
SECTION 9: TREE PRESERVATION

9-1 PURPOSE

The City finds it is in the best interest of the public to protect, preserve, and enhance the natural environment and to encourage a resourceful and prudent approach to the development and alteration of wooded areas. In the interest of achieving these objectives, the City has established the tree preservation regulations herein.

9-2 SCOPE OF APPLICATION

A tree preservation plan shall be submitted to and approved by the City and implemented in accordance with all subdivisions of five (5) or more lots. If no significant trees or woodlands are present on the site, a tree preservation plan will not be required.

9-3 TREE PRESERVATION FOR SUBDIVISIONS

A. Required Actions

Applicants shall:

1. Incorporate the preservation of trees into the overall design of the plat.
2. Prepare a tree preservation plan superimposed on the grading plan, as described below.
3. Ensure the tree preservation plan is followed during the plan development (mass grading).
4. Provide a financial guarantee as part of the development agreement to guarantee the preparation and implementation of the preservation plan and the replacement of all significant trees which were to be saved but were actually destroyed or damaged. The financial security in an amount determined by the City Council and adopted by ordinance shall be provided for:
 - a. each mass graded lot with at least one (1) significant tree to be saved, and
 - b. each custom graded lot with at least one (1) significant tree on the lot, and

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- c. each outlot with at least one (1) significant tree.
5. Install snow fencing or polyethylene laminar safety netting at the drip line or critical root zones of trees to be saved.
 6. Install signage at all tree protection areas that instructs workers to stay out.
 7. Install erosion control measures.
 8. Keep tree protection measures in place and in good condition until all grading and construction activity is terminated.
 9. Prevent change in soil chemistry due to concrete wash out and leakage or spillage of toxic materials such as fuels or paints.

B. Prohibited Actions

1. No soil disturbance shall occur within the subdivision until the tree preservation plan is approved, financial securities have been submitted and development agreement approved, and tree protection measures are in place on site.
2. Construction staging areas and areas for the storage of equipment and stockpiling of materials shall not be within tree protection areas.
3. Fill shall not be placed against tree trunks, under the drip line, or in critical root zones of trees to be saved.
4. Pruning of oak trees shall not take place from April 1st through July 15th. If wounding of oak trees occurs, a non-toxic tree wound dressing must be applied immediately. Excavators shall have a non-toxic tree wound dressing with them on the development site.

C. Tree Preservation Plan

The tree preservation plan shall be submitted by a forester or landscape architect retained by the applicant and shall consist of the following items:

1. Tree inventory that includes the size, species, tag numbers, and locations of all significant trees, specimen trees, and significant tree stands on the property being platted.

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2. Mass graded areas and proposed grades. Changes in grades should be well planned with the objective of preserving significant trees.
 3. Custom graded lots.
 4. All significant trees proposed to be saved and significant trees proposed to be removed in soil disturbance areas
 5. The plan shall designate tree save zones for:
 - a. areas not in soil disturbance areas or within 50 feet of such areas, and
 - b. all specimen trees to be saved, and
 - c. all significant tree stands to be saved.
 6. Measures proposed to protect significant trees including, but not limited to:
 - a. Tree removal procedures including directional felling away from existing trees to be saved and trenching to separate root systems prior to bulldozing trees or stumps.
 - b. Installation of signage at all tree protection areas that instructs workers to stay out.
 - c. Installation of snow fencing or polyethylene laminar safety netting at the drip line or critical root zones of trees to be saved.
 - d. Installation of erosion control measures.
 - e. Designation of a construction staging area along with a designated area for the storage of equipment and stockpiling of materials that is not within tree save zones.
 - f. Construction access locations.
 - g. Overlay of the subdivision utility plan on the tree preservation plan to strategically lay out utility locations and trenches in a manner that protects trees to be saved. Individual utility stubs to home sites shall be reviewed for compliance with tree preservation plans.

D. Certification of Plan Implementation

After mass grading has been completed and streets and utilities installed, the subdivider's forester or landscape architect shall:

1. Certify in writing to the City the status of all trees indicated as trees to be saved in the approved plan.
2. Certify in writing to the City whether tree protection measures were installed.
3. Certify the status of any remove-designated trees that were saved.

E. Damaged Trees

If a significant tree indicated to be saved on the tree preservation plan is destroyed or damaged, the applicant shall be replaced in accordance with the tree replacement requirements of Section 9-5.

F. Release of Financial Security

The financial security will be released upon:

1. Certification in writing by the forester or landscape architect indicating that the tree protection measures were installed on mass graded lots and tree replacement is completed, if necessary. These must be confirmed by the City.
2. The home builders having posted a security for the custom graded lots.

9-4 CUSTOM GRADED LOTS/HOME BUILDERS REQUIREMENTS

A. Required Actions

Home builders shall:

1. Home builders shall furnish the following items for tree preservation at the time the building permit application is submitted for all lots with at least one (1) significant tree identified for preservation in a subdivision tree preservation plan.

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- a. A tree preservation plan with the elements described in Section 9-4-3. The individual lot tree preservation plan shall be certified by a forester or landscape architect and signed by the homebuilder or homeowner.
 - b. A financial security in an amount determined by the City Council, and adopted by ordinance, shall be required for tree protection requirements for each lot or outlot with at least one (1) significant tree to be saved and each lot that is a custom graded lot.
2. Builders shall be liable for their subcontractors that destroy or damage significant trees that were indicated to be saved on the individual lot tree preservation plan.
 3. Tree protection measures shall remain in place until all grading and construction ability is terminated.
 4. Site grading for individual lots shall comply with the final grading plan of the plat and shall not result in the flooding of tree preservation areas.

B. Prohibited Actions

1. No soil disturbance shall occur within the lot until the tree preservation plan is approved and tree protection measures are in place.
2. Pruning of oak trees shall not take place from April 15 through July 1. If wounding of oak trees occurs, a non-toxic tree wound dressing must be applied immediately. Excavators shall have a non-toxic tree wound dressing with them on the development site.
3. Builders, contractors, or others working on site shall not fill, stockpile materials, or store equipment or vehicles against the trunk of the tree, in the critical root zone, or under the drip line of a tree to be saved.

C. Tree Preservation Plan

1. On mass graded lots with at least one (1) significant tree to be saved, home builders are required to follow the tree preservation plan for the plat.
2. For each custom graded lot with at least one (1) significant tree, the home builder shall submit an individual lot tree preservation plan. The plan shall be consistent with the original tree preservation plan for the plat. The homeowner and/or home builder, forester or landscape architect shall meet with City staff prior to the development of the individual lot tree preservation plan to determine the

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- placement of the home where the fewest significant trees would be destroyed or damaged. The home builder shall be responsible for ensuring the tree preservation plan is followed during building construction.
3. The tree preservation plan shall be prepared and incorporated on the certificate of survey for a building permit and shall include the following:
- a. Size, species, and location of all significant trees, specimen trees, and significant tree stands including significant trees with drip lines or critical root zones extending over the lot line of an adjoining lot.
 - b. Identification of all significant trees proposed to be saved and significant trees proposed to be removed, including significant trees with drip lines or critical root zones extending over the lot line of an adjoining lot.
 - c. Location of snow fencing or polyethylene laminar safety netting placed at the drip line or critical root zones.
 - d. Installation of signage at all tree protection areas that instructs workers to stay out.
 - e. Erosion control methods.
 - f. Measures proposed to protect significant trees including but not limited to:
 - (1) Tree removal procedures including directional felling away from existing trees to be saved and trenching to separate root system prior to bulldozing trees or stumps.
 - (2) Coordination of utility planning with tree preservation plan to strategically extend utility connections from the street to the house in a manner that protects trees intended to be saved.
 - (3) Measures for preventing changes in soil chemistry due to concrete wash out and leakage or spillage of toxic materials such as fuels or paints.
 - g. Creation of a temporary access road when temporary site access through a significant tree stand or a critical root zone of a significant tree to be saved is necessary that meets the following standards:

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- (1) The temporary access road shall be routed in a manner that is least disruptive to the significant tree stand per the approval of the Zoning Administrator.
 - (2) Temporary access roads shall not exceed twenty-five (25) feet in width and shall be delineated by snow fencing or safety fencing.
 - (3) An eight (8) inch deep cover of wood chip mulch shall be placed over the temporary access road to cushion the critical root zones from compaction.
 10. The Zoning Administrator shall monitor the tree protection measures at the time of routing inspections.
 11. If tree replacement is required on the individual lot because the builder destroyed or damaged a tree which was to be saved, the forester or landscape architect in conjunction with the property owner shall determine where the replacement trees shall be installed. Tree replacement shall be consistent with Section 9-5 of this Ordinance.
 12. Prior to the issuance of a certificate of occupancy and release of tree preservation security, the forester or landscape architect shall certify to the City in writing the final disposition of saved trees on the lot and that all the tree protection measures identified on the tree preservation plan were installed from the start of construction to the end of construction and tree replacement is completed, if necessary.

9-5 TREE REPLACEMENT

- A. Subdividers and/or home builders shall be required to replace significant trees which were indicated on the tree preservation plan to be saved but ultimately were destroyed or damaged. The subdivider and home builder shall be required to replace each significant tree destroyed or damaged with two (2) replacement trees.
- B. Replacement trees shall consist of nursery stock and be no less than the following sizes:
 1. Deciduous Trees: No less than two and one-half (2.5) inches in diameter.
 2. Coniferous Trees: No less than six (6) feet high.

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- C. Replacement trees shall be species similar to the trees which were destroyed or damaged and can include those species shown on the following table:

1. Deciduous Trees:

Maple	Oak
Linden	Ash
Honeylocust	Birch
Hackberry	

2. Coniferous Trees:

Fir	Red Pine
White spruce	Eastern red cedar
Black Hills spruce	White pine
Austrian pine	Northern white cedar

- D. Unacceptable Trees: The following trees are unacceptable because of structural instability, susceptibility to disease, or because they are invasive species.

1. Deciduous :

Silver maple	Siberian Elm
Amur maple	Cottonwood (seed producing)

2. Coniferous:

Colorado spruce

- E. Replacement trees shall not be placed on easements or street rights-of-way. The Zoning Administrator shall determine the locations of tree replacement for subdividers' tree plans.
- F. Any replacement tree which is not alive or healthy, as determined by the Zoning Administrator, or which subsequently dies due to construction activity within one (1) year after the date of project closure, shall be removed by the applicant and replaced with a new healthy tree meeting the same minimum size requirements within eight (8) months of removal.

9-6 REVIEW PROCESS

The tree preservation plan shall be reviewed by City staff to assess the best possible layout to preserve significant trees and significant woodlands and to enhance the efforts to minimize damage to significant trees and significant woodlands. The applicant shall meet with the City prior to submittal of the subdivision application or prior to application for the grading permit, whichever is sooner, 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 tree stands are destroyed or damaged. The subdivision tree preservation plan shall follow the preliminary plat/final plat review process. Individual lot tree preservation plans shall be processed with the building permit.

9-7 REMOVAL OF DISEASED TREES REQUIRED

Prior to any grading, all diseased and hazardous trees on the subject property shall be removed from the property.

9-8 COMPLIANCE WITH PLAN

The applicant shall implement the tree preservation plan prior to and during any construction. The tree protection measures of the plan shall remain in place until all grading and construction activity is terminated, or until a request is made to and approved by the City. The City shall have the right to inspect the development and/or building site in order to determine compliance with the approved tree preservation plan. The City shall determine whether compliance with the tree preservation plan has been met.