

### 3.11 Woodland and Tree Preservation

(1) Purpose.

The preservation and protection of trees and woodlands can significantly add to the quality of the physical environment of the community. The City recognizes the value of trees and woodlands for improving air quality, scenic beauty, protection against wind and water erosion, shade, natural insulation for energy conservation, wildlife habitat, and protecting the integrity of the natural environment.

(2) Applicability.

(A) A Woodland Preservation Plan shall be required for:

1. Any Preliminary Plat when significant trees or significant woodlands exist in the proposed construction zone.
2. Any Minor Subdivision when significant trees or significant woodlands exist in the proposed construction zone.
3. Any Landscape Plan as required by Section 3.12 of this Chapter when significant trees or significant woodlands exist in the proposed construction zone.

(B) A Woodland Preservation Plan shall not be required for:

1. Removal of Diseased Trees. All diseased, hazardous, dead and dying trees may be removed.
2. Removal of invasive tree species. Invasive tree species are encouraged to be removed and chemically treated with appropriate herbicides and application methods to discourage re-sprouting and minimize ecological impacts.

(3) Woodland Preservation Plan Requirements.

(A) All Woodland Preservation Plans shall be certified by a forester, ecologist, landscape architect or other qualified professional retained by the applicant.

(B) The Woodland Preservation Plan shall include the following information:

1. Boundary lines of the property with accurate dimensions as established by survey.
2. Location of existing and proposed buildings, structures, parking lots, roads, impervious surfaces and other improvements.
3. Proposed grading plan with two-foot contour intervals and limits of the construction zone.
4. Location of all significant woodlands, area in square feet and acres, and description of natural community type or predominant canopy tree species, identified in both graphic and tabular form.

5. Location of all existing significant trees, size by caliper inch, scientific name, and common name for all areas of the site identified in both graphic and tabular form.
6. Location of significant trees and significant woodlands proposed to be removed within the construction zone, identified in both graphic and tabular form.
7. Measures to protect significant trees and significant woodlands, as required by Section 3.11(7).
8. Size, scientific name, common name, and location of all replacement trees proposed to be planted on the property to replace significant trees and/or significant woodlands proposed to be removed.
9. The name(s), telephone number(s), and address(es) of Applicants, property owners, developers, and/or builders.
10. Signature and qualifications of the person preparing the plan.

(4) Significant Tree Replacement

All significant trees removed shall be replaced by the applicant as determined by the tree replacement schedule. Option A, B or C, or some combination may be proposed by the applicant. The list of coniferous, primary and secondary deciduous tree species is included in Section 3.12 (4)(G).

Tree Replacement Schedule. Size of Tree Damaged or Destroyed	Number of Replacement Trees		
	A	B	C
	Deciduous trees at least 4 caliper inches; Coniferous trees at least 12 feet in height	Deciduous trees at least 2.5 caliper inches; Coniferous trees at least 6 feet in height	Deciduous trees at least 1.5 caliper inches; Coniferous trees at least 4 feet in height
Coniferous, 12 to 24 feet high	1	2	4
Coniferous, greater than 24 feet in height	2	4	8
Primary Deciduous, 6 to 20 inches diameter	1	2	4
Primary Deciduous, greater than 20 inches in diameter	2	4	8
Secondary Deciduous, 20 to 30 inches diameter	1	2	4
Secondary Deciduous, greater than 30 inches diameter	2	4	8

- (5) **Tree Replacement Fund.** In the event that sufficient land area on the subdivision or commercial lot is not available to plant the replacement trees, as determined by the City, the Applicant shall provide to the City payment for the planting of the required trees elsewhere at a rate of \$100 per caliper inch.
- (6) **Significant Woodland Replacement.**

All significant woodlands removed shall be replaced by the applicant. The number of replacement trees shall be determined by either of the following methods, whichever yields the greater number of replacement trees.

- (A) Replacement of significant trees within the significant woodland that are damaged or destroyed, per the Tree Replacement Schedule.
- (B) Replacement for every 125 square feet of significant woodland damaged or destroyed, or increment thereof, with:
1. 1 deciduous tree of at least 4 caliper inches or 1 coniferous tree at least 12 feet tall; or
  2. 2 deciduous trees of at least 2.5 caliper inches or 2 coniferous trees at least 6 feet tall; or
  3. 4 deciduous trees of at least 1.5 caliper inches or 4 coniferous trees at least 4 feet tall.
- (C) **Species Requirement.**
1. The City may require that the replacement species is identical to the removed species.
  2. Where 10 or more replacement trees are required, not more than 50% of the replacement trees shall be of the same species of tree without the approval of the City.
  3. Trees planted to replace significant woodland shall be arranged in stands to provide a habitat similar to the damaged or destroyed habitat. An appropriate native groundcover seed mix and/or understory planting approved by the City's ecologist shall be planted along with the replacement trees.
- (D) **Warranty Requirement.**

Any replacement tree which is not alive or healthy, as determined by the City, or which subsequently dies due to construction activity within 2 years of the tree's planting, shall be removed by the applicant and replaced with a new healthy tree meeting the same minimum size requirements within 8 months of removal.

- (E) **Landscaping Requirements.**

The planting of trees for mitigation shall be in addition to any other landscape requirements of the City.

(F) Shoreland Overlay District.

Trees and woodlands within the Shoreland Overlay District are subject to the requirements stated in Chapter Five of this Development Code, in addition to the regulations of this Section.

(7) Required Protective Measures.

The following measures shall be utilized to protect significant trees and significant woodlands during any type of grading or construction:

- (A) Installation of snow fencing or polyethylene laminate safety netting placed at the drip line or at the perimeter of the critical root zone (CRZ), whichever is greater, of significant trees and significant woodlands to be preserved. No grade change, construction activity, or storage of materials shall occur within this fenced area.
- (B) Identification of any oak trees requiring pruning between April 15 and July 1 to avoid the spread of Oak Wilt. Any oak trees so pruned shall be required to have any cut areas sealed immediately with an appropriate non-toxic tree wound sealant. The sealant shall be kept on-site for the duration of pruning, grading, and construction activities.
- (C) Prevention of change in soil chemistry due to concrete washout and leakage or spillage of toxic materials, such as fuels or paints.

(8) Recommended Protective Measures

The following tree protection measures are suggested to protect significant trees and/or significant woodland that are intended to be preserved:

- (A) Installation of retaining walls or tree wells to preserve trees.
- (B) Placement of utilities in common trenches outside of the drip line of significant trees, or use of tunneled installation.
- (C) Use of tree root aeration, fertilization, and/or irrigation systems.
- (D) Transplanting of significant trees into a protected area for later moving into permanent sites within the construction area.
- (E) Therapeutic pruning.

(9) Review Process.

The Woodland Preservation Plan shall be reviewed by the City to assess the best possible layout to preserve significant trees and significant woodland, and to enhance the efforts to minimize damage to significant trees and woodland. The applicant shall meet with the Zoning Administrator prior to submission of the development application to determine the most feasible and practical placement of buildings, parking, driveways, streets, storage, and other physical features in order that the fewest significant trees and significant woodlands are destroyed or damaged.

(10) Compliance with the Plan.

(A) Implementation of the Plan.

The applicant shall implement the Woodland Preservation Plan prior to and during any construction. The tree protection measures shall remain in place until all grading and construction activity is terminated, or until a request is made to and approved by the City. No significant trees or significant woodland shall be removed until a Woodland Preservation Plan is approved.

(B) Performance Guarantee.

The applicant shall provide the required performance guarantee following preliminary approval of the Woodland Preservation Plan and prior to any construction and/or grading.

The amount of the performance guarantee to be submitted, specific to the Woodland preservation requirements, shall be calculated as follows:

1. An amount to guarantee preservation of all trees identified by the approved Woodland Preservation Plan to be preserved within the Construction Zone shall be deposited with the City.

The amount shall be calculated by multiplying the total caliper inches of significant trees to be preserved by the rate of payment of \$100.00 per caliper inch and the total square feet of significant woodland to be preserved at the rate of \$1.50 per square foot.

2. Following written request by the applicant for acceptance, the performance guarantee will be released upon verification by the City that the Woodland Preservation Plan was followed and that the tree replacement schedule was complied with where necessary; in no event shall the performance guarantee be released earlier than completion of the warranty requirements.