dwelling-Related</i>
• Comprehensive	• Column	<i>Definitions</i>
• Generalized	• Cornice	Dwelling-Related
• Land	• Eaves	Definitions
• Plan Coordination	• Entry	• Accessory Dwelling Unit
Conditional Use	• Frieze	• Apartment
Construct <i>See Chapter</i>	• Marquee	• Attached Dwelling
18.780, <i>Signs</i>	• Medallion	• Detached Dwelling
Contiguous	• Parapet	• Duplex
Contiguous Lots <i>See</i>	• Pilaster	• Dwelling
<i>Abutting Lots</i>	• String Course	• Manufactured Home
Corner Lot <i>See Lot-Related</i>	• Transom	• Multiple-Family Dwelling
<i>Definitions</i>	• Turret	• Single-Family Dwelling
Corner Side <i>See Yard-Related</i>	• Visible Transmittance	Easement
<i>Definitions</i>	Detached Dwelling <i>See</i>	
Cornice <i>See Design-Related</i>	<i>Dwelling-Related Definitions</i>	
<i>Definitions</i>	Development	
Council	Development Adjustment	
Covered Soil <u>Volume See</u>	<i>See Section 18.370.020,</i>	
<u>Tree Related Definitions Area</u>	<i>Adjustments</i>	
<i>See Landscaping-Related</i>		
<i>Definitions</i>		
Cul-de-sac		

Commentary

18.115 List of Terms

List of terms continued.

- Eaves *See Design-Related Definitions*
- Effective Date *See Section 18.390.080, General Provisions*
- Egress
- Electrical Sign *See Chapter 18.780, Signs*
- Electronic Information Sign *See Chapter 18.780, Signs*
- Enlargement
- Entry *See Design-Related Definitions*
- Entryway Sign *See Chapter 18.780, Signs*
- Evidence *See Section 18.390.080, General Provisions*
- Exception
- FAA *See Chapter 18.798, Wireless Communication Facilities*
- Face
- Face of a Building *See Chapter 18.780, Signs*
- FCC *See Chapter 18.798, Wireless Communication Facilities*
- Fence, Sight-Obscuring
- Final Action
- Final Decision *See Final Action*
- Final For Purposes Of Appeal *See Section 18.390.080, General Provisions*
- Final Order *See Final Action*
- Findings
- Flag Lot *See Lot-Related Definitions*
- Flashing Sign *See Chapter 18.780, Signs*
- Floodplain *See Flood-Related Definitions*
- Flood-Related Definitions
- Base Flood
  - Floodplain
  - Floodway
  - Floodway Fringe
- Floodway *See Flood-Related Definitions*
- Floodway Fringe *See Flood-Related Definitions*
- Floor Area
- Floor Area Ratio
- Flush Pitched Roof Sign *See Chapter 18.780, Signs*
- Freestanding Sign *See Chapter 18.780, Signs*
- Freeway Interchange *See Chapter 18.780, Signs*
- Freeway-Oriented Sign *See Chapter 18.780, Signs*
- Frieze *See Design-Related Definitions*
- Front *See Yard-Related Definitions*
- Frontage *See also Chapter 18.780, Signs*
- Front Lot Line *See Lot-Related Definitions*
- Garage
- Generalized *See Comprehensive Plan-Related Definitions*
- Glare
- Guyed Tower *See Chapter 18.798, Wireless Communication Facilities*
- Habitable Floor Area
- Hazard Tree *See Tree Related Definitions*
- Hazard Tree Abatement *See Tree Related Definitions*
- Hazard Tree Owner or Responsible Party *See Tree Related Definitions*
- Heritage Tree *See Tree Related Definitions*
- ~~Hazardous Tree *See Chapter 18.790, Tree Removal*~~
- Home Occupation
- Homeowners Association
- Household
- Housing Complex *See Chapter 18.780, Signs*
- Immediate or Serious Danger *See Chapter 18.780, Signs*
- Impact Analysis
- Impervious Surface
- Implementing Ordinance
- Improved Lot *See Lot-Related Definitions*
- Improvement
- Industrial Park *See Chapter 18.780, Signs*
- Ingress
- Interior Lot *See Lot-Related Definitions*
- Land *See Comprehensive Plan-Related Definitions*
- Land Form Alteration

Commentary

18.115 List of Terms

List of terms continued.

Landscape Architect

Landscaping

Landscaping-Related

## Definitions

- Covered Soil Area
- Open Soil
- Root Paths
- Soil Volume Calculations

Lattice Tower *See Chapter 18.798, Wireless**Communication Facilities*Lawn Sign *See Chapter**18.780, Signs*Legal Entity *See Chapter**18.780, Signs, "Business"*

Legislative

Lighting Methods *See**Chapter 18.780, Signs*Loading Area *See Loading**Space*

Loading Space

Lot *See Lot-Related Definitions*Lot Area *See Lot-Related**Definitions*Lot Averaging *See Lot-**Related Definitions*Lot Coverage *See Lot-Related**Definitions*Lot Depth *See Lot-Related**Definitions*Lot Line *See Lot-Related**Definitions*Lot Line Adjustment *See**Lot-Related Definitions*Lot of Record *See Lot-**Related Definitions*

Lot-Related Definitions

- Corner Lot
- Flag Lot

- Front Lot Line
- Improved Lot
- Interior Lot
- Lot
- Lot Area
- Lot Averaging
- Lot Coverage
- Lot Depth
- Lot Line
- Lot Line Adjustment
- Lot of Record
- Lot Width
- Rear Lot Line
- Side Lot Line
- Substandard Lot
- Tax Lot
- Through Lot
- Zero Lot Line

Lot Width *See Lot-Related Definitions*Maintenance *See Chapter 18.780, Signs*Manufactured Home *See Dwelling-Related Definitions*Marquee *See Design-Related Definitions*Medallion *See Design-Related Definitions*Median Tree See Tree Related DefinitionsMinimal Use Facilities *See Open Space Facility-Related Definitions*

Mitigation

Mixed Solid Waste *See Chapter 18.755, Mixed Solid Waste And Recyclable Storage*

Mixed-Use Development

Mobile Home

Mobile Home Park

Mobile Home Subdivision

Monopole *See Chapter**18.798, Wireless**Communication Facilities*Moving Sign *See Chapter**18.780, Signs*

Multiple-Family Dwelling

*See Dwelling-Related**Definitions*

Multi-Unit Residential

Building *See Chapter**18.755, Mixed Solid Waste And Recyclable Storage*

Neighborhood Activity

Center

Noise

Nonconforming Sign *See**Chapter 18.780, Signs*

Nonconforming Situation

Non-Residential Building

*See Chapter 18.755, Mixed Solid Waste And Recyclable Storage*Non-Structural Trim *See**Chapter 18.780, Signs*Nuisance Tree See TreeRelated Definitions

Occupancy Permit

Off-Site Impact

Off-Site Improvement

Open Grown Tree See TreeRelated DefinitionsOpen Soil Volume *See Tree**Related Definitions See**Landscaping-Related**Definitions*

Commentary

18.115 List of Terms

List of terms continued.

- Open Space Facility-Related Definitions
- Active Use Facilities
  - Minimal Use Facilities
  - Passive Use Facilities
- Oregon Administrative Rules
- Oregon Revised Statutes
- Outdoor Storage
- Owner
- Painted Wall Decorations *See Chapter 18.780, Signs*
- Painted Wall Highlights *See Chapter 18.780, Signs*
- Painted Wall Sign *See Chapter 18.780, Signs*
- Parapet *See Design-Related Definitions*
- Park
- Parking Lot Tree *See Tree Related Definitions*
- Parking Space
- Partition
- Party
- Passive Use Facilities *See Open Space Facility-Related Definitions*
- Perimeter
- Permitted Use
- Person *See also Chapter 18.780, Signs*
- Pilaster *See Design-Related Definitions*
- Plan Coordination *See Comprehensive Plan-Related Definitions*
- Plat
- Premises *See Chapter 18.780, Signs*
- Projecting Sign *See Chapter 18.780, Signs*
- Projection *See also Chapter 18.780, Signs*
- Provider *See Chapter 18.798, Wireless Communication Facilities*
- ~~Pruning *See Chapter 18.790, Tree Removal*~~
- Public Business Day
- Public Support Facilities
- Quasi-Judicial
- Reader-Board Sign *See Chapter 18.780, Signs*
- Rear *See Yard-Related Definitions*
- Rear Lot Line *See Lot-Related Definitions*
- Receipt
- Recreational Vehicles
- Remodel
- ~~Removal *See Chapter 18.790, Tree Removal*~~
- Reserve Strip
- Residence
- Residential Trailer
- Responsible Party, *See Section 18.230.030, Penalty*
- Revolving Sign *See Chapter 18.780, Signs*
- Right-of-Way
- Road
- Roof
- Roof Line *See Chapter 18.780, Signs*
- Roof Sign *See Chapter 18.780, Signs*
- ~~Root Paths *See Landscaping-Related Definitions*~~
- Rotating Sign *See Chapter 18.780, Signs*
- ~~Sensitive Lands *See Chapter 18.790, Tree Removal*~~
- Setback
- Shopping Center *See Chapter 18.780, Signs*
- Shopping Plaza *See Chapter 18.780, Signs*
- Side *See Yard-Related Definitions*
- Side Lot Line *See Lot-Related Definitions*
- Sign *See Chapter 18.780, Signs*
- Sign Structure *See Chapter 18.780, Signs*
- Significant Tree Grove *See Tree Related Definitions*
- Single-Family Dwelling *See Dwelling-Related Definitions*
- Site
- Slope
- Soil Volume Calculations *See Landscaping-Related Definitions*
- Source-Separated Recyclable *See Chapter 18.755, Mixed Solid Waste And Recyclable Storage*
- Special Adjustments, *See Section 18.370.020, Adjustments*
- Specified Anatomical Areas *See Adult Entertainment-Related Definitions*
- Specified Sexual Activities *See Adult Entertainment-Related Definitions*

Commentary

18.115 List of Terms

List of terms continued.

Stand (Of Trees) See Tree

Related Definitions

Stand Grown Tree See Tree

Related Definitions

Storage Area *See Chapter 18.755, Mixed Solid Waste And Recyclable Storage*

Story

Story, First

Story, Half

Street

Street, Private

Street, Public

Street Tree See Tree Related

Definitions

String Course *See Design-Related Definitions*

Structural Alteration *See Chapter 18.780, Signs*

Structure

Subdivision

Substandard Lot *See Lot-Related Definitions*

Substantial Improvement

Surface Street *See Chapter 18.780, Signs*

Tax Lot *See Lot-Related Definitions*

Temporary Sign *See Chapter 18.780, Signs*

Temporary Use

Tenant Sign *See Chapter 18.780, Signs*

Through Lot *See Lot-Related Definitions*

Tigard-Based Nonprofit Organization

Traffic Flow Plan

Transom *See Design-Related Definitions*

Tree See Tree Related

Definitions See also Chapter 18.790, Tree Removal

Tree Canopy See Tree Related Definitions

Tree Canopy Cover, Effective See Tree Related Definitions

Tree Care Industry Standards See Tree Related Definitions

Tree Related Definitions

- Caliper
- Certified Arborist
- Certified Tree Risk Assessor
- Covered Soil Volume
- Diameter at Breast Height (DBH)
- Dripline
- Hazard Tree
- Hazard Tree Abatement
- Hazard Tree Owner or Responsible Party
- Heritage Tree
- Median Tree
- Nuisance Tree
- Open Grown Tree
- Open Soil Volume
- Parking Lot Tree
- Significant Tree Grove
- Stand (Of Trees)
- Stand Grown Tree
- Street Tree
- Tree
- Tree Canopy
- Tree Canopy Cover, Effective
- Tree Care Industry Standards
- Tree Removal

• Understory Tree

Tree Removal See Tree

Related Definitions

Turret See Design-Related Definitions

Understory Tree See Tree Related Definitions

Uniform Building Code *See Chapter 18.780, Signs*

Use

Vehicle Parking Space

Visible Transmittance *See Design-Related Definitions*

Vision Clearance Area

Visual Obstruction

Wall Sign *See Chapter 18.780, Signs*

Wetlands

Will

Window

Wireless Communication Facility *See Chapter 18.798, Wireless Communication Facilities*

Wireless Communication Facility, Attached *See Chapter 18.798, Wireless Communication Facilities*

Wireless Communication Transmissions Towers *See Chapter 18.798, Wireless Communication Facilities*

Yard *See Yard-Related Definitions*

•

Commentary

18.115 List of Terms

List of terms continued.

Yard-Related Definitions

- Corner Side
- Front
- Rear
- Side
- Yard

Zero Lot Line *See Lot-Related Definitions*

Zoning District

## Commentary

### 18.120.030 Meaning of Specific Words and Terms

The definitions that were previously included in Chapter 18.790 and Title 9 have been moved into Chapter 18.120 in order to consolidate all urban forestry relevant definitions into one chapter in the Tigard Development Code. Existing tree related definitions that have been substantially modified have been struck and replaced with new definitions. Definitions in Chapter 18.790 have been copied to Title 8, Urban Forestry, to ensure consistency of terms between Title 8 and Title 18. Both Title 8 and Title 18 specify that the title definitions apply to administrative rules (in this case the Urban Forestry Manual).

In Title 18, existing and proposed tree related definitions have been further consolidated under a “tree related definitions section” so that a developer or arborist/landscape architect seeking to apply the definitions can find all of the tree related definitions in one place.

The term “development impact area” is a new term that was created for Chapter 18.790 (Urban Forestry Plan) as a catchall term for any type of ground disturbance on a site. Trees can be severely impacted by any ground disturbance on a site, and Section 10 of the Urban Forestry Manual requires that a complete tree preservation and removal site plan display the development impact area. Since the concept of the development impact area may be useful for future code amendments besides trees, it is not included as one of the tree related definitions.

## Chapter 18.120

## DEFINITIONS

## Sections:

- 18.120.010    **Meaning of Words Generally**  
 18.120.020    **Meaning of Common Words**  
 18.120.030    **Meaning of Specific Words and Terms**

18.120.010    **Meaning of Words Generally**

[No change.]

18.120.020    **Meaning of Common Words**

[No change.]

18.120.030    **Meaning of Specific Words and Terms**

A. For additional words and terms, also see Use Categories (Chapter 18.130); Mixed Solid Waste and Recyclable Storage (Chapter 18.755); Sensitive Lands (Chapter 18.775); Signs (Chapter 18.780); ~~Tree Removal (Chapter 18.790)~~; and Wireless Communication Facilities (Chapter 18.798). As used in this title and corresponding administrative rules, the following words and phrases mean:

1. through 41.

[No change]

~~42. "Caliper" - The diameter of a tree trunk measured at a prescribed height.~~

**Renumber definitions 43-59**

~~60. "Covered soil area" - An area of soil that is under pavement and specially designed accommodate tree root growth.~~

**Renumber definitions 61-70**

71. "Development Impact Area" - The area on a site or right of way associated with a site affected by any and all site or right of way improvements, including but not limited to buildings, structures, walls, parking and loading areas, street improvements, paved and graveled areas, utilities, irrigation, equipment storage, construction parking and landscaping. The impact area also refers to areas of grading, filling, stockpiling, demolition, tree removal, trenching, boring and any other activities that require excavation or soil disturbance.

Commentary

18.120.030 Meaning of Specific Words and Terms

The term “landscape architect” is also a new term that specifies their registration requirements with the State of Oregon. Chapter 18.790 allows landscape architects, in addition to arborists, to create urban forestry plans.

The following new or substantially modified definitions have been included in Chapter 18.120:

**Caliper:** The term caliper is referenced throughout the code and Urban Forestry Manual when specifying minimum size of nursery trees. The term caliper follows tree care industry standards.

**Certified arborist:** This term clarifies that certified arborists are certified by the International Society of Arboriculture.

**Certified tree risk assessor:** This term clarifies that certified tree risk assessors are certified by the International Society of Arboriculture.

**Renumber definitions 71-103**

104. "Landscape Architect" - An individual registered with the Oregon State Landscape Architect Board as a registered landscape architect.

**Renumber definitions 103-120**

~~121. "Open soil" - An unpaved area of soil surrounding a tree, which contains existing, new or amended soil.~~

**Renumber definitions 122-150**

~~151. "Root paths" - Constructed paths that use aeration or drainage strips to give roots a way to grow out of the tree space and under pavement in order to access better planting soils. Root paths can connect tree spaces and adjacent green spaces.~~

**Renumber definitions 152-154**

~~155. "Soil volume calculations" - Sum total of soil volumes from each design method used for a tree. A soil depth of three feet is assumed. Soil volume (cubic feet) = open soil area (length x width x depth) (feet) + covered soil area (length x width x depth) (feet) + root path length (feet) x 0.25 + green space area (length x width x depth) (feet).  
\*Include only applicable soil areas and design methods for each tree.~~

**Renumber definitions 156-169**

170. "Tree-related definitions:"<sup>22</sup> -

- a. "Caliper" - The tree care industry standard for measuring the trunk diameter of nursery stock. Caliper is the average diameter of the trunk of a nursery tree measured six (6) inches above the ground for trunks less than or equal to an average of four (4) inches in diameter (when measured six (6) inches above ground). When the trunk of a nursery tree is greater than an average of four (4) inches in diameter (when measured six (6) inches above ground), caliper is the average diameter at 12 inches above ground (see figure 18.120.3).
- b. "Certified Arborist" - An individual certified by the International Society of Arboriculture as a certified arborist.
- c. "Certified Tree Risk Assessor" - An individual certified by the International Society of Arboriculture to conduct tree risk assessments.

Commentary

18.120.030 Meaning of Specific Words and Terms

Covered soil volume: This definition is for Sections 12 and 13 of the Urban Forestry Manual which allows soil volume requirements for street trees and parking lot trees to be met underneath pavement when certain design criteria are met.

Diameter at breast height (DBH): The term DBH is referenced throughout the code and Urban Forestry Manual when specifying the size of trees that are subject to various regulations. The term DBH follows tree care industry standards.

Dripline: This definition is primarily for Section 10 of the Urban Forestry Manual to clarify what portion of a tree is eligible for the effective canopy requirement.

Hazard tree: The term hazard tree has been made more specific to the International Society of Arboriculture Standards so that a more objective evaluation can be made as to what constitutes a hazard tree. A tiered system of rating hazards ensures the risks associated with small diameter tree parts are not understated while the risks associated with large diameter tree parts are not overstated.

Hazard tree abatement: The term hazard tree abatement clarifies that abatement is reducing risk below the established threshold. This can be accomplished through pruning or other means, not solely through tree removal.

Hazard tree owner or responsible party: Hazard tree issues are often highly contentious, so the hazard tree owner or responsible party definition is very specific in assigning ownership and/or responsibility for the tree in question.

- d. “Covered soil volume” - A volume of soil that is under pavement and specially designed to support the growth of a tree. Covered soil volumes contain existing, new or amended soil with the physical, chemical and biological properties necessary to support the growth of a tree, while at the same time supporting the load-bearing requirements and engineering standards of the overlying pavement. Covered soil volumes would not be considered tree growth limiting by a project arborist or landscape architect in an urban forestry plan developed per the standards in Chapter 18.790 and the Urban Forestry Manual.
- e. “Diameter at Breast Height (DBH)” - The average diameter of the trunk of a tree measured 4 ½ feet above mean ground level at the base of the trunk (see figure 18.120.4). If the tree splits into multiple trunks above ground, but below 4 ½ feet, the DBH is the average diameter of the most narrow point beneath the split (see figure 18.120.5). If the tree has excessive swelling at 4 ½ feet, the DBH is the average diameter of the most narrow point beneath the swelling. If the tree splits into multiple trunks at or directly below ground, it shall be considered one tree and the DBH shall be the square root of the sum of the cross-sectional area of each trunk at 4 ½ feet above mean ground level multiplied by 1.1284 (see figure 18.120.6).
- f. “Dripline” - The outer limit of a tree canopy projected to the ground.
- g. “Hazard Tree” - Any tree or tree part that has been or could be determined by an independent certified tree risk assessor to constitute a high level hazard requiring hazard tree abatement with an overall minimum risk rating of 8 for trees or tree parts up to 4 inch DBH, 9 for trees or tree parts greater than 4 inch and up to 20 inch DBH, or 10 for trees or tree parts greater than 20 inch DBH using the most current version of the tree risk assessment methodology developed by the International Society of Arboriculture.
- h. “Hazard Tree Abatement” - The process of reducing or eliminating a hazard to an overall risk rating of less than 8 for trees or tree parts up to 4 inch DBH, 9 for trees or tree parts greater than 4 inch and up to 20 inch DBH, or 10 for trees or tree parts greater than 20 inch DBH using the most current version of the tree risk assessment methodology developed by the International Society of Arboriculture through pruning, tree removal or other means in a manner that complies with all applicable rules and regulations.
- i. “Hazard Tree Owner or Responsible Party” - The property owner or responsible party with the largest percentage of a hazard tree trunk immediately above the trunk flare or root buttresses. In cases where the hazard tree consists of a branch instead of an entire tree, the hazard tree owner or responsible party is the person who owns or is responsible for the property from where the branch originates.

## Commentary

### 18.120.030 Meaning of Specific Words and Terms

**Heritage tree:** This term has been revised slightly from the existing definition to remove reference to Chapter 9.08 since heritage trees will be administered through Chapter 8.16.

**Median tree:** This term was created to distinguish between median trees (which are between vehicle traffic) and street trees, since median trees are the responsibility of the city.

**Nuisance tree:** A nuisance tree list has been added to the Urban Forestry Manual to specify the types of trees that are prohibited from planting or receiving credit towards the effective canopy requirement. A nuisance tree is defined as any tree on the nuisance list.

**Open grown tree:** Open grown trees are distinguished from stand grown trees in Section 10 of the Urban Forestry Manual so that arborists/landscape architects do not have to inventory every tree in a stand as currently required. Arborists/landscape architects will only have to inventory open grown or isolated trees, and stands of trees can be delineated at their edges. This will cut down on unnecessary inventory work. A definition of the two types of trees is required to distinguish the two.

**Open soil volume:** As with covered soil volume, this definition is for Section 12 and 13 of the Urban Forestry Manual to clarify how to calculate soil volumes for trees.

**Parking lot tree:** Parking lot trees are explicitly defined since they are required by Chapter 18.745 to provide canopy over parking areas and referenced extensively in Section 13 of the Urban Forestry Manual.

**Significant tree grove:** A definition for significant tree groves is needed since flexible standards and preservation incentives that are specific to significant tree groves have been added to Chapter 18.790. A significant tree grove is a native “stand of trees” (already defined) that has been identified as significant through the Statewide Land Use Planning Goal 5 process. A significant tree grove map is available through a publicly accessible mapping program.

**Stand (of trees):** Section 10 of the Urban Forestry Manual allows groups of stand grown trees (stands) to be delineated at their edges. A definition of stand (of trees) is provided for additional guidance as to what is considered a stand.

**Stand grown tree:** A definition of stand grown tree is required to distinguish it from open grown tree so that arborists/landscape architects do not have to inventory every tree in a stand as currently required. Section 10 of the Urban Forestry Manual allows stands of trees to be delineated at their edges.

**Street tree:** This term clarifies the size and location thresholds that define a street tree. The definition also distinguishes street trees from median trees.

- i. “Heritage Tree” - Any tree or stand of trees of landmark importance due to age, size, species, horticultural quality, or historic importance that has been approved as a heritage tree by Tigard City Council.
- k. “Median Tree” - Any tree within the public right of way under City of Tigard jurisdiction between opposing lanes of vehicular traffic. Trees in the centers of cul-de-sacs and roundabouts within the public right of way under City of Tigard jurisdiction shall also be considered median trees.
- l. “Nuisance Tree” - Any tree included on the Nuisance Tree List in the Urban Forestry Manual.
- m. “Open Grown Tree” - Any tree that has grown and established in an isolated manner without significant competition for light, space and nutrients from other trees. Open grown trees generally retain more foliage, develop greater trunk tapers, have more extensive root systems and are more resistant to windthrow than stand grown trees.
- n. “Open Soil Volume” - An unpaved volume of soil, which contains existing, new or amended soil with the physical, chemical and biological properties necessary to support the growth of a tree.
- o. “Parking Lot Tree” - Any tree used to meet the requirements in Section 18.745.050(F).
- p. “Significant Tree Grove” - A stand of trees that has been identified as significant through the Statewide Land Use Planning Goal 5 process. A Significant Tree Grove Map is maintained by the Director.
- q. “Stand (Of Trees)” - A distinct area of stand grown trees, often predominantly native and with contiguous canopies, which form a visual and/or biological unit.
- r. “Stand Grown Tree” - Any tree that has grown and established in close association with other trees and, as a result, has experienced significant competition for light, space, and nutrients from other trees. Stand grown trees generally retain less foliage, develop less trunk taper, have less extensive root systems and are less resistant to windthrow than open grown trees.
- s. “Street Tree” - Any tree equal to or greater than 1 ½ inch caliper or DBH within a public right of way under City of Tigard jurisdiction or easement for public access under City of Tigard jurisdiction, or any tree equal to or greater than 1 ½ inch caliper or DBH outside of a public right of way or easement for public access that the city can demonstrate was planted or preserved as a street tree to meet the requirements for a city permit or project. Median trees shall not be considered street trees.

Commentary

18.120.030 Meaning of Specific Words and Terms

Tree: The definition of tree is revised using the standard definition of tree by the International Society of Arboriculture.

Tree canopy: Tree canopy is a central theme of the revised code and forms the basis for many of the code revisions and corresponding administrative procedures. The term tree canopy is closely related to dripline. Dripline is specific to only the outer edge of the tree canopy, whereas tree canopy encompasses everything in between.

Tree canopy cover, effective: A definition for effective tree canopy cover is required to distinguish it from actual tree canopy cover. Effective tree canopy cover has specific requirements for measurement in Section 10 of the Urban Forestry Manual. For example, preserving existing trees is given double tree canopy credit compared to planting new trees. Therefore, effective tree canopy cover is not the same as actual tree canopy.

Tree Care Industry Standards: Tree care industry standards are defined using the American National Standard Institute (ANSI) standards for tree care operations. ANSI standards outline accepted practices for planting, pruning and maintenance of trees. ANSI standards are incorporated by reference rather than explaining the standards in detail.

Tree removal: The existing definition of tree removal is retained.

Understory tree: This definition is required for Section 10 of the Urban Forestry Manual to allow for the planting of trees beneath the canopies of larger trees when required for constrained sites.

- t. “Tree” - A woody perennial plant, often with one dominant trunk, the capacity to achieve a mature height greater than 16 feet, and primarily referred to as a tree in scientific literature. A standing woody plant, or group of such, having a trunk which is two inches or more in caliper size when measured four feet from the ground.
- u. “Tree Canopy” - The area above ground which is covered by the trunk, branches and foliage of a tree or group of trees’ crowns.
- v. “Tree Canopy Cover, Effective” - A formula detailed in Chapter 18.790 and the Urban Forestry Manual used to calculate the amount of tree canopy that will be provided for a given lot or tract through any combination of preserving existing trees and planting new trees. In general, the formula grants bonus tree canopy credit based on the existing tree canopy of trees that are preserved, and grants additional tree canopy credit based on the projected mature tree canopy of newly planted trees.
- w. “Tree Care Industry Standards” - Generally accepted industry standards for tree care practices detailed in the most current version of the American National Standards Institute (ANSI) A300 Standards for Tree Care Operations. In addition, tree care industry standards shall include adherence to all applicable rules and regulations for the completion of any tree care operation.
- x. “Tree Removal” - The cutting or removing of 50 percent (50%) or more of a crown, trunk or root system of a tree, or any action which results in the loss of aesthetic or physiological viability or causes the tree to fall or be in immediate danger of falling.
- y. “Understory Tree” - Any tree that is adapted to grow and complete its lifecycle within the shade and beneath the canopy of another tree.

**Renumber definitions 171-181**

Commentary

18.120.030 Meaning of Specific Words and Terms

Four new figures are added to the end of the chapter where existing figures for definitions are located. The definitions of “caliper” and “DBH” can be confusing for non-arborists/landscape architects, and the figures are meant to better illustrate the definitions. These figures are included to illustrate the definitions for “caliper” and “DBH” in Chapter 8.02 as well.

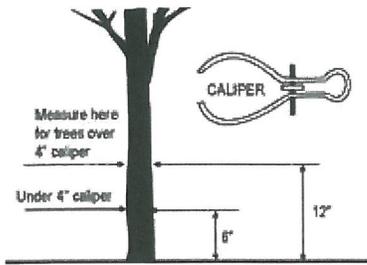


Figure 18.120.3

Caliper

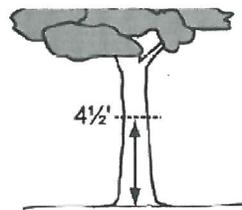


Figure 18.120.4

Standard DBH

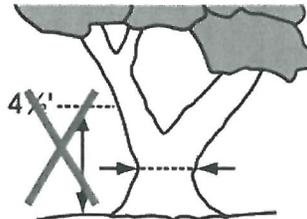


Figure 18.120.5

DBH for Split Trunk

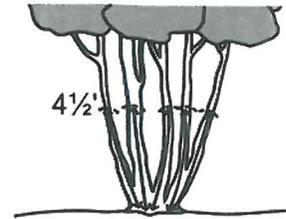


Figure 18.120.6

DBH for Multiple Trunks

Commentary

18.310 Summary of Land Use Permits

The following revisions to permit types are included in chapter 18.310 (Summary of Land Use Permits):

- Street tree adjustments are struck because they will be handled administratively through Chapter 18.745;
- Modifications to the urban forestry plan component of an approved land use permit will be allowed by Chapter 18.790 through a Type I process so reference is included in table 18.390.1;
- Tree removal permits are struck because they will be administered through Title 8; and
- Discretionary urban forestry plans that are alternatives to standard urban forestry plans will be allowed by Chapter 18.790 through a Type III process so reference is included in table 18.390.1.

**Chapter 18.310**  
**SUMMARY OF LAND USE PERMITS**

**Sections:**

- 18.310.010 Purpose**  
**18.310.020 Summary of Land Use Permits**

**18.310.010 Purpose**

- A. Introduction. In this development code, each land use permit or related action is processed by means of a generic decision-making type, e.g., Types I - IV or Limited Land Use Decisions (LLD) or Expedited Land Divisions (ELD), to which it is assigned. A description of these decision-making procedures are summarized in Chapter 18.390. In addition, to be approved, each permit or related action must comply with specifically-tailored approval criteria, which with few exceptions are contained in Chapters 18.320 - 18.385, as well as all other pertinent development standards, which are found throughout this code.
- B. Purpose. The purpose of this chapter is to provide a table summarizing all land use permits and related actions, including cross-references to type of decision-making process, approval criteria and other development standards. As such, this chapter provides a “road map” for the permit approval process.

**18.310.020 Summary of Land Use Permits**

- A. Summary Table. The table summarizing the decision-making procedure and substantive approval requirements of each land use permit and related action is presented in Table 18.310.1 below:

Commentary

Table 18.310 Summary of Land Use Permits and Related Actions

No changes to the first set of land use permits and related actions in the table.

**TABLE 18.310.1**  
**SUMMARY OF LAND USE PERMITS AND RELATED ACTIONS**

<u>Land Use Permit/Action</u>	<b>Decision-Making Type</b>	<b>Approval Criteria</b>	<b>Other Development Regulations</b>
<u>Annexation</u>	IV	18.320.020	18.320
<u>Conditional Use</u>			
Initial	III-HO	18.330.030	18.330
Major Modification	III-HO	18.330.030	18.510, 18.520
Minor Modification	I	18.330.030	18.530
<u>Director's Interpretation</u>	-- <sup>1</sup>	---	18.340
<u>Planned Development</u>			
Detailed Plan	III-PC; ELD II	18.350.100 18.350.020	18.350 18.350
<u>Site Development Review</u>			
New Construction	II	18.360.090	18.360
Major Modification	II	18.360.090	18.360
Minor Modification	I	18.360.090	18.360

Commentary

Table 18.310 Summary of Land Use Permits and Related Actions

Street tree adjustments are struck because they will be handled administratively through Chapter 18.745.

Tree removal permits are struck because they will be administered through Title 8.

A more flexible urban forestry plan modification process is proposed in section 18.790.070 (Modification to the Urban Forestry Plan Component of an Approved Land Use Permit). The process allows modifications through a Type I permit and is more fully described in section 18.790.070.

TABLE 18.310.1 (Con't)

<u>Land Use Permit/Action</u>	<u>Decision-Making Type</u>	<u>Approval Criteria</u>	<u>Other Development Regulations</u>
<u>Variances/Adjustments</u>			
Variances	II	18.370.010.C	18.370
Development Adjustments	I	18.370.020.B.2	18.370
Special Adjustments			
• Adjustments in Subdivisions	-- <sup>2</sup>	18.370.020.C.1	18.430
• Reduction of Minimum Res. Densities	I	18.370.020.C.2	18.430, 18.715
• Access/Egress Standards Adjustments	II	18.370.020.C.3.b	18.705
• <u>Landscaping Adjustments</u>			
<del>-Existing Street Trees</del>	<del>I</del>	<del>18.370.020.C.4.a</del>	<del>18.745</del>
<del>-New Street Trees</del>	<del>I</del>	<del>18.370.020.C.4.b</del>	<del>18.745</del>
• Parking Adjustments			
-Reduction in Minimum Prkg. Ratios	II	18.370.020.C.5.a	18.765
-Prkg Reduct. in New Developmts/ Transit Improvements	II	18.370.020.C.5.b	18.765
-Prkg Reduct. in Existing Developmts/ Transit Improvements	II	18.370.020.C.5.c	18.765
-Increases in Maximum Parking Ratios	II	18.370.020.C.5.d	18.765
-Reduction in Bicycle Parking	II	18.370.020.C.5.e	18.765
-Alternative Parking Garage Layout	II	18.370.020.C.5.f	18.765
-Reduction in Stacking Lane Length	I	18.370.020.C.5.g	18.765
• Sign Code Adjustments	II	18.370.020.C.6	18.780
<del>• Tree Removal Adjustments</del>	<del>I</del>	<del>18.370.020.C.7</del>	<del>18.790</del>
• Wireless Communication Facility Adj.			
-Setback from Nearby Residence	II	18.370.020.C.8.a	18.798
-Distance from Another Tower	I	18.370.020.C.8.b	18.798
• Street Improvement Adjustments	II	18.370.020.C.9	18.810
• <u>Modification to the Urban Forestry Plan Component of an Approved Land Use Permit</u>	<u>I</u>	<u>18.790.070.D</u>	<u>18.790</u>

Commentary

Table 18.310 Summary of Land Use Permits and Related Actions

The discretionary urban forestry plan review option is an alternative to meeting the clear and objective effective canopy requirements in chapter 18.790. An applicant could make their case at a public hearing in front of Planning Commission or the hearings officer about how their proposal is an adequate substitute for the functions and values otherwise provided by trees.

The review body (Planning Commission or hearings officer) will depend on whether there is a concurrent Type III review. For example, if an applicant for a Planned Development (Type III Planning Commission review) chooses to receive a discretionary urban forestry plan review, the review body will be the Planning Commission. However, if an applicant for a Conditional Use Permit (Type III hearings officer review) chooses to receive a discretionary urban forestry plan review, the review body will be the hearings officer. Finally, if an applicant does not have a concurrent Type III review (e.g. Subdivision, Minor Land Partition, etc.), yet chooses to receive a discretionary urban forestry plan review, the review body will be the hearings officer.

The discretionary urban forestry plan review process is described more fully in section 18.790.040.

Zoning Map/Text Amendments

Legislative	IV	Comprehensive Plan	18.380
Quasi-Judicial	III-PC	18.380.030.B	18.380

Miscellaneous Permits

Accessory Residential Units 18.710	I	Development Standards in	
Historic Overlay			
• Historic Overlay Designation	III-PC	18.740.040.A	18.740
• Removal Historic Overlay Designation	III-PC	18.740.040.B	18.740
• Exterior Alteration in HO District	II	18.740.040.C	18.740
• New Construction in HO District	II	18.740.040.D	18.740
• Demolition in HO District	II	18.740.040.E	18.740
Home Occupations			
• Type I	I	18.742.040.A	18.742
• Type II	II	18.742.050.A	18.742
Nonconforming Use Confirmation	I	18.760.020.A	18.760
<u>Discretionary Urban Forestry Plan</u>	<u>III-PC, III-HO</u>	<u>18.790.040.C</u>	<u>18.790</u>
<u>Review</u>			

Commentary

Table 18.310 Summary of Land Use Permits and Related Actions

Tree removal permits are struck because they will be administered through Title 8.

TABLE 18.310.1 (Con't.)

Land Use Permit/Action	Decision-Making Type	Approval Criteria	Other Development Regulations
Sensitive Lands			
• Within 100-Year Flood Plain	I, III-HO	18.775.020.E <sup>4</sup> , 18.775.070.B	18.775
• With Excessive Slopes	I, II, III-HO <sup>3</sup>	18.775.020.E <sup>4</sup> , 18.775.070.C	18.775
• Within Drainage Ways	I, II, III-HO <sup>3</sup>	18.775.020.E <sup>4</sup> , 18.775.070.D	18.775
• Within Wetlands	II, III-HO <sup>3</sup>	18.775.070.E	18.775
Signs			
• Existing Each	I	{Development Standards for	
• Modification of Existing	I	{Sign Type, per 18.780	
• Temporary	I	18.780.100	
Temporary Uses			
• Seasonal/Special Events	I	18.785.040.A	18.785
• Emergency	I	18.785.040.B	18.785
• Temporary Sales Office/Home	I	18.785.040.C	18.785
• Temporary Building	I	18.785.040.D	18.785
<del>Tree Removal</del>	<del>I</del>	<del>18.790.050.A</del>	<del>18.790</del>

Land Division

Lot Line Adjustment	I	18.410.040	18.410
Land Partition	II, ELD	18.420.050	18.420
Subdivisions			
• Without Planned Development	II, ELD	18.430.070	18.430
• With Planned Development	III-PC, ELD	18.430.070 18.350.100	18.430, 18.350

<sup>1</sup> Special kind of decision: Type I if not appealed, Type II if appealed by applicant. Because of recent Oregon case law, appeal goes directly to City Council.

<sup>2</sup> Addressed concurrently with subdivision review.

<sup>3</sup> Can be reviewed as either Type II or IIIA, depending on criteria in 18.775.015.D and E.

<sup>4</sup> Type I procedures are reviewed with criteria of Section 18.775.020.E. Type II and III procedures are reviewed with criteria of Section 18.775.070.B.

**KEY:**

Type I:	Ministerial Review (18.390.030)
Type II:	Quasi-Judicial Review by Director (18.390.040)
Type III-HO:	Quasi-Judicial by Hearings Officer (18.390.050)
Type III-PC:	Quasi-Judicial by Planning Commission (18.390.050)
Type IV:	Legislative (18.390.060)
LLD:	Limited Land Use Decision (18.390.070)
ELD:	Expedited Land Division (18.390.070)

## Commentary

### 18.330.030 Approval Standards and Conditions of Approval

The Conditional Use Permits (CUPs) have been, and will continue to be required to meet the requirements of Chapter 18.745 (Landscaping and Screening) and Chapter 18.790 (Urban Forestry Plan). Explicit references to these requirements are made in the approval standards section of the conditional use chapter.

**Chapter 18.330  
CONDITIONAL USE**

**Sections:**

- 18.330.010 Purpose**
- 18.330.020 Approval Process**
- 18.330.030 Approval Standards and Conditions of Approval**
- 18.330.040 Additional Submission Requirements**
- 18.330.050 Additional Development Standards for Conditional Use Types**

**18.330.010 Purpose**

[No change.]

**18.330.020 Approval Process**

[No change.]

**18.330.030 Approval Standards and Conditions of Approval**

A. Approval standards. The Hearings Officer shall approve, approve with conditions, or deny an application for a conditional use or to enlarge or alter a conditional use based on findings of fact with respect to each of the following criteria:

1. The site size and dimensions provide adequate area for the needs of the proposed use;
2. The impacts of the proposed use of the site can be accommodated considering size, shape, location, topography, and natural features;
3. All required public facilities have adequate capacity to serve the proposal;
4. The applicable requirements of the zoning district are met except as modified by this chapter;
5. The applicable requirements of 18.330.050; and
6. The supplementary requirements set forth in other chapters of this code including but not limited to Chapter 18.780, Signs, Chapter 18.745, Landscaping and Screening, Chapter 18.790, Urban Forestry Plan, and Chapter 18.360, Site Development Review, if applicable, are met.

B. [No change.]

Commentary

18.330.040 Additional Submission Requirements

The Conditional Use Permits (CUPs) have been, and will continue to be required to meet the requirements of Chapter 18.790 (Urban Forestry Plan). Explicit reference to the submission requirements for an urban forestry plan has been made.

**18.330.040 Additional Submission Requirements**

A. Additional submission requirements. In addition to the submission requirements required in Chapter 18.390, Decision-Making Procedures, an application for conditional use approval must include the following additional information in graphic, tabular and/or narrative form. The Director shall provide a list of the specific information to be included in each of the following:

1. Existing site conditions;
2. A site plan;
3. A grading plan;
4. A landscape plan;
5. An urban forestry plan consistent with Chapter 18.790;
56. Architectural elevations of all structures; and
67. A copy of all existing and proposed restrictions or covenants.

Commentary

18.330.050 Additional Development Standards for Conditional Use Types

Conditional uses have specific requirements based on the type of use. The parking and storage setback requirement for motor vehicle servicing and repair has been increased from 5 to 6 feet so that required parking lot trees can be planted within the perimeter setback.

The Urban Forestry Manual consists of administrative rules to implement the details of the urban forestry related code provisions in Title 8, Title 18 and other applicable titles in the Tigard Municipal Code. Section 13 of the Urban Forestry Manual requires parking lot trees to be planted in locations with minimum dimensions of 6 feet by 6 feet, so the amendment is intended to be consistent with the parking lot tree requirements.

The screening requirements are found in Section 18.745.050, so the existing scrivener's error has been corrected.

**18.330.050 Additional Development Standards for Conditional Use Types**

- A. Concurrent variance application(s). A conditional use permit shall not grant variances to the regulations otherwise prescribed by this title. A variance application(s) may be filed in conjunction with the conditional use application and both applications may be heard at the same hearing.
- B. Additional development standards. The additional dimensional requirements and approval standards for conditional use are as follows:

1. Adult Entertainment:

[No change.]

2. Motor Vehicle Servicing and Repair:

- a. Setbacks:

- (i) A ~~six~~ five-foot perimeter setback shall surround all outdoor parking and storage areas;
- (ii) Buffer screening shall be provided along the perimeter of all outdoor parking and storage areas as required in Section 18.745.0450; and
- (iii) All repair work shall be performed indoors.

3. through 16.

[No change.]

Commentary

18.330.050 Additional Development Standards for Conditional Use Types

Conditional uses have specific requirements based on the type of use. The parking setback requirement for non-accessory parking has been increased from 5 to 6 feet so that required parking lot trees can be planted within the perimeter setback.

The Urban Forestry Manual consists of administrative rules to implement the details of the urban forestry related code provisions in Title 8, Title 18 and other applicable titles in the Tigard Municipal Code. Section 13 of the Urban Forestry Manual requires parking lot trees to be planted in locations with minimum dimensions of 6 feet by 6 feet, so the amendment is intended to be consistent with the parking lot tree requirements.

17. Non-Accessory Parking:
- a. Minimum lot size shall be 5,000 square feet;
  - b. Minimum setbacks: for structures: shall be those of the applicable zone; for parking area: ~~five~~ six feet around perimeter of paved area for landscaping and screening purposes;
  - c. Height limitation shall be that of the applicable zone;
  - d. Off-street parking requirements shall be in accordance with Chapter 18.765; and
  - e. Screening shall be in accordance with Chapter 18.745.

18. through 20.

[No change.]

## Commentary

### 18.350.040 Concept Plan Submission Requirements

Planned developments (PDs) have been, and will continue to be required to meet the requirements of Chapter 18.790 (Urban Forestry Plan).

In addition, among the stated purposes of PDs (18.350.010) is the preservation of natural resources, with tree preservation called out specifically. PDs are typically approved through a two-step process with a conceptual plan approval followed by a detailed plan approval by Planning Commission. Therefore, the submittal of an urban forestry plan during the conceptual stage will help the Planning Commission implement the purpose of PDs during the conceptual phase of approval.

**Chapter 18.350  
PLANNED DEVELOPMENTS**

**Sections:**

- 18.350.010 Purpose**
- 18.350.020 Process**
- 18.350.030 Administrative Provisions**
- 18.350.040 Concept Plan Submission Requirements**
- 18.350.050 Concept Plan Approval Criteria**
- 18.350.060 Detailed Development Plan Submission Requirements**
- 18.350.070 Detailed Development Plan Approval Criteria**

**18.350.010 Purpose**

[No change.]

**18.350.020 Process**

[No change.]

**18.350.030 Administrative Provisions**

[No change.]

**18.350.040 Concept Plan Submission Requirements**

A. [No change.]

B. Additional information. In addition to the general information described in Subsection A above, the concept plan, data, and narrative shall include the following information, the detailed content of which can be obtained from the Director:

1. Existing site conditions;
2. A site concept including the types of proposed land uses and structures, including housing types, and their general arrangement on the site;
3. A grading concept;
4. A landscape concept indicating a percentage range for the amount of proposed open space and landscaping, and general location and types of proposed open space(s);
5. An urban forestry plan consistent with Chapter 18.790;
56. Parking concept;

Commentary

18.350.040 Concept Plan Submission Requirements

Renumbering of submission requirements continued.

18.350.050 Concept Plan Approval Criteria

Since tree preservation is called out specifically as one of the purposes of PDs, and urban forestry plans are required during the conceptual stage, the concept plan approval criteria should include tree preservation.

The word “significant” is removed because the word is undefined, and could be misconstrued as applying only to “significant tree groves”. The intent of the approval criterion is to consider the preservation of any tree or natural resource as part of PDs.

67. A sign concept;

78. A streets and utility concept; and

89. Structure setback and development standards concept, including the proposed residential density target if applicable.

C. Allowable uses.

[No change.]

**18.350.050 Concept Plan Approval Criteria**

A. The concept plan may be approved by the Commission only if all of the following criteria are met:

1. The concept plan includes specific designations on the concept map for areas of open space, and describes their intended level of use, how they relate to other proposed uses on the site, and how they protect natural features of the site.
2. The concept plan identifies areas of ~~significant~~ trees and other natural resources, if any, and identifies methods for their maximized protection, preservation, and/or management.
3. The concept plan identifies how the future development will integrate into the existing neighborhood, either through compatible street layout, architectural style, housing type, or by providing a transition between the existing neighborhood and the project with compatible development or open space buffers.
4. The concept plan identifies methods for promoting walkability or transit ridership, such methods may include separated parking bays, off street walking paths, shorter pedestrian routes than vehicular routes, linkages to or other provisions for bus stops, etc.
5. The concept plan identifies the proposed uses, and their general arrangement on site. In the case of projects that include a residential component, housing type, unit density, or generalized lot sizes shall be shown in relation to their proposed location on site.
6. The concept plan must demonstrate that development of the property pursuant to the plan results in development that has significant advantages over a standard development. A concept plan has a significant advantage if it provides development consistent with the general purpose of the zone in which it is located at overall densities consistent with the zone, while protecting natural features or providing additional amenities or features not otherwise available that enhance the development project or the neighborhood. (Ord. 06-16)

## Commentary

### 18.350.060 Detailed Development Plan Submission Requirements

A scrivener's error has been corrected to reference Title 18 instead of Title 3.

The detailed development plan submission requirements have been revised to require contour elevations of 1 foot instead of 2 to 5 feet consistent with typical engineering practice and available technology. For tree preservation, accuracy in grading plans is required because a 1-foot difference in a cut or fill could cause a tree to die or become hazardous.

The Urban Forestry Manual consists of administrative rules to implement the details of the urban forestry related code provisions in Title 8, Title 18 and other applicable titles in the Tigard Municipal Code. Contours of 1 foot are required by Section 10 of the Urban Forestry Manual in the tree preservation and removal site plan, so 1 foot contours for PDs is consistent. The phrase "unless otherwise approved" is included because there will be many cases where such detail is not necessary or will make the plans illegible.

A development schedule is required for PDs, and an important element to include is the timing of landscaping. The landscaping phase is important to tree preservation (irrigation installation, etc.) and to insure required trees are planted at appropriate times of year.

### 18.350.070 Detailed Development Plan Approval Criteria

No changes to the detailed development plan approval criteria.

**18.350.060 Detailed Development Plan Submission Requirements**

- A. General submission requirements. The applicant shall submit an application containing all of the general information required for a Type III-PC procedure, as governed by Section 18.390.050, the additional information required by Section 18.350.040.B and the approval criteria under Section ~~18.3~~350.070.
- B. Additional information. In addition to the general information described in subsection A above, the detailed development plan, data, and narrative shall include the following information:
1. Contour intervals of one foot unless otherwise approved by the Director ~~two to five feet, depending on slope gradients~~, and spot elevations at breaks in grade, along drainage channels or swales, and at selected points, as needed.
  2. A specific development schedule indicating the approximate dates of construction activity, including demolition, tree protection installation, tree removal, ground breaking, grading, public improvements, ~~and building construction,~~ and landscaping for each phase.
  3. A copy of all existing and/or proposed restrictions or covenants.
- C. [No change.]

**18.350.070 Detailed Development Plan Approval Criteria**

[No change.]

Commentary

18.360 SITE DEVELOPMENT REVIEW

Site development reviews (SDRs) have been, and will continue to be required to meet the requirements of Chapter 18.790 (Urban Forestry Plan).

18.360.070 Submission Requirements

Explicit reference to the urban forestry plan requirement is made in the submission requirement section.

## Chapter 18.360

## SITE DEVELOPMENT REVIEW

## Sections:

18.360.010	Purpose
18.360.020	Applicability of Provisions
18.360.030	Approval Process
18.360.040	Bonding and Assurances
18.360.050	Major Modification(s) to Approved Plans or Existing Development
18.360.060	Minor Modification(s) to Approved Plans or Existing Development
18.360.070	Submission Requirements
18.360.080	Exceptions to Standards
18.360.090	Approval Criteria

## 18.360.010 – 18.360.060

[No change.]

## 18.360.070 Submission Requirements

- A. General submission requirements. The applicant shall submit an application containing all of the general information required for a Type II procedure, as governed by Section 18.390.040.
- B. Additional information. In addition to the submission requirements required in Chapter 18.390, Decision-Making Procedures, an application for the conceptual development plan must include the following additional information in graphic, tabular and/or narrative form. The Director shall provide a list of the specific information to be included in each of the following:
1. An existing site conditions analysis;
  2. A site plan;
  3. A grading plan;
  4. A landscape plan;
  5. An urban forestry plan consistent with Chapter 18.790;
  - 5~~6~~. Architectural elevations of all structures; and
  - 6~~7~~. A copy of all existing and proposed restrictions or covenants.

## 18.360.080 Exceptions to Standards

[No change.]

Commentary

18.360.090 Approval Criteria

The reference to “preserve trees to the extent possible” in Chapter 18.790 has been struck since the statement does not describe the requirements in Chapter 18.790. A cross reference to Chapter 18.790 has already been provided in Section 18.360.070.

A cross reference stating that landscaping is required to be designed in accordance with both Chapter 18.745 and Chapter 18.790 has been added. Both chapters have specific landscaping requirements.

**18.360.090 Approval Criteria**

- A. Approval criteria. The Director shall make a finding with respect to each of the following criteria when approving, approving with conditions, or denying an application:
1. Compliance with all of the applicable requirements of this title including Chapter 18.810, Street and Utility Standards;
  2. Relationship to the natural and physical environment:
    - a. Buildings shall be:
      - (1) Located to preserve existing trees, topography and natural drainage where possible based upon existing site conditions;
      - (2) Located in areas not subject to ground slumping or sliding;
      - (3) Located to provide adequate distance between adjoining buildings for adequate light, air circulation, and fire-fighting; and
      - (4) Oriented with consideration for sun and wind.
    - ~~b. Trees shall be preserved to the extent possible. Replacement of trees is subject to the requirements of Chapter 18.790, Tree Removal.~~
    - eb. Innovative methods and techniques to reduce impacts to site hydrology and fish and wildlife habitat shall be considered based on surface water drainage patterns, identified per Section 18.810.100.A.3. and the City of Tigard “Significant Habitat Areas Map.” Methods and techniques for consideration may include, but are not limited to the following:
      - (1) through (7) [No change.]
  3. through 11. [No change.]
  12. Landscaping:
    - a. All landscaping shall be designed in accordance with the requirements set forth in Chapter 18.745 and 18.790;
    - b. In addition to the open space and recreation area requirements of Subsections A.5 and 6 above, a minimum of 20% of the gross area including parking, loading and service areas shall be landscaped; and
    - c. A minimum of 15% of the gross site area shall be landscaped.
  13. through 15. [No change.]

**18.775.080 Application Submission Requirements**

A. Application submission requirements. All applications for uses and activities identified in Sections 18.775.020.A—18.775.020.G shall be made on forms provided by the Director and must include the following information in graphic, tabular and/or narrative form. The specific information on each of the following is available from the Director:

1. A CWS Stormwater Connection permit;
2. A site plan;
3. A grading plan; and
- ~~4. An urban forestry plan per chapter 18.790 (for 18.775.020.F and G only); and~~
45. A landscaping plan.

**18.775.090 through 18.775.140**

[No change.]

Commentary

18.790 Urban Forestry Plan

The chapter title has been revised from “Tree Removal” to “Urban Forestry Plan” to better reflect the intent of chapter which is to create a plan to enhance the urban forest through the development process rather than to simply remove trees.

The guiding principles for Urban Forestry Standards for Development are in Volume I of the legislative adoption package for the Urban Forestry Code Revisions. These guiding principles represent the consensus view of the citizen advisory committee that advised staff on the Urban Forestry Code Revisions.

18.790.010 Purpose

The purpose has been simplified to cross reference the Comprehensive Plan and Urban Forestry Master Plan. Both documents provide the detailed policy basis for the extensive revisions to Chapter 18.790.

## Chapter 18.790

~~TREE REMOVAL~~ URBAN FORESTRY PLAN

## Sections:

- 18.790.010 Purpose  
 18.790.020 ~~Definitions~~ Applicability  
 18.790.030 ~~Tree Plan~~ Urban Forestry Plan Requirements  
 18.790.040 ~~Incentives for Tree Retention~~ Discretionary Urban Forestry Plan Review Option  
 18.790.050 ~~Permit Applicability~~ Flexible Standards for Tree Planting and Preservation  
 18.790.060 ~~Illegal Tree Removal~~ Urban Forestry Plan Implementation  
 18.790.070 Modification to the Urban Forestry Plan Component of an Approved Land Use Permit

## 18.790.010 Purpose

Purpose. The purpose of this chapter is to implement the City's urban forestry goals articulated in the Comprehensive Plan as recommended by the Urban Forestry Master Plan.

~~Value of trees.~~ After years of both natural growth and planting by residents, the City now benefits from a large number of trees. These trees of varied types add to the aesthetic beauty of the community, help clean the air, help control erosion, maintain water quality and provide noise barriers.

~~B. Purposes.~~ The purposes of this chapter are to:

- ~~1. Encourage the preservation, planting and replacement of trees in the City;~~
- ~~2. Regulate the removal of trees on sensitive lands in the City to eliminate unnecessary removal of trees;~~
- ~~3. Provide for a tree plan for developing properties;~~
- ~~4. Protect sensitive lands from erosion;~~
- ~~5. Protect water quality;~~
- ~~6. Provide incentives for tree retention and protection; and~~
- ~~7. Regulate commercial forestry to control the removal of trees in an urban environment.~~

~~C. Recognize need for exceptions.~~ The City recognizes that, notwithstanding these purposes, at the time of development it may be necessary to remove certain trees in order to accommodate structures, streets utilities, and other needed or required improvements within the development.

## Commentary

### 18.790.020 Applicability

This section is renamed to Applicability.

Urban forestry plans will be required for larger (Type II or III) development project types (Minor Land Partitions, Subdivisions, Conditional Use Permits, Site Development Reviews, Planned Developments, Downtown Design Reviews and Sensitive Lands Reviews).

After reviewing existing project types and conditions, it was determined that only the larger project types identified above have the most consistent and tangible impacts on trees. All of the larger project types currently require tree plans and a project arborist except Type II or III Downtown Design Reviews and Sensitive Lands Reviews. Type II or III Downtown Design Reviews and Sensitive Lands Reviews are similar in scale to the other projects, and it would be appropriate to require similar tree/urban forestry plan requirements as the other project types.

The projects with the highest likelihood to impact trees and not require an urban forest plan are residential building projects (house additions, retaining walls, landscape grading, etc.). However, a review of past residential building projects illustrate that they rarely are designed in ways that necessitate tree removal. Also, as demonstrated in the Urban Forestry Master Plan, residential property has the highest tree canopy of all zoning types which implies that residential property owners are generally good stewards of their tree resources despite a lack of regulations. If increased regulations on developed residential properties are identified as necessary in the future as the city continues to develop, the code could be revised at that time.

The current proposal will address the redevelopment of existing commercial, industrial and mixed use zones, especially as buildable residential lands in Tigard continue to decrease. The Urban Forestry Master Plan demonstrates that existing commercial, industrial and mixed use zones currently have less than half the tree canopy of residential zones. Staff's proposal is to require significant increases in tree canopy through redevelopment of commercial, industrial, and mixed use zones through the urban forestry plan requirements.

A more flexible urban forestry plan modification process is proposed in section 18.790.070 (Modification to the Urban Forestry Plan Component of an Approved Land Use Permit). The process allows modifications administratively or through a Type I permit depending on the magnitude of the modification. The modification process allows applicant to address issues that arise during development such as shifting tree planting locations, adjusting tree protection fence location, and removing trees that are no longer feasible to preserve due to condition or location. The current code does not provide a process for these types of modifications other than through revisions to the original land use permit (which is expensive and time consuming). The rationale for allowing flexibility in tree removal is to encourage applicants to "take a chance" on preservation given the uncertainty of the development process because they know they will have flexibility for removal in the future if preservation is not feasible. The modification process is more fully described in section 18.790.070.

Some development projects (such as trails and utility projects) are limited to right of ways or easements on property the applicant does not otherwise control. In these situations, planting and preservation requirements should be limited to the right of way or easement portion of the property the applicant does control.

**18.790.020 Definitions Applicability**

The requirements of this chapter apply to the following situations:

A. The following land use reviews:

1. Conditional Use (Type III);
2. Downtown Design Review (Type II and III);
3. Minor Land Partition (Type II);
4. Planned Development (Type III);
5. Sensitive Lands Review (Type II and III);
6. Site Development Review (Type II); and
7. Subdivision (Type II and III).

B. All Type I modifications to the urban forestry plan component of an approved land use permit as required by Section 18.790.070.

C. For land use projects limited to an existing right of way or easement, the development site shall be considered the existing right of way or easement and the urban forestry plan requirements shall be limited to the existing right of way or easement.

~~A. Definitions. The following definitions apply to regulations governing the preservation and removal of trees contained in this chapter exclusively:~~

- ~~1. "Canopy cover" means the area above ground which is covered by the trunk and branches of the tree;~~
- ~~2. "Commercial forestry" means the removal of ten or more trees per acre per calendar year for sale. Tree removal undertaken by means of an approved tree removal plan under Section 18.790.030 is not considered commercial forestry under this definition;~~
- ~~3. "Hazardous tree" means a tree which by reason of disease, infestation, age, or other condition presents a known and immediate hazard to persons or to public or private property;~~
- ~~4. "Pruning" means the cutting or trimming of a tree in a manner which is consistent with recognized tree maintenance practices;~~

## Commentary

### 18.790.030 Urban Forestry Plan Requirements

This section is renamed to Urban Forestry Plan Requirements

Urban forestry plans are required to be developed by a landscape architect or a person certified as both an arborist and tree risk assessor. Many arborists are dual certified, and adding the new requirement for tree risk assessment will help ensure safe conditions during and after construction. Landscape architects often work closely with arborists when developing urban forestry plans, so the option of allowing landscape architects to sign off on the plans has been added to reduce costs by eliminating the need for hiring two urban forestry consultants. The urban forestry plan requirements will consist of three main parts.

The first part, tree preservation and removal site plan, is essentially a demolition/preservation plan identifying trees to remain and trees to be removed. The Urban Forestry Manual consists of administrative rules to implement the details of the urban forestry related code provisions in Title 8, Title 18 and other applicable titles in the Tigard Municipal Code. The detailed requirements for the tree preservation and removal site plan are in Section 10, part 1 of the Urban Forestry Manual. Trees over 6 inch diameter, and those trees less than 6 inch diameter that are protected by Title 8 (street trees, heritage trees, etc.) are required to be shown on the plan. Individual trees near the development impact area are required to be individually inventoried, but cohesive stands of trees away from the development impact area can be delineated at the edge of the stand. Tree protection fencing is required to be shown on the plan as well. The requirements in Section 10, part 1 essentially document the current practice except that trees within stands away from the development impact area are not required to be individually inventoried.

The second part is the tree canopy site plan (Section 10, part 2 of the Urban Forestry Manual). This plan shows all trees to be preserved as well as those to be planted. It is essentially a landscape plan that includes just the trees. It visually displays how the effective tree canopy requirements for the overall development site and individual lots/tracts will be met. It also includes specifications for spacing and placement of trees, measurement of trees, and acceptable/prohibited species.

The third part is the supplemental report (Section 10, part 3 of the Urban Forestry Manual). This is a narrative for the site plans and provides more detailed inventory data on the species, size, condition, and suitability of preservation of trees and stands of trees in a more standardized format than exists currently. It also contains supplemental preservation and planting information to be implemented during the development process. Finally, it contains the standards for determining how the effective tree canopy requirements for the overall development site and individual lots/tracts shall be met.

(Tree canopy fee continued on following commentary page)

~~5. "Removal" means the cutting or removing of 50 percent (50%) or more of a crown, trunk or root system of a tree, or any action which results in the loss of aesthetic or physiological viability or causes the tree to fall or be in immediate danger of falling. "Removal" shall not include pruning;~~

~~6. "Tree" means a standing woody plant, or group of such, having a trunk which is six inches or more in caliper size when measured four feet from ground level;~~

~~7. "Sensitive lands" means those lands described at Chapter 18.775 of the title.~~

~~B. General rule. Except where the context clearly indicates otherwise, words in the present tense shall include the future and words in the singular shall include the plural.~~

### **18.790.030 Tree Plan Requirement Urban Forestry Plan Requirements**

A. Urban Forestry Plan Requirements. An urban forestry plan shall:

1. Be coordinated and approved by a landscape architect (the project landscape architect) or a person possessing dual certifications as a certified arborist and certified tree risk assessor (the project arborist);

2. Meet the tree preservation and removal site plan standards in Section 10, part 1 of the Urban Forestry Manual;

3. Meet the tree canopy site plan standards in Section 10, part 2 of the Urban Forestry Manual; and

4. Meet the supplemental report standards in Section 10, part 3 of the Urban Forestry Manual.

B. Tree Canopy Fee. If the supplemental report demonstrates that the applicable standard percent effective tree canopy cover in Section 10, part 3, item N will not be provided through any combination of tree planting or preservation for the overall development site (excluding streets) or that the 15 percent effective tree canopy cover will not be provided through any combination of tree planting or preservation for any individual lot or tract in the R-1, R-2, R-3.5, R-4.5 and R-7 districts (when the overall development site meets or exceeds the standard percent effective tree canopy cover), then the applicant shall provide the city a tree canopy fee according to the methodology outlined in Section 10, part 4 of the Urban Forestry Manual.

C. Tree Canopy Fee Use. Tree canopy fees provided to the city shall be deposited into the Urban Forestry Fund and used as approved by council through a resolution.

The tree canopy fee was developed by converting the wholesale median tree cost in the Willamette Valley, Oregon developed by the PNWISA<sup>3</sup> to a unit canopy cost. According to the PNWISA, the median wholesale cost of a 3-inch diameter deciduous tree is \$174. The formula developed by Krajicek, et al<sup>4</sup> for open grown, broad spreading trees (maximum crown width (feet) = 3.183+1.829\*DBH (inches)) was then utilized to convert tree diameter to canopy diameter. According to the Krajicek formula, a 3-inch diameter tree should have a crown width of 8.67 feet or crown area of 59 square feet. These dimensions were confirmed as reasonable by staff through several local field samples. Using the median cost of a 3-inch deciduous tree (\$174) and the crown area of a 3-inch diameter tree (59 square feet), the unit canopy cost or tree canopy fee should be \$2.95 per square foot.

This methodology is a reasonable approach for three main reasons. First, tree benefits (aesthetic, stormwater management, air quality, etc.) are derived primarily from their canopies, so proposing to place a value to tree canopy is appropriate. Second, in the proposal, tree canopy is valued using the median wholesale tree cost only, whereas standard tree appraisal is based on the wholesale tree cost plus the cost of tree installation. Finally, the Krajicek formula and field samples by staff are based on the maximum crown width to trunk diameter ratio, and a typical tree does not have such a high ratio. If the typical ratio were used, the unit canopy cost would increase.

Based on community discussions, the future use of tree canopy fees (outlined through council resolution) should be as follows:

1. Tree Planting and Early Establishment (50 percent allocation);
2. Preservation of existing trees following a recommendation approved by majority vote of the city board or committee designated by the city manager to give such recommendations (25 percent allocation);
3. Maintenance of those trees planted using the Urban Forestry Fund after the early establishment period has ended (10 percent allocation);
4. Urban Forestry Education and Outreach following a recommendation approved by majority vote of the city board or committee designated by the city manager to give such recommendations (10 percent allocation); and
5. Urban Forestry Planning for activities that support periodic updates of the City of Tigard's Urban Forestry Master Plan, Municipal Code or Development Code following a recommendation approved by majority vote of the city board or committee designated by the city manager to give such recommendations (5 percent allocation).

The planting, early establishment and maintenance items should be implemented by staff because they are technical in nature. However, deciding how and where to use funds for preservation, education and outreach and planning should involve a discussion and recommendation by a designated board (such as the Tree Board) to help ensure expenditures are consistent with community expectations.

---

<sup>3</sup> Pacific Northwest Chapter of the International Society of Arboriculture. Species Ratings for Landscape Tree Appraisal. 2<sup>nd</sup> Edition, Silverton, OR: Pacific Northwest ISA, 2007.

<sup>4</sup> Krajicek, J. E., K. E. Brinkman, S. F. Gingrich 1961. Crown Competition - A Measure of Density. *Forest Science* 7:35-42.

- ~~A. Tree plan required. A tree plan for the planting, removal and protection of trees prepared by a certified arborist shall be provided for any lot, parcel or combination of lots or parcels for which a development application for a subdivision, partition, site development review, planned development or conditional use is filed. Protection is preferred over removal wherever possible.~~
- ~~B. Plan requirements. The tree plan shall include the following:~~
- ~~1. Identification of the location, size and species of all existing trees including trees designated as significant by the city;~~
  - ~~2. Identification of a program to save existing trees or mitigate tree removal over 12 inches in caliper. Mitigation must follow the replacement guidelines of Section 18.790.060D, in accordance with the following standards and shall be exclusive of trees required by other development code provisions for landscaping, streets and parking lots:~~
    - ~~a. Retention of less than 25% of existing trees over 12 inches in caliper requires a mitigation program in accordance with Section 18.790.060D of no net loss of trees;~~
    - ~~b. Retention of from 25% to 50% of existing trees over 12 inches in caliper requires that two-thirds of the trees to be removed be mitigated in accordance with Section 18.790.060D;~~
    - ~~c. Retention of from 50% to 75% of existing trees over 12 inches in caliper requires that 50 percent of the trees to be removed be mitigated in accordance with Section 18.790.060D;~~
    - ~~d. Retention of 75% or greater of existing trees over 12 inches in caliper requires no mitigation.~~
  - ~~3. Identification of all trees which are proposed to be removed;~~
  - ~~4. A protection program defining standards and methods that will be used by the applicant to protect trees during and after construction.~~
- ~~C. Subsequent tree removal. Trees removed within the period of one year prior to a development application listed above will be inventoried as part of the tree plan above and will be replaced according to Section 18.790.060D.~~

This section is renamed to Discretionary Urban Forestry Plan Review Option.

The discretionary urban forestry plan review option is an alternative to meeting the clear and objective effective canopy requirements. An applicant could make their case at a public hearing in front of Planning Commission or the hearings officer about how their proposal is an adequate substitute for the functions and values otherwise provided by trees. The functions and values provided by trees that may be substituted through alternative means are broken down into three main categories:

1. Hydrological benefits (managing stormwater quantity and quality);
2. Climate benefits (reducing fossil fuel consumption and carbon emissions when appropriately placed for shading, improving air quality through carbon storage and absorption of gaseous pollutants, intercepting particulates, etc.); and
3. Wildlife benefits (food and shelter).<sup>5</sup>

The discretionary option provides examples of the alternative stormwater management, energy efficiency and wildlife enhancement methods that could be presented to the Planning Commission or hearings officer for consideration as adequate substitutes for the functions and values of trees described above. When deciding whether to approve alternative methods, the Planning Commission or hearings officer is encouraged to require certification through a third party system (e.g. Earth Advantage, LEED, etc.).

The review body (Planning Commission or hearings officer) will depend on whether there is a concurrent Type III review. For example, if an applicant for a Planned Development (Type III Planning Commission review) chooses to receive a discretionary urban forestry plan review, the review body will be the Planning Commission. However, if an applicant for a Conditional Use Permit (Type III hearings officer review) chooses to receive a discretionary urban forestry plan review, the review body will be the hearings officer. Finally, if an applicant does not have a concurrent Type III review (e.g. Subdivision, Minor Land Partition, etc.), yet chooses to receive a discretionary urban forestry plan review, the review body will be the hearings officer.

---

<sup>5</sup> McPherson, E.G., S.E. Maco, P.J. Peper, Q. Xiao, A. VanDerZanden, and N. Bell. 2002 *Western Washington and Oregon Community Tree Guide: Benefits, Costs, and Strategic Planting*. International Society of Arboriculture, Pacific Northwest Chapter, Silverton, OR.

**18.790.040 ~~Incentives for Tree Retention~~ Discretionary Urban Forestry Plan Review Option**

A. General Provisions. In lieu of providing payment of a tree canopy fee when less than the standard effective tree canopy cover required by Section 10, part 3 of the Urban Forestry Manual will be provided, an applicant may apply for a discretionary urban forestry plan review. The discretionary urban forestry plan review cannot be used to modify an already approved urban forestry plan, any tree preservation or tree planting requirements established as part of another land use review approval, or any tree preservation or tree planting requirements required by another chapter in this title.

B. Application Procedures. Discretionary urban forestry plan reviews shall be processed through a Type III procedure using approval criteria contained in Section 18.790.040.C below. When a discretionary urban forestry plan review is submitted for concurrent Type III land use review with one of the land use reviews types listed in Section 18.790.020, the review body will be the one designated for the land use review type listed in Section 18.790.020. If the discretionary urban forestry plan review is not concurrent with any other Type III land use review, then the review body shall be the hearings officer.

C. Approval Criteria. A discretionary urban forestry plan review application will be approved if the review body finds that the applicant has shown that all of the applicable approval criteria are met::

1. The applicant has demonstrated that the proposed plan will equally or better replace the environmental functions and values that would otherwise be provided through payment of a tree canopy fee in lieu of tree planting or preservation. Preference shall be given to projects that will receive certifications by third parties for various combinations of proposed alternatives such as:

a. Techniques that minimize hydrological impacts beyond regulatory requirements such as those detailed in Clean Water Services Low Impact Development Approaches (LIDA) Handbook including but not limited to porous pavement, green roofs, infiltration planters/rain gardens, flow through planters, LIDA swales, vegetated filter strips, vegetated swales, extended dry basins and constructed water quality wetlands;

b. Techniques that minimize reliance on fossil fuels and production of greenhouse gases beyond regulatory requirements through the use of energy efficient building technologies and onsite energy production technologies; and

c. Techniques that preserve and enhance wildlife habitat beyond regulatory requirements including but not limited to the use of native plant species in landscape design, removal of invasive plant species and restoration of native habitat and preservation of habitat through the use of conservation easements or other protective instruments.

## Commentary

### 18.790.040 Discretionary Urban Forestry Plan Review Option

The existing incentives for tree retention have been modified to make them more attractive to developers and user friendly. They are included in Section 18.790.050.

D. Decision. The discretionary urban forestry plan review decision shall be incorporated into the land use review decision types in Section 18.790.020. The discretionary urban forestry plan approved in this section shall supersede and replace any conflicting requirements in this chapter. However, all of the non-conflicting requirements in this chapter shall continue to apply.

A. Incentives. To assist in the preservation and retention of existing trees, the Director may apply one or more of the following incentives as part of development review approval and the provisions of a tree plan according to Section 18.790.030:

1. Density bonus. For each 2% of canopy cover provided by existing trees over 12 inches in caliper that are preserved and incorporated into a development plan, a 1% bonus may be applied to density computations of Chapter 18.715. No more than a 20% bonus may be granted for any one development. The percentage density bonus shall be applied to the number of dwelling units allowed in the underlying zone. This bonus is not applicable to trees preserved in areas of floodplain, slopes greater than 25%, drainageways, or wetlands that would otherwise be precluded from development;
2. Lot size averaging. To retain existing trees over 12 inches in caliper in the development plan for any land division under Chapter 18.400, lot size may be averaged to allow lots less than the minimum lot size allowed by the underlying zone as long as the average lot area for all lots and private open space is not less than that allowed by the underlying zone. No lot area shall be less than 80% of the minimum lot size allowed in the zone;
3. Lot width and depth. To retain existing trees over 12 inches in caliper in the development plan for any land division under Chapter 18.400, lot width and lot depth may be reduced up to 20% of that required by the underlying zone;
4. Commercial/industrial/civic use parking. For each 2% of canopy cover provided by existing trees over 12 inches in caliper that are preserved and incorporated into a development plan for commercial, industrial or civic uses listed in Section 18.765.080, Minimum and Maximum Off-Street Parking Requirements, a 1% reduction in the amount of required parking may be granted. No more than a 20% reduction in the required amount of parking may be granted for any one development;
5. Commercial/industrial/civic use landscaping. For each 2% of canopy cover provided by existing trees over 12 inches in caliper that are preserved and incorporated into a development plan, a 1% reduction in the required amount of landscaping may be granted. No more than 20% of the required amount of landscaping may be reduced for any one development.

Commentary

18.790.040 Discretionary Urban Forestry Plan Review Option

The existing incentives for tree retention have been modified to make them more attractive to developers and user friendly. They are included in Section 18.790.050.

- ~~B. Subsequent removal of a tree. Any tree preserved or retained in accordance with this section may thereafter be removed only for the reasons set out in a tree plan, in accordance with Section 18.790.030, or as a condition of approval for a conditional use, and shall not be subject to removal under any other section of this chapter. The property owner shall record a deed restriction as a condition of approval of any development permit affected by this section to the effect that such tree may be removed only if the tree dies or is hazardous according to a certified arborist. The deed restriction may be removed or will be considered invalid if a tree preserved in accordance with this section should either die or be removed as a hazardous tree. The form of this deed restriction shall be subject to approval by the Director.~~
- ~~C. Site development modifications granted as incentives. A modification to development requirements granted under this section shall not conflict with any other restriction on the use of the property, including but not limited to easements and conditions of development approval.~~
- ~~D. Design modifications of public improvements. The City Engineer may adjust design specifications of public improvements to accommodate tree retention where possible and where it would not interfere with safety or increase maintenance costs.~~

## Commentary

### 18.790.050 Flexible Standards for Tree Planting and Preservation

This section is renamed to Flexible Standards for Tree Planting and Preservation.

Text has been added to the general provisions portion of the section that all the flexible standards and incentives supersede conflicting standards in the code unless the flexibility would present an unreasonable risk to public health, safety or welfare.

The director has been authorized to use discretion when granting flexibility. The general consensus of the CAC was to allow applicants to take advantage of the flexibility without requiring a public hearing.

There are two categories of flexible standards for planting and preservation. The flexible standards in subsection "C" are available for the planting and/or preservation of all trees. The flexible standards in subsection "D" are available only for development sites with a significant tree grove. However, development sites with significant tree groves are also eligible for all of the flexible standards and incentives in subsection "C".

The following flexible standards for tree preservation in subsection "C" are proposed to be allowed outright without requiring a variance or adjustment:

- Lot size averaging;
- Flexible setbacks;
- Flexible sidewalk locations;
- Allowing reductions in minimum parking requirements; and
- Allowing reductions in minimum landscape requirements.

Additional flexibility is included in subsection "C" to facilitate the planting of large stature street trees (flexible sidewalk locations such as allowing curb tight sidewalks or allowing sidewalks in easements to increase the size of planting strips without losing developable site area). Also included is flexibility to reduce competition for space between trees and parking lots to facilitate the planting of large stature parking lot trees (allowing reductions in minimum parking requirements when providing canopy through planting).

Tree removal permit provisions are struck from Chapter 18.790 and revised/relocated to Title 8.

**18.790.050 Permit Applicability Flexible Standards for Tree Planting and Preservation**

A. General Provisions. To assist in the preservation and/or planting of trees and significant tree groves, the director may apply one or more of the following flexible standards as part of the land use review approval. To the extent that the standards in this section conflict with the standards in other sections of this title, the standards in this section shall apply except in cases where the director determines there would be an unreasonable risk to public health, safety, or welfare. Use of the flexible standards shall be requested by the project arborist or landscape architect as part of the land use review process. The flexible standards are only applicable to trees that are eligible for credit towards the effective tree canopy cover of the site.

B. Approval Criterion for use of Flexible Standards. The review body may consider modifications for lot dimension standards or site-related development standards as part of the urban forestry plan review process. These modifications are done as part of the urban forestry plan review process and are not required to go through the adjustment process. In order to approve these modifications, the review body must find that the modification request is the least required to preserve and/or plant trees, that the modification will result in the preservation of or an addition to tree canopy on the lot, and that the modification will not impede adequate emergency access to the site.

C. Flexible Standards to Preserve or Plant Trees. The following flexible standards are available to applicants in order to preserve or plant trees on a development site.

1. Lot size averaging. To preserve existing trees in the development plan for any land partition under Chapter 18.420, lot size may be averaged to allow lots less than the minimum lot size required in the underlying zone as long as the average lot area is not less than that allowed by the underlying zone. No lot area shall be less than 80 percent of the minimum lot size allowed in the zone.

2. Adjustments to Setbacks. The following setback reductions will be allowed for lots preserving existing trees using the criteria in subsection b below.

a. Reductions allowed:

(i) Front yard – up to a 25 percent reduction of the dimensional standard for a front yard setback required in the base zone. Setback of garages may not be reduced by this provision.

(ii) Other setbacks - up to a 20 percent reduction of the dimensional standards for other setbacks required in the base zone.

Commentary

18.790.050 Flexible Standards for Tree Planting and Preservation

Flexible standards in subsection “C” continued.

3. Adjustments to Sidewalks. Location of a public sidewalk may be flexible in order to preserve existing trees or to plant new large stature street trees. Sidewalk location and design must be approved by the Development Engineer. For preservation, this flexibility shall be the minimum required to achieve the desired effect. For planting, preference shall be given to retaining the planter strip and separation between the curb and sidewalk wherever practicable. If a preserved tree is to be utilized as a street tree, it must meet the criteria found in the Landscaping and Screening Section 18.745.040.A.5.

4. Adjustments to Commercial/Industrial/Civic Use Parking. For each 2 percent of effective canopy cover provided by preserved or planted trees incorporated into a development plan for commercial, industrial or civic uses listed in Section 18.765.080, Minimum and Maximum Off-Street Parking Requirements, a 1 percent reduction in the amount of required parking may be granted. No more than a 20 percent reduction in the required amount of parking may be granted for any one development.

5. Adjustments to Commercial/Industrial/Civic Use Landscaping. For each 2 percent of effective canopy cover provided by preserved trees incorporated into a development plan, a 1 percent reduction in the minimum landscape requirement may be granted. No more than 20 percent of the minimum landscape requirement may be reduced for any one development.

## Commentary

### 18.790.050 Flexible Standards for Tree Planting and Preservation

The guiding principles for Tree Grove Preservation Incentives are in Volume I of the legislative adoption package for the Urban Forestry Code Revisions. These guiding principles represent the consensus view of the citizen advisory committee that advised staff on the Urban Forestry Code Revisions.

Some base requirements have been included in subsection “D” in order for an applicant to be eligible for the additional flexible standards and incentives for preservation of a significant tree grove:

- There has to be at least 10,000 square feet (~¼ acre) of tree canopy within a development site that is part of a significant tree grove.
- The 10,000 square feet of significant tree grove canopy is not already protected by floodplain, stream corridor and/or wetland regulations.
- The project arborist or landscape architect demonstrates consistency with the applicable provisions in the urban forestry plan for the development site.

If these base requirements are met, there are six flexible standards and incentives that may be utilized by the applicant.

The first is a reduction in minimum density requirements. The applicant will be given the option to remove the significant tree grove portion of their property from their minimum density calculations. This will allow applicants to build only on the non-tree grove portion of their property. The applicant would also be required to work with their project arborist or landscape architect to designate 50 percent or more of their tree grove for preservation, maximize the connectivity and viability of the remaining portion of the tree grove and protect the remaining tree grove through a conservation easement or other protective instrument.

D. Flexible Standards and Incentives for the Preservation of Significant Tree Groves. A Significant Tree Grove Map is maintained by the director. The following additional flexible standards and incentives are available when a development site contains at least 10,000 square feet of tree canopy that is part of a significant tree grove and is not also within sensitive lands identified in Section 18.775.010.G.1-3. If any of these flexible standards and incentives are requested, the project arborist or landscape architect shall clearly demonstrate in the urban forestry plan consistency with the following provisions:

1. Reduction of Minimum Density. The minimum density required by Section 18.510.040.B may be reduced to preserve a significant tree grove. The amount of reduction in minimum density shall be calculated as described in Chapter 18.715. Reduction of minimum density is permitted provided that:

a. At least 50 percent of the significant tree grove's canopy within the development site (and not also within the sensitive lands types in Section 18.775.010.G.1-3) is preserved;

b. The project arborist or landscape architect certifies the preservation is such that the connectivity and viability of the remaining significant tree grove is maximized while balancing the considerations in Section 10, part 5 of the Urban Forestry Manual; and

c. The significant tree grove is protected through an instrument or action subject to approval by the director that demonstrates it will be permanently preserved such as:

- (i) A conservation easement;
- (ii) An open space tract;
- (iii) A deed restriction; or
- (iv) Through dedication and acceptance by the city.

## Commentary

### 18.790.050 Flexible Standards for Tree Planting and Preservation

The second flexible standard and incentive is residential density transfer. This will allow applicants to build attached units and reduce lot or unit area so they can preserve a significant tree grove while building to allowed densities on the non-tree grove portion of the site. In order to develop with the 100 percent density transfer, housing types not typically allowed in lower density zones will now be permitted if a tree grove is preserved. These housing types include attached single family and duplexes. Currently these uses are either not permitted in lower density zones, are a conditional use or require a planned development application. The proposed changes would allow these uses with the staff level Type II review and not require a public hearing process.

The development standards are adjusted accordingly to accommodate smaller lots including: 1) reduced lot widths; 2) reduced front, side and rear yard setbacks; 3) reduced garage setbacks and 4) increased building height.

Lots that abut a developed residential zone with the same or lower density are only allowed a 25 percent reduction in lot area so they are more compatible with the abutting lots.

The applicant would also be required to work with their project arborist or landscape architect to designate their tree grove for preservation, maximize the connectivity and viability of the remaining portion of the tree grove, and protect the remaining tree grove through a conservation easement or other protective instrument.

2. Residential Density Transfer. Up to 100 percent density transfer is permitted from the preserved portion of a significant tree grove within a development site to the buildable area of the development site.

a. Density may be transferred provided that:

(i) The standards in Table 18.790.1 are met with the preservation of the corresponding percent of the significant tree grove's canopy within the development site (and not also within the sensitive lands types in Section 18.775.010.G.1-3);

(ii) The project arborist or landscape architect certifies the preservation is such that the connectivity and viability of the remaining significant tree grove is maximized while balancing the considerations in Section 10, part 5 of the Urban Forestry Manual;

(iii) Maximum density for the net site area including the significant tree grove is not exceeded; and

(iv) The significant tree grove is protected through an instrument or action subject to approval by the director that demonstrates it will be permanently preserved such as:

(A) A conservation easement;

(B) An open space tract;

(C) A deed restriction; or

(D) Through dedication and acceptance by the city.

b. The proposed development may include the following:

(i) Zero lot line single-family detached housing for the portion of the development site that receives the density transfer.

(ii) The following variations from the base zone development standards are permitted:

lot width;

(A) Up to 25 percent reduction of average minimum

(B) Up to 10 foot minimum front yard setback;

(C) Up to 33 percent reduction of side and rear yard

setbacks;

(D) Up to 4 foot minimum garage setback; and

(E) Up to 20 percent increase in maximum height as

long as height adjustments comply with the International Building Code.

(iii) When the portion of the development site that receives the density transfer abuts a developed residential district with the same or lower density zoning, the average area of abutting perimeter lots shall at least be 75 percent or greater than the corresponding minimum lot area of the base residential zoning district.

Commentary

18.790.050 Flexible Standards for Tree Planting and Preservation

Table 18.790.1 (Density Transfer Table for Preservation of Significant Tree Groves) allows reduced lot and unit sizes to facilitate density transfer from the tree grove portion to the non-tree grove portion of a site.

**TABLE 18.790.1**  
**DENSITY TRANSFER TABLE FOR PRESERVATION OF SIGNIFICANT TREE GROVES**

<u>Residential Zoning District</u>	<u>Detached SQ. FT.<sup>1</sup> Percent Tree Grove Canopy Preserved / Min Lot or Unit Area</u>	<u>Attached SQ. FT. Percent Tree Grove Canopy Preserved / Min Lot or Unit Area</u>	<u>Duplex Percent Tree Grove Canopy Preserved / Min Lot or Unit Area</u>	<u>Multifamily Percent Tree Grove Canopy Preserved / Min Unit Area</u>
<u>R-1</u> <u>(30,000 sq. ft. per unit)</u>	<u>25-49% / 22,500 sq. ft.</u> <u>50-74% / 15,000 sq. ft.</u> <u>75-100% / 7,500 sq. ft.</u>	<u>Not Allowed</u>	<u>Not Allowed</u>	<u>Not Allowed</u>
<u>R-2</u> <u>(20,000 sq. ft. per unit)</u>	<u>25-49% / 15,000 sq. ft.</u> <u>50-74% / 10,000 sq. ft.</u> <u>75-100% / 5,000 sq. ft.</u>	<u>Permitted with 75% or greater tree grove canopy preservation / 5,000 sq. ft.</u>	<u>Not Allowed</u>	<u>Not Allowed</u>
<u>R-3.5</u> <u>(10,000 sq. ft. per unit)</u>	<u>25-49% / 7,500 sq. ft.</u> <u>50-74% / 5,000 sq. ft.</u> <u>75-100% / 2,500 sq. ft.</u>	<u>Permitted with 75% or greater tree grove canopy preservation / 2,500 sq. ft.</u>	<u>Permitted with 75% or greater tree grove canopy preservation / 5,000 sq. ft.</u>	<u>Not Allowed</u>
<u>R-4.5</u> <u>(7,500 sq. ft. per unit)</u>	<u>25-49% / 5,625 sq. ft.</u> <u>50-74% / 3,750 sq. ft.</u> <u>75-100% / 1,875 sq. ft.</u>	<u>Permitted with 75% or greater tree grove canopy preservation / 1,875 sq. ft.</u>	<u>Permitted with 75% or greater tree grove canopy preservation / 3,750 sq. ft.</u>	<u>Not Allowed</u>
<u>R-7</u> <u>(5,000 sq. ft. per unit)</u>	<u>25-49% / 3,750 sq. ft.</u> <u>50-74% / 2,500 sq. ft.</u> <u>75-100% / 1,250 sq. ft.</u>	<u>Permitted with 75% or greater tree grove canopy preservation / 1,250 sq. ft.</u>	<u>Permitted with 75% or greater tree grove canopy preservation / 2,500 sq. ft.</u>	<u>Not Allowed</u>
<u>R-12</u> <u>(3,050 per unit)</u>	<u>Single family, duplex and multifamily housing permitted at the following densities:</u> <u>25-49% tree grove canopy preservation / 2,288 sq. ft. per unit</u> <u>50-74% tree grove canopy preservation / 1,525 sq. ft. per unit</u> <u>75-100% tree grove canopy preservation / 763 sq. ft. per unit</u>			
<u>R-25</u> <u>(1,480 sq. ft. per unit)</u>	<u>Single family, duplex and multifamily housing permitted at the following densities:</u> <u>25-49% tree grove canopy preservation / 1,110 sq. ft. per unit</u> <u>50-74% tree grove canopy preservation / 740 sq. ft. per unit</u> <u>75-100% tree grove canopy preservation / 370 sq. ft. per unit</u>			
<u>R-40</u> <u>(None)</u>	<u>Single family, duplex and multifamily housing permitted with no upper density limit.</u>			

## Commentary

### 18.790.050 Flexible Standards for Tree Planting and Preservation

The third and fourth flexible standards and incentives are applicable to commercial and industrial development. They both allow up to 50 percent reduction in minimum setbacks and 20 feet additional building height for significant tree grove preservation. Buffering and screening per Chapter 18.745 would still be required between differing land uses. Maximum floor area ratio (FAR) in the MUE zoning district supersede the allowed increase in building height in that zone. Maximum FAR in the MUE zone limits traffic impacts on state highway facilities.

The applicant would be required to work with their project arborist or landscape architect to designate 50 percent or more of their tree grove for preservation, maximize the connectivity and viability of the remaining portion of the tree grove and protect the remaining tree grove through a conservation easement or other protective instrument.

3. Adjustments to Commercial Development Standards. Adjustments to Commercial Development Standards (Table 18.520.2) of up to 50 percent reduction in minimum setbacks and up to 20 feet additional building height are permitted provided:

a. At least 50 percent of a significant tree grove's canopy within a development site (and not also within the sensitive lands types in Section 18.775.010(G)(1-3)) is preserved;

b. The project arborist or landscape architect certifies the preservation is such that the connectivity and viability of the remaining significant tree grove is maximized while balancing the considerations in Section 10, part 5 of the Urban Forestry Manual;

c. Applicable buffering and screening standards in Section 18.745.050 are met;

d. Any height adjustments comply with the International Building Code;

e. Maximum floor area ratio is not exceeded in the MUE zoning district as described in Section 18.520.050.C.1;

f. Any setback reduction is not adjacent to residential zoning; and

g. The significant tree grove is protected through an instrument or action subject to approval by the director that demonstrates it will be permanently preserved and managed such as:

(i) A conservation easement;

(ii) An open space tract;

(iii) A deed restriction; or

(iv) Through dedication and acceptance by the city.

4. Adjustments to Industrial Development Standards. Adjustments to Development Standards in Industrial Zones (Table 18.530.2) of up to 50 percent reduction in minimum setbacks and up to 20 feet additional building height are permitted provided:

a. At least 50 percent of a significant tree grove's canopy within a development site (and not also within the sensitive lands types in Section 18.775.010(G)(1-3)) is preserved;

b. The project arborist or landscape architect certifies the preservation is such that the connectivity and viability of the remaining significant tree grove is maximized while balancing the considerations in Section 10, part 5 of the Urban Forestry Manual;

c. Applicable buffering and screening standards in Section 18.745.050 are met;

d. Any height adjustments comply with the International Building Code;

e. Any setback reduction is not adjacent to residential zoning; and

## Commentary

### 18.790.050 Flexible Standards for Tree Planting and Preservation

The fifth flexible and incentive based standard is an adjustment to the minimum effective canopy requirement. A standard urban forestry plan requires 15 percent effective tree canopy in the R-1, R-2, R-3.5, R-4.5 and R-7 districts per lot in addition to the overall development site effective canopy requirement which is based on zoning (25, 33 or 40 percent). In order to facilitate the preservation of significant tree groves, the “per lot” effective canopy requirement could be waived. This could benefit development that uses density transfer and reduced lot sizes to preserve a significant tree grove by not requiring trees on individual lots as long the overall development site meets the zoning specific canopy requirement. The applicant would be required to work with their project arborist to designate 50 percent of their tree grove for preservation, maximize the connectivity and viability of the remaining portion of the tree grove and protect the remaining tree grove through a conservation easement or other protective instrument.

The final flexible and incentive based standard is an adjustment to the street and utility standards. The intent is to highlight the director’s authority in Chapter 18.810 to vary from street and utility standards to preserve natural features (such as a significant tree grove) provided the adjustment does not result in an unreasonable risk to public safety. In addition, variation from the street tree standards in Chapter 18.745 would be permitted to facilitate the preservation of a significant tree grove. The project arborist would be required to show that the variation from the standards will facilitate preservation and help to maximize the connectivity and viability of a significant tree grove. The applicant would also be required to protect the remaining tree grove through a conservation easement or other protective instrument.

f. The significant tree grove is protected through an instrument or action subject to approval by the director that demonstrates it will be permanently preserved such as:

- (i) A conservation easement;
- (ii) An open space tract;
- (iii) A deed restriction; or
- (iv) Through dedication and acceptance by the city.

5. Adjustment to Minimum Effective Tree Canopy Cover Requirement. The requirement for 15 percent effective tree canopy cover per lot or tract in the R-1, R-2, R-3.5, R-4.5 and R-7 districts is not required when:

a. At least 50 percent of a significant tree grove's canopy within a development site (and not also within the sensitive lands types in Section 18.775.010.G.1-3) is preserved;

b. The project arborist or landscape architect certifies the preservation is such that the connectivity and viability of the remaining significant tree grove is maximized while balancing the considerations in Section 10, part 5 of the Urban Forestry Manual;

c. The applicable standard percent effective tree canopy cover in Section 10, part 3, item N of the Urban Forestry Manual will be provided for the overall development site (excluding streets);

d. The significant tree grove is protected through an instrument or action subject to approval by the director that demonstrates it will be permanently preserved such as:

- (i) A conservation easement;
- (ii) An open space tract;
- (iii) A deed restriction; or
- (iv) Through dedication and acceptance by the city.

6. Adjustment to Street and Utility Standards. If requested, the director shall use his or her discretion when considering adjustments to Chapter 18.810, Street and Utility Improvement Standards and Section 18.745.040, Street Trees provided:

a. The adjustments will facilitate preservation and help to maximize the connectivity and viability of a significant tree grove while balancing the considerations in Section 10, part 5 of the Urban Forestry Manual;

b. The significant tree grove is protected through an instrument or action subject to approval by the director that demonstrates it will be permanently preserved and managed such as:

- (i) A conservation easement;
- (ii) An open space tract;
- (iii) A deed restriction; or
- (iv) Through dedication and acceptance by the city.

Commentary

18.790.060 Urban Forestry Plan Implementation

The urban forestry plan implementation requirements standardize the inspection and documentation requirements currently administered through conditions of development approval.

The general provisions section states that urban forestry plans are in effect from the point of land use approval until all applicable urban forestry plan conditions of approval and code requirements have been met (typically after planted trees have met their two year establishment requirement). The reason for requiring an end point for the effective period of an urban forestry plan is to allow future permitting decisions to occur through the regulatory framework in Title 8 (rather than as a modification to a previous land use decision).

**18.790.060 Urban Forestry Plan Implementation**

A. General Provisions. An urban forestry plan shall be in effect from the point of land use approval until the director determines all applicable urban forestry plan conditions of approval and code requirements have been met. For subdivisions and partitions, the urban forestry plan shall remain in effect for each resulting lot or tract separately until the director determines all applicable urban forestry plan conditions of approval and code requirements have been met. Prior and subsequent permitting decisions regarding the planting, maintenance, removal and replacement of trees when not associated with one of the land use review types in Section 18.790.020.A shall be administered through Title 8 (Urban Forestry) of the Tigard Municipal Code.

## Commentary

### 18.790.060 Urban Forestry Plan Implementation

The other implementation elements include regular inspections of tree protection during development, two years of tree establishment for newly planted trees, and an inventory of trees and stands of trees for the city's GIS database. The tree protection inspection requirements conform to current requirements implemented through conditions of development approval. The tree establishment requirements allow for bonding of newly planted trees during the establishment period, require replacement of trees that die and require a renewal of the bonding period if less than 80 percent of the planted trees survive (replacement of trees is required even if over 80 percent survive). The details of the inspection and tree establishment requirements are included in Section 11 of the Urban Forestry Manual.

The urban forest inventory requirements are in Section 11 of the Urban Forestry Manual as well, and require trees to be included in a publicly accessible GIS database. This could allow people to type in their address and find information about the protected trees on their property from the city's website. This will make information retrieval for both the city and public easier than through other instruments such as deed restrictions. Section 11 of the Urban Forestry Manual allows the city to charge a fee to cover its cost of collecting and processing the urban forest inventory data.

Tree removal permit provisions are struck from Chapter 18.790 and revised/relocated to Title 8.

B. Inspections. Implementation of the urban forestry plan shall be inspected, documented and reported by the project arborist or landscape architect whenever an urban forestry plan is active. In addition, no person may refuse entry or access to the director for the purpose of monitoring the urban forestry plan on any site with an effective urban forestry plan. The inspection requirements in Section 11, part 1 of the Urban Forestry Manual shall apply to sites with an effective urban forestry plan.

C. Tree Establishment. The establishment of all trees shown to be planted in the tree canopy site plan (per 18.790.030.A.3) and supplemental report (per 18.790.030.A.4) of a previously approved urban forestry plan shall be guaranteed and required according to the tree establishment requirements in Section 11, part 2 of the Urban Forestry Manual.

D. Urban Forest Inventory. Spatial and species specific data shall be collected according to the urban forestry inventory requirements in Section 11, part 3 of the Urban Forestry Manual for each open grown tree and area of stand grown trees in the tree canopy site plan (per 18.790.030.A.3) and supplemental report (per 18.790.030.A.4) of a previously approved urban forestry plan.

~~A. Removal permit required. Tree removal permits shall be required only for the removal of any tree which is located on or in a sensitive land area as defined by Chapter 18.775. The permit for removal of a tree shall be processed as a Type I procedure, as governed by Section 18.390.030, using the following approval criteria:~~

- ~~1. Removal of the tree must not have a measurable negative impact on erosion, soil stability, flow of surface waters or water quality as evidenced by an erosion control plan which precludes:
 
  - ~~a. Deposits of mud, dirt, sediment or similar material exceeding 1/2 cubic foot in volume on public or private streets, adjacent property, or into the storm and surface water system, either by direct deposit, dropping, discharge or as a result of the action of erosion;~~
  - ~~b. Evidence of concentrated flows of water over bare soils; turbid or sediment laden flows; or evidence of on site erosion such as rivulets on bare soil slopes where the flow of water is not filtered or captured on site using the techniques of Chapter 5 of the Washington County Unified Sewerage Agency Environmental Protection and Erosion Control rules.~~~~
- ~~2. Within stream or wetland corridors, as defined as 50 feet from the boundary of the stream or wetland, tree removal must maintain no less than a 75% canopy cover or no less than the existing canopy cover if the existing canopy cover is less than 75%.~~

~~B. Effective date of permit. A tree removal permit shall be effective for one and one half years from the date of approval.~~

Commentary

18.790.060

Urban Forestry Plan Implementation

Tree removal permit provisions are struck from Chapter 18.790 and revised/relocated to Title 8.

- ~~C. Extension. Upon written request by the applicant prior to the expiration of the existing permit, a tree removal permit shall be extended for a period of up to one year if the Director finds that the applicant is in compliance with all prior conditions of permit approval and that no material facts stated in the original application have changed.~~
- ~~D. Removal permit not required. A tree removal permit shall not be required for the removal of a tree which:~~
- ~~1. Obstructs visual clearance as defined in Chapter 18.795 of the title;~~
  - ~~2. Is a hazardous tree;~~
  - ~~3. Is a nuisance affecting public safety as defined in Chapter 7.40 of the Municipal Code;~~
  - ~~4. Is used for Christmas tree production, or land registered with the Washington County Assessor's office as tax deferred tree farm or small woodlands, but does not stand on sensitive lands.~~
- ~~E. Prohibition of commercial forestry. Commercial forestry as defined by Section 18.790.020 A.2., excluding D.4. above, is not permitted.~~

Commentary

18.790.070 Modification to the Urban Forestry Plan Component of an Approved Land Use Permit

Two levels of modifications to the urban forestry plan component of an approved land use permit will be allowed. Minor modification to will be completed as a staff level, technical review. The following items would be considered minor modifications:

- Removal of hazard trees if there is sufficient documentation by a certified tree risk assessor;
- Modification of the quantity, location or species of trees to be planted, provided the same or greater tree canopy will result;
- Modification of the location of tree protection fencing, provided the arborist or landscape architect certifies that the viability of the trees will not be impacted;
- Modifying any other site elements (e.g. paving, building, etc.) that do not also require a modification to the location of the tree protection fencing; and
- Maintenance of trees (pruning, mulching, fertilization, etc.) in accordance with tree care industry standards.

Significant modifications to the urban forestry plan component of an approved land use permit such as cutting down existing trees and replacing them with new trees will be required to be a Type I land use decision. Type I decisions are clear and objective decisions and do not require notice of the surrounding neighbors. The criteria for approving such modifications are:

- The project arborist or landscape architect has provided a report certifying that trees are being removed due to unforeseen circumstances;
- The project arborist or landscape architect has provided a report certifying that there is no practicable alternative to tree removal; and
- The project arborist or landscape architect demonstrates that the canopy requirement will be met through a revised plan.

18.790.070 Modification to the Urban Forestry Plan Component of an Approved Land Use Permit

A. General Provisions. Except as exempted in Section 18.790.070.B below, any modification to the urban forestry plan component of an approved land use permit shall be processed as a Type I land use decision as described below.

B. Exemptions. The following activities shall be exempt from the Type I Modification to the Urban Forestry Plan Component of an Approved Land Use Permit process:

1. Removal of any tree shown as preserved in the tree canopy site plan (per 18.790.030.A.3) and supplemental report (per 18.790.030.A.4) of a previously approved urban forestry plan provided:

a. The project arborist or landscape architect provides a written report prior to removal attesting that either the condition rating (per Section 10, part 3, item D.7 of the Urban Forestry Manual) or suitability of preservation rating (per Section 10, part 3, item D.8 of the Urban Forestry Manual) of the tree has changed to a rating of less than 2; and

b. A revised tree canopy site plan and supplemental report are submitted for review and approval prior to removal that reflect the proposed changes to the previously approved urban forestry plan. The revised tree canopy site plan and supplemental arborist report shall demonstrate how the effective tree canopy cover requirements in Section 10, part 3 of the Urban Forestry Manual will be provided by tree planting, preservation and/or payment of a tree canopy fee in lieu of planting or preservation.

Commentary

18.790.070 Modification to the Urban Forestry Plan Component of an Approved Land Use Permit

Modification procedures continued.

2. Modification of the quantity, location or species of trees to be planted in the tree canopy site plan and supplemental report of a previously approved urban forestry plan provided:

a. The modification results in the same or greater amount of future tree canopy through tree planting as the previously approved urban forestry plan for the lot or tract where the modification is proposed;

b. Payment of a tree canopy fee in lieu of planting is not proposed as part of the modification; and

c. A revised tree canopy site plan and supplemental report are submitted for review and approval prior to planting that reflect the proposed changes to the previously approved urban forestry plan.

3. Modification of the tree protection fencing location in the tree preservation and removal site plan (per 18.790.030.A.2), tree canopy site plan and supplemental report of a previously approved urban forestry plan provided:

a. The project arborist or landscape architect provides a written report prior to modification of the tree protection fencing describing how the proposed modification will continue to protect the viability of the trees shown as preserved in the previously approved urban forestry plan; and

b. A revised tree preservation and removal site plan, tree canopy site plan and supplemental report are submitted for review and approval prior to modification of the tree protection fencing that reflect the proposed modifications to the previously approved urban forestry plan.

4. Modification of any other site elements that do not require any modification of the tree protection fencing location or trees to be planted or preserved in the tree preservation and removal site plan, tree canopy site plan and supplemental report of a previously approved urban forestry plan; and

5. Maintenance of any trees in accordance with tree care industry standards.

C. Application Procedures. Modifications to the urban forestry plan component of an approved land use permit that are not exempted by 18.790.070.B shall be processed as a Type I procedure, using approval criteria contained in Section 18.790.070.D below.

D. Approval Criteria. The director shall approve the modification to the urban forestry plan component of an approved land use permit upon determining:

1. The project arborist or landscape architect has provided a report and statement certifying that the previously approved urban forestry plan did not account for the circumstances that lead to the proposed modification;

Commentary

18.790.070 Modification to the Urban Forestry Plan Component of an Approved Land Use Permit

Modification procedures continued.

18.790.060 Illegal Tree Removal

This section is struck.

Tree violations are now consolidated with other nuisance violations in Title 6. Violations of the new Title 8 (Urban Forestry) are also consolidated into Title 6.

Penalties for tree violations are in Chapter 1.16 where other penalties are already consolidated. Penalties for violations of Title 8 (Urban Forestry) are also outlined in Chapter 1.16.

The details of tree violations and penalties for tree violations are in Title 6 and Chapter 1.16 respectively.

~~2. The project arborist or landscape architect has provided a report and statement certifying that there is no practicable alternative to the proposed modification; and~~

~~3. The project arborist or landscape architect demonstrates through a revised urban forestry plan, compliance with Section 18.790.030.~~

**18.790.060 — Illegal Tree Removal**

~~A. Violations. The following constitute a violation of this chapter:~~

~~— 1. Removal of a tree:~~

~~— a. Without a valid tree removal permit; or~~

~~b. In noncompliance with any condition of approval of a tree removal permit; or~~

~~c. In noncompliance with any condition of any City permit or development approval;  
or~~

~~— d. In noncompliance with any other section of this title.~~

~~2. Breach of a condition of any City permit or development approval, which results in damage to a tree or its root system.~~

~~B. Remedies. If the Director has reason to believe that a violation of this chapter has occurred, then he or she may do any or all of the following:~~

~~1. Require the owner of the land on which the tree was located to submit sufficient documentation, which may include a written statement from a qualified arborist or forester, showing that removal of the tree was permitted by this chapter;~~

~~2. Pursuant to Section 18.390.050, initiate a hearing on revocation of the tree removal permit and/or any other permit or approval for which this chapter was an approval standard;~~

~~— 3. Issue a stop order pursuant to Section 18.230 of this title;~~

~~— 4. Issue a citation pursuant to Chapter 1.16 of the Municipal Code;~~

~~— 5. Take any other action allowed by law.~~

Commentary

18.790.060    Illegal Tree Removal

Strikethroughs of existing code language continued.

~~C. Fines. Notwithstanding any other provision of this title, any party found to be in violation of this chapter pursuant to Section 1.16 of the Municipal Code shall be subject to a civil penalty of up to \$500 and shall be required to remedy any damage caused by the violation. Such remediation shall include, but not be limited to, the following:~~

- ~~1. Replacement of unlawfully removed or damaged trees in accordance with Section D below; and~~
- ~~2. Payment of an additional civil penalty representing the estimated value of any unlawfully removed or damaged tree, as determined using the most current International Society of Arboriculture's Guide for Plant Appraisal.~~

~~D. Guidelines for replacement. Replacement of a tree shall take place according to the following guidelines:~~

- ~~1. A replacement tree shall be a substantially similar species taking into consideration site characteristics;~~

Commentary

18.790.060    Illegal Tree Removal

Strikethroughs of existing code language continued.

- ~~2. If a replacement tree of the species of the tree removed or damaged is not reasonably available, the Director may allow replacement with a different species of equivalent natural resource value;~~
  - ~~3. If a replacement tree of the size cut is not reasonably available on the local market or would not be viable, the Director shall require replacement with more than one tree in accordance with the following formula: The number of replacement trees required shall be determined by dividing the estimated caliper size of the tree removed or damaged by the caliper size of the largest reasonably available replacement trees. If this number of trees cannot be viably located on the subject property, the Director may require one or more replacement trees to be planted on other property within the City, either public property or, with the consent of the owner, private property;~~
  - ~~4. The planting of a replacement tree shall take place in a manner reasonably calculated to allow growth to maturity.~~
- ~~E. In lieu of payment. In lieu of tree replacement under Section D above, a party may, with the consent of the Director, elect to compensate the City for its costs in performing such tree replacement.~~
- ~~F. Exclusivity. The remedies set out in this section shall not be exclusive.■~~

Commentary

18.798

WIRELESS COMMUNICATION FACILITIES

In Chapter 18.798, the term “registered” has been changed to “certified” to reflect International Society of Arboriculture terminology.

**Chapter 18.798**  
**WIRELESS COMMUNICATION FACILITIES**

**Sections:**

- 18.798.010 Purpose**
- 18.798.020 Definitions**
- 18.798.030 Exemptions**
- 18.798.040 Uses Permitted Outright**
- 18.798.050 Uses Subject to Site Development Review**
- 18.798.060 Uses Permitted Subject to Conditional Use Review**
- 18.798.070 Submission Requirements**
- 18.798.080 Collocation Protocol**
- 18.798.090 Abandoned Facilities**

**18.798.010 through 18.798.040**

[No change.]

**18.798.050 Uses Permitted Subject to Site Development Review**

- A. [No change.]
- B. Review criteria. Any use subject to Site Development Review per Subsection A above, shall be evaluated using the following standards:
  - 1. through 6.

[No change.]

Commentary

18.798.050 Uses Permitted Subject to Site Development Review

The term “registered” has been changed to “certified” to reflect International Society of Arboriculture terminology.

7. Landscaping and screening.
  - a. Landscaping shall be placed outside the fence and shall consist of evergreen shrubs which reach six feet in height and 95% opacity within three years of planting;
  - b. When adjacent to or within residentially-zoned property, freestanding towers and accessory equipment facilities shall be screened by the planting of a minimum of four evergreen trees at least 15 feet in height at the time of planting. The planting of said trees shall be prescribed in number by a plan prepared by a ~~registered~~ certified arborist in locations that (1) most effectively screen the wireless facilities from residential uses and (2) promote the future survival of the trees while limiting adverse effects of the trees on abutting properties. Existing evergreen trees at least 15 feet in height may be used to meet the screening requirement of this section if the arborist demonstrates that they provide screening for abutting residential uses.

8. [No change.]

C. [No change.]

**18.798.060 Uses Permitted Subject to Conditional Use Review**

A. [No change.]

B. Review criteria. Any use subject to review per Subsection A above, shall be evaluated using the following standards:

1. through 6.

[No change.]

Commentary

18.798.060 Uses Permitted Subject to Conditional Use Review

The term “registered” has been changed to “certified” to reflect International Society of Arboriculture terminology.

7. Landscaping and screening.

- a. Landscaping shall be placed outside the fence and shall consist of evergreen shrubs which reach six-feet in height and 95% opacity within three years of planting.
- b. When adjacent to or within residentially-zoned property, free-standing towers and accessory equipment facilities shall be screened by the planting of a minimum of four evergreen trees at least 15 feet in height at the time of planting. The planting of said trees shall be prescribed in number by a plan prepared by a ~~registered~~ certified arborist in locations that (1) most effectively screen the wireless facilities from residential uses and (2) promote the future survival of the trees while limiting adverse effects of the trees on abutting properties. Existing evergreen trees at least 15 feet in height may be used to meet the screening requirement of this section if the arborist demonstrates that they provide screening for abutting residential uses.

8. [No change.]

C. [No change.]

**18.798.070 through 18.798.090**

[No change.]





# City of Tigard Memorandum

**To:** Tigard City Council  
**From:** Marissa Daniels, Associate Planner  
**Re:** Urban Forestry Code Revisions  
**Date:** November 27, 2012

On November 27, 2012 Council is scheduled to continue the Urban Forestry Code Revisions public hearing. The purpose of the meeting is to receive a brief staff report, receive public testimony and consider amendments to Planning Commission’s recommendation.

### Council Amendments for Consideration

Staff has prepared several amendments to Planning Commission’s recommended draft based on Council direction on October 23 and November 13, 2012.

Amendment	Addresses Policy Issue	Brief Description
1	3	Differentiates between residential and non residential maintenance requirements for trees planted with development.
2	4	Removes tree removal permit requirements for single family residential developments.
3	5	Clarifies that hazard trees are required to be removed only in response to verified complaints.
4	7	Enhances the purpose statement in Chapter 18.790 to draw a clear link between the details in the Urban Forestry Manual and the overall purpose of the development code revisions.
5	7	<del>Adds the canopy requirements to the code to draw a clearer link between the details in the Urban Forestry Manual and the overall purpose of the development code revisions.</del>
6	8	Reduces development costs for Minor Land Partitions by not requiring an arborist or landscape architect for partition projects that can meet the requirements by planting street trees in open soil volumes only.

On 11/27/2012, City Council approved amendments 1, 2, 3, 4 and 6. Amendment 5 was not approved.

At the November 13 meeting, Council asked staff if there are any issues associated with not requiring arborists/landscape architects for Minor Land Partition projects that can meet the tree

canopy requirements by planting street trees only (Amendment 6, Policy Issue 8). In deciding whether to adopt this amendment, staff offers the following considerations:

1. **Reverse Incentive** - This amendment could create a reverse incentive where a property owner might remove mature trees and plant only street trees to avoid costs associated with hiring an arborist/landscape architect.
2. **Equity** - In developing the Urban Forestry Code Revisions, one of the main community goals was to address the equity issue in the existing code that places more financial burdens on property owners with mature trees. The canopy approach addresses this issue by applying the same requirements regardless of the amount of existing trees. This amendment could result in an equity issue by exempting owners without trees from hiring arborists/landscape architects, while placing greater requirements on owners that choose to preserve mature trees with development.
3. **Adjacent trees** - Minor Land Partitions involve the creation of two or three new lots in existing residential neighborhoods (aka infill development). Often one of the greatest points of conflict with infill development is the potential development impacts on trees that are on an adjacent property but near the property line. Involving arborists/landscape architects in the development of Minor Land Partitions helps ensure trees adjacent to the site are protected with accepted methods such as tree protection fencing during development. If professionals are not required, there is less certainty for neighbors that their trees will be adequately protected.

More information about each of the amendments, including the affected code sections and specific amendments are included on page 3. Council will have the opportunity to accept, reject, or modify these amendments on November 27.

### **Housekeeping Amendments for Consideration**

In addition to Council's amendments, staff is also recommending a set of housekeeping amendments to the code. These items are insubstantial to the code, and are described in more detail on page 13. For example, Amendments 8 and 9 correct cross references internal to the code.

## Amendments to the Urban Forestry Code Revisions Based on Council Direction

**Amendment 1 (Policy Issue 3):** Differentiate between residential and non residential requirements for the maintenance of trees planted with development. Residential trees should have a maintenance period of two years or until a house is sold. Non residential trees should have a one year maintenance period.

**Code/Manual Section:** Urban Forestry Manual Section 11, Part 2 (Urban Forestry Plan Implementation Standards – Tree Establishment Requirements:)

...

- A. Prior to any ground disturbance work, the applicant shall provide a tree establishment bond for all trees to be planted per the approved urban forestry plan. The total bond amount:
1. For subdivisions and minor land partitions shall be equivalent to the city's average cost to plant and maintain a tree per the applicable standards in the Urban Forestry Manual for a period of two years after planting multiplied by the total number of trees to be planted and maintained; and
  2. For all other land use review types shall be equivalent to the city's average cost to plant and maintain a tree per the applicable standards in the Urban Forestry Manual for a period of one year after planting multiplied by the total number of trees to be planted and maintained.
- B. Following final building inspection or upon acceptance by the city manager or designee when there is no final building inspection, the tree establishment period shall immediately begin and continue; ~~for a period of two years.~~
1. In subdivisions and partitions, for a period of two years or until such time as each lot is sold; and
  2. In all other land use review types, for a period of one year.
- C. When the land use review type will result in the division of land into multiple lots or tracts, there shall be a separate tree establishment period for each resulting lot or tract where trees are shown to be planted in the approved urban forestry plan.
- D. Following the ~~two-year~~ applicable tree establishment period for each lot or tract, the bond shall be correspondingly reduced based on tree survival following a site inspection, documentation of successful tree establishment and/or replacement according to items ~~e~~ E and F below, and receipt by the city manager or designee of written verification of findings and a signature of approval by the project arborist.
- E. For planted open grown trees, successful establishment shall be considered 80 percent survival of the open grown trees planted on the lot or tract, and replacement of 100 percent of the remaining open grown trees planted on the lot or tract that did not survive.
- F. For planted stand grown trees, successful establishment shall be considered survival of at least 80 percent of the original stand grown trees planted on the lot or tract.
- G. If successful establishment for open grown trees is less than 80 percent for any lot or tract, the ~~two-year~~ applicable tree establishment period shall reset for that lot or tract and the establishment process for open grown trees described in part 2.B-F above shall be repeated until the successful establishment requirement for open grown trees

Amendments to the Urban Forestry Code Revisions Based on Council Direction

is met.

- H. If successful establishment for stand grown trees is less than 80 percent for any lot or tract, the ~~two-year~~ applicable tree establishment period shall reset for that lot or tract and the establishment process for stand grown trees described in Part 2.B-F above shall be repeated until the successful establishment requirement for stand grown trees is met.

...

**Note:** Exhibits A and B to the Resolution revising The Master Fees and Charges Schedule is amended as follows to reflect changes in the methodology for calculating tree establishment bonds:

...

Exhibit A - Legislative Intent for Urban Forestry Fees

...

Tree Establishment Bond (Planting and ~~2 Years of Early Establishment~~)

\$489 per 1.5 inch caliper open grown tree for subdivisions and minor land partitions\*

\$441 per 1.5 inch caliper open grown tree for land use review types other than subdivisions and minor land partitions\*\*

\$367 per 0.5 inch caliper stand grown tree for subdivisions and minor land partitions\*\*\*

\$351 per 0.5 inch caliper stand grown tree for land use review types other than subdivisions and minor land partitions \*\*\*\*

\*The Tree Establishment Bond for the planting and maintenance of a 1.5 inch caliper tree for the required two years in subdivisions and minor land partitions is based on a formula that combines 50% of the published PNWISA wholesale median tree cost estimate to purchase and install a 3 inch diameter tree, with the average historical cost for City of Tigard staff to perform two years of maintenance on a 1.5 inch caliper tree.

\*\*The Tree Establishment Bond for the planting and maintenance of a 1.5 inch caliper tree for the required one year in land use review types other than subdivisions and minor land partitions is based on a formula that combines 50% of the published PNWISA wholesale median tree cost estimate to purchase and install a 3 inch diameter tree, with the average historical cost for City of Tigard staff to perform one year of maintenance on a 1.5 inch caliper tree.

\*\*\*The Tree Establishment Bond for the planting and maintenance of a tree two feet in height or one gallon container size (estimated 0.5 inch caliper) for the required two years in subdivisions and minor land partitions is based on a formula that combines 16.6% of the published PNWISA cost estimate to purchase and install a 3 inch caliper tree, with the average historical cost for City of Tigard staff to perform two years of maintenance on a 0.5 inch caliper tree.

\*\*\*\*The Tree Establishment Bond for the planting and maintenance of a tree two feet in height

Master Fees and Charges Resolution was not considered/adopted by the council on 11/27/2012

Amendments to the Urban Forestry Code Revisions Based on Council Direction

or one gallon container size (estimated 0.5 inch caliper) for the required one year in land use review types other than subdivisions and minor land partitions is based on a formula that combines 16.6% of the published PNWISA cost estimate to purchase and install a 3 inch caliper tree, with the average historical cost for City of Tigard staff to perform one year of maintenance on a 0.5 inch caliper tree.

...

Exhibit B - Amended Master Fees and Charges Schedule

...

Community Development - Miscellaneous Development

...

Urban Forestry

...

Tree Establishment Bond (Planting & ~~2 Year Maintenance~~ Early Establishment)

1.5" Caliper Street or Open Grown Tree <u>in Subdivisions or Minor Land Partitions</u>	\$489 per tree	3/1/2013
---	----------------	----------

<u>1.5" Caliper Street or Open Grown Tree in Land Use Review Types other than Subdivisions or Minor Land Partitions</u>	<u>\$441 per tree</u>	<u>3/1/2013</u>
---	-----------------------	-----------------

2' in Height or 1 Gallon Container Minimum Stand Grown Tree <u>in Subdivisions or Minor Land Partitions</u>	\$367 per tree	3/1/2013
---	----------------	----------

<u>2' in Height or 1 Gallon Container Minimum Stand Grown Tree in Land Use Review Types other than Subdivisions or Minor Land Partitions</u>	<u>\$351 per tree</u>	<u>3/1/2013</u>
--	-----------------------	-----------------

...

Amendments to the Urban Forestry Code Revisions Based on Council Direction

**Amendment 2 (Policy Issue 4):** Do not require tree removal permits for single family residential developments. **Applies to Ordinance No. 12-11**

**Code/Manual Section:** Tigard Municipal Code Chapter 8.12 (Trees that were Required with Development)

...

8.12.010 Purpose

The purpose of this chapter is to establish standards and procedures for the maintenance, removal and replacement of trees that were required with high density residential and non residential development to maintain their environmental, aesthetic, social and economic benefits after the development process is complete.

8.12.020 General Provisions

A. The provisions of this chapter do not apply ~~unless there is substantial evidence that one of the following situations exists:~~ to residential developments in the R-1, R-2, R-3.5, R-4.5, R-7, and R-12 districts.

B. The provisions of this chapter do apply when there is substantial evidence that one of the following situations exists:

1. Except for those developments listed in 8.12.020.A above, ~~T~~rees were planted or preserved under a requirement found in Title 18 or found in a land use permit; and

2. Trees ~~were~~ required as replacements for trees originally required under 8.12.020.AB.1 above.

BC. The city manager or designee shall utilize all available land use permit records and data when determining whether a tree is subject to the provisions of this chapter.

...

**Note:** The corresponding commentary for the code amendments is amended as follows to provide a record of legislative intent:

...

Chapter 8.12 TREES THAT WERE REQUIRED WITH DEVELOPMENT

Chapter 8.12 establishes the framework for permitting decisions for trees that were required to be planted or preserved by a land use permit for high density residential and non residential development when the removal is not associated with an active land use permit. The intent of the legislative amendments in Chapter 8.12 is to supersede the planting and preservation requirements for trees that were required by prior land use decisions. This includes trees that are recorded as preserved on property deeds as a result of past land use

## Amendments to the Urban Forestry Code Revisions Based on Council Direction

decisions. However, for these deed restricted trees, applicants (and not the city) will be solely responsible for identifying and removing any applicable deed restrictions. The city will provide any signatures necessary to facilitate the removal of deed restrictions for trees permitted for removal by decisions pursuant to Chapter 8.12.

The reason for not requiring permits for trees required with development in low and medium density residential development is because the owners of these properties are likely to maintain and preserve trees in these locations regardless of code requirements. The circumstances where owners decide to remove healthy trees required with development are expected to be negligible when compared with Tigard's overall urban forest.

However, it is important to note that the permit requirements for Street and Median Trees (Chapter 8.08), Trees in Sensitive Lands (8.10), Trees that were Planted using the Urban Forestry Fund (8.14) and Heritage Trees (8.16) would continue to apply even in low and medium density residential development. In addition, if significant tree groves are preserved in low and medium density residential development, the significant tree grove preservation requirements in section 18.790.050.D would apply.

### 8.12.010 Purpose

The purpose statement explains that the chapter establishes standards and procedures for trees that were required with high density residential and non residential development to maintain their benefits after the development process is complete.

### 8.12.020 General Provisions

The provisions of Chapter 8.12 apply to trees required to be planted or preserved in high density residential and non residential development by a land use permit and trees that are required as replacements for said trees.

The provisions of Chapter 8.12 do not apply to residential developments in the R-1, R-2, R-3.5, R-4.5, R-7, and R-12 districts since these are the primary locations of single family residences. The provisions specify "residential developments" so as not to exempt non residential developments such as schools in residential districts from the requirements.

...

### 8.12.030 Maintenance of Trees That Were Required With Development

Trees that were required to be planted or preserved in high density residential and non residential development by a land use permit are required to be maintained per tree care industry standards.

...

### 8.12.040 Removal of Trees That Were Required With Development

## Amendments to the Urban Forestry Code Revisions Based on Council Direction

Permits obtained through the City Manager Decision Making Procedures or the City Board or Committee Decision Making Procedures are required to remove trees required to be planted or preserved in high density residential and non residential development by a land use permit.

...

Amendments to the Urban Forestry Code Revisions Based on Council Direction

**Amendment 3 (Policy Issue 5):** Clarify that hazard trees are required to be removed only in response to verified complaints.

**Code/Manual Section:** Tigard Municipal Code Section 8.06.020 (Hazard Trees Prohibited)

...

A. Hazard trees that are verified through the Hazard Tree Evaluation and Abatement Procedure in Section 1 of the Urban Forestry Manual are prohibited within the City of Tigard.

B. Any hazard tree owner or responsible party identified through the Hazard Tree Evaluation and Abatement Procedure in Section 1 of the Urban Forestry Manual shall be required to complete hazard tree abatement.

C. Failure of a hazard tree owner or responsible party identified through the Hazard Tree Evaluation and Abatement Procedure in Section 1 of the Urban Forestry Manual to complete hazard tree abatement is a nuisance under Chapter 6.02 and subject to penalties under Chapter 1.16.

...

**Note:** The corresponding commentary for the code amendments is amended as follows to provide a record of legislative intent:

...

Chapter 8.06 HAZARD TREES

The hazard trees chapter creates a framework for addressing hazard trees.

The guiding principles for Hazard Trees are in Volume IV of the legislative adoption package for the Urban Forestry Code Revisions. These guiding principles represent the consensus view of the citizen advisory committee that advised staff on the Urban Forestry Code Revisions.

...

8.06.020 General Provisions

Hazard trees (defined in Chapter 8.02) that are verified through the Hazard Tree Evaluation and Abatement Procedure in Section 1 of the Urban Forestry Manual are prohibited in Tigard. The reason for specifying that the prohibition applies only to hazard trees verified through the procedure in the Urban Forestry Manual is to avoid the large scale removal of trees by property owners that would otherwise be unclear whether or not their specific trees are hazards. ~~The definition of hazard tree incorporates by reference the procedure in the Urban Forestry Manual includes an evaluation by a tree risk assessor of the probability of failure, size of defective part and target area~~ before determining whether a tree is a hazard.

...

Amendments to the Urban Forestry Code Revisions Based on Council Direction

**Amendment 4 (Policy Issue 7):** Enhance purpose statement in Chapter 18.790 to draw a clearer link between the details in the Urban Forestry Manual and the overall purpose of the development code revisions.

**Code/Manual Section:** Tigard Development Code Section 18.790.010 (Purpose)

...

Purpose. The purpose of this chapter is to implement the City's urban forestry goals articulated in the Comprehensive Plan as recommended by the Urban Forestry Master Plan by establishing:

A. Tree canopy cover requirements for new development regardless of the amount of existing trees on site;

B. Alternatives to meeting tree canopy cover requirements when equivalent environmental functions or values are provided;

C. Flexible and incentive based requirements to facilitate the planting of large stature trees, and the preservation of existing trees and significant tree groves;

D. Requirements that ensure successful implementation of urban forestry plans during and after site development; and

E. A process for modifying urban forestry plans to address changes that occur during the development process.

...

**Note:** The corresponding commentary for the code amendments is amended as follows to provide a record of legislative intent:

...

18.790.010 Purpose

The purpose ~~has been simplified to~~ statement cross references the Comprehensive Plan and Urban Forestry Master Plan. Both documents provide the detailed policy basis for the extensive revisions to Chapter 18.790. Examples of the chapter provisions that implement the City's urban forestry goals are provided to give users of the code a better understanding of the overall purpose of the chapter.

...

Amendments to the Urban Forestry Code Revisions Based on Council Direction

**Amendment 5 (Policy Issue 7):** Add the canopy requirements in the code to draw a clearer link between the details in the Urban Forestry Manual and the overall purpose of the development code revisions.

**Code/Manual Section:** Tigard Development Code Section 18.790.030 (Urban Forestry Plan Requirements)

...  
 A. Urban Forestry Plan Requirements. An urban forestry plan shall demonstrate the following effective tree canopy cover requirements will be met in the following districts:

<u>Effective Tree Canopy Cover Requirement</u>	<u>District</u>
<u>40% for overall site and 15% for each lot or tract</u>	<u>R-1, R-2, R-3.5, R-4.5 and R-7 districts, except for schools (18.130.050(I))</u>
<u>33% for overall site</u>	<u>R-12, R-25, R-40, C-N, C-C, C-G, C-P, MUE, MUE-1, MUE-2, MUC, MUR and I-P districts, except for schools (18.130.050(I))</u>
<u>25% for overall site</u>	<u>MU-CBD, MUC-1, I-L and I-H districts, and for schools (18.130.050(I)) in all districts</u>

An urban forestry plan shall:

1. Be coordinated and approved by a landscape architect (the project landscape architect) or a person possessing dual certifications as a certified arborist and certified tree risk assessor (the project arborist);

...  
**Note:** The corresponding commentary for the code amendments is amended as follows to provide a record of legislative intent:

...  
 18.790.030 Urban Forestry Plan Requirements

This section is renamed to Urban Forestry Plan Requirements.

The effective tree canopy cover requirements are included in the code to provide users of the code a clearer understanding of the overall purpose of the Urban Forestry Plan Requirements without requiring them to read through the details of the Urban Forestry Manual. The effective tree canopy cover requirements were extensively tested during the peer review phase of the Urban Forestry Code Revisions and were found to be achievable through planting and preserving an amount of tree canopy that is acceptable to the community. The peer review results can be found in Volume II, and a more detailed description of the canopy standards can be found in Volume V of the legislative adoption package for the Urban Forestry Code Revisions.

...

Amendments to the Urban Forestry Code Revisions Based on Council Direction

**Amendment 6 (Policy Issue 8):** Reduce development costs for Minor Land Partitions by not requiring arborists or landscape architects for partition projects that can meet the requirements by planting street trees in open soil volumes only.

**Code/Manual Section:** Tigard Development Code Section 18.790.030.A (Urban Forestry Plan Requirements)

...

...An urban forestry plan shall:

1. Be coordinated and approved by a landscape architect (the project landscape architect) or a person possessing dual certifications as a certified arborist and certified tree risk assessor (the project arborist), except for Minor Land Partitions that can demonstrate compliance with effective tree canopy cover and soil volume requirements by planting street trees in open soil volumes only;

...

**Note:** The corresponding commentary for the code amendments is amended as follows to provide a record of legislative intent:

...

18.790.030 Urban Forestry Plan Requirements

...

Urban forestry plans are required to be developed by a landscape architect or a person certified as both an arborist and tree risk assessor. Many arborists are dual certified, and adding the new requirement for tree risk assessment will help ensure safe conditions during and after construction. Landscape architects often work closely with arborists when developing urban forestry plans, so the option of allowing landscape architects to sign off on the plans has been added to reduce costs by eliminating the need for hiring two urban forestry consultants.

Arborists and landscape architects are not required for Minor Land Partitions if the effective tree canopy cover and soil volume requirements can be met by planting street trees in open soil volumes only. The purpose of the exemption is to reduce costs for small scale residential projects where the required level of specialized professional expertise is limited.

...

Housekeeping Amendments to the Urban Forestry Code Revisions

**Amendment 1:** Ensure consistency in the title of Chapter 8.02. **Applies to Ordinance No. 12-11**

**Code/Manual Section:** Tigard Municipal Code Chapter 8.02 (Definitions, Penalties and Administrative Rules)

...

TIGARD MUNICIPAL CODE

Title 8

URBAN FORESTRY

Chapters:

- 8.02 DEFINITIONS, PENALTIES AND ADMINISTRATIVE RULES
- 8.04 TREE PERMIT PROCEDURES
- 8.06 HAZARD TREES
- 8.08 STREET AND MEDIAN TREES
- 8.10 TREES IN SENSITIVE LANDS
- 8.12 TREES THAT WERE REQUIRED WITH DEVELOPMENT
- 8.14 TREES THAT WERE PLANTED USING THE URBAN FORESTRY FUND
- 8.16 HERITAGE TREES

Chapter 8.02 DEFINITIONS, PENALTIES AND ADMINISTRATIVE RULES

...

**Amendment 2:** Correct a cross reference in Section 8.02.020.C (Defining Words). **Applies to Ordinance No. 12-11**

**Code/Manual Section:** Tigard Municipal Code Section 8.02.020 (General Provisions)

...

C. Defining Words. Words used in this title and the Urban Forestry Manual have their normal dictionary meaning unless they are listed in Section 8.02.050. Words listed in Section 8.02.0450 have the specific meaning stated, unless the context clearly indicates another meaning.

....

## Housekeeping Amendments to the Urban Forestry Code Revisions

**Amendment 3:** Ensure the term "Diameter at breast height (DBH)" is placed in alphabetical order in Section 8.02.050 (Definition of Specific Words). **Applies to Ordinance No. 12-11**

**Code/Manual Section:** Tigard Municipal Code Section 8.02.050 (Definition of Specific Words)

...

GH. "Dripline" - The outer limit of a tree canopy projected to the ground.

HG. "Diameter at breast height (DBH)" - The average diameter of the trunk of a tree measured 4 ½ feet above mean ground level..

...

[note: reverse order to place terms in alphabetical order]

## Housekeeping Amendments to the Urban Forestry Code Revisions

**Amendment 4:** The Pacific Northwest Chapter of the International Society of Arboriculture (PNWISA) developed the current tree risk assessment methodology and certification program. Due to the success of the program, the International Society of Arboriculture (ISA) is in the process of adopting the program internationally. However, in the process of adopting the regional program for international users, the ISA expects to modify some of its aspects.

Terry Flanagan, local arborist, tree risk instructor and President of the ISA, has advised on how to address the expected modifications in light of the pending adoption of the Urban Forestry Code Revisions. Specifically, he has advised generalizing the term "certified tree risk assessor" to "tree risk assessor" because of anticipated revisions to the certification process, and replacing reference to "PNWISA" with "ISA" to reflect the international scope of the program. Finally, he has advised retaining the numerical rating system since that is the currently adopted standard. If the numerical system is revised in the future, it may be replaced with the updated system.

The following amendments implement these recommendations. **Applies to Ordinance No. 12-09 and 12-11. Ordinance No. 12-09 affects Title 18 also known as the Community Development Code while Ordinance No. 12-11 covers affected chapters in the Tigard Municipal Code consisting of active and reserved Titles 1-17.**

**Code/Manual Section:** Tigard Municipal Code Section 8.02.050 (Definition of Specific Words)

...

D. ~~“Certified tree risk assessor”~~ - An individual ~~certified~~ deemed qualified by the International Society of Arboriculture to conduct tree risk assessments.

...

[note: re-lettering of the section is required to place terms in alphabetical order]

**Code/Manual Section:** Tigard Municipal Code Section 8.02.050.I (Hazard Tree Related Definitions)

...

2. “Hazard tree - Any tree or tree part that has been or could be determined by an independent ~~certified~~ tree risk assessor to constitute a high level hazard requiring hazard tree abatement with an overall minimum risk rating of 8 for trees or tree parts up to 4 inch DBH, 9 for trees or tree parts greater than 4 inch and up to 20 inch DBH, or 10 for trees or tree parts greater than 20 inch DBH using ~~the most current version of~~ the tree risk assessment methodology ~~developed by the International Society of Arboriculture~~ in Appendix 1 of the Urban Forestry Manual.

3. “Hazard tree abatement” - The process of reducing or eliminating a hazard to an overall risk rating of less than 8 for trees or tree parts up to 4 inch DBH, 9 for trees or tree parts greater than 4 inch and up to 20 inch DBH, or 10 for trees or tree parts greater than 20

## Housekeeping Amendments to the Urban Forestry Code Revisions

inch DBH using ~~the most current version of the tree risk assessment methodology developed by the International Society of Arboriculture in Appendix 1 of the Urban Forestry Manual~~ through pruning, tree removal or other means in a manner that complies with all applicable rules and regulations.

...

**Code/Manual Section:** Tigard Development Code Chapter 18.115 (List of Terms)

...

~~Certified~~ Tree Risk Assessor

*See Tree Related Definitions*

...

Tree Related Definitions

- Caliper
- Certified Arborist
- ~~Certified~~ Tree Risk Assessor

...

[note: re-ordering of the section is required to place terms in alphabetical order]

**Code/Manual Section:** Tigard Development Code Section 18.120.030.A.170 (Tree-related definitions)

...

c. ~~“Certified Tree Risk Assessor”~~ - An individual ~~certified~~ deemed qualified by the International Society of Arboriculture to conduct tree risk assessments.

...

g. ~~“Hazard Tree”~~ - Any tree or tree part that has been or could be determined by an independent ~~certified~~ tree risk assessor to constitute a high level hazard requiring hazard tree abatement with an overall minimum risk rating of 8 for trees or tree parts up to 4 inch DBH, 9 for trees or tree parts greater than 4 inch and up to 20 inch DBH, or 10 for trees or tree parts greater than 20 inch DBH using ~~the most current version of the tree risk assessment methodology developed by the International Society of Arboriculture in Appendix 1 of the Urban Forestry Manual~~.

h. ~~“Hazard Tree Abatement”~~ - The process of reducing or eliminating a hazard to an overall risk rating of less than 8 for trees or tree parts up to 4 inch DBH, 9 for trees or tree parts greater than 4 inch and up to 20 inch DBH, or 10 for trees or tree parts greater than 20 inch DBH using ~~the most current version of the tree risk assessment methodology developed by the International Society of Arboriculture in Appendix 1 of the Urban Forestry Manual~~ through pruning, tree removal or other means in a manner that complies with all applicable rules and regulations.

...

[note: re-ordering of the section is required to place terms in alphabetical order]

**Code/Manual Section:** Tigard Development Code Section 18.790.030 (Urban Forestry

## Housekeeping Amendments to the Urban Forestry Code Revisions

Plan Requirements)

...

A. Urban Forestry Plan Requirements. An urban forestry plan shall:

1. Be coordinated and approved by a landscape architect (the project landscape architect) or a person ~~possessing dual certifications as~~ that is both a certified arborist and ~~certified~~ tree risk assessor (the project arborist);

...

**Code/Manual Section:** Urban Forestry Manual Section 1 (Hazard Tree Evaluation and Abatement Procedure)

...

### Part 1. Informal Reconciliation

...The claimant is encouraged to support their claim with documentation by a ~~certified~~ tree risk assessor...

...

### Part 2. Formal Reconciliation

... Within seven calendar days of receipt of all the required application materials, the city shall gain access to the respondent's property either voluntarily or with a warrant pursuant to Chapter 1.16 of the Tigard Municipal Code, conduct a tree risk assessment by a ~~certified~~ tree risk assessor using the ~~most current version of the~~ tree risk assessment methodology developed by the International Society of Arboriculture in Appendix 1 of the Urban Forestry Manual, determine if the definition of hazard tree in Tigard Municipal Code Chapter 8.02 has been met and, if necessary, prescribe hazard tree abatement as defined in Tigard Municipal Code Chapter 8.02...

...

**Code/Manual Section:** Urban Forestry Manual Section 10 (Urban Forestry Plan Standards)

...

### Part 3. Urban Forestry Plan - Supplemental Report Requirements:

...

C. The name, address, telephone number, email address, and ISA certified arborist number ~~and PNW-ISA certified tree risk assessor number~~ of the project arborist or stamp and registration number of the project landscape architect.

...

**Code/Manual Section:** Urban Forestry Manual Appendix 1 (Tree Risk Assessment Form)

...

Date of Evaluation:
<del>Certified</del> Tree Risk Assessor:
<del>Certificate</del> Number:
ISA Number:

## Housekeeping Amendments to the Urban Forestry Code Revisions

~~Certified~~ Tree Risk Assessor Signature: \_\_\_\_\_

...

**Code/Manual Section:** Urban Forestry Manual Appendix 9 (Urban Forestry Plan - Supplemental Report Example Template)

...

### General Information

...

ISA Certified Arborist No.:

~~ISA Certified Tree Risk Assessor No.:~~

...

**Note:** The corresponding commentary for the code amendments is amended as follows to provide a record of legislative intent:

18.120.030 Meaning of Specific Words and Terms

...

~~Certified~~ Tree risk assessor: This term clarifies that ~~certified~~ tree risk assessors are ~~certified~~ individuals deemed qualified by the International Society of Arboriculture (ISA) to conduct tree risk assessments. The Pacific Northwest Chapter of the International Society of Arboriculture (PNWISA) developed the current tree risk assessment methodology and certification program. Due to the success of the program, the ISA is in the process of adopting the program internationally. However, in the process of adopting the program for international users, the ISA expects to modify some of its aspects. One anticipated modification is replacement of the term "certified tree risk assessor" with the term "qualified tree risk assessor". The term and definition of "tree risk assessor" is flexible enough to respond to the anticipated changes.

...

Hazard tree: The term hazard tree has been made more specific to the current PNWISA International Society of Arboriculture Standards so that a more objective evaluation can be made as to what constitutes a hazard tree. A tiered system of rating hazards ensures the risks associated with small diameter tree parts are not understated while the risks associated with large diameter tree parts are not overstated.

The ISA is in the process of adopting the PNWISA program internationally. However, in the process of adopting the program for international users, the ISA expects to modify some of its aspects. The current PNWISA numerical based system is included in Appendix 1 and referenced by the definition of "hazard tree". If the numerical system is revised in the future, it may be replaced with the updated system.

...

[note: re-ordering of the commentary section is required to place terms in alphabetical order]

18.790.030 Urban Forestry Plan Requirements

## Housekeeping Amendments to the Urban Forestry Code Revisions

...

Urban forestry plans are required to be developed by a landscape architect or a person ~~certified as that is~~ both an certified arborist and tree risk assessor. Many arborists possess both qualifications ~~are dual certified~~, and adding the new requirement for tree risk assessment will help ensure safe conditions during and after construction.

...

18.790.070 Modification to the Urban Forestry Plan Component of an Approved Land Use Permit

...

Two levels of modifications to the urban forestry plan component of an approved land use permit will be allowed. Minor modification will be completed as a staff level, technical review. The following items would be considered minor modifications:

- Removal of hazard trees if there is sufficient documentation by the arborist or landscape architect ~~a certified tree risk assessor~~;

...

**Amendment 5:** Ensure consistency between the Site Design Standards (Section 18.620.030) and Landscaping and Screening (Section 18.620.070) in the Tigard Triangle Design Standards. **Applies to Ordinance No. 12-09**

**Code/Manual Section:** Tigard Development Code Section 18.620.030.A (Site Design Standards)

...

3. Front yard setback design - Landscaping, an arcade, or a hard-surfaced expansion of the pedestrian path must be provided between a structure and a public street or accessway. If a building abuts more than one street, the required improvements shall be provided on all streets. Landscaping shall be developed to the applicable standard in Section 18.620.030.A.5 ~~an L-1 standard on public streets and an L-2 standard on accessways~~. Hard-surfaced areas shall be constructed with scored concrete or modular paving materials. Benches and other street furnishings are encouraged. These areas shall contribute to the minimum landscaping requirement per Section 18.520.040B and Table 18.520.2.

...

5. Parking location and landscape design - Parking for buildings or phases adjacent to public street rights-of-way must be located to the side or rear of newly constructed buildings. If located on the side, parking is limited to 50% of the street frontage, and When abutting public streets, parking must be behind a landscaped area constructed to an L-1 Landscape Parking Lot Screen Standard. The minimum depth of the L-1 landscaped area is eight feet or is equal to the adjacent building setback, whichever is greater. All other site landscaping ~~Interior side and rear yards~~ shall be landscaped to an L-2 Landscape General Landscaping Standard, ~~except where a side yard abuts a public street, where it shall be landscaped to an L-1 Landscape Standard.~~ The L-1 and L-2 Standards are more fully described in Section 18.620.070.

...

## Housekeeping Amendments to the Urban Forestry Code Revisions

**Amendment 6:** Ensure consistency between the Site Design Standards (Section 18.630.050) and Landscaping and Screening (Section 18.630.090) in the Washington Square Regional Center Design Standards. **Applies to Ordinance No. 12-09**

**Code/Manual Section:** Tigard Development Code Section 18.630.050.A (Site Design Standards)

...

3. Front yard setback design.

a. Purpose. The front yard is the most conspicuous face of a building and requires special attention. Places for people and pedestrian movement helps create an active and safer street. Higher level of landscape anticipates a more immediate visual result.

b. Standard. For setbacks greater than 0 feet, landscaping, an arcade, or a hard-surfaced expansion of the pedestrian path must be provided between a structure and a public street or accessway. If a building abuts more than one street, the required improvements shall be provided on all streets. Landscaping shall be developed to the applicable standard in Section 18.630.050.A.5 ~~an L-1 standard on public streets and an L-2 standard on accessways~~. Hard-surfaced areas shall be constructed with scored concrete or modular paving materials. Benches and other street furnishings are encouraged. These areas shall contribute to the minimum landscaping requirement per Section 18.520.040.B and Table 18.520.2.

...

5. Parking location and landscape design.

a. Purpose. The emphasis on pedestrian access and a high quality streetscape experience requires that private parking lots that abut public streets should not be the predominant street feature. Where parking does abut public streets, high quality landscaping should screen parking from adjacent pedestrian areas.

b. Standard. Parking for buildings or phases adjacent to public street rights-of-way must be located to the side or rear of newly constructed buildings. When buildings or phases are adjacent to more than one public street, primary street(s) shall be identified by the City where this requirement applies. In general, streets with higher functional classification will be identified as primary streets unless specific design or access factors favor another street. If located on the side, parking is limited to 50% of the primary street frontage, and When abutting public streets, parking must be behind a landscaped area constructed to an L-1 landscape Parking Lot Screen standard. The minimum depth of the L-1 landscaped area is eight feet or is equal to the adjacent building setback, whichever is greater. All other site landscaping Interior side and rear yards shall be landscaped to an L-2 landscape General Landscaping standard, ~~except where a side yard abuts a public street, where it shall be landscaped to an L-1 landscape standard.~~ The L-1 and L-2 standards are more fully described in Section 18.630.090.

...

## Housekeeping Amendments to the Urban Forestry Code Revisions

**Amendment 7:** Ensure consistency between the Site Design Standards (Section 18.640.200.B) and Landscaping and Screening (Section 18.640.200.D) in the Durham Quarry (i.e. Bridgeport) Design Standards. **Applies to Ordinance No. 12-09**

**Code/Manual Section:** Tigard Development Code Section 18.640.200.B (Site Design Standards)

...

3. Front yard setback design. For setbacks greater than zero feet, landscaping, an arcade, or a hard-surfaced expansion of the sidewalk shall be provided between a structure and a public street or accessway. If a building abuts more than one street, the required improvements shall be provided on all streets. Landscaping shall be developed to the applicable standard in Section 18.640.200.B.5 ~~an L-1 standard on public streets and an L-2 standard on accessways~~. Hard-surfaced areas shall be constructed with scored concrete or modular paving materials. Benches and other street furnishings are required. These areas shall contribute to the minimum landscaping requirements.

...

5. Parking location and landscape design. Parking for buildings or phases adjacent to public street rights-of-way shall be located to the side or rear of newly constructed buildings. When buildings or phases are adjacent to more than one public street, primary street(s) shall be identified where this requirement applies. If located on the side, parking is limited to 50% of the street frontage, ~~and~~ When abutting public streets, parking must be behind a landscaped area constructed to an L-1 Landscape Parking Lot Screen Standard. The minimum depth of the L-1 landscaped area is eight feet or is equal to the adjacent building setback, whichever is greater. All other site landscaping Interior side and rear yards shall be landscaped to an L-2 Landscape General Landscaping Standard ~~except where a side yard abuts a public street, where it shall be landscaped to an L-1 Landscape Standard~~. See Section 18.640.200.D

....

**Amendment 8:** Correct a cross reference in Section 18.790.050.C.2 (Adjustments to Setbacks). **Applies to Ordinance No. 12-09**

**Code/Manual Section:** Tigard Development Code Section 18.790.050.C.2 (Adjustments to Setbacks)

...

2. Adjustments to Setbacks. The following setback reductions will be allowed for lots preserving existing trees using the criteria in subsection ~~b~~ a below.

....

## Housekeeping Amendments to the Urban Forestry Code Revisions

**Amendment 9:** Correct a cross reference in Section 18.790.050.C.3 (Adjustments to Sidewalks). **Applies to Ordinance No. 12-09**

**Code/Manual Section:** Tigard Development Code Section 18.790.050.C.3 (Adjustments to Sidewalks)

...

3. Adjustments to Sidewalks. ...If a preserved tree is to be utilized as a street tree, it must meet the criteria found in the Landscaping and Screening Section 18.745.040.A.56.

....

## Housekeeping Amendments to the Urban Forestry Code Revisions

**Amendment 10:** During the development of the tree grove preservation incentives, the initial proposal was to require permanent preservation and management of tree groves if applicants utilized any one of the preservation incentives (density transfer, increased building height, setback reduction, etc.). While the Citizen Advisory Committee agreed that permanent preservation was appropriate, they advised staff to strike the management requirement. Their rationale was that the management requirement could be seen as onerous by applicants and act as a disincentive to preservation. Staff struck the management requirement for most of the preservation incentives, but inadvertently failed to strike the requirement for two of the incentives. The purpose of the following amendments is to strike the remaining management requirements consistent with the Citizen Advisory Committee recommendation. **Applies to Ordinance No. 12-09**

**Code/Manual Section:** Tigard Development Code Section 18.790.050.D.3 (Adjustments to Commercial Development Standards)

...

3. Adjustments to Commercial Development Standards. Adjustments to Commercial Development Standards (Table 18.520.2) of up to 50 percent reduction in minimum setbacks and up to 20 feet additional building height are permitted provided:

....

g. The significant tree grove is protected through an instrument or action subject to approval by the director that demonstrates it will be permanently preserved ~~and managed~~ such as:

...

**Code/Manual Section:** Tigard Development Code Section 18.790.050.D.6 (Adjustment to Street and Utility Standards)

...

6. Adjustment to Street and Utility Standards. If requested, the director shall use his or her discretion when considering adjustments to Chapter 18.810, Street and Utility Improvement Standards and Section 18.745.040, Street Trees provided:

...

b. The significant tree grove is protected through an instrument or action subject to approval by the director that demonstrates it will be permanently preserved ~~and managed~~ such as:

...

## Housekeeping Amendments to the Urban Forestry Code Revisions

**Amendment 11:** One of the goals when revising the Urban Forestry Standards for Development was to clarify when an urban forestry plan for development is "in effect". The purpose of the clarification is to avoid the current situation where future homeowners must amend their land use approvals to remove trees that were required with development. Initially, the term "active" was used but was later replaced with "in effect" since that term is more commonly used in the land use process. The term "active" was inadvertently left in Section 18.790.060 and the purpose of this amendment is to replace it with "in effect".

**Applies to Ordinance No. 12-09**

**Code/Manual Section:** Tigard Development Code Section 18.790.060 (Urban Forestry Plan Implementation)

...

B. Inspections. Implementation of the urban forestry plan shall be inspected, documented and reported by the project arborist or landscape architect whenever an urban forestry plan is ~~active~~ in effect...

....

**Amendment 12:** Correct spelling error of a tree's common name in the Urban Forestry Manual. **Volume IV – Urban Forestry Manual – Not codified.**

**Code/Manual Section:** Urban Forestry Manual Appendix 2 (Street Tree List - Small Stature Trees)

...

Gloryblower...

....

## Housekeeping Amendments to the Urban Forestry Code Revisions

**Amendment 13:** Generalize cross references from the code to the Urban Forestry Manual. If the administrative rules are modified during the upcoming administrative rule adoption process or any other future date, this will make the process more efficient by avoiding the necessity of making changes to corresponding cross references in the code. **Applies to Ordinance No. 12-09 and 12-11. Ordinance No. 12-09 affects Title 18 also known as the Community Development Code while Ordinance No. 12-11 covers affected chapters in the Tigard Municipal Code consisting of active and reserved Titles 1-17.**

**Code/Manual Section:** Tigard Municipal Code Section 8.02.050.I (Hazard tree related definitions)

...

1. “Claimant” - Any person that believes in good faith there is a hazard tree on a property, can demonstrate that their life, limb or property has the potential to be impacted by said tree and seeks resolution through the Hazard Tree Evaluation and Abatement Procedure specified in ~~Section 1~~ of the Urban Forestry Manual.

...

5. “Respondent” - Any person that receives notice from a claimant seeking resolution through the Hazard Tree Evaluation and Abatement Procedure specified in ~~Section 1~~ of the Urban Forestry Manual.

...

**Code/Manual Section:** Tigard Municipal Code Section 8.06.030 (Hazard Tree Evaluation and Abatement Procedure)

...

A. Any claimant may seek resolution through the Hazard Tree Evaluation and Abatement Procedure specified in ~~Section 1~~ of the Urban Forestry Manual.

B. Once initiated by the claimant, both the claimant and respondent have an obligation to complete the Hazard Tree Evaluation and Abatement Procedure specified in ~~Section 1~~ of the Urban Forestry Manual. Failure of the claimant or respondent to perform their obligations specified in the Hazard Tree Evaluation and Abatement Procedure constitutes a violation of this code by the negligent party.

...

**Code/Manual Section:** Tigard Municipal Code Section 8.06.040 (Emergency Abatement Procedure)

...

If the city has reason to believe a hazard tree poses an immediate danger and there is not enough time to complete the Hazard Tree Evaluation and Abatement Procedure in ~~Section 1~~ of the Urban Forestry Manual, the city may choose to take immediate remedial action as defined in Section 1.16.150 of the Tigard Municipal Code.

...

**Code/Manual Section:** Tigard Municipal Code Section 8.08.030 (Street Tree Planting)

...

No person shall plant a street tree without prior written approval obtained through the City

## Housekeeping Amendments to the Urban Forestry Code Revisions

Manager Decision Making Procedures detailed in Section 8.04.020 using the approval criteria in ~~Section 2, part 1 of~~ the Street Tree Planting Standards in the Urban Forestry Manual.

...

**Code/Manual Section:** Tigard Municipal Code Section 8.08.040 (Street Tree Maintenance)

...

A. All street trees shall be maintained in a manner consistent with the ~~s~~Street ~~t~~Tree ~~m~~Maintenance ~~s~~Standards specified in ~~Section 2, part 2 of~~ the Urban Forestry Manual.

...

**Code/Manual Section:** Tigard Municipal Code Section 8.08.050 (Street Tree Removal)

...

A. The City Manager Decision Making Procedures detailed in Section 8.04.020 using the approval criteria in ~~Section 3, part 1 of~~ the Street Tree Removal Standards in the Urban Forestry Manual; or

...

**Code/Manual Section:** Tigard Municipal Code Section 8.08.060 (Median Tree Planting)

...

No person shall plant a median tree without prior written approval obtained through the City Manager Decision Making Procedures detailed in Section 8.04.020 using the approval criteria in ~~Section 4, part 1 of~~ the Median Tree Planting Standards in the Urban Forestry Manual.

...

**Code/Manual Section:** Tigard Municipal Code Section 8.08.070 (Median Tree Maintenance)

...

A. All median trees shall be maintained in a manner consistent with the ~~m~~Median ~~t~~Tree ~~m~~Maintenance ~~s~~Standards specified in ~~Section 4, part 2 of~~ the Urban Forestry Manual.

...

**Code/Manual Section:** Tigard Municipal Code Section 8.08.080 (Median Tree Removal)

...

A. The City Manager Decision Making Procedures detailed in Section 8.04.020 using the approval criteria in ~~Section 5, part 1 of~~ the Median Tree Removal Standards in the Urban Forestry Manual; or

...

**Code/Manual Section:** Tigard Municipal Code Section 8.10.040 (Sensitive Lands Tree Removal)

...

A. The City Manager Decision Making Procedures detailed in Section 8.04.020 using the approval criteria in ~~Section 6, part 1 of~~ the Sensitive Lands Tree Removal Standards in the Urban Forestry Manual; or

...

**Code/Manual Section:** Tigard Municipal Code Section 8.12.040 (Removal of Trees That Were Required With Development)

## Housekeeping Amendments to the Urban Forestry Code Revisions

...

A. The City Manager Decision Making Procedures detailed in Section 8.04.020 using the approval criteria in ~~Section 7, part 1 of~~ the Development Tree Removal Standards in the Urban Forestry Manual; or

...

**Code/Manual Section:** Tigard Municipal Code Section 8.14.040 (Removal of Trees that were Planted Using the Urban Forestry Fund)

...

A. The City Manager Decision Making Procedures detailed in Section 8.04.020 using the approval criteria in ~~Section 8, part 1 of~~ the Urban Forestry Fund Tree Removal Standards in the Urban Forestry Manual; or

...

**Code/Manual Section:** Tigard Municipal Code Section 8.16.070 (Removal of Heritage Tree Designation)

...

A. The City Manager Decision Making Procedures detailed in Section 8.04.020 using the approval criteria in ~~Section 9, part 1 of~~ the Heritage Tree Designation Removal Standards in the Urban Forestry Manual; or

...

**Code/Manual Section:** Tigard Development Code Section 18.745.040.A (Street Tree Standards)

...

1. Street trees shall be required as part of the approval process for Conditional Use (Type III), Downtown Design Review (Type II and III), Minor Land Partition (Type II), Planned Development (Type III), Site Development Review (Type II) and Subdivision (Type II and III) permits.
2. The minimum number of required street trees shall be determined by dividing the linear amount of street frontage within or adjacent to the site (in feet) by 40 feet. When the result is a fraction, the minimum number of required street trees shall be determined by rounding to the nearest whole number.
3. Street trees required by this section shall be planted according to the Street Tree Planting sStandards in ~~Section 2 of~~ the Urban Forestry Manual.
4. Street trees required by this section shall be provided adequate soil volumes according to the Street Tree Soil Volume sStandards in ~~Section 12 of~~ the Urban Forestry Manual.
5. Street trees required by this section shall be planted within the right of way whenever practicable according to the Street Tree Planting sStandards in ~~Section 2 of~~ the Urban Forestry Manual. Street trees may be planted no more than 6 feet from the right of

## Housekeeping Amendments to the Urban Forestry Code Revisions

way according to the Street Tree Planting sStandards in ~~Section 2~~ of the Urban Forestry Manual when planting within the right of way is not practicable.

6. An existing tree may be used to meet the street tree standards provided that:
  - a. The largest percentage of the tree trunk immediately above the trunk flare or root buttresses is either within the subject site or within the right of way immediately adjacent to the subject site;
  - b. The tree would be permitted as a street tree according to the Street Tree Planting and Soil Volume sStandards in ~~Sections 2 and 12~~ of the Urban Forestry Manual if it were newly planted; and
  - c. The tree is shown as preserved in the Tree Preservation and Removal site plan (per 18.790.030.A.2), Tree Canopy Cover site plan (per 18.790.030.A.3) and sSupplemental rReport (per 18.790.030.A.4) of a concurrent urban forestry plan and is eligible for credit towards the effective tree canopy cover of the site.

7. In cases where it is not practicable to provide the minimum number of required street trees, the Director may allow the applicant to remit payment into the Urban Forestry Fund for tree planting and early establishment in an amount equivalent to the City's cost to plant and maintain a street tree for three (3) years (per the Street Tree Planting sStandards in ~~Section 2~~ of the Urban Forestry Manual) for each tree below the minimum required.

...

**Code/Manual Section:** Tigard Development Code Section 18.745.050.E.1.a (Screening of parking and loading areas is required)

...

(4) All parking areas, including parking spaces and aisles, shall be required to achieve at least 30% tree canopy cover at maturity directly above the parking area in accordance with the Parking Lot Tree Canopy Standards in ~~Section 13~~ of the Urban Forestry Manual.

...

**Code/Manual Section:** Tigard Development Code Section 18.790.030 (Urban Forestry Plan Requirements)

...

A. Urban Forestry Plan Requirements. An urban forestry plan shall:

1. Be coordinated and approved by a landscape architect (the project landscape architect) or a person possessing dual certifications as a certified arborist and certified tree risk assessor (the project arborist);
2. Meet the rTree pPreservation and rRemoval sSite pPlan standards in ~~Section 10, part 4~~ of the Urban Forestry Manual;

## Housekeeping Amendments to the Urban Forestry Code Revisions

3. Meet the ~~Tree e~~Canopy ~~s~~Site ~~p~~Plan standards in ~~Section 10, part 2~~ of the Urban Forestry Manual; and

4. Meet the ~~s~~Supplemental ~~r~~Report standards in ~~Section 10, part 3~~ of the Urban Forestry Manual.

B. Tree Canopy Fee. If the ~~s~~Supplemental ~~r~~Report demonstrates that the applicable standard percent effective tree canopy cover in ~~Section 10, part 3, item N~~ will not be provided through any combination of tree planting or preservation for the overall development site (excluding streets) or that the 15 percent effective tree canopy cover will not be provided through any combination of tree planting or preservation for any individual lot or tract in the R-1, R-2, R-3.5, R-4.5 and R-7 districts (when the overall development site meets or exceeds the standard percent effective tree canopy cover), then the applicant shall provide the city a tree canopy fee according to the methodology outlined in the Tree Canopy Fee Calculation Requirements in Section 10, part 4 of the Urban Forestry Manual.

...

**Code/Manual Section:** Tigard Development Code Section 18.790.040 (Discretionary Urban Forestry Plan Review Option)

...

A. General Provisions. In lieu of providing payment of a tree canopy fee when less than the standard effective tree canopy cover ~~required by Section 10, part 3 of the Urban Forestry Manual~~ will be provided, an applicant may apply for a discretionary urban forestry plan review. The discretionary urban forestry plan review cannot be used to modify an already approved urban forestry plan, any tree preservation or tree planting requirements established as part of another land use review approval, or any tree preservation or tree planting requirements required by another chapter in this title.

...

**Code/Manual Section:** Tigard Development Code Section 18.790.050.D.1 (Reduction of Minimum Density)

...

- b. The project arborist or landscape architect certifies the preservation is such that the connectivity and viability of the remaining significant tree grove is maximized while balancing the Significant Tree Grove Preservation eConsiderations in ~~Section 10, part 5~~ of the Urban Forestry Manual; and

...

**Code/Manual Section:** Tigard Development Code Section 18.790.050.D.2.a (Density may be transferred provided that:)

...

- (ii) The project arborist or landscape architect certifies the preservation is such that the connectivity and viability of the remaining significant tree grove is maximized while balancing the Significant Tree Grove

## Housekeeping Amendments to the Urban Forestry Code Revisions

Preservation eConsiderations in ~~Section 10, part 5~~ of the Urban Forestry Manual;

...

**Code/Manual Section:** Tigard Development Code Section 18.790.050.D.3 (Adjustments to Commercial Development Standards)

...

- b. The project arborist or landscape architect certifies the preservation is such that the connectivity and viability of the remaining significant tree grove is maximized while balancing the Significant Tree Grove Preservation eConsiderations in ~~Section 10, part 5~~ of the Urban Forestry Manual;

...

**Code/Manual Section:** Tigard Development Code Section 18.790.050.D.4 (Adjustments to Industrial Development Standards)

...

- b. The project arborist or landscape architect certifies the preservation is such that the connectivity and viability of the remaining significant tree grove is maximized while balancing the Significant Tree Grove Preservation eConsiderations in ~~Section 10, part 5~~ of the Urban Forestry Manual;

...

**Code/Manual Section:** Tigard Development Code Section 18.790.050.D.5 (Adjustment to Minimum Effective Tree Canopy Cover Requirement)

...

- b. The project arborist or landscape architect certifies the preservation is such that the connectivity and viability of the remaining significant tree grove is maximized while balancing the Significant Tree Grove Preservation eConsiderations in ~~Section 10, part 5~~ of the Urban Forestry Manual;

...

**Code/Manual Section:** Tigard Development Code Section 18.790.050.D.6 (Adjustment to Street and Utility Standards)

...

- a. The adjustments will facilitate preservation and help to maximize the connectivity and viability of a significant tree grove while balancing the Significant Tree Grove Preservation eConsiderations in ~~Section 10, part 5~~ of the Urban Forestry Manual;

...

**Code/Manual Section:** Tigard Development Code Section 18.790.060 (Urban Forestry Plan Implementation)

...

B. Inspections. Implementation of the urban forestry plan shall be inspected, documented and reported by the project arborist or landscape architect whenever an urban forestry plan is active. In addition, no person may refuse entry or access to the director for the purpose of monitoring the urban forestry plan on any site with an effective urban forestry plan. The ~~i~~Inspection ~~r~~Requirements in ~~Section 11, part 1~~ of the Urban Forestry

## Housekeeping Amendments to the Urban Forestry Code Revisions

Manual shall apply to sites with an effective urban forestry plan.

C. **Tree Establishment.** The establishment of all trees shown to be planted in the ~~€Tree e~~Canopy ~~sSite p~~Plan (per 18.790.030.A.3) and ~~sSupplemental r~~Report (per 18.790.030.A.4) of a previously approved urban forestry plan shall be guaranteed and required according to the ~~€Tree e~~Establishment ~~r~~Requirements in ~~Section 11, part 2~~ of the Urban Forestry Manual.

D. **Urban Forest Inventory.** Spatial and species specific data shall be collected according to the ~~uUrban f~~Forestry ~~i~~Inventory ~~r~~Requirements in ~~Section 11, part 3~~ of the Urban Forestry Manual for each open grown tree and area of stand grown trees in the ~~€Tree e~~Canopy ~~sSite p~~Plan (per 18.790.030.A.3) and ~~sSupplemental r~~Report (per 18.790.030.A.4) of a previously approved urban forestry plan.

...

**Code/Manual Section:** Tigard Development Code Section 18.790.070.B (Exemptions)

...

B. **Exemptions.** The following activities shall be exempt from the Type I Modification to the Urban Forestry Plan Component of an Approved Land Use Permit process:

1. Removal of any tree shown as preserved in the ~~€Tree e~~Canopy ~~sSite p~~Plan (per 18.790.030.A.3) and ~~sSupplemental r~~Report (per 18.790.030.A.4) of a previously approved urban forestry plan provided:

a. The project arborist or landscape architect provides a written report prior to removal attesting that either the condition rating (~~per Section 10, part 3, item D.7 of the Urban Forestry Manual~~) or suitability of preservation rating (~~per Section 10, part 3, item D.8 of the Supplemental Report Requirements in the Urban Forestry Manual~~) of the tree has changed to a rating of less than 2; and

b. A revised ~~€Tree e~~Canopy ~~sSite p~~Plan and ~~sSupplemental r~~Report are submitted for review and approval prior to removal that reflect the proposed changes to the previously approved urban forestry plan. The revised ~~€Tree e~~Canopy ~~sSite p~~Plan and ~~sSupplemental r~~Report shall demonstrate how the effective tree canopy cover requirements ~~in Section 10, part 3 of the Urban Forestry Manual~~ will be provided by tree planting, preservation and/or payment of a tree canopy fee in lieu of planting or preservation.

...