

**ORDINANCE NO. 66**

**AN ORDINANCE REGULATING TREE AND NATURAL BARRIER PROTECTION AND PRESERVATION AND PROVIDING PENALTIES FOR VIOLATION THEREOF.**

The City of Gem Lake does ordain as follows:

**Section 1 - Title**

- 1.1 This ordinance shall be known, cited and referred to as the **TREE AND NATURAL BARRIER PROTECTION ORDINANCE**, except as referred to herein, where it shall be know as "this ordinance".

**Section 2 - Purpose**

- 2.1 The purpose of this Ordinance is to preserve and protect the unique natural environment of the City of Gem Lake and provide for minimal tree loss and mitigation of tree removal in wooded areas of the City. It also provides for protection of natural barriers provided by trees or shrubs along the borders of our city, along major roads and between differing land uses.
- 2.2 Tree cover and natural barriers are beneficial in terms of aesthetics, screening, cooling, wildlife habitat protection, watershed control, air quality enhancements, erosion control and preservation and enhancement of property values. Land alteration that causes destruction of trees or shrubs diminishes and impairs the public health, safety and general welfare. The intention of this Ordinance is to provide regulations relating to the cutting and removal of trees in areas where the natural vegetation or topography are to be altered.

**Section 3 - Separability**

- 3.1 It is the intention of the City Council that the several provisions of this Ordinance are separable and that if any court of competent jurisdiction shall adjudge any provisions of this Ordinance or application thereof to be invalid, such judgment shall not affect any other provisions or this Ordinance not specifically included in such judgment.

**Section 4 - Interaction Between This Ordinance And Other Ordinances**

- 4.1 This Ordinance is written to complement the City of Gem Lake Zoning Ordinance and the City of Gem Lake Subdivision Ordinance. In the event of conflicting requirements imposed by this Ordinance or by other Ordinances of the City of Gem Lake, the more restrictive provisions shall apply.

**Section 5 - Wording Of This Ordinance**

- 5.1 Words used in the present tense include the past and future tense; the singular includes the plural; and the plural includes the singular. The word "shall" is mandatory and the "may" is permissive. The masculine gender includes the feminine.

## Section 6 - Definitions

- 6.1 **Applicant** The person or entity proposing land alteration as described in this Ordinance.
- 6.2 **City Council** The City of Gem Lake City Council.
- 6.3 **City Forester** A forester appointed by the City of Gem Lake.
- 6.4 **Coniferous/Evergreen Tree** A woody plant which, at maturity, is at least thirty (30') feet in height, with a single trunk, fully branched to the ground, having foliage on the outermost portion of the branches year round.
- 6.5 **Deciduous Tree** A woody plant which, at maturity, is at least twenty (20') feet in height, with a single trunk, un-branched for several feet above the ground, having a defined crown which loses leaves annually.
- 6.6 **Land Alteration** Any modification, tree cutting or removal, grading, clearing, filling or other change to any parcel of land including a woodland, shore land or natural barrier within a five (5) year period which may initially or cumulatively result in:
- 6.61 The movement of more than four-hundred (400) cubic yards of earth where significant trees are present; or
- 6.62 Any alteration of land of:
- A. more than one (1') foot from the natural contour of the ground; or
  - B. any contiguous four-hundred fifty (450 sf) square feet of ground where significant trees are located; or
  - C. any cutting, removal or killing of trees equal to or greater than twenty (20%) percent of the significant trees on any parcel of land; or
- 6.63 Any cutting, removal or killing of trees equal to or greater than twenty (20%) percent of the significant trees on any parcel of land; or
- 6.64 Any destruction or disruption of tree cover equal to or greater than twenty-five (25%) percent of the total tree cover on any parcel of land; or
- 6.65 Any changes in the Natural Barriers provided by trees or shrubs along the borders of the City, along major roads or between differing land uses, or
- 6.66 Any intensive vegetation clearance (clear cutting) within a shore land area or on steep slopes; or
- 6.67 Any other significant change in the natural character or topography of the land.

- 6.7 **Natural Barrier** Screening provided by a tree or shrubbery barrier that acts as a visual or noise barrier from roads, railroads and differing land uses, said barrier not to exceed thirty (30') feet in barrier depth. When a Natural Barrier is part of a Woodland, the Natural Barrier shall be considered the first thirty (30') feet of the Woodland.
- 6.8 **Preservation Area** A delineated area which designates trees and vegetation which will be preserved during the construction and land alteration process.
- 6.9 **Performance Bond** A bond with good and sufficient sureties, approved by the City Council, which is conditioned upon satisfactory implementation of an approved plan and which names the City as obligee.
- 6.10 **Critical Root Zone** An area under a tree equal to one and one-half (1'6") feet of radius for every one (1") inch of tree diameter (e.g A 20" tree has a critical root zone of 30' radius or 60' diameter).
- 6.11 **Shore Land** That area surrounding Gem Lake or any other recognized wetland and extending horizontally seventy-five (75') feet back from the mean high water line.
- 6.12 **Significant Tree** A healthy deciduous tree measuring eight (8") inches or greater in diameter, at a point four and one half feet above grade, or a healthy coniferous tree measuring ten (10') feet in height or greater.
- 6.13 **Steep Slopes.** A slope with greater than a thirty-three (33%) percent change in elevation or a 3:1 grade (3 parts horizontal to 1 part vertical).
- 6.14 **Woodland.** An area of at least one-half (1/2) acre in size of land, utility easements, or rights-of-way, with at least twenty (20) significant trees on the parcel or with tree cover over at least thirty-five (35%) percent of the total land area.

**Section 7 - Protection Standards.**

- 7.1 No land alteration shall occur until the City finds that the planned land alteration complies with the following:
  - 7.11 **Maximum Possible Preservation.**
    - A. All land alteration shall be conducted so that the maximum amount of woodland and natural screening and barriers are preserved by the clustering of structures wherever possible, or by the use of other appropriate methods. Measures shall be taken to protect and preserve all trees and shrubs in the preservation area as described.
  - 7.12 **Protection Of Root Zones.**
    - A. Grading, contouring, paving and any excavation or trenching shall not detrimentally affect the aeration or permeability of the root zone in the preservation area.

### 7.13 Data Submission.

- A. The applicant shall submit data to the City, at the time of a preliminary plat submission or whenever land alteration (as described in this Ordinance) is planned, that outlines the conformance to this Ordinance. This submission shall include:
  - 1. The name and address of the person preparing the plan and applying for a permit to do this alteration, and
  - 2. The name and address of the person who owns the land that is to be altered, and
  - 3. The estimated period of time within which this land alteration will be conducted, and
  - 4. A topographical map of the land on which the proposed land alteration is to occur having a scale of one inch equals 100 feet and showing the ground elevation contours at two foot intervals. The map shall also show:
    - a. The land as it exists prior to the proposed land alteration including, a minimum one-hundred (100') feet of the abutting properties; and
    - b. The proposed ground elevation contours at 2 foot intervals on the land when the proposed land alteration is complete, and
    - c.. A re-grading, drainage and planting plan, if appropriate.
- B. A statement relating to the proposed use of the land including the type of building or structure situated thereon or to be constructed, and
- C.. A tree inventory, certified by a registered land surveyor, landscape architect or forester depicting the size, species, condition and location of each significant tree by species, diameter and condition, and
- D.. Identification of significant trees that will be lost due to the proposed land alteration and those which will be preserved, and
- E.. Identification of all significant trees within 30 feet of the grading limit, and
- F.. Identification of all natural barriers of trees or shrubs.

### Section 8 - Removal Thresholds

- 8.1 Although the applicant must retain the maximum amount of woodland possible, the City recognizes that a certain amount of significant trees and tree cover removal is an inevitable consequence of the urban development process.

8.2 Therefore, in the following Zoning areas or Zoning Districts listed in Column I, a percentage of the woodland may be removed without any obligation for reforestation, but only up to and including the threshold percentage of Woodland listed in Column II. If the land alteration results in woodland removal that exceeds the percentage listed in Column II, then the applicant shall be responsible to replace the trees in accordance with Section 9 of this Ordinance.

8.3 Natural borders may not be removed or altered without the written permission of the City.

8.4 Intensive vegetation clearance within the shore land area and on steep slopes is prohibited.

**8.5 TABLE OF ZONING DISTRICT AND TREE REMOVAL THRESHOLD**

Tree removal in excess of the thresholds shown requires Planning Commission and City Council approval and reforestation.	
COLUMN 1 ZONING AREA OR DISTRICT	COLUMN II REMOVAL THRESHOLD
<b>R1 - Residential</b>	<b>25%</b>
<b>R2 - Residential</b>	<b>25%</b>
<b>R3 - Residential</b>	<b>25%</b>
<b>R4 - Residential</b>	<b>25%</b>
<b>GB, GB II, RB, LDB - Commercial</b>	<b>25%</b>
<b>SHORE LAND - All Districts</b>	<b>10%</b>
<b>NATURAL BARRIER - All Districts</b>	<b>0%</b>

**Section 9 - Reforestation**

**9.1 Tree Removal Beyond The Removal Threshold.**

9.11 If the land alteration results in tree removal beyond the tree removal threshold in Section 8 of this Ordinance, or as defined in Section 6.6 of this Ordinance, or a natural barrier is to be altered or removed, the applicant shall be required to submit a reforestation plan. The reforestation plan must be submitted and approved by the City Forester prior to final plat approval, if a subdivision is being done, or before the work of land alteration is begun. The reforestation plan shall include:

- A. Location of proposed reforestation, and
  - 1. Species and size of proposed plantings, and
- B. Quantity of proposed plantings.

**9.2 Reforestation Plan**

9.21 The reforestation plan shall comply with the following criteria:

- A. Tree replacement will be predicated on the total number of diameter inches of significant trees removed beyond the threshold limits.
- B. Actual replacement quantities shall be adjusted based on the type of trees removed in accordance with the following guidelines:
  - 1. Class A Conifer or Softwood- predominantly Poplar, Box Elder, Cottonwood, Aspen and Conifers: 75 %
  - 2. Class B Mixed Hardwoods - predominantly species other than Oak including, but not limited to, Cherry, Birch, Walnut, Elm, Ironwood, Maple, Basswood, Ash: 100 %
  - 3. Class C Hardwood - Predominantly mature Oaks : 125%

**9.3 Where trees are to be located.**

9.31 Trees to be provided as part of a reforestation plan shall be located adjacent to the development or proposed structures in areas such as yard setbacks, on outlots or common areas, at the project entrance area, in buffer zones between different land uses or roads, or at other locations as directed by the City. Reforestation shall occur in such a way as to replace trees removed with desirable trees of the same or similar species and/or densities. These trees must be planted based on the frequency and density as determined by the City Forester.

**9.4 Sizes and type of replacement trees.**

9.41 Replacement trees must be no less than the following sizes:

- A. Deciduous trees
  - 1. No less than two and one-half (2½") inches in diameter on steep slopes, or
  - 2. No less than three (3") inches on all other grades.
- B. Coniferous trees
  - 1. No less than six (6') feet high on steep slopes, or
  - 2. No less than seven (7') feet high on all other grades.

**Section 10: Construction Damage To Significant Trees In Or Near The Preservation Area.**

10.1 Significant trees which are within thirty (30) feet of the proposed grading limit shall be surveyed by the applicant. Any significant tree that the applicant commits to preserve that is subsequently damaged, during or as the result of construction, shall be replaced by the applicant on a one for one diameter inch basis.

## **Section 11 - Agreement To Replace Trees**

- 11.1 The developer or applicant, prior to the approval of, or issuance of a permit for any land alteration in connection with which trees are required to be replaced by the provisions in this Ordinance, shall
- 11.11. enter into such written agreements or arrangements with the City of Gem Lake in such form and substance as shall be approved by the City, whereby the applicant shall undertake to comply with the provisions and conditions imposed by this Ordinance and in connection with any such approval or issuance of a permit and shall further provide that the applicant shall indemnify the City against any loss, cost or expense, including an amount as and for reasonable attorneys' fees incurred in enforcing the terms of such agreement or agreements; and
  - 11.12 provide security for the performance of its obligations pursuant to such agreement or agreements. The security may consist of a bond, letter of credit, cash, or escrow deposit, all in such form and substance as shall be approved by the City.
    - A. The amount of this security shall be \$ 1,000 or 150% of the estimated cost to furnish and plant the replacement trees (estimated cost) which ever is greater. The estimated cost shall be at least as much as the reasonable amount charged by nurseries for furnishing and planting of replacement trees. The estimated cost shall be subject to approval by the City, and in the event the estimated cost is not approved, the City shall have the right, in its sole discretion, to determine the escrow amount.

## **Section 12: Collector And Arterial Roads And Trunk And Lateral Utility Construction**

### **12.1 When This Section Applies.**

- 12.11 This section shall only apply to collector and arterial road and trunk and lateral utility construction projects. All interior roads and utility services will be required to adhere to applicable zoning district thresholds.

### **12.2 Road And Utility Construction.**

- 12.21 Significant trees shall not be destroyed or removed within the right-of-way unless such destruction or removal is absolutely necessary because of engineering, safety, sight distances, or maintenance requirements and acceptable alternate means of construction or alternate routes are not possible. Such reasons must be submitted for review by the City.

### **12.3 Reforestation.**

- 12.31 If the road or utility construction destroys or removes fifty (50%) percent or less of the significant trees or tree cover in the right-of-way, then the person or entity conducting the construction shall not be responsible for reforestation. If, however, more than fifty (50%) percent of the significant trees or tree cover within the easement or right-of-way are destroyed or removed, the person conducting the construction shall be responsible for the following:

- A. Filing a landscape bond pursuant to Section 11; and
- B. Replacement of trees that exceed the fifty (50%) percent threshold shall be in accordance with Section 9 of this Ordinance. The replacement trees shall be planted on the adjoining setback areas, assuming the adjoining landowners consent. Otherwise, the replacement trees shall be planted at locations as determined by the City.

**Section 13 - Exceptions To This Ordinance**

- 13.1 The requirements of this Ordinance shall not apply to the removal of trees which are dead, diseased, seriously damaged by storm, or other acts of nature.

**Section 14 - Tree Replacement**

- 14.1 Replacement trees shall be planted not later than 12 months after the date the land alteration has commenced. If the applicant is prevented from performing within this time limit, because of unforeseen circumstances beyond the applicant’s control, the City Forester may extend the time for performance. The applicant shall inform the City Forester when all replacement trees have been planted, at which time the City Forester shall inspect the site.
- 14.2 Replacement trees shall consist of "certified nursery stock" as defined by Minnesota Statutes Section 18.46 or other trees ("wilding trees") so long as the wilding trees comply with the following standards. A wilding tree measured in diameter inches shall not exceed the maximum height as shown below:

**TABLE 14.3**

<b>DIAMETER OF TREE IN INCHES</b>	<b>MAXIMUM HEIGHT OF TREES IN FEET</b>
Two (2.0") Inches	Eighteen (18') Feet
Two and One-Half (2.5") Inches	Eighteen (18') Feet
Three (3") Inches	Twenty (20') Feet
Three and One-Half (3.5") Inches	Twenty (20') Feet
Four (4") Inches	Twenty-Four (24') Feet
Five (5") Inches	Twenty-Eight (28') Feet

- 14.4 The lowest branch of a wilding tree shall be at a height above the surface of the ground not more than one-half of the total height of the tree. (Example, a 16 foot tree must have a branch within 8 feet of the surface of the surrounding ground.)
- 14.5 Trees planted in place of missing, dead or un-healthy replacement trees shall consist of only "certified nursery stock" as defined by Minnesota Statutes, Section 18.46.



## Section 15 - Release And Retention Of Performance Security

### 15.1 Release Of Performance Security

15.11 The performance security shall remain in effect for not less than one (1) year after the date that the last replacement tree has been planted. The City may release the performance security at that time unless the City Forester, upon inspection, finds that any of the replacement trees have died or are unhealthy, or if there was any encroachment upon the protective fencing surrounding any tree to be saved.

15.12 If the applicant supplies proof of a nursery guarantee which is approved by the City Forester, then the performance security posted by the applicant shall be released upon planting of the last guaranteed tree. The nursery guarantee shall remove liability from the applicant and responsibility will be placed upon the nursery or current land owner.

### 15.2 Retention Of All Or Portion Of Performance Security

15.21 The City may retain the portion of the performance security equal to the cost of removing dead or unhealthy trees and replanting replacement trees.

## Section 16 - Penalty

16.1 Any person violating or refusing to comply with the provisions of this Ordinance shall be guilty of a misdemeanor, and prosecuted and upon conviction thereof, shall be punished by a fine of not more than Seven Hundred and no/100 (\$700.00) dollars or by imprisonment not to exceed ninety (90) days, or both. The costs of prosecution may also be added.

Adopted by the City Council of the City of Gem Lake on this 16 day of October in the year 1995 and placed into effect upon \_\_\_publication / \_\_\_12:00 am on the day following enactment by the City Council.

ATTEST:

Paul R. Emeott

Paul R. Emeott, Mayor

Enacted: 16 October 1995

ATTEST:

Frederic C. Magnuson

Frederic C. Magnuson, City Clerk

Enacted: 16 October 1995

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COUNTY OF RAMSEY  
STATE OF MINNESOTA***

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BARRIER PROTECTION AND PRESERVATION AND  
PROVIDING PENALTIES FOR VIOLATION THEREOF.***

***Enacted by the City Council of Gem Lake on the  
16th day of October in the year 1995.***