

ORDINANCE NO. O2018-003

AN ORDINANCE OF THE CITY OF SHAKOPEE AMENDING TITLE XV OF THE CITY CODE BY MODIFYING THE SCREENING, LANDSCAPING AND TREE PRESERVATION SECTIONS

THE CITY COUNCIL OF THE CITY OF SHAKOPEE, MINNESOTA, ORDAINS:

151.111 SCREENING.

(A) Whenever required, screening shall be accomplished through the use of landscaping, topography, site planning, or construction materials. Screening shall provide an opaque obstruction to view. All construction materials used shall be of good quality and compatible with the materials of the principal structure. Chain link fencing interwoven with slats shall not be allowed as a screening material. Landscaping materials utilized for screening shall be healthy specimens of hardy species appropriate for the purpose. All screening shall be maintained in good condition or repair and shall be replaced when it no longer serves its intended function.

(B) Screening shall be accomplished in accordance with the following:

(1) All exterior storage permitted by this chapter shall be screened, except for the following: goods being displayed for sale, materials and equipment being used for construction on the premises, merchandise located on gas station pump islands, and accessory uses in residential zones (except parking facilities as specified below);

(2) Off-street parking facilities in the Medium-Density Residential (R-2) and Multiple-Family Residential (R-3/R-4) Zones shall be screened whenever the parking facility contains more than 4 parking spaces and is within 30 feet of a lot line, and whenever the driveway to a parking facility of more than 6 parking spaces is within 15 feet of a lot line by landscaping and where practicable, berming;

(3) Parking facilities within any required front yard setback shall be screened to a height of 3 feet by landscaping and where practicable, berming or low wall;

(4) Screening shall be required in all business and industry zones whenever any business or industrial use is adjacent to or across a street from property zoned or developed for residential use;

(5) Screening shall be required between any multifamily complex and single-family property(ies);

(6) All roof top mechanical equipment shall be totally screened from view from adjacent properties and existing and planned streets, painted to match or complement the building, or incorporated into an architectural design which is aesthetically compatible with the building;

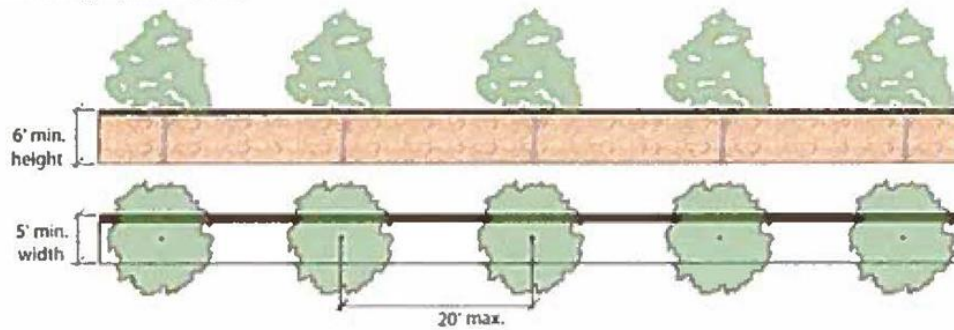
(7) Refuse containers in business and industry zones which are visible from existing or planned streets, residential areas, institutional uses, or places of public assembly shall be screened to a height of 6 feet and be fully enclosed;

(8) Loading and service areas located between a street and a building in any commercial or industry zone shall be screened to a height of 4 feet; and

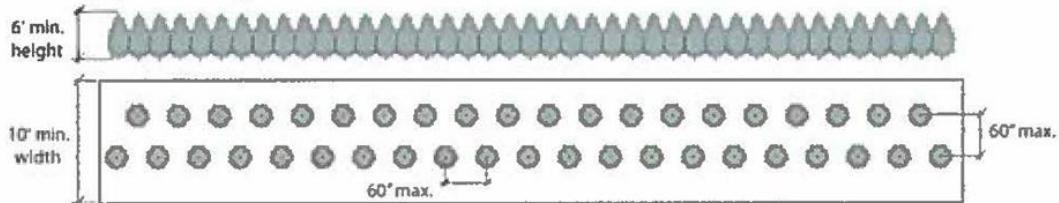
(9) When commercial or industrial development abuts existing residential development or residentially zoned properties, the Nonresidential development shall provide one of the following screening treatments along all lot lines abutting single-family detached dwellings:

- (a) Buffer yard with a minimum width of five feet that includes a solid masonry wall measuring at least six feet in height and canopy trees planted along the outside perimeter with a maximum on-center spacing of 20 feet; or
- (b) Buffer yard with a minimum width of ten feet that includes an alternating double row of various evergreen shrubs and may include a berm to achieve a minimum height at time of planting of six feet, planted a maximum of 60 inches on-center per the table of approved plant materials or spacing on industry plant standards; or
- (c) Buffer yard with a minimum width of 20 feet that includes vegetative screening meeting the following standards per 100 linear feet and the requirements. Eight canopy trees (at least two evergreen); and ii. Four understory trees (at least one evergreen); and iii. 25 shrubs (at least 16 evergreen shrubs).
- (d) Additional Buffer yard is not required when residential uses are separated from other uses by a public street. Ordinary landscaping requirements must still be met.

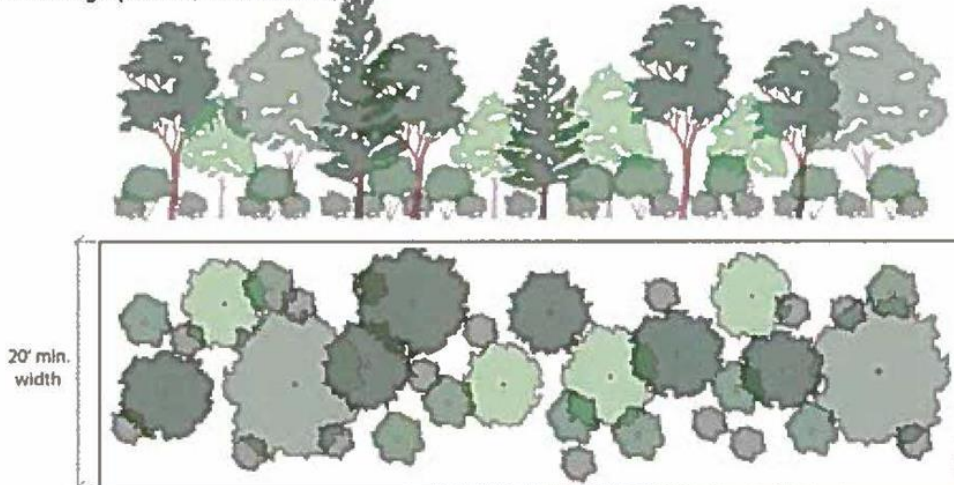
Screening Option 1 (Wall)



Screening Option 2 (Hedge)



Screening Option 3 (Planted Buffer)



(2013 Code, § 11.60) (Ord. 1, passed 4-1-1978; Ord. 31, passed 10-25-1979; Ord. 96, passed 11-11-1982; Ord. 132, passed 9-22-1983; Ord. 158, passed 1-31-1985; Ord. 246, passed 6-17-1988; Ord. 253, passed 10-14-1988; Ord. 259, passed 11-11-1988; Ord. 272, passed 8-25-1989; Ord. 338, passed 8-6-1992; Ord. 377, passed 7-7-1994; Ord. 434, passed 11-30-1995; Ord. 430, passed 2-1-1996; Ord. 563, passed 11-25-1999; Ord. 631, passed 6-27-2002; Ord. 815, passed 3-26-2009)

§ 151.112 LANDSCAPING AND CONNECTION REQUIREMENTS.

Landscaping shall be required in all residential, commercial, and industrial zones.

(A) *Definitions.* For this section, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

EXTERIOR SIDEWALK CONNECTION. A sidewalk or trail which connects the interior sidewalk or trail network to a required or existing public sidewalk or trail.

FLOOR AREA. The total floor area for the first floor inside the building envelope, including the external walls, and excluding the roof.

INTERIOR SIDEWALK CONNECTION. A sidewalk or trail network which is within a development project to connect multiple businesses, or parking facilities to primary entrances or privately owned open space areas.

SIDEWALK. A finished hard surface with a width of at least 5 feet.

TRAIL. A finished hard surface or a firm and stable natural surfacing material with a width of at least 8 feet.

(B) *Landscaping materials.*

(1) For all single-family residential uses in the R-1 A, R-1B, R-1C new construction only, R-2 and Planned Residential District, the following landscaping materials shall be provided prior to the issuance of a final certificate of occupancy:

(a) Placement of at least 6 inches of topsoil meeting requirements set in division (N) below;

(b) Each single-family lot shall have a minimum of two street trees in the boulevard or if not feasible, 2 non-ornamental trees (planted or preserved), in the front yard. In R-1 A, 3 non-ornamental trees (planted or preserved) must be placed in the front yard. If trees cannot be placed in the front yard due to easements or spacing, trees shall be placed in the rear yard;

(c) Sod shall be placed in the front yard, and

(d) The side yards and rear yard shall be seeded.

(2) Native plants may be substituted for sod or seeding as long as they meet the requirements set in the city native landscape plant list (see city website)

(C) *Landscape requirements for residential, business, and industrial uses.* For all residential uses containing 6 or more dwellings, and for all business and industrial uses, at least 15% of the lot area shall be landscaped with grass, shrubs and trees per the required table. The landscaping shall be concentrated between the principal structure and any adjacent street right-of-way or other areas of the lot which are visible from a street. Street trees shall be placed every forty (40) feet or if not permitted, tree shall be placed in the front yard.

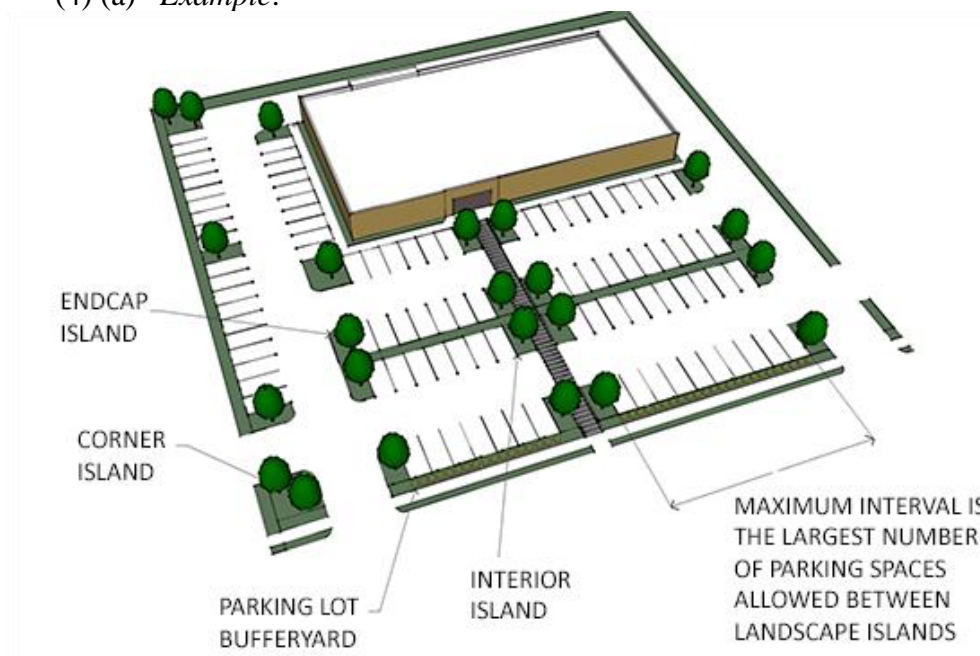
Building Footprint Area	Required Landscaping
First 10,000 Square-feet	2 trees / 1,000 SF
10,001 to 50,000 Square-feet	Additional 1.5 trees / 1,000 SF

50,0001 to 100,000 Square-feet	Additional 1 tree / 1,000 SF
100,001 Square-feet and Greater	Additional 1 tree / 1,500 SF
Maximum Number of Ornamental Trees	25% of required landscaping trees

(D) *Impervious areas.* In addition to landscaping units required for gross building area, for projects with impervious areas which exceed 4,000 square feet, one shade tree shall be required for each 4,000 square feet of impervious area. When calculating the required landscaping, square feet shall be rounded up to the nearest 1,000 square feet and pervious pavement shall be excluded.

(E) *Parking facilities.* A portion of the required landscaping shall be placed in a parking facility containing more than 25 parking spaces in accordance with the following minimum landscaping requirements.

- (1) At least 1 deciduous shade tree shall be planted for every ten spaces.
- (2) Landscape islands shall meet the following requirements:
 - (a) Contain at least one shade tree;
 - (b) Provide the appropriate available rooting space listed in division (H) below;
 - (c) A minimum of 10 feet wide;
 - (d) Curbed around all outside corners/radius of end caps and extending 10 feet from the corner/end of the radius;
 - (e) Concrete ribbon curbing must be provided on any paved edge which is not curbed; and
 - (f) Proper drainage must be provided within landscape islands which allow storm water flow into the island.
- (3) Non-permanent car stops and asphalt curbing shall not be used.
- (4) (a) *Example.*



(c) *Trees needed.* Number of trees needed to be placed within the parking area equals 1 tree for every ten (10) spaces plus street trees and perimeter landscaping

(F) *Minimum size requirements.*

(1) Landscaping materials must meet the following minimum size requirements:

(a) *Deciduous trees:* Two-and-a-half-inch caliper for commercial/industrial and 2 inches for single family residential;

(b) *Coniferous trees:* 6 feet in height;

(c) *Shrubbery:* 5 gallons; and

(d) *Native plants:* 800 square feet.

(2) Each of the above shall constitute one unit of landscaping. Not more than 50% of the landscaping units required by this section shall be composed of shrubbery and no more than 25% of the trees may be made of ornamental species.

(G)

Planting Space Soil Volume Required	Cubic Feet	Maximum Depth for Volume Calculation	Maximum Compaction	
One Tree	700	3 feet	200 PSI or 80% Standard Proctor	
Two Trees	1000	3 feet	200 PSI or 80% Standard Proctor	

(H) *Allowable trees.* Landscaping trees shall not be any species presently under disease or insect epidemics, considered invasive, or a species that composes a high percentage of the city’s urban forest without prior written approval from the city. Recommended species can be found on the city’s website, shakopeemn.gov under Forestry *Specification Manual*.

(I) *Tree diversity*

Diversity for Required / Replacement Trees	Maximum Quantity
Species	10%
Genus	20%
Family	30%

If less than 30 trees are required, one species shall make up no more than one-fourth of the total and meet the requirements set in the city’s *Forestry Specifications Manual on the city website*.

(J) *Trees location.* Trees shall not be planted in a location that will interfere with other infrastructure or be in extreme competition for resources with other trees at maturity.

(K) *Landscaping credit.*

(1) If healthy landscaping of acceptable species and location exist on a site prior to development and is preserved, the city’s Zoning Administrator may allow credit for such landscaping to meet up to 30% of the trees required. (2) Credit may be given based on the following

Preserved Trees:	Tree Credit:
Excluded Tree	No credit
Common Significant Tree > 6 inches	1 tree
Exceptional Significant Tree > 4 inches	4 trees

High Priority Tree > 15 inches	8 trees
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(L) *Pedestrian sidewalk system in Commercial and Industrial Zones.* In all zoning districts the pedestrian sidewalk system shall meet the following standards.

(1) In retail center developments, interior sidewalk connections are required between each building.

(2) A pedestrian island or walkway at least 5 feet in width shall be required for all parking facilities which have parking spaces greater than 250 feet from a main entrance to a building and in accordance with the following:

(a) A pedestrian island or walkway shall be provided to separate pedestrian traffic and vehicular traffic.

(b) A pedestrian island or walkway must provide pedestrian access spanning in a generally direct route from main entrance to the furthest drive aisle within a parking facility. City staff may allow pedestrian walkways or islands to be of a reduced length if other adjacent sidewalks and trails outside of the parking area allow pedestrians access to a main entrance of a building.

(c) Pedestrian islands or walkways which are adjacent to handicapped (ADA compliant) parking shall provide ADA compliant pedestrian ramps or be at the same elevation as the parking and loading area.

(d) The pedestrian island shall be landscaped in accordance with the requirements for landscape islands and parking lots.

(e) Pedestrian islands and walkways shall be designed to limit vehicle encroachment into walkway area, either by 2 feet setback from parking lot to walkway edge or a physical barrier such as but not limited to: curbing, trees, shrubs, or bollards.



(3) An exterior sidewalk connection is required for all sites which have existing and/or required public sidewalks, adjacent trails, parks, or greenways.

(4) Where pedestrian islands and walkways cross drive aisles, crossing areas shall be clearly designated by striping or differentiated paving material.

(M) *Topsoil.* Topsoil in landscaped areas shall be at least 6 inches in depth and a sandy loam, silt loam, loam, or sandy clay consisting of no more than 65% sand, 1.5% to 10% organic matter, a pH of 4.5 to 6.8, soluble salts less than 2 mmhos/cm, free of chemical contaminants, and not compacted beyond 80% of Standard Proctor or 200 PSI. Subsoil shall be scarified before topsoil is spread. Soil shall be generally free of debris such as large rocks and fragments of wood.

(N) *Financial security.*

(1) The city shall require submission of a financial security in form of a cash escrow, or other form of security that the city deems acceptable, in the amount of 150% of the total tree replacement estimate, at \$400 per replacement tree or as is updated from time to time in the city's fee schedule.

(2) The city shall require a landscaping escrow prior to issuance of any certificate of occupancy including temporary or permanent if landscaping work is not completed. The escrow amount shall be 150% of the contract value as reviewed and approved by the city. The landscape escrow agreement shall also include a right of entry for the city to install landscaping using the escrow if it is not completed or if plantings die within six months or next growing cycle of TCO or permanent CO.

(a) The financial security shall be collected before the grading permit is issued for tree replacement and prior to TCO or CO if all the landscaping is completed.

(b) All required landscaping plants must be warranted for two years to guarantee survival. The warranty period shall begin upon inspection and acceptance by city staff of the installed plants for proper planting, size, species, health, and location, and if at any time during the warranty period the plants are found to be unhealthy by city staff, they are required to be replaced with the same size and species by the applicant at the soonest appropriate planting time.

1. For commercial/industrial sites and residential developers, up to 75% of the financial security may be returned upon inspection and acceptance by the city of installed plants and upon the submittal of a city-approved two-year warranty from the landscape contractor who installed the plants. This warranty must cover plant health issues relating to excess or insufficient water. The remaining financial security will be held by the city for 2 years. When reducing the financial security, 75% will be returned unless city staff feels the trees have a heightened risk of failure.

2. For builders of individual residential lots in a subdivision who receive a two-year warranty from the landscape contractor who installed the plants, up to 100% of the financial security may be returned upon:

a. Inspection and acceptance of installed plants by the city; and

b. Providing the lot buyer with the copy of the 2-year warranty from the landscape contractor and contact information to make a claim on the warranty.

(3) (a) If the financial security has not been returned in full after the inspection of the installed trees, at the end of a two-year warranty period the applicant shall schedule a final inspection with city staff.

(b) Prior to the inspection, the applicant shall confirm the following conditions are met:

1. All trees have 1 dominate leader, are free of deadwood, and injured branches;
2. All tree wrap is removed;
3. All stakes and wires are removed; and
4. Plants are in leaf.

(c) At the time of final inspection, the city shall decide to:

1. Refund the financial security in full; or

2. Require the installation of new plants to replace what did not survive or are declared unhealthy by city staff. If 25% or more of the plants are required to be replaced, the appropriate amount of financial security may be held for an additional 2 years for said plants.

(4) The financial security will be used by the city only if the applicant does not install the plants required in this division (P). The owner/builder/developer grants the city access to its property to replace required place using the financial security that has been provided if plants are not replaced within 60 days or such time as negotiated by city staff.

(P) *Effective date.* This section becomes effective from and after its passage and publication. (Ord. 1, passed 4-1-1978; Ord. 31, passed 10-25-1979; Ord. 96, passed 11-11-1982; Ord. 132, passed 9-22-1983; Ord. 158, passed 1-31-1985; Ord. 246, passed 6-17-1988; Ord. 253, passed 10-14-1988; Ord. 259, passed 11-11-1988; Ord. 272, passed 8-25-1989; Ord. 338, passed 8-6-1992; Ord. 377, passed 7-7-1994; Ord. 434, passed 11-30-1995; Ord. 430, passed 2-1-1996; Ord. 487, passed 7-10-1997; Ord. 815, passed 3-26-2009; Ord. 884, passed 5-20-2014; Ord. 923, passed 11-17-2015)

§ 151.113 TREE PRESERVATION REGULATIONS.

(A) *Purpose.* The city regards natural features such as woodlands and bluffs as part of the community's identity, attracting residents and businesses to the area. City Council recognizes that not protecting these assets would have a quantifiable economic, social, and environmental loss. An objective of the city's comprehensive plan is to preserve, enhance, and maintain natural wooded areas within the city. This section aims to achieve this objective by encouraging responsible land development through rewarding those who use creative site design and minimize the impact to existing landscape and neighborhood character.

(B) *Regulations.*

(1) The following requirements and standards shall apply to any tree removal including, a preliminary plat, final plat, minor subdivision, building permit, demolition permit, conditional use permit, variance, or grading permit is required by the city on any parcel of land containing a significant tree. The city is authorized to deny or revoke any permits extended by the city for individuals or organizations in violation of this section.

(C) *Applicability.* The following developments are exempt from the requirements for tree replacement:

(1) Any alteration of the tree canopy taking place on a residential property less than 2-1/2 acres in size other than for an initial dwelling;

(2) Home gardens or an individual's home landscaping, repairs, and maintenance work;

(3) Existing agricultural, horticultural, or silvicultural operations. Expansions of existing agricultural operations will be subject to the requirements for tree replacement;

(4) Emergency work to prevent or alleviate immediate damages to life, limb, property, or natural resources. In such event, if tree replacement had been required but for emergency, the obligations of this division (C) shall apply and shall be performed at the earliest reasonable time thereafter;

(5) Maintenance of existing infrastructure by the city is exempt from the requirements of this section.

(D) *Definitions.* For the purpose of this section, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

APPLICANT. Any person submitting an application to the city for any activity for which a preliminary plat, final plat, minor subdivision, building permit, demolition permit, conditional use permit, variance, or grading permit is required on land containing a significant tree.

BASIC INFRASTRUCTURE. Includes roads, streets, sidewalks, rights-of-way, sanitary sewer, storm sewer, septic tanks, drain fields, water, natural gas, electric, cable television service, drainage ways, and storm ponds.

BUILDABLE LAND. Any land not considered a wetland or easement as defined in city code or a bluff impact zone as defined in the design criteria.

BUILDING PARAMETER. The footprint of a building or structure with a distance not to exceed 20 feet in each direction thereof. The area of disturbance on either side of a driveway, when added together, shall not exceed 20 feet.

CALIPER INCH. The measurement of a tree trunk measured at 4.5 feet above the root ball.

COMMON TREE. Any of the following trees: poplar; red maple; elm; cedar; mulberry; balsam fir; birch; pine; spruce; tamarack; black locust; or other fast growing deciduous trees not listed as an exceptional tree. Trees that are not included in overall tree inventory and are not required to be replaced are Ash, Box Elder, buckthorn, Willow, fruit trees, Silver Maple and Cottonwood

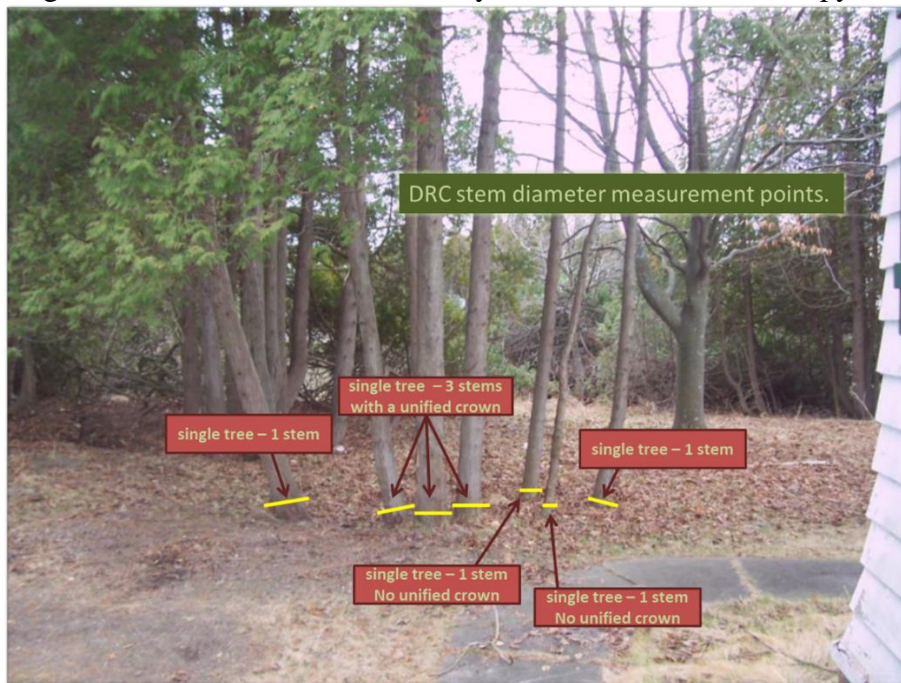
CONTIGUOUS WOODLAND. A contiguous tree canopy greater than 2 acres regardless of land ownership.

CRITICAL ROOT ZONE or **CRZ.** A radius of 1-1/2 feet for every 1 inch of DBH for the tree trunk of the tree being preserved. Example: If a tree's DBH is 10 inches, its **CRZ** is 15 feet ($10 \times 1\text{-}1/2 = 15$)

DEVELOPMENT. Any activity for which a preliminary plat, final plat, minor subdivision, building permit, demolition permit, conditional use permit, variance, fence permit, or grading permit is required on land containing a tree.

DIAMETER AT BREAST HEIGHT or **DBH.** The diameter of the trunk of a tree measured in inches 4-1/2 feet above the ground from the uphill side of the tree.

DIAMETER AT ROOT COLLAR or **DRC.** Used for measuring multi-stem trees. Trees are examined to see if they have a unified crown and are counted at each stem and multiplied by .6. Single trees are measured individually if there is no shared canopy.



EXCEPTIONAL TREE. Any of the following trees: oak; hickory; basswood; sugar maple; black maple; cherry; catalpa; walnut; hackberry; hornbeam; coffee tree; butternut; buckeye; or horse chestnut.

FORESTRY SPECIALIST. A state registered land surveyor, civil engineer, landscape architect, forester, or certified arborist, who is capable of identifying a tree by species. Only an arborist can identify and classify trees that are in poor health or considered hazardous.

HAZARD TREE. A tree posing a threat to property or people that has visible hazardous defects such as dead wood, cracks, weak branch unions, decay, cankers, root problems, or poor tree architecture as defined by the U.S. Department of Agriculture, Forest Service, Northeastern Area's publication *How to Recognize Hazardous Defects in Trees (NA-FR-01-96)*.

HIGH PRIORITY AREA. A group of 3 or more exceptional trees 10 inches DBH or greater with near contiguous canopies or group of any trees that provide a buffer or screening along an adjacent property or street.

HIGH PRIORITY TREE. An exceptional tree 15 inches DBH or greater, or any tree the city has a strong desire to preserve and is declared healthy by the city's staff.

MULTI-STEM TREE. A group of trees that share both a unified crown and common root stock. The diameter is recorded as the diameter at root collar.

REPLACEMENT TREE.

(a) A tree that replaces diameter inches of a removed tree. The number of replacement trees required is based off the number of replacement inches calculated with the "remove: replace" ratio.

RESIDENTIAL BUILDING PERMIT. A building permit required for the building of an initial dwelling.

SIGNIFICANT TREE. A living specimen of a woody plant species that is either an exceptional tree whose diameter is 4 inches or greater DBH; a common tree whose diameter is 6 inches or greater DBH, or a multi-stem tree with 2 or more stems measuring 4 inches or greater in diameter measured above the root collar.

TREE PRESERVATION PLAN. The tree inventory, site plan, and tree replacement sheet for a site where an applicant proposes to remove a significant tree.

TREE PROTECTION FENCE. Orange snow fencing or polyethylene laminate safety netting placed at the critical root zone of a tree to be preserved.

TREE REPLACEMENT ESTIMATE. The city's cost for a 3-inch balled and burlapped tree for the current year. The city is required to get 3 quotes per year and post the chosen quote in the current fee schedule.

WOODLAND ALTERATION. Any private or public infrastructure and utility installation, building construction, excavation, grading, clearing, filling, or other earth change on any parcel of land, where any cutting, removal, or killing of a significant tree on any parcel of land will occur. Residential parcels of land less than 2-1/2 acres in size are subject to the requirements in this section only if the **WOODLAND ALTERATION** is for an initial dwelling.

WOODLAND ALTERATION PERMIT. A permit to allow woodland alteration.

(E) *Tree preservation plan requirements.*

(1) *Requirements generally.* All applicants are required to submit and follow the approved tree preservation plan.

(2) *Requirements of the tree preservation plan.* The tree preservation plan must be completed by a forestry specialist and meet the following requirements.

(a) *Tree inventory.*

1. The tree inventory must include every significant tree on buildable land on the property where the permit is being applied for. In addition to trees on said property, significant trees on adjacent property which have CRZ overlapping onto said property must be inventoried. Each inventoried tree must be tagged with a unique identification number.

2. In circumstances where larger areas of the site are not being altered/graded or have no flexibility in planning around significant trees, the applicant may request permission from the city's Planning Department to use a stratified random sample with a fixed area plot to calculate an estimated tree DBH and species for each stratum. The survey results must be within less than 10% of standard error for each stratum. Plots must be marked to allow for replication of survey if necessary.

3. The applicant must provide a working digital copy and hardcopy spreadsheet displaying the following information for each inventoried tree:

- a. Identification number;
 - b. Tree size (DBH or DRC);
 - c. Tree species;
 - d. Tree type (common, exceptional, or high priority);
 - e. On-site or off-site (adjacent property);
 - f. Critical root zone (if being preserved);
 - g. Removed or preserved;
 - i. Whether the tree is within a contiguous woodland or high priority area; and
 - j. The total diameter inches of both high priority trees and significant trees inventoried
- must be displayed.

(b) *Site plan.*

1. *Generally.* A scaled drawing of the site including:
 - a. The location, identification number, and tree type (common, exceptional, or high priority) of all inventoried trees;
 - b. Proposed trees to remove and preserve;
 - c. High priority areas and contiguous woodland area;
 - d. Critical root zones of all trees being preserved along with any area within critical root zone that will be impacted;
 - e. Proposed construction/grading limits, lot lines, building parameter, basic infrastructure, buildable land, and building footprint/elevation;
 - f. Locations of tree protection fence and silt fence; and
 - g. Soil stockpile and parking locations during construction.

2. *Additional requirements.*
 - a. A survey of the lot meeting all possible requirements of the tree inventory and site plan must be provided to the builder of the lot. The city must be provided a digital copy of the tree survey for each individual lot.
 - b. Note areas with oak wilt, Dutch elm disease, Emerald Ash Borer, invasive plants such as buckthorn or others listed on the current year's State Department of Agriculture's noxious weed list.

(c) *Tree replacement sheet.*

1. The tree replacement sheet is a scaled drawing of the site depicting where the replacement trees will be planted.
2. The plan must include:

a. Calculations for determination of required replacement trees and landscaping required by division (H) below;

b. Locations of all trees and other plants being installed on-site;

c. Plant list including species, size, and stock type of installed plants;

d. Planting details that meet the city's tree planting specifications; and

e. Easements, rights-of-way, construction limits, building pads, driveways, and basic infrastructure.

(3) *Residential building permit tree preservation plan.* The applicant must complete the city's "residential building-tree preservation plan" as their tree preservation plan which includes a survey meeting all requirements of this division (E) to the city.

(4) *Permit prerequisites.* No woodland alteration, grading, or building permits shall be issued by the city until the applicant has installed any required tree protection fencing and it has been inspected and approved by the city.

(5) *Changes to tree preservation plan.* Any changes to the tree preservation plan shall be submitted in writing to the city by the applicant for approval. If the change includes any additional significant tree removal, an additional inspection and approval by the city of the tree protection fencing will be required.

(6) *Current tree preservation plan.* All information contained in the tree preservation plan must not be more than 2 years old at the time of submittal. City staff may grant reasonable exceptions to this requirement for residential builders of an individual lot.

(7) *Removal of significant trees.* Significant trees required to be removed pursuant to § [130.17](#), shall be identified as removed on the tree preservation plan and must be removed. Significant trees that are removed for this reason are exempt from the replacement requirements of this division (E).

(F) *Allowable tree removal.*

(1) *Generally.*

(a) Developers and builders are required to save as many trees as feasible when grading or building a site.

(b) When developing the site plan the developer or builder shall:

1. Identify high priority trees and areas (using the tree inventory) that are most worthy of preservation;
2. Locate roads, buildings, utilities, parking areas, or other infrastructure to minimize their impacts on exceptional and high priority trees;
3. Preserve trees in groves or clusters recognizing that survivability is greater for groups of trees than individuals;
4. Manipulate proposed grading and the limits of disturbance by changing the elevation/location of building pads, parking lots, and streets, and consider the use of retaining walls to reduce the impact of the trees; and
5. Review all construction factors that influence tree survivability.

Type of Development	Permitted Removal	Caliper Inches Significant Trees Above Permitted Removal	Caliper Inches High Priority Trees	Excluded Trees and Trees Health Classified "Poor" / Hazard Trees
Residential buildings 6 units or less during subdivision	30% of Inventoried DBH	1 : 1 DBH Inventoried	1 : 1.5 (Remove: Replace)	None
Residential 6 Units or less after subdivision	100% DBH Within Building Parameter	None	None	None
Commercial, Industrial, > 6-unit residential bldgs	60% of Inventoried DBH	1 : 1 DBH Inventoried	1 : 1.5 (Remove: Replace)	None
Redevelopment	60% of Inventoried DBH	1 : 1 DBH Inventoried	1 : 1.5 (Remove: Replace)	None

(G) *Tree preservation requirements.*

- (1) The applicant must preserve all trees identified to be preserved on the tree preservation plan.
- (2) For grading being done between the dates of April 1 and July 31, the CRZ for an oak tree may be increased due to threat of oak wilt. During this time, wound dressing will be applied immediately after damage of an oak tree takes place.
- (3) A tree shall be considered removed if:
 - (a) More than 30% of the CRZ is compacted over 80% of Standard Proctor or 200 PSI, cut, filled, or paved;
 - (b) More than 30% of the circumference of the trunk is damaged;
 - (c) The hydrology in the area of preserved trees changes due to site grading; or
 - (d) Severe damage to an oak tree takes place between April 1 and July 31.
- (4) Tree protection fence shall be placed outside of the CRZ of trees being preserved. If fencing is not possible, covering and maintaining the CRZ with geotextile fabric and 6 plus inches of wood-chip mulch will suffice.
- (5) There may be no construction activity within the CRZ of a significant tree located on an adjacent property.

(H) *Tree replacement standards.*

- (1) A replacement tree shall not be any species presently under disease or insect epidemics, considered invasive, or a species that composes a high percentage of the city's urban forest without prior written approval from the city. Recommended species can be found in the City's *Forestry Specification Manual*.
- (2) Replacement trees must meet the planting size requirements for required landscaping.:
- (3) All replacement trees must be installed during appropriate season for that planting stock.

(4) Replacement trees are not to be installed until exterior construction activities are complete in that area.

(5) If there are greater or equal to 30 trees that are required, they shall be composed of no more than 10% of 1 species, 20% of 1 genus, and 30% of 1 family. If there are less than 30 trees are required, 1 species shall make up no more than 25% of the total.

(6) Replacement trees shall not be planted in a location that will interfere with other infrastructure or be in extreme competition for resources with other trees at maturity.

(7) The city may accept other vegetative or environmental alternatives proposed by an applicant if those alternatives are monetarily or ecologically equivalent to the value of the replacement trees required by this section.

(8) Replacement trees shall be planted not more than 18 months from the date of the final approved tree replacement sheet as part of the tree preservation plan. Extensions may be requested in writing to the city.

(9) If the number of replacement trees cannot be met on-site, the following is required:

(a) A cash payment of \$400 per replacement tree shall be provided to the city for the planting of trees that are as close as possible to the site that payment was received for or to subsidize trees sold to the city's residents;

(b) Trees may be planted in city-owned or managed land as approved by the city;

(c) Replacement trees may be installed on other properties owned by the applicant within the city. If a buffer area as defined by the natural resource corridor map is on said property, replacement trees shall be planted in this area first.

(I) *Unauthorized significant tree removal.*

(1) Any person, firm, or corporation who removes or causes the loss of a significant tree identified to be preserved on an approved tree preservation plan or without a permit allowing woodland alteration, shall be required to complete 1 of the following as determined by the city:

(a) Installation of replacement trees within the same development at a 1:2 DBH (remove: replace); or

(b) Payment to the city of \$500 for every 1 inch of significant tree removed that was unauthorized. Measurement of each tree will be at DBH or diameter of the stump, whichever is readily available. This amount may be taken by the city from the financial security posted by the applicant for tree replacement, if any. A minimum of \$15,000 payment will be required if measurements are unavailable.

(2) This provision also applies to a conservation easement area that is disturbed during or after development as well as removing a publicly managed tree of any size without written city authorization.

(3) The city may withhold permits from any person, firm, or corporation who fails to complete the requirements above.

(J) *Financial security.*

(1) (a) The applicant shall provide the city with a cash escrow, or other form of security that the city deems acceptable, in the amount of 150% of the total tree replacement estimate.

(b) Formula: Number of replacement trees x tree replacement estimate x 150%= financial security due.

(2) The financial security required for the replacement trees is due prior to the issuance of the grading permit or the commencement of any woodland alteration activity.

(3) All replacement trees must be warrantied to guarantee survival. The warranty period shall begin upon inspection and acceptance by city staff of the installed trees for proper planting,

size, species, health, and location. If at any time during the warranty period replacement trees are found to be unhealthy by city staff, they are required to be replaced with the same size and species by the applicant at the soonest appropriate planting time.

(a) For commercial/industrial sites and residential developers, up to 75% of the financial security may be returned upon inspection and acceptance by the city of installed trees and the submittal of a city-approved two-year warranty from the landscape contractor who installed the trees. This warranty must cover tree health issues relating to excess or insufficient water. The remaining financial security will be held by the city for 2 years. When reducing the financial security, 75% will be returned unless city staff feels the trees have a heightened risk of failure.

(b) For builders of individual residential lots within a subdivision who receives a one-year warranty from the landscape contractor who installed the trees, 100% of the financial security will be returned upon:

1. Inspection and acceptance of installed trees by the city; and
2. Providing the lot buyer with the copy of the two-year warranty from the landscape contractor and contact information to make a claim on the warranty.

(4) (a) If the financial security has not been returned in full after the inspection of the installed trees, at the end of a two-year warranty period, the applicant shall schedule a final inspection with city staff.

(b) Prior to scheduling the inspection, the applicant shall confirm the following conditions are met:

1. All trees have 1 dominate leader, are free of deadwood, and injured branches;
2. All tree wrap is removed;
3. All stakes and wires are removed; and
4. Trees are in leaf.

(c) At the time of final inspection, the city shall decide to:

1. Refund the financial security in full; or
2. Require the planting of new trees to replace the replacement trees which do not survive or are declared unhealthy by city staff. If 25% or more of the replacement trees are required to be replaced, the appropriate amount of financial security will be held for an additional 2 years for said trees.

(5) The financial security will be used by the city only if the applicant does not install the initial or subsequent replacement trees required in this chapter.

(6) Any trees required to be removed per § [130.17](#) from a site, shall be removed and disposed of according to § [130.17](#) prior to release of the financial security.

(7) The city shall be exempt from the financial security requirement of this section.

(K) *General regulations.*

(1) If the applicant disagrees with the city staff's decision with respect to the interpretation or enforcement of this chapter, the applicant may appeal that decision by following the procedure established in § [151.016](#).

(2) Land previously planted for commercial tree farm purposes shall be subject to tree replacement requirements as determined appropriate by the city with the maximum requirement being the current allowable tree removal requirements of division (F) above.

(3) Inspections required in this chapter will be conducted by staff from the City's Natural Resources Department or other city staff as assigned.

(L) *Effective date.* This section becomes effective from and after its passage and publication.

Ord. 1, passed 4-1-1978; Ord. 31, passed 10-25-1979; Ord. 96, passed 11-11-1982; Ord. 132, passed 9-22-1983; Ord. 158, passed 1-31-1985; Ord. 246, passed 6-17-1988; Ord. 253, passed 10-14-1988; Ord. 259, passed 11-11-1988; Ord. 272, passed 8-25-1989; Ord. 338, passed 8-6-1992; Ord. 377, passed 7-7-1994; Ord. 434, passed 11-30-1995; Ord. 430, passed 2-1-1996; Ord. 815, passed 3-26-2009; Ord. 883, passed 5-20-2014)

Adopted in regular session of the City Council of the City of Shakopee, Minnesota,
held this 3rd day of April 2018

Bill Mars
Mayor of the City of Shakopee

ATTEST:

City Clerk