

## **CHAPTER 152: NATURAL RESOURCE PROTECTION ORDINANCE**

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### **SECTION 152.200 PURPOSE.**

The purpose of this ordinance is as follows:

- To protect the high quality natural resources found within the City of Annandale in order to maintain the characteristics of the neighborhoods and overall quality of the community.
- To guide development goals and strategies for natural resource protection by requiring new development applications to assess natural resources within the development.
- To guide new development within Annandale to protect intact natural resources while maintaining an equitable economic return.

### **SECTION 152.201 POLICY.**

The uncontrolled use and development of natural resources in the City of Annandale affects public health, safety and general welfare not only by contributing to the destruction of native habitats and outdoor recreation opportunities, but also by impairing the local tax base. Therefore, it is in the best interest of the City of Annandale to provide for the wise, regulated use and development of the community's natural resources.

### **SECTION 152.202 SCOPE OF COMPLIANCE.**

All new residential and non-residential development within or near any natural resource defined in this Ordinance; the size and shape of lots; the use, size, type and location of structures on lots; installation and maintenance of water supply and waste treatment systems, the grading and filling of any natural resource area; the cutting of vegetation protected in this Ordinance; and the subdivision of land shall be in full compliance with the terms of this Chapter and other applicable regulations.

## **SECTION 152.203 ENFORCEMENT.**

The Zoning Administrator shall be responsible for the administration and enforcement of this Chapter. Any violation of the provisions of the Chapter or failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with grants of variance or conditional uses) shall constitute a misdemeanor and shall be punishable as defined by law. Violations of this Chapter can occur regardless of whether or not a permit is required for a regulated activity pursuant to the Chapter.

## **SECTION 152.204 APPLICATION REQUIREMENTS.**

It is recognized that this Chapter is structured to regulate development within natural resource areas of the City of Annandale. This Chapter is to accommodate all proposals within and around those areas by providing City input prior to the submission of a concept plan. The following are the minimum requirements which must be met before the City will approve a development proposal:

1. A general Natural Resources Protection and Mitigation Plan shall be submitted with an application for any concept illustrating the general location of natural resources, which natural resources are to be preserved, which natural resources are to be removed, and where the mitigation will occur within the property. The plan shall include the following:
  - a. Base mapping at a scale of 1" = 100' (one inch equals 100 feet)
  - b. A mapped resource inventory that includes:
    - 1) Topographic contours at 10-foot intervals;
    - 2) Hydrologic characteristics, including surface water bodies, floodplains, wetlands, natural swales and drainageways
    - 3) Vegetation present on the site according to cover type (pasture, woodland, etc.)
    - 4) Current land use including all buildings and structures.
  - c. A site analysis that identifies, precisely locates, and calculates the acreage of all natural resource areas
  - d. Net developable acreage and allowed gross density
  - e. Street and open space concept
  - f. Building setbacks
  - g. Parcel lines and building placement concepts for residential and accessory buildings
  - h. Natural resource and tree protection plan

i. Landscape plan

j. Utility easements

2. A final Natural Resources Protection and Mitigation Plan shall be submitted with an application for preliminary plat illustrating the location of natural resources, which natural resources are to be preserved, which natural resources are to be removed, and where the mitigation will occur within the property. The plan shall include the following:

a. Base mapping at a scale of 1" = 100' (one inch equals 100 feet)

b. A mapped resource inventory that includes:

- 1) Topographic contours at 2-foot intervals;
- 2) Hydrologic characteristics, including surface water bodies, floodplains, delineated wetlands, natural swales and drainageways
- 3) Vegetation present on the site according to cover type (pasture, woodland, etc.)
- 4) Current land use including all buildings and structures.

c. A site analysis that identifies, precisely locates, and calculates the acreage of all natural resource areas

d. Net developable acreage and allowed gross density

e. Street and open space concept

f. Building setbacks

g. Parcel lines and building placement concepts for residential and accessory buildings

h. Natural resource and tree preservation/protection plan

i. Landscape plan

j. Utility easements

## **SECTION 152.205 DEFINITIONS**

**Contour.** An imaginary line on the surface of the earth, connecting points of the same vertical elevation. A line drawn on a map connecting the points of the same vertical elevation.

**Contour Interval.** A vertical distance measured between contours

**Diameter at Breast Height (DBH).** The diameter of the trunk of a tree (including the bark) measured in inches at point four and one-half (4.5) feet above the ground level. This point of measurement is used for established and mature trees.

**Drainageway.** The land on either side of and within fifty (50) feet of the centerline of any intermittent or perennial stream graphically shown on: a topographic survey prepared by and certified by a Minnesota registered land surveyor at a contour interval of not less than two (2) feet; the U.S. Geological Survey (U.S.G.S.) 7.5-minute quadrangle topographic map of the area; or the large scale 1"=100' Wright County topographic maps except areas designated as wetlands, shoreland wetlands, floodlands, floodways, or 100-year recurrence interval floodplains.

**Drip Line.** The farthest distance, measured as a radius and the total area encompassed thereby, where the branches of a tree extend from its trunk indicating the extent of the canopy of a tree.

**Floodlands.** Those lands, including the channels, floodways, and floodplain fringe of any given reach, which are subject to inundation by the flood with a given recurrence frequency. The floodlands are all lands contained in the "regional flood" or 100-year recurrence interval flood.

**Floodplain.** Land subject to inundation by the 100-year recurrence interval flood.

**Floodway.** The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

**Green Space.** A park, vegetated corridor, or open land reserved for recreation and wildlife habitat use to maintain and enhance environmental quality.

**Invasive Species.** Species that have been introduced, or moved, by human activities to a location where they do not naturally occur, causing ecological or economic problems.

<b><u>Invasive Plants (MN DNR)</u></b>	
Amur Maple	<i>Acer ginnala</i>
Amur Silver Grass	<i>Miscanthus sacchariflorus</i>
Birdsfoot Trefoil	<i>Lotus corniculatus</i>
Black Locust	<i>Robinia pseudoacacia</i>
Bull Thistle	<i>Cirsium vulgare</i>
Butter and eggs	<i>Linaria vulgaris</i>
Canada thistle	<i>Cirsium arvense</i>
Common Buckthorn	<i>Rhamnus cathartica</i>
Common Tansy	<i>Tanacetum vulgare</i>
Cow Vetch and Hairy Vetch	<i>Vicia cracca, Vicia villosa</i>
Creeping Charlie	<i>Glechoma bederacea</i>
Crown Vetch or Axseed	<i>Coronilla varia</i>
Curly-leaf Pondweed	<i>Potamogeton crispus</i>

Eurasian Watermilfoil	<i>Myriophyllum spicatum</i>
Exotic Honeysuckles	<i>Lonicera tartarica</i> , <i>L. morrowii</i> , <i>L. x bella</i>
Flowering Rush	<i>Butomus umbellatus</i>
Garlic Mustard	<i>Alliaria petiolata</i>
Glossy Buckthorn	<i>Frangula alnus</i>
Grecian Foxglove	<i>Digitalis lanata</i>
Hoary Alyssum	<i>Berteroa incana</i>
Japanese Barberry	<i>Berberis thunbergii</i>
Japanese Knotweed	<i>Polygonum cuspidatum</i>
Leafy Spurge	<i>Euphorbia esula</i>
Musk or Nodding Thistle	<i>Carduus nutans</i>
Norway Maple	<i>Acer platanoides</i>
Orange Hawkweed	<i>Hieracium aurantiacum</i>
Oxeye Daisy	<i>Chrysanthemum leucanthemum</i>
Perennial Sow Thistle	<i>Sonchus arvensis</i>
Purple Loosestrife	<i>Lythrum salicaria</i>
Queen Ann's Lace	<i>Daucus carota</i>
Reed Canary Grass	<i>Phalaris arundinacea</i>
Russian Olive	<i>Elaeagnus angustifolia</i>
Siberian Elm	<i>Ulmus pumila</i>
Siberian Peashrub	<i>Caragana arborescens</i>
Smooth Brome Grass	<i>Bromus inermis</i>
Spotted Knapweed	<i>Centaurea maculosa</i>
White and Yellow Sweet Clover	<i>Melilotus alba</i> , <i>M. officinalis</i>
Wild Parsnip	<i>Pastinaca sativa</i>
Yellow Iris	<i>Iris pseudacorus</i>

**Natural Resources.** Areas of bluffs, woodlands and forests (mature and young), lakes, ponds, streams, shore buffer, floodplains, floodlands, drainageways, wetlands, and shoreland wetlands as defined in this Ordinance.

**Shrub.** A woody, perennial plant differing from a perennial herb in its persistent and woody stem(s) and less definitely from a tree in its lower stature and/or the general absence of a well-defined main stem.

**Tree.** Any self-supporting, woody plant with its root system, growing upon the earth usually with one (1) trunk, or a multi-stemmed trunk system, supporting a definitely formed crown.

**Tree, Canopy.** A tree whose leaves would occupy the upper level of a forest in a natural ecological situation. This type of tree is often called a shade tree.

**Tree, Healthy.** A tree which is not dead, diseased, or in a weakened state and which does not pose a safety hazard to buildings, pedestrians, and/or vehicles.

**Tree, Understory.** A tree whose leaves would occupy the lower level of a forest in a natural ecological situation. This type of tree is often called an ornamental tree.

**Wetland.**: As defined in Minnesota rules section 70750.0130, subpart F, "wetlands" are those areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. "Wetlands" generally include swamps, marshes, bogs, and similar areas. Constructed wetlands designed for wastewater treatment are not waters of the state. "Wetlands" must have the following attributes:

- a. A predominance of hydric soils;
- b. Inundated or saturated by surface water or ground water at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a saturated soil condition; and
- c. Under normal circumstances support a prevalence of such vegetation.

## **SECTION 152.206 RESIDENTIAL AND NON-RESIDENTIAL REQUIREMENT AND EXCLUSIONS**

1. **Recognition of Natural Resource Features.** This Ordinance recognizes that landforms, parcel size and shape, and natural resource features vary from site to site and that development regulations must take into account these variations. The maximum density or intensity of use allowed in any zoning district is controlled by the various district standards set forth for each of the various zoning districts of this Ordinance, or where applicable district standards can be altered by a PUD for cluster development.
2. **Exclusions.** The tree preservation and replacement requirements are not required for minor subdivisions or non-residential subdivisions.

## **SECTION 152.207 NATURAL RESOURCE PROTECTION STANDARDS**

1. **Natural Resources to be Protected under this Division to Remain Undisturbed and in a Natural State.** All the natural resources required to be protected under this Section shall remain undisturbed and in a natural state except those natural resources where mitigation is in strict accord with requirements set forth in this Ordinance.
2. **Clear Cutting and Destruction of Existing Natural Resources.** All clear cutting and destruction of natural resource features shall:
  - a. Be required to meet the protection levels described in this Ordinance or other relevant statutes.
  - b. Where such clear cutting and/or destruction violations occur, shall be required to meet the mitigations standards set forth in this Ordinance.

**3. Tree Protection and Preservation.**

- a. Affected areas. The following process for protecting significant trees (8" DBH) shall be required for all new residential subdivisions except for minor subdivisions.
- b. Tree Inventory. A tree inventory and survey shall be provided that includes all trees greater than 8 inches in diameter at breast height.
- c. Tree Protection. Subdividers are required to protect at minimum thirty (30) percent of the inches of existing significant trees on the property.
- d. Mitigation Standards. Tree removal that goes beyond the allowed 30 percent shall be mitigated by tree replacement as required in Section 150.210.

**4. Wetlands and Wetland Buffers.** Wetland and wetland buffer area shall be determined by reference to the following sources shown below:

- a. Under the Minnesota Wetland Conservation Act and the Corps of Engineers Section 404 Program, delineations are conducted using the 1987 United States Army Corps of Engineers Wetland Delineation Manual (caution: large file). Delineations using this manual are prepared on the basis of field work, taking into account the three parameters of soils, hydrology, and vegetation. Under the DNR Public Waters Permit Program, the jurisdictional boundary of a wetland is the Ordinary High Water Level (OHWL). Information on determining the OHWL can be found in "Guidelines for Ordinary High Water Level (OHWL) Determinations," Minn. Department of Natural Resources (1993).
- b. All wetland buffers shall not be less than thirty (30) feet.
- c. No structures may be placed within wetlands or wetland buffers.
- d. Any subdivisions shall result in all wetland and wetland buffers being placed within easements.
- e. All residential subdivisions, except minor subdivisions, shall result in a wetland buffer planting plan where appropriate vegetation is placed within the required wetland buffer.

**SECTION 152.208 NATURAL RESOURCE FEATURES MITIGATION**

- 1. Intent of Mitigation.** The City of Annandale recognizes that, under certain circumstances, property owners and developers may wish to develop in portions of those protected natural resources areas. In this section the conditions for mitigation and mitigation standards are set forth for the various natural resource features for which mitigation is allowed. The intent of this Section is not to permit greater destruction of natural resources than is permitted under the requirements of this

Ordinance for typical property or development. This Section sets specific standards for use when the extent of the natural resources on a site and the use of the regulations would create a major hardship for said natural resource feature protection.

2. **Mitigation Standards.** The following methods, requirements, standards and/or criteria shall be followed for the mitigation of those natural resource features that may be mitigated and as determined by the City Council.

a. **Tree Preservation and Replacement.**

- 1) The applicant shall submit a Tree Preservation Plan illustrating all trees on the tree inventory superimposed on the grading plan. The Plan shall illustrate which trees shall be preserved and which trees shall be removed. The landscape plan shall show the existing and proposed planting of new trees. The tree preservation plan shall include a table of all trees on site being preserved and all trees being removed with the species and DBH of the trees.
- 2) Tree removal shall not exceed 70 percent of total inches of trees 8" DBH or greater without replacement of the inches removed over 70 percent. A tree preservation plan that includes removal of inches greater than 70 percent, a landscaping plan shall be submitted depicting replacement of trees at 1" for every 1" of removal over 70 percent. Said plantings shall be in excess of any other tree planting requirements found in this ordinance.
- 3) When determining the location of improvements within a new residential or non-residential development and the location of structures on parcels or lots, every reasonable effort shall be made to protect and preserve healthy trees having a diameter of eight (8) inches or greater. For healthy trees to be preserved not located in areas designated for a proposed building(s), circulation area, or parking area, the following measures shall be taken:
  - a) Site grading and construction equipment shall not encroach within the tree's drip line. No soil is to be removed from within one (1) foot of the drip line of an existing tree to be preserved.
  - b) Crushed stone or any other materials which may be detrimental to the tree shall not be dumped or stored within a tree's drip line or at any other such location where the drainage from said stone or materials would be directed towards the tree.
  - c) In the case of healthy trees to be preserved, a snow fence shall be installed on the periphery of the tree's drip line during construction in order to help assure the continual protection of the tree during construction.



d) No attachment or wires, other than those of a protective or non-damaging nature, shall be attached to any existing tree(s) during construction.

e) If possible, and in order to avoid destruction or razing, existing trees which are eight (8) inches or less in diameter at breast height may be relocated and replanted on a parcel or lot. All such trees which are relocated shall be maintained alive and healthy on the parcel or lot. Any such trees which die shall be replaced by the developer. The developer shall be required by the City Council to post a letter of credit to assure tree replacement if the trees die within a period of two years.

f) In the event that a tree designated on any approved plan for preservation is destroyed or razed during the construction process, said tree shall be replaced by the developer with a species as set forth by the requirements of the City and in conformance with the size and number requirements of this Ordinance. If the tree razed is between 8" and 11" DBH the replacement shall be 1.5" for every 1" removed. If the DBH is greater than 11" the replacement shall be 2" for every 1" removed.

g) The developer shall be required by the City Council to post a letter of credit to assure tree replacement.

4) Locations where it may be impossible to plant the minimum requirement of replacement trees, the applicant may pay a fee in the equivalent of the amount of money to plant said trees to the City's Park Dedication Fund. Such payment shall be in excess of any other park dedication requirements.

5) All replacement trees shall be, at minimum, 2" in DBH at the time of planting. The following trees are acceptable for the purpose of replacement trees:

Species Common Name	Species Scientific Name
Sugar Maple	<i>Acer saccharum</i>
Yellowbud Hickory	<i>Carya cordiformis</i>
Hackberry	<i>Celtis occidentalis</i>
Northern Pin Oak	<i>Quercus ellipsoidalis</i>
White Ash	<i>Fraxinus americana</i>
Butternut	<i>Juglans cinerea</i>
Black Walnut	<i>Juglans nigra</i>
Ironwood	<i>Ostrya virginiana</i>
Red Oak	<i>Quercus borealis</i>
American Basswood	<i>Tilia americana</i>

American Elm	<i>Ulmus americana</i>
Slippery Elm	<i>Ulmus rubra</i>

6) A minimum of 10 percent up to a maximum 25 percent of all replacement trees shall be coniferous trees a minimum of 4' in height, which will be counted as 2" of replacement trees.

- b. Wetlands and Wetland Buffer. The required wetland protection standards may be mitigated only if such reduction/mitigation is part of the City Engineer's approved Stormwater Management Plan and consistent with all other requirements. In addition, a permit from the US Army Corps of Engineers pursuant to the requirements of Section 404 of the Clean Water Act (33 USC 1344) shall be submitted to the City of Annandale certifying that filling has been approved and permitted by the Corps, as a condition of City review. If a MN DNR water quality certification is needed, a copy of said certification shall be provided to the City.