ROCK DELL TOWNSHIP

ZONING ORDINANCE

COUNTY OF OLMSTED

REVISED ADOPTION DATE 5/11/2015

STATE OF MINNESOTA

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ROCK DELL TOWNSHIP

ORDINANCE TO ADOPT A ZONING CODE

AN ORDINANCE REGULATING THE USE OF LANDS AND/OR STRUCTURES IN ROCK DELL TOWNSHIP, COUNTY OF OLMSTED, MINNESOTA, INCLUDING THE REGULATION OF THE LOCATION, SIZE, USE, AND HEIGHT OF STRUCTURES, THE ARRANGEMENT OF STRUCTURES ON LOTS AND THE DENSITY OF POPULATION FOR SAID LANDS, FOR THE PURPOSE OF PROMOTING THE PUBLIC HEALTH, SAFETY, ORDER, CONVENIENCE AND GENERAL WELFARE OF ROCK DELL TOWNSHIP AND REPEALING THE ROCK DELL TOWNSHIP ZONING ORDINANCE AND ALL AMENDMENTS THERETO PRIOR TO THIS DATE.

The Town Board of Rock Dell does ordain as follows:

ARTICLE I -- GENERAL PROVISIONS

Section 1.00 **SHORT TITLE**:

This ordinance shall be known as the Rock Dell Township, County of Olmsted, Minnesota, Zoning Ordinance and cited as the Township Zoning Ordinance.

Section 1.01 **EFFECTIVE DATE:**

This revised ordinance shall become effective May 11, 2015 and replaces the ordinance originally adopted on November 7, 1994.

Section 1.02 **PURPOSE AND INTENT:**

This zoning ordinance is enacted for the following purpose: to implement the Rock Dell Township Land Use Plan and to promote and protect the health, safety, and general welfare throughout Rock Dell Township by lessening congestion in the public right-of-ways; securing safety from fire, panic and other dangers; providing adequate light and air; facilitating the adequate provision of water, sewerage and other public facilities; conserving the value of properties and encouraging the most appropriate use of the land; and to protect the environment; pursuant to authority granted in Minnesota Statutes, Chapter 462.351, as amended, authorizing Township planning and zoning activities, establishing a Board of Adjustment and authorizing the enactment of official controls and providing penalties for the violation thereof, in accordance with the authority granted in Minnesota Statutes, Chapter 103F. to adopt regulations designed to minimize flood losses, and other appropriate Minnesota Statues.

Section 1.04 **JURISDICTION**:

The jurisdiction of this zoning ordinance shall apply to all the area of Rock Dell Township in Olmsted County.

A. The shoreland provisions of this ordinance shall apply to the shorelands of the public water bodies as classified in Section 9.10(B) of this ordinance. Pursuant to Minnesota Regulations 6120.2500- 6120.3900, no lake, pond, or flowage less than 25 acres in unincorporated areas need be regulated by the local government's shoreland regulations. A body of water created by a private user where there was no previous shoreland may, at the discretion of the governing body, be exempt from the shoreland provisions

Section 1.06 **SCOPE**:

From and after the effective date of this zoning ordinance and subsequent amendments, the use of all land and every building or portion of a building erected, altered in respect to height and area, or portion of a building erected, altered in respect to height and area, added to or relocated, and every use within a building or use accessory thereto Rock Dell Township shall be in conformity with the provisions of this zoning ordinance. Any existing building or structure and any existing use of properties not in conformity with the regulations herein prescribed shall be regarded as non-conforming, but may be continued, extended or changed, subject to the special regulations herein provided with respect to non-conforming uses. (See Section 1.28.)

Section 1.08 **INTERPRETATION AND APPLICATION**:

- A. In their interpretation and application, the provisions of this zoning ordinance shall be held to be the minimum requirements for the promotion of the public health, safety and welfare.
- B. Where the conditions imposed by any provision of this zoning ordinance are either more restrictive or less restrictive than comparable conditions imposed by any other law, ordinance, statute, resolution, or regulation of any kind, the regulations which are more restrictive or which impose higher standards or requirements shall prevail.
- C. Except as specifically provided in this zoning ordinance, no structure shall be erected, converted, enlarged, reconstructed or altered, and no structure or land shall be used for any purpose nor in any manner which is not in conformity with this ordinance.

Section 1.10 **VALIDITY**:

Should any section or provision of this zoning ordinance be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of the zoning ordinance as a whole or any part thereof other than the part so declared to be invalid.

Section 1.12 **ZONING DISTRICTS**:

The following zoning districts are provided in order to promote and encourage the efficient economic use of land, buildings, and all usable structures. Rock Dell Township of Olmsted County, Minnesota, is hereby divided into the districts which shall be known by the following respective symbols and names:

A-2	Agricultural Protection District
ARCD	Agricultural Resource Commercial District:
	AGGREGATE EXTRACTION AND REUSE
	LAND INTENSIVE LOW IMPACT USES
RSD	Rural Services District

Section 1.14 **OVERLAY ZONING DISTRICTS**:

The following overlay zoning districts are also made a part of the zoning ordinance. On property where both the zoning districts (Section 1.12) and the overlay districts would apply, the use or development of such a property shall comply with both the zoning district and the overlay district. The following overlay zoning districts shall be known by the following respective symbols and names:

FW	Floodway District
FFA	Flood Fringe District
FFB	Flood Fringe District
FP	Flood Plain District
	Shoreland District
	SPECIAL DISTRICTS
SD	

Section 1.16 **OFFICIAL ZONING MAP**:

The map or maps which are a part of this zoning ordinance delineate the boundaries of the zoning districts and represent the approximate boundaries of the overlay zoning districts. The maps are available for viewing at the office of the Rock Dell Township Zoning Administrator

Section 1.18 **DISTRICT BOUNDARIES**:

The boundaries of the zoning district, unless otherwise identified, shall be construed as following property lines, water sources, right-of-way lines, corporate limits of cities, or the centerline of roads.

Section 1.20 **BOUNDARY INTERPRETATION**:

The Zoning Administrator shall interpret questions concerning district boundary lines as shown on the official zoning map; such interpretation may be appealed in accordance to Section 4.06.

The boundaries of the Floodplain District are determined by soil types in areas which have not been mapped by FEMA. In mapped areas the Floodplain District boundaries are determined by scaling distances on the Flood Insurance Rate Maps.

- A. Where conflict exists between the floodplain limits illustrated on the official zoning map and the field conditions, the flood elevations must be the governing factor. The Zoning Administrator must interpret the boundary location based on the ground elevations that existed on the site the date of the first National Flood Insurance Program map showing the area within the regulatory floodplain, and other technical data.
- B. Persons contesting the location of the district boundaries may appeal the Zoning Administrators decision as outlined in Section 4.06 of this Ordinance.

Section 1.22 FLOOD PLAIN DISTRICTS BOUNDARY INTERPRETATION:

The boundaries of the four (4) flood plain districts, FW, FFA, FFB, and FP, shall be determined by elevation and by scaling distances from the Flood Insurance Rate Map (FIRM) dated February 4, 1998, and, when appropriate, by the Flood Plain Areas--South Fork, Zumbro River, and Tributaries Maps, dated October, 1977, and the soils maps contained in the Soil Survey of Olmsted County, Minnesota, dated March, 1980. Where interpretation is needed as to the exact location of the boundaries as shown on the previously referenced maps, as for example where there appears to be conflict between a mapped boundary and actual field conditions, the Zoning Administrator shall make the necessary interpretation based on elevation of the regional (100 year) flood profile and other technical data.

Section 1.24 WARNING AND DISCLAIMER OF LIABILITY:

The degree of flood protection intended to be provided by the zoning ordinance is considered reasonable for regulatory purposes and is based on engineering and specific methods of study. Larger floods may occur on rare occasions or the flood height may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. The zoning ordinance does not imply that areas outside of designated flood plain districts or land uses permitted within such districts will always be totally free from flooding or flood damages, nor shall the zoning ordinance create a liability on the part of, or be a cause of action against, Rock Dell Township or an employee thereof for any flooding or flood damages that may result from reliance on the zoning ordinance.

Section 1.26 **BUILDABLE LOTS**:

A lot that meets the Minnesota Pollution Control Agency's regulations and fulfills the criteria specified in one of the following subsections (A) or (B) is considered to be a buildable lot. All other lots, including illegally created lots, shall not be considered buildable lots and no building shall be constructed or placed upon such lots.

- A. **Buildable Lots for Uses Other than Dwellings:** (These other uses would include agricultural uses such as barns and other agricultural buildings, but would not include a dwelling.)
- B. Lots of record or newly created lots that meet the lot area, lot width and access requirements of this ordinance. Any newly created lot which does not meet the standards for non-farm dwellings in the zoning district where such lot is located, or the standards for farmstead dwellings, shall be designated as an (N.B.)

 Non-Buildable Lot for Dwelling Purposes on the Official Zoning Map.
- C. **Non-conforming lots of record**, providing that such lot has recorded access to a public road and the proposed building complies with the regulations in Section 1.28 (B).

D. Buildable Lots for a Dwelling Are:

- 1. A lot that qualifies as a farm.
- 2. Lots created after the effective date of this ordinance which meet the lot area, lot width, access requirements and either the standards for non-farm dwellings in the zoning district where such lot is located or the standards for farmstead dwellings.
- 3. Lots of record, providing that such a lot has recorded access to a public road and the proposed building complies with the regulation of Section 1.28 (B).
- 4. If in a group of two or more contiguous lots under the same ownership, any individual lot does not meet the zoning district lot area, width, or access standards of the zoning district where located, the lots must not be considered as separate parcel of land for purposes of development. The lots must be combined

with one or more contiguous lots so they equal one or more parcels of land, each meeting the lot area, width, or access standards to the extent possible.

E. Non-farm Lots in Agricultural Districts:

This section of the ordinance applies only to the A-2 district of the zoning ordinance. A lot, as defined in the ordinance, recorded on a single deed is deemed to be a single lot for zoning purposes. If a lot on a single deed is divided by a public right-of-way, thereby creating one or more non-farm sized tracts of land, the property owner must submit an application for a Metes and Bounds subdivision to create a buildable lot for a dwelling. The metes and bounds subdivision must be approved using the provisions 1) Standards for a Non-farm Dwelling under the applicable zoning district, 2) the requirements of Section 1.26 D.3. and the applicable zoning district General Regulations.

Section 1.28 NON-CONFORMING USES:

The lawful use of land or structures existing at the time of the adoption of this zoning ordinance may be continued although such use does not conform with the district provisions herein, subject to the following provisions.

- A. **Land**: The non-conforming use of land shall not in any way be expanded or extended either on the same or adjoining property.
- B. Lot of Record: A non-conforming lot of record may be used for any principal use permitted in the zoning district in which the lot is located, provided that for any use which is to be served by an individual well and/or septic system, the non-conforming lot shall be of a size and design to meet the minimum requirements of the Board of Health regulations for such wells and septic systems.
- C. **Structure, Enlargement or Alterations**: No non-conforming structure may be enlarged or altered in any way which increases its non-conformity. No addition or modification to a use within a flood fringe or floodway district shall increase the flood damage potential of the structure or increase the degree of obstruction to flood flow. No addition or modification to a non-conforming structure with a conforming use, over the life of the structure, within a flood fringe or floodway district shall exceed fifty (50%) percent of its current market value as determined by the Olmsted County Assessor's records, unless the entire structure is made conforming.
- D. **Structure, Damage or Destruction**: If a non-conforming structure is destroyed by any means to an extent of more than fifty (50%) percent of its current market value, as determined by the Olmsted County Assessor's records at the time of destruction, it shall not be reconstructed except in conformity with the provisions of the zoning code. If destroyed to less than fifty (50%) percent of its market value, said restoration shall begin within twelve (12) months or the structure shall be made conforming.

- E. **Structure, Relocation**: If a non-conforming structure is moved any distance, for any reason whatever, it shall thereafter conform to the regulations for the district in which it is located after it is moved.
- F. **Use, Change:** Whenever a non-conforming use has been changed to a conforming use or to a use permitted in a district of greater restrictions, it shall not thereafter be changed back to a non-conforming use.
- G. **Use, Discontinuance:** In the event that a non-conforming use of any structure or structure and land is discontinued for a period of one (1) year, the use of the same shall conform thereafter to the uses permitted in the district in which it is located.
- H. **Use, Zone Change:** The foregoing provisions relative to non-conforming uses shall apply to buildings, land and uses which hereafter become non-conforming due to classification or reclassification of districts under this ordinance.
- I. Use, Change In: Any nonconforming use of land or structure may be changed to another nonconforming use of the same nature or less intensive nature if no structural alterations are involved and if it is found that the relation of the structure and proposed use to surrounding property is such that adverse effects on the occupants and neighboring property will not be greater than if the original nonconforming use continued. Approval for such a change shall be through the approval of a Conditional/Interim Use permit that has considered the following factors:
 - 1. The character and history of the use and of development in the surrounding area.
 - 2. The comparable degree of noise, vibration, dust, odor, fumes, glare or emissions detectable at the property line.
 - 3. The comparative numbers and kinds of vehicular trips to the site.
 - 4. The comparative amount and nature of outside storage, loading and parking.
 - 5. The comparative visual appearance.
 - 6. The comparative hours of operation
 - 7. The comparative effect on existing vegetation.
 - 8. The comparative effect on water drainage.
 - 9. The comparative effect on the environment.
- J. EXPANSION OF NONCONFORMING USE: Nonconforming commercial, industrial or institutional uses in any nonresidential district and any residential uses in any residential district may be modified or expanded in certain situations subject to approval as a Conditional/Interim Use. In acting on an application for modifying or expanding a nonconforming use, the Commission shall use the Section 1.28I criteria to determine the impact of modifying or expanding the nonconforming use. A proposal where the commission finds significant injurious impact should be denied or approved with conditions which will mitigate the impact of the modification or expansion. Potential modifications or expansions which the commission may consider shall include:

- 1. Rebuilding of a structure devoted to a nonconforming use if destroyed to an extent greater than 50% of the replacement value of the structure.
- 2. Expanding a nonconforming use of structure to a portion of the structure not manifestly arranged or designed for such use at the time the use became nonconforming.
- 3. The addition of new principal buildings or accessory structures on the same parcel of land occupied or under the same ownership on the effective date that the use became nonconforming. The new structures added must be for such purpose that if not associated with the nonconforming use they would be permitted by the zoning district of the property. The applicant must show that the intensity of use will not substantially increase over the current level of activity with the addition of the new structures.

Section 1.29 NONCONFORMITIES WITHIN SHORELAND AREAS

A. Construction on Non-conforming Lots of Record

- Lots of record in the office of the County Recorder on the date of enactment of local shoreland controls that do not meet the minimum lot area and width standards of the underlying zoning district may be allowed as buildable lots, provided the use is permitted in the zoning district, the lot has been in separate ownership from abutting lands at all times since it became substandard, was created compliant with official controls in effect at the time, and sewage treatment and setback requirements are met.
- 2. A variance from setback requirements must be obtained before any use, sewage treatment system, or building permit is issued for a lot. In evaluating the variance, the Board of Adjustment shall consider sewage treatment and water supply capabilities or constraints of the lot and shall deny the variance if adequate facilities cannot be provided.
- 3. If, in a group of two or more contiguous lots under the same ownership, any individual lot does not meet the underlying zoning district lot area and width standards the lot must not be considered as a separate parcel of land for sale or purposes of development. The lot must be combined with the one or more contiguous lots so they equal one or more parcels of land, each meeting the lot area and width standards to the extent possible.

B. Additions/Expansions to Non-conforming Structures.

- 1. All additions or expansions to the outside dimensions of an existing non-conforming structure must meet the setback and height requirements of this ordinance. Any deviation from these requirements must be authorized by a variance pursuant to Section 4.08.
- 2. Deck additions may be allowed without a variance to a structure not meeting the required setback from the ordinary high water level if all of the following criteria and standards are met:
 - a) The structure existed on the date the structure setbacks were established;

- b) A thorough evaluation of the property and structure reveals no reasonable location for a deck meeting or exceeding the existing ordinary high water level setback of the structure;
- c) The deck encroachment toward the ordinary high water level does not exceed 15 percent of the existing setback of the structure from the ordinary high water level or does not encroach closer than 30 feet, whichever is more restrictive; and
- d) The deck is constructed primarily of wood, and is not roofed or screened.

C. Non-conforming Sewage Treatment Systems:

An existing individual sewage treatment system, which is non-conforming according to Minnesota Rules, Chapter 7080 (and amendments thereto), shall be upgraded to meet the requirements. Upgrading shall occur, at a minimum, any time a permit or variance of any type is required for any improvement on, or use of, the property. For the purposes of this provision, a sewage treatment system shall not be considered non-conforming if the only deficiency is the sewage treatment system's improper setback from the ordinary high water level.

Section 1.30 NON-CONFORMITIES WITHIN FLOODPLAIN MANAGEMENT AREAS:

- A. Continuance of Nonconformities: A use, structure, or occupancy of land which was lawful before the passage or amendment of this ordinance but which is not in conformity with the provisions of this ordinance may be continued subject to the following conditions. Historic structures, as defined in Section 2 under "Substancial Improvement" "B.", of this ordinance, are subject to the following provisions:
 - 1. A nonconforming use, structure, or occupancy must not be expanded, changed, enlarged, or altered in a way that increases its nonconformity.
 - 2. The cost of all structural alterations or additions to any nonconforming structure over the life of the structure may not exceed fifty (50) percent of the market value of the structure unless the conditions of this Section are satisfied. The cost of all structural alterations and additions must include all costs such as construction materials and a reasonable cost placed on all manpower or labor. If the cost of all previous and proposed alterations and additions exceeds fifty (50) percent of the market value of the structure, then the structure must meet the standards of this ordinance for new structures.
 - 3. If any nonconforming use, or any use of a nonconforming structure, is discontinued for 12 consecutive months, any future use of the premises must conform to this ordinance. The Assessor must notify the Zoning Administrator in writing of instances of nonconformities that have been discontinued for a period of 12 months.

- 4. If any nonconformity is substantially damaged, as defined in Section 2 under "Substantial Damage" of this ordinance, it may not be reconstructed except in conformity with the provisions of this ordinance.
- 5. Any substantial improvement, as defined in Section 2 of this ordinance, to a nonconforming structure requires that the existing structure and any additions must meet the requirements of this ordinance for new structures.

Section 1.32 **FEES**:

There shall be fees established for items of this ordinance as established from time to time by resolution of the Rock Dell Township Board of Supervisors.

ARTICLE II -- RULES AND DEFINITIONS

Section 2.00 **RULES, WORD USAGE**:

For the purpose of this ordinance, certain terms or words used herein shall be interpreted as follows:

Board: The word "Board" includes the, the Town Board, Board of Supervisors, or any other word or words meaning the Rock Dell Township Board of Supervisors.

Board of Adjustment: The "Board of Adjustment" shall mean the Rock Dell Township Board of Adjustment and Appeals.

Board of Appeals The "Board of Appeals" shall mean the Rock Dell Township Board of Adjustment and Appeals.

Board of Health: The "Board of Health" shall mean the Minnesota Board of Health or its designee.

Commission: The "Commission" shall mean the Rock Dell Township Planning and Zoning Commission.

Comprehensive Plan: The "Comprehensive Plan" shall mean the General Land Use Plan for the Olmsted County Area, or the Currently Held Valid Thoroughfare Plan, or the Housing Plan for the Olmsted County Area, or other interrelated policies and plans for private and public land and water use, transportation and community facilities adopted by the Olmsted County Board of Commissioners.

FEMA: Federal Emergency Management Agency.

Fractions of Measurement: All stated and measured distances shall be taken to the nearest integral foot. If a fraction is one-half (1/2) or less, the integral foot next below shall be taken.

Lot: The word "lot" shall include the word piece, parcel and plot.

Masculine and Feminine Gender: The masculine gender includes the feminine and neuter genders.

Person: The word "person" includes a firm, association, organization, partnership, trust, company or corporation as well as an individual.

Shall and May: The word "shall" is mandatory and not discretionary; the word "may" is permissive.

Singular and Plural: Words used in the singular shall include the plural, and the plural the singular.

Tenses: Words used in the present tense shall include the future.

Used For: The word "used for" shall include the phrases arranged for, designed for, intended for, maintained for and occupied for.

Section 2.02 **DEFINITIONS:**

Accessory Building: A building detached from a principal building on the same lot and customarily incidental and subordinate to the principal building or use.

Accessory Structure: A structure detached from a principal building on the same lot and customarily incidental and subordinate to the principal structure or use.

Accessory Use: A use customarily incidental and subordinate to the principal use located on the same lot as the principal use.

Adult Body Painting Studio: An establishment or business which provides the service of applying paint or other substance whether transparent or non-transparent to or on the body of a patron when such body is wholly or partially nude in terms of "specified anatomical areas."

Adult Bookstore: A business engaging in the barter, rental, or sale of products consisting of printed matter, pictures, slides, records, audiotapes, novelties, cd roms or other electronic media, videotapes or motion picture film, if such business is not open to the public generally but only to one or more classes of the public, excluding any minor by reason of age, or if a substantial or significant portion of such products are distinguished or characterized by an emphasis on the depiction or description of "specified sexual activities" or "specified anatomical areas". The phrase "substantial or significant portion of such products", as used in the definition of an adult bookstore means with respect to any building or buildings upon one Lot:

- A. twenty-five (25) percent of the inventory, stock and trade, or publicly displayed products, or the lesser of
- B. 1000 square feet or twenty-five (25) percent of the floor area of the business (not including storerooms, stock areas, bathrooms, basement, or any portion of the business not open to customers or clients), devoted to the products described above.
- C. In no event shall more than a total of 1000 square feet of floor area in any building or buildings upon a Lot be devoted to the public display of the products described above.

Adult Cabaret: An establishment which provides dancing or other live entertainment, if such establishment excludes minors by virtue of age, or such dancing or other live entertainment is distinguished or characterized by an emphasis on the performance, depiction or description of "specified sexual activities" or "specified anatomical areas."

Adult Companionship Establishment: A companionship establishment which excludes minors by reason of age, or which provides the service of engaging in or listening to conversation, talk, or discussion between an employee of the establishment and a customer, if such service is distinguished or characterized by an emphasis on "specified sexual activities" or "specified anatomical areas".

Adult Entertainment: Adult entertainment shall include but not be limited to; adult bookstores, adult motion pictures theaters, adult mini-motion picture theaters, adult massage parlors, adult saunas, adult companionship establishments adult health clubs, adult cabarets, adult novelty businesses, adult motion picture arcades, adult modeling studios adult hotel or motel, adult body painting studios and other adult only oriented establishments

Adult Establishment: A business engaged in any of the following activities or which utilizes any of the following business procedures or practices; either:

- A. Any business which is conducted exclusively for the patronage of adults and as to which minors are specifically excluded from patronage there at either by law or by the operators of such business,
- B. Any other business which offers its patrons services or entertainment characterized by an emphasis on matter depicting, exposing, describing, discussing, or relating to specified sexual activities or specified anatomical areas. Specifically included in the term, but without limitation, are adult bookstores, adult motion picture theaters, adult mini-motion picture theaters, adult massage parlors, adult saunas, adult companionship establishments, adult health clubs, adult cabarets, adult novelty businesses, adult motion picture arcades, adult modeling studios, adult hotel or motel, and adult body painting studios.

Adult Hotel or Motel: Adult hotel or motel means a hotel or motel from which minors are specifically excluded from patronage and wherein material is presented which is distinguished or characterized by an emphasis on matter depicting, describing or relating to "specified sexual activities" or "specified anatomical areas".

Adult Massage Parlor, Health Club: A massage parlor as required to be licensed or a health club which restricts minors by reason of age, and which provides the services of massage, if such service is distinguished or characterized by an emphasis on "specified sexual activities" or "specified anatomical areas".

Adult Mini-Motion Picture Theater: A business premises within an enclosed building with a capacity for less than 50 persons used for presenting visual media material if such business as a prevailing practice excludes minors by virtue of age, or if said material is distinguished or characterized by an emphasis on the depiction or description of "specified sexual activities" or "specified anatomical areas" for observation by patrons therein.

Adult Modeling Studio: An establishment whose major business is the provision, to customers, of figure models who are so provided with the intent of providing sexual stimulation or sexual gratification to such customers and who engage in specified sexual activities or display specified anatomical areas while being observed, painted, painted upon, sketched, drawn, sculptured, photographed, or otherwise depicted by such customers.

Adult Motion Picture Arcade: Any place to which the public is permitted or invited wherein coin or slug-operated or electronically or mechanically controlled still or motor picture machines, projectors or other image-producing devices are maintained to show images to five or fewer persons per machine at any one time, and where the images so displayed are distinguished or characterized by an emphasis on depicting or describing "specified sexual activities" or "specified anatomical areas".

Adult Motion Picture Theaters: A business premises within an enclosed building with a capacity of 50 or more persons used for presenting visual media material if said business as a prevailing practice excludes minors by virtue of age, or if said material is distinguished or characterized by an emphasis on the depiction or description of "specified sexual activities" or "specified anatomical areas" for observation by patrons therein.

Adult Novelty Business: A business which has as a principal activity the sale of devices which simulate human genitals or devices which are designed for sexual stimulation.

Adult Sauna: A sauna which excludes minors by reason of age, or which provides a steam bath or heat bathing room used for the purpose of bathing, relaxation, or reducing, utilizing steam or hot air as a cleaning, relaxing or reducing agent, if the service provided by the sauna is distinguished or characterized by an emphasis on "specified sexual activities" or "specified anatomical areas".

Agricultural Uses: Use of land for forestry, pasture, or crop production, or for the production of livestock, poultry or poultry products, fur-bearing animals, horticultural or nursery stock including sod, fruit, vegetables, forage grains, or bees and apiary products. Wetlands, pasture, and woodlands accompanying land in agricultural use are also defined as in agricultural use.

Aggregate Extraction: Mining of aggregate material as defined by Minnesota Statute 298.75 involving the use of heavy vehicles.

Alterations: See Structure Alteration.

Animal Feedlot: Land and/or buildings used for, or a building that has in the past five (5) years been used for the confined feeding, breeding, raising or holding of poultry or animals exceeding thirty (30) animal units and where the concentration of animals is such that a vegetative cover cannot be maintained within the enclosure. Pastures are not considered animal feedlots.

Animal Feedlot, New: An animal feedlot constructed and operated at site where no animal feedlot existed previously or where a pre-existing animal feedlot has been abandoned or unused for period of five (5) years or more.

Animal Unit: A unit of measure used to compare difference in the production of animal manure that employs as a standard the amount of manure produced on a regular basis by different types of animals. For the purpose of this zoning ordinance, the animal unit or animal unit calculation measure shall be the same unit of measure used in the current Minnesota Pollution Control Agency, Minnesota Rules Chapter 7020, relating to animal feedlots and storage, transportation and utilization of animal manure. The table below is an example of those measures.

For animals not listed below, the number of animal units shall be defined as the average weight of the animal divided by one thousand (1,000) lbs.

ANIMAL	UNIT	
Mature dairy cow		
1. Over 1,000 lb	1.4 animal unit	
2. Under 1,000 lb	1.0 animal unit	
Cow and calf pair	1.2 animal unit	
Calf	0.2 animal unit	
Slaughter steer	1.0 animal unit	
Feeder cattle or heifer	0.7 animal unit	
Horse	1.0 animal unit	
Swine		
1. Over 300 lb	0.4 animal unit	
2. Between 55-300 lb	0.3 animal unit	
3. Under 55 lb	0.05 animal unit	
Duck	0.01 animal unit	
Sheep/lamb	0.1 animal unit	
Turkey		
1. Over 5 lb	0.018 animal unit	
2. Under 5 lb	0.005 animal unit	
Chicken		
 Layer/Broiler (liq.store) 	0.033 animal unit	
Layer/Broiler(dry store)		
a. over 5 lb	0.005 animal unit	
b. under 5 lb	0.003 animal unit	

Antenna: Any structure or device used for the purpose of collecting or transmitting electromagnetic waves, including but not limited to, directional antennas such as panels, microwave dishes and satellite dishes, and omni-directional antennas, such as whip antennas.

AO Zone: An area of shallow flooding shown on the Olmsted County Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and undetermined, and where low velocity may be evident.

Area: See Buildable Area, Floor Area or Lot Area.

Asphalt Concrete Plant: Any facility used to manufacture asphalt concrete by heating and drying aggregate and mixing with asphalt cements; including dryers; systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing asphalt concrete; and the loading, transfer, and storage system associated with emission control system.

Base Flood Elevation: The elevation of the "regional flood," as defined. The term "base flood elevation" is used in the flood insurance survey.

Basement: Any area of a structure, including crawl spaces, having its floor or base subgrade (below ground level) on all four sides, regardless of the depth of excavation below ground level.

Berm: A mound of earth, or the act of pushing earth into a mound.

Bluff: A topographic feature such as a hill, cliff, or embankment having the following characteristics (an area with an average slope of less than 18 percent over a distance for 50 feet or more shall not be considered part of the bluff):

- a) Part or all of the feature is located in a shoreland area;
- b) The slope rises at least 25 feet above the ordinary high water level of the waterbody;
- c) The grade or slope from the toe of the bluff to a point 25 feet or more above the ordinary high water level averages 30 percent or greater; and
- d) The slope must drain toward the waterbody.

Bluff Impact Zone: A bluff and land located within 20 feet from the top of a bluff.

Buildable Area: The area of a lot remaining after the minimum yard requirements of this ordinance have been met.

Building: Any structure having a roof supported by columns or walls and intended for the shelter, housing or enclosure of any individual, animal, process, equipment, goods or material of any kind.

Building, Accessory: See Accessory Building.

Building Envelope: That portion of a residential lot reserved for the construction of a residence and all accessory buildings.

Building Height: The vertical distance measured from the average ground elevation adjoining the front wall of the building to the highest point of the roof surface of a flat roof, to the deck line of a mansard roof, or to the average height between the eaves and ridge of a gable, hip or gambrel roof.

Building Line: An imaginary line separating the buildable area and the required minimum yard.

Building, Principal: See Principal Building or structure.

Building, Temporary: See Temporary Building or structure.

Campground: A plot of ground upon which two or more camp sites are located, established or maintained for occupancy by camping units of the general public as temporary living quarters for recreation, education or vacation purposes.

Child: A person who has not reached the age of 18.

Cemetery: Property used for the interment of the dead.

Church: A building where persons regularly assemble for religious service and which is maintained and controlled by an organized group for public worship.

Commercial wireless telecommunication services: Licensed commercial wireless telecommunication services including cellular, personal communication services (PCS), specialized mobilized radio (SMR), enhanced specialized mobilized radio (ESMR), paging and similar services that are marketed to the general public.

Commissioner: "Commissioner" means the Commissioner of the Department of Natural Resources.

Concentrating solar power device (CSP): A device designed to receive solar radiation and convert it to thermal energy, with some systems converting the thermal energy into electrical energy. Normally, a solar thermal collector includes a frame, glazing, and an absorber, together with appropriate insulation. The heat collected by the solar collector may be used immediately or stored for later use. Solar collectors are generally used for space heating; domestic hot water heating; and heating swimming pools, hot tubs, or spas. This definition also includes systems of mirrors that including tracking and focus sunlight onto receivers located at a focal point. The receivers may be thermal or photovoltaic.

Conditional Use/Interim Use: A use that would not be appropriate generally but may be allowed with appropriate restrictions upon finding that certain conditions and criteria exist and that the use is compatible with the neighborhood. A Conditional/Interim Use permit would be appropriate when significant investment is proposed for equipment or structures or a use so specific that it would not be used for other uses.

Conservation Plan: A resource management system plan prepared in accordance with the SCS technical guide that will decrease soil erosion to or below the soil loss tolerance factor on a particular parcel of land according to a specified time schedule.

Conservation Practices: Practices and standards containing a definition, purpose, and conditions that the practice applies to, including design requirements and specifications containing a statement of details required for installing a conservation practice, including kinds, quality, and quantity of work and materials needed to meet the requirements of the technical guide.

Contractor: An individual or company which supplies materials and equipment and/or performs services in construction activities such as the erection, maintenance or repair of structures, the development of improvements such as sewer, water and streets, or specialized activities such as landscaping, painting, plumbing and the like.

Contractor's Equipment: Materials, machinery, supplies and vehicles used by a contractor in conjunction with construction related activity.

Contractor's Yard: An area on a lot, either open or enclosed, where contractor's equipment is left on a regular basis when not stored on a job site. This definition is not meant to apply to a vehicle, which does not have a commercial (Y-type) license and is rated less than 12,000 pounds gross vehicle weight, parked overnight on a driveway area, when it is neither loaded nor unloaded at that location and when it is used primarily for transportation to and from the job site.

Corner Lot: A lot abutting upon two or more streets at their intersection, or upon two parts of the same street forming an interior angle of less than 135 degrees.

Coverage: See Lot Coverage.

Crop Equivalent Rating: A soils rating system developed by the Soils Conservation Service based on the net value (gross value of crops minus production costs) of their productivity for commonly grown crops of the area. Commonly grown crops are corn, soybeans, small grains, hay and permanent pasture.

Cultivated Agricultural Land: Land which is used to raise agricultural crops, is capable of use for that purpose, or is plowed, fallow, or contains harvested crop residue or is pasture land.

Deck: A horizontal, unenclosed platform with or without attached railings, seats, trellises, or other features, attached or functionally related to a principal use or site and at any point extending more than three feet above ground.

Depth: See Lot Depth.

Development: Any man made change to improved or unimproved real estate, including a change in use or the creation of a subdivision.

Development Site: For single-family attached dwellings involving three or more buildings and for multiple family dwellings, those lot areas, along with any associated common open space identified in the open space plan required by Section 10.38, that are to be used to justify the density limitation established for the zoning district where the projects are to be located.

District, Zoning: See Zoning District.

District: The elected Board of the Olmsted County Soil and Water Conservation District organized under Minnesota Statutes, Chapter 40.

Drainageway: Any surface area over which water flows in a concentrated form, whether permanently, continually, occasionally, or intermittently, and including public waters, intermittent streams, and grassed waterways.

Dwelling: Any building or portion thereof which contains one or more dwelling units not including buildings containing rooms for transient guests such as a hotel or motel, or a temporary or transient structure such as a tent, trailer or travel trailer.

Dwelling, Farm: See Farm Dwelling.

Dwelling, Mobile Home: See Mobile Home.

Dwelling, Multiple Family: A building containing three or more dwelling units.

Dwelling, Non-Farm: See Non-Farm Dwelling.

Dwelling, Single Family: A building containing only one dwelling unit.

Dwelling, Single Family Attached: A building containing a single family dwelling, attached at the side or sides in a series of two or more principal buildings, each containing not more than a one-family dwelling.

Dwelling, Single family Detached: A single-family dwelling surrounded by open space or yards, which is not attached to any other building, which is permanently attached to and supported by a permanent frost depth foundation system, and has a minimum dimension of not less than twenty two (22) feet at the first floor level of the dwelling. In addition, the requirements of Section 10.01 must be complied with. Under the provisions of Minnesota Statutes, Chapter 394.25, nothing herein shall prevent a manufactured home that meets the above mentioned criteria from being considered a single family detached dwelling.

Dwelling Site: A designated location for residential use by one or more persons using temporary or movable shelter, including camping and recreational vehicle sites.

Dwelling, Two Family: A building on a single lot containing two single family dwellings which are totally separated from each other by an unpierced wall extending from ground to roof or an unpierced ceiling and floor extending from exterior wall to exterior wall, except for a common stairwell exterior to both dwelling units.

Dwelling Unit: A room or rooms, connected together, constituting a separate, independent housekeeping establishment for a family (for owner occupancy or rental, lease, or other occupancy on weekly or longer terms), physically separated from any other rooms or dwelling units that may be in the same structure, and containing its own independent kitchen and sleeping facilities, but not including temporary housing, such as recreational vehicles, etc.

Easement: A grant of one or more of the property rights by the property owner to and/or for the use by the public, a corporation, or another person or entity.

Equal Degree of Encroachment: A method of determining the location of floodway boundaries so that flood plain lands on both sides of a stream are capable of conveying a proportionate share of the flood flows.

Erosion: The general process by which soils are removed from an area by wind or flowing surface or sub-surface waters.

Erosion, Channel or Gully: Erosion caused by the action of water flowing in a concentrated stream acting against the soil confining its flow, resulting in a channel that cannot readily be cultivated by customary farm machinery, and that is at least three (3) feet wide or has a cross-sectional area of at least four (4) square feet. Gully erosion is distinguished from ephemeral erosion by its size and relative permanence, and from streambank erosion by the intermittent nature of the water flow.

Erosion, Ephemeral: Erosion caused by the action of flowing surface water against the soil confining its flow, occurring in channels with periods of short duration. Such channels are smaller in size than gullies, and can be readily eliminated by field cultivation using customary farm machinery.

Erosion, Sheet and Rill: Erosion caused be the general, as opposed to channeled, flow of water over a surface.

Erosion, Streambank: Erosion within a perennial stream or river which is caused by the action of water flowing in a concentrated stream acting against the soil confining its flow.

Erosion, Wind: Erosion caused by the action of wind on the soil surface and soil particles.

Essential Services: The erection, construction, alteration, or maintenance of underground, surface or overhead electrical, gas, steam, water and sewerage transmission and collection systems, and the equipment and appurtenances necessary for such systems to furnish an adequate level of public service, but not to include any buildings.

Family: One or more persons related by blood, marriage or adoption, including foster children, or a group of not more than five persons (excluding servants), some or all of whom are not related by blood, marriage or adoption, living together and maintaining a common household.

Farm: A lot used for agricultural or horticultural uses and comprised of either at least eighty (80) acres or two (2) contiguous and undivided quarter-quarter sections in the A-1 Agricultural Zoning District, or being at least thirty-five (35) acres in size in the other Zoning Districts. For the purposes of determining a farm, a quarter-quarter section separated by only a public right-of-way shall be considered as an undivided quarter-quarter section.

Farm Dwelling: One single-family detached dwelling or mobile home located on a farm.

Farmstead: A rectangular area surrounded by a farmstead boundary which contains a farm dwelling and may contain other buildings which are or have been used for farming uses. In some instances minor amounts of tilled acreage or pasture land would be contained within the boundary to enable a rectangular boundary to be established.

Farmstead Boundary: An imaginary line separating a farmstead from tilled land and pasture land. For the purposes of this ordinance said tilled and non-tilled acreage or a reasonable area encompassing existing farm buildings to ensure compliance with the yard requirements of this ordinance.

Farmstead Dwelling: A dwelling which on April 16, 1993, was located upon a farm, as defined by this ordinance, but subsequently subdivided from that farm onto a non-farm lot which does not conform to the standards for non-farm dwellings within the district where located.

Feedlot: See Animal Feedlot.

Field Windbreak: A living barrier of trees, or a combination of trees and shrubs, located adjacent to a field, that is designed to reduce wind erosion by virtue of its location with regard to the wind, and by the type of vegetation; and meeting the standards for field windbreaks in the Technical Guide.

Fill: Sand, gravel, earth or other material of any composition whatsoever placed or deposited by humans.

Financial Institution: Any lending institution that is chartered by the United States of America or the State of Minnesota.

Flood Fringe: That portion of the flood plain outside the floodway.

Flood Plain: The land adjacent to a body of water which has need or may be hereafter covered by flood water, including that land covered by the Regional Flood.

Flood Proofing: Any combination of structural and nonstructural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate, water and sanitary facilities, structures and their contents.

Flood Protection Elevation: A level one (1) foot above the Regional Flood plus any increase in flood level that would be caused by the future flood plain development outside the floodway.

FP1, **FP2**, **FP3**, **FP4**, **FP5**: Different classifications of flood-proofing measures as defined by the State Building Code.

Flood, Regional: See Regional Flood.

Floodway: The bed of a wetland or lake and the channel of a watercourse and those portions of the adjoining floodplain which are reasonably required to carry or store the regional flood discharge.

Floor Area: The sum of the gross horizontal areas of the several floors of a building measured from the exterior face of exterior walls, or from the centerline of a wall separating two buildings, but not including interior parking spaces, loading space for motor vehicles, or any space where the floor-to-ceiling height is less than six (6) feet.

Forest Land Conversion: The clear cutting of forested lands to prepare for a new land use other than re-establishment of a subsequent forest stand.

Front Lot Line: See Lot Line, Front.

Front Yard: See Yard, Front.

Garage: A building or part thereof used for storage of vehicles.

Glare: The sensation produced within the visual field by luminance that is sufficiently greater than the luminance to which the eyes are adapted, causing annoyance, discomfort, or loss in visual performance and visibility. For the purposes of this ordinance glare is reflected sunlight. Glare is an effect that causes a loss of or reduced contrast that results in vision being obscured.

Haul Route: The set of public roads used for transporting materials in heavy commercial vehicles, extending from the access onto the first abutting public road of the property from which the heavy vehicle traffic originates, to the final destination, or to a state highway constructed to a ten-ton standard that leads to the final destination.

Height: See Building Height.

Highway: See Road.

Home Business: An occupation with all of the following characteristics:

- conducted as an independent business or franchise,
- conducted on a property whose principal use includes a residence, whether in a residential or agricultural zoning district,
- conducted principally by the occupants of the dwelling, and

• in which the home business is clearly incidental and secondary to the principal agricultural or residential use of the property.

The term does not apply to work conducted within a dwelling by an employee of an offsite enterprise customarily referred to as telecommuting.

Hotel: See Motel.

Impervious Surface: Any surface having a percolation rate of slower than 120 minutes per inch.

Impoundment: A body of water artificially created by blocking the flow of surface runoff, and intended for runoff control, water supply, flood control, or recreation. The term is not intended to include farm ponds used for water supply for livestock, but does include any such pond if used for runoff control.

Intensive Vegetation Clearing: The complete removal of trees or shrubs in a contiguous patch, strip, row or block.

Interim Use: A use that would not be appropriate generally but may be allowed with appropriate restrictions upon finding that certain conditions and criteria exist and that the use is compatible with the neighborhood. A use that does not require a significant monetary investment or the use of equipment or structures that would not generally be used for other uses allowed within the district. The permit if appropriate shall be limited with a condition to a specified date, and/ or occurrence of a particular event, at which time the permit will end. An interim use may be used in any zoning district where conditional use permit is allowed if it is deemed as appropriate by the Zoning Administrator or the Town Board.

Interior: See Lot, Interior.

Interior Side Lot Line: See Lot Line, Interior Side.

Interior Side Yard: See Yard, Interior Side.

Junk Yard: See Salvage

Karst: A geologic condition occurring over a large area where groundwater dissolves well jointed, crystalline, carbonate bedrock, typically limestone or dolomite.

Karst Feature: A topographic feature resulting from the occurrence of subsurface karst conditions that are so extensively developed and close to the surface, that surface drainage is affected. Typical Karst features occurring in Olmsted County include dolines (sinkholes), disappearing streams, losing streams, blind valleys, springs, and caves.

Kennel: Any lot or building on which five (5) or more dogs, cats, or other common household pets, that are six months of age or older, are kept permanently or temporarily boarded.

Land Disturbing Activity: Any activity not directly related to general farming resulting in a disturbance of the natural condition or vegetative covering of the earth's surface.

Land Occupier: A person, firm, corporation, government entity, or other legal entity that holds title to or is in possession of any lands as owner, lessee, or otherwise. Land occupier includes both the owner and the occupier of the land if they are not the same.

Landspreading: The placement of sewage sludge, fly ash or other by-products of power generation, waste incineration or biosolids, on or incorporated into the soil surface.

Landspreading Facility: Any land that is used for landspreading activity and is owned, leased, or rented by the political subdivision originating the material to be landspread.

Landspreading Site: Any land used for landspreading activity that is not owned, leased, or rented by the political subdivision generating the originating the material to be landspread.

Land Use Plan: Land Use or Land Use Plan shall mean the Olmsted County Land Use Plan.

Licensed Shooting Preserve: Permitted shooting reserve as licensed by Minnesota Department of Natural Resources.

Lot: A designated parcel, tract or area of land established by plat, subdivision, or as otherwise permitted by law, to be used, developed or built upon as a unit.

Lot Area: The area of a horizontal plane bounded by the front, side or rear lot lines, but not including any area occupied by the waters of lakes or rivers or by public right-of-ways.

Lot, Corner: See Corner Lot.

Lot Coverage: That part or percentage of a lot occupied by structures, including accessory structures.

Lot Depth: The mean horizontal distance between the front lot line and the rear lot line of a lot, measured within the lot lines.

Lot, Interior: A lot other than a corner lot.

Lot Line: A line of record bounding a lot which divides one lot from another lot or from a right-of-way or any other public space.

Lot Line, Front: The lot line separating the lot from the road right-of-way.

Lot Line, Interior Side: Any lot line, other than a front or rear lot line, which separates a lot from another lot.

Lot Line, Rear: The lot line opposite and most distant from the front lot line; or in the case of triangular or otherwise irregularly shaped lots, a line ten (10) feet in length entirely within the lot, parallel to and at a maximum distance from the front lot line.

Lot Line, Side Street: Any lot line, other than a front, rear or interior side lot line, which separates the lot from a road or street.

Lot, Non-Farm: See Non-Farm Lot.

Lot, Through: See Through Lot.

Lot of Record: Any legally recorded lot that, at the time it was recorded, fully complied with all applicable laws and ordinances.

Lot of Record, Non-Conforming: See Non-Conforming Lot of Record.

Lot Width: The horizontal distance between the side lines of a lot, measured at right angles to its depth along a straight line parallel to the front lot line at the minimum required building setback line for the principal building.

Manure Storage Facility: A manufactured manure storage structure, detention pond, sedimentation terrace, or manure catchment basin.

Manufactured Building: Has the following features or characteristics; it is:

- A. Mass-produced in a factory;
- B. Designed and constructed for transportation to a site for installation and use when connected to required utilities;
- C. Either an independent, individual building or a module for combination with other elements to form a building on the site.

Manufactured Home: A structure, transportable in one or more sections, which in the traveling mode, is eight body feet or more in width or 40 body feet or more in length, or when erected on site, is 320 or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air conditioning, and electrical systems contained therein; except that the term includes any structure which meets all the requirements and with respect to which the manufacturer voluntarily files a certification required by the secretary and complies with the standards established under this chapter.

Manufactured Housing: A manufactured building or portion of a building designed for long-term residential use.

Mobile Home: Manufactured housing built on a chassis.

Mobile Home Community: A mobile home park or a mobile home subdivision.

Mobile Home Park: A parcel of land under single ownership which has been planned and improved for the placement of mobile homes for non-transient use.

Mobile Home Subdivision: A subdivision designed to accommodate mobile homes on individual lots.

Motel or Hotel: A business comprising a series of attached or detached rental units, with or without eating facilities, used primarily as temporary residences for motorists, tourists or travelers.

Mulch: Any material deposited on the surface, including but not limited to crop residues, leaves, wood chips, straw, or other similar organic or inorganic materials, which protect the soil from erosion without causing an increase in the rate of runoff.

Multiple Family Dwellings: See Dwelling, Multiple Family.

Non-Buildable Lot: A lot which is not permitted to have a dwelling of any kind erected or placed upon said lot.

Non-Conforming Lot of Record: Any legal lot of record that at the time it was recorded fully complied with all applicable laws and ordinances but which does not fully comply with the lot requirements of this zoning ordinance concerning minimum area or minimum lot width.

Non-Conforming Structure: A structure the size, dimensions or location of which was lawful prior to the adoption of this zoning ordinance, but which fails by reason of such adoption, or subsequent revision or amendment, to conform to the present requirements of the zoning district.

Non-Conforming Use: A use or activity which was lawful prior to the adoption of this zoning ordinance but which fails, by reason of such adoption, or subsequent revisions or amendment, to conform to the present requirements of the zoning district.

Non-Farm Dwelling: A single-family detached dwelling or mobile home located on a lot which does not qualify as a farm.

Non-Farm Lot: A lot which does not qualify as a farm.

Non-Residential Facility: For the purposes of the zoning ordinance a non-residential facility includes licensed adult day care, family adult day care services, drop in child care, school age child care program, and family day care.

Obstruction: Any dam, wall, wharf, embankment, levee, dike, pile, abutment, projection, excavation, channel modification, culvert, building, wire, fence, stockpile, refuse, fill structure or matter in, along, across, or projection into any channel, water course or regulatory flood plain which may impede, retard or change the direction of the flow of water, either in itself or by catching or collecting debris carried by such water.

Offender Transitional Housing: A dwelling unit or one or more habitable units in a rooming house or hotel designed, intended, or used principally to provide short-term housing to offenders on supervised release or conditional release who are receiving housing assistance from the Minnesota Department of Corrections or Olmsted County Community Corrections and/or who are required to live in the housing as a condition of their release. "Offender transitional housing" does not include housing declared by state law to be a permitted single-family residential use. The term "short-term" shall mean a period of time not exceeding one year. A dwelling or lodging facility owned by the offender or a member of the offender's immediate family shall not be considered offender transitional housing.

Official Zoning Map: The map or maps which are a part of this ordinance and delineate the boundaries of the zoning districts.

Ordinary High Water Level: The boundary of public waters and wetlands, and shall be an elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial. For watercourses, the ordinary high water level is the elevation of the top of the bank of the channel. For reservoirs and flowages, the ordinary high water level is the operating elevation of the normal summer pool.

Parcel: A lot, as defined (see "Lot").

Pastures: Areas where grass or other growing plants are used for grazing and where the concentration of animals is such that a vegetation cover is maintained during the growing

season except in the immediate vicinity of temporary supplemental feeding or watering devices.

Paved Surface: A hard, smooth surface which is made from concrete, asphalt, paving bricks, or similar durable permanent material. Paved surfaces may be pervious or impervious.

Permanent Vegetative Cover: An area of wooded or perennial herbaceous plant materials, including pasture, hayland, and woodland, but excluding any area that is tilled, any over-grazed pasture, and any area in which trampling by livestock results in a cover of less than ninety percent (90%) of the surface area.

Permitted Use: A use allowed in a zoning district and subject to the restrictions applicable to that zoning district.

Person: A child or adult as defined in the ordinance.

Photovoltaic device: An electronic device consisting of layers of semiconductor materials fabricated to form a junction (adjacent layers of materials with different electronic characteristics) and electrical contacts and capable of converting incident light directly into electricity (direct current).

Pipeline: Pipes located in this Township which are used to transport natural or synthetic gas at a pressure of more than ninety (90) pounds per square inch, or to transport crude petroleum or petroleum fuels or oil or their derivatives, coal, anhydrous ammonia, or any mineral slurry within this Township or any other product that can be transported by pipeline.

Prime Crop Land: Land which has been determined by the Agricultural Stabilization and Conservation Committee to be cropland, having a crop equivalency rating of 60 or greater.

Principal Building or Structure: The primary or predominant building or structure on any lot.

Principal Use: The primary or predominant use of any lot.

Public Park: A tract of land set apart for the benefit of the public and supported and maintained by public funds

Public Sewer and Water System: A system, other than an individual septic tank, tile field, or individual well, that is operated by a municipality, governmental agency, or a public utility for the collection, treatment and disposal of wastes and the furnishing of potable water.

Public Utility: A closely regulated private enterprise with an exclusive franchise for providing a public service.

Public Utility Facilities: Telephone, electric and cable television lines, poles, equipment and structures; water or gas pipes, mains, valves or structures; sewer pipes, valves or structures; pumping stations; telephone exchanges and repeater stations; and all other facilities, equipment and structures necessary for conducting a service by a government or a public utility. For the purposes of this ordinance, commercial wireless telecommunication service facilities shall not be considered public utility uses, and are defined separately.

Public Waters: Any waters as defined in Minnesota Statutes, Section 105.37, Subdivisions 14 and 15.

Quarter and Quarter-Quarter Section: A division of a section of land according to the rules of the original United States Government Public Land Surveyor.

Reach: A hydraulic engineering term to describe a longitudinal section of a stream or river influenced by a natural or man-made obstruction.

Rear Lot Line: See Lot Line, Rear.

Rear Yard: See Yard, Rear.

Recreational Vehicle: A vehicle that is built on a single chassis, is 400 square feet or less when measured at the largest horizontal projection, is designed to be self propelled or permanently towable by a light duty truck, and is designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use. For the purposes of this ordinance, the term recreational vehicle is synonymous with the term "travel trailer/travel vehicle."

Regional Flood: A flood which is representative of large floods known to have occurred generally in Minnesota and reasonably characteristic of what can be expected to occur with an average frequency in the magnitude of the 1% chance/one hundred (100) year recurrence interval. Regional flood is synonymous with the term "base flood" used in the Flood Insurance Study.

Regulatory Flood Protection Elevation: An elevation no lower than one foot above the elevation of the regional flood plus any increases in flood elevation caused by encroachments on the floodplain that result from designation of a floodway.

Residential Facility: For the purposes of the zoning ordinance a residential facility includes licensed residential programs and housing with services establishment registered under M.S. chapter 1440. Offender transitional housing is not considered a residential facility for the purposes of this ordinance.

Resort: A facility for transient guests where the primary attraction is generally recreational features or activities.

Right-Of-Way: A strip of land acquired by reservation, dedication, forced dedication, prescription or condemnation and intended to be occupied or occupied by a road, crosswalk, railroad, electric transmission lines, oil or gas pipeline, and other similar uses.

Right-Of-Way Lines: The lines that form the boundaries of a right-of-way.

Road: A public right-of-way, or a private right-of-way or easement serving two or more buildable non-farm lots, affording primary access by pedestrians and vehicles to abutting properties, whether designated as a street, highway, thoroughfare, parkway, throughway, road, avenue, boulevard, lane, place, or otherwise.

Road Use Agreement: An agreement between a developer or property owner and a road authority identifying the road improvements, road impacts, and impact mitigation and remediation measures necessary to preserve the condition of road infrastructure and to make such improvements as may be necessary to handle the volume, weight, size, turning radius, and other attributes of the truck traffic generated by a land use. The Agreement may address, but is not limited to, any of the following road infrastructure matters:

- 1. Responsibility for upgrading
 - a) Pavement sections, bridges, and culverts structural condition
 - b) Geometric design, including entrances, intersections, railroad and pedestrian/bicycle facility crossings, geometric design of bridges and culverts, and typical road cross-sections;
- 2. Responsibility for exceptional maintenance attributable to the use, estimated based on Minnesota Local Road Research Board (LRRB) Pavement Impacts of Large Traffic Generators methodology;
- 3. Responsibility for clean-up of spillage and public road dust control along haul routes:
- 4. Establishment of financial accounts to address costs associated with upgrading and exceptional maintenance costs;
- 5. Delineation of haul routes:
- 6. Schedules of operation and hauling, including construction operations;
- 7. Methods to verify and report type, number, and weight of truck loads;
- 8. Emergency conditions creating a need for immediate road repairs or road closing;
- 9. Required insurance; and
- 10. Remedies and enforcement measures.

Runoff: The portion of rainfall or other precipitation that leaves a parcel in the form of surface water.

Salvage or Junk Yard: An area where used, waste, discarded or salvaged materials are brought, sold, exchanged, stored, baled, cleaned, packed, disassembled or handled; including but not limited to scrap iron and other metals, paper, rags, rubber products,

bottles and lumber. Storage of such materials in conjunction with a permitted manufacturing process when within an enclosed area or building shall not be included.

School: A public school as defined in Minnesota Statutes, Section 120.05 or a nonpublic school as defined in Minnesota Statutes, Section 123.932.

Sediment: Soil particles in suspension, being transported, or moved from their original location by wind, water, gravity, or ice, or which has been deposited at another location, including any sediment-related pollutants.

Semipublic Use: The use of land by a private, nonprofit organization to provide a public service that is ordinarily open to some persons outside the regular constituency of the organization.

Sensitive Resource Management: The preservation and management of areas unsuitable for development in their natural state due to constraints such as shallow soils over groundwater or bedrock, highly erosive or expansive soils, steep slopes, susceptibility to flooding, or occurrence of flora or fauna in need of special protection.

Setback: The minimum horizontal distance between a structure and the nearest property line or highway easement line; within shoreland districts it shall also mean the minimum horizontal distance between a structure and the ordinary high water mark.

Setback Line: That line that is the required minimum distance from the street right-of-way line or any other lot line that establishes the area within which the principal structure must be erected or placed.

Sewage Sludge: As defined in Minnesota Statutes, section 115A.03, subdivision 29, means the solids and associated liquids in municipal wastewater which are encountered and concentrated by a municipal wastewater treatment plant. Sewage sludge does not include incinerator residues and grit, scum, or screenings removed from other solids during treatment.

Shore Impact Zone: Land located between the ordinary high water level of a public water and a line parallel to it at a setback of 50 percent of the structure setback.

Shoreland: Land located within the following distances from public waters: 1,000 feet from the normal high water mark of a lake, pond or flowage; and 300 feet from a river or stream or the landward extent of a flood plain designated by ordinance on such a river or stream, which ever is greater. The practical limits of shorelands may be less than the statutory limits whenever the waters involved are bounded by natural topographic divides which extend landward from the waters for lesser distances and when approved by the Commissioner of the Department of Natural Resources.

Side Street Yard: See Yard, Side Street.

Side Yard: See Yard, Side.

Sign: Any object, device, display, structure or part thereof, situated outdoors or indoors, which is displayed to attract the attention of the public while on public streets, highways or walkways to an object, person, institution, organization, business, product, service, event or location by any means, including words, letters, figures, designs, symbols, fixtures, colors, illumination or projected images. Signs do not include flags of any nation, state, city, religion, fraternal or civic organization, merchandise and pictures or models of products or services incorporated in a window display, works of art which in no way identify a product, scoreboards on athletic fields, sound trucks or other moving advertising media while operated on a public right-of-way, official traffic signs or symbols, banners announcing civic celebrations or events of special interest, mounted house numbers under twelve (12) inches in height, mounted name plates or building address numbers under six square feet in area identifying the occupants or address of a building, or address or public information sign displayed for the convenience of the traveling public when established by public patterns which by themselves would not convey a message about a business or product without other sign elements present.

Sign, General Advertising; A sign that directs attention to a business service, event, product, or location not related to or on the premises where the sign is located.

Sign, Directional Advertising: A sign that directs attention to a business, service or location not related to or on the premises where the sign is located.

Sign, Business: A sign which directs attention to a business or profession conducted, or to a commodity or service sold, offered or manufactured, or to an entertainment offered, on the premises where the sign is located.

Significant Historic Site: Any archaeological site, standing structure, or other property that meets the criteria for eligibility to the National Register of Historic Places or is listed in the State Register of Historic Sites, or is determined to be an unplatted cemetery that falls under the provisions of Minnesota Statutes, section 307.08. A historic site meets these criteria if it is presently listed on either register or if it is determined to meet the qualifications for listing after review by the Minnesota State Archaeologist or the director of the Minnesota Historical Society. All unplatted cemeteries are automatically considered to be significant historic sites.

Single Family Attached Dwelling: See Dwelling, Single Family Attached.

Single Family Detached Dwelling: See Dwelling, Single Family Detached.

Single Family Dwelling: See Dwelling, Single Family.

Slope: The deviation of a surface from the horizontal, expressing the change in elevation as a percentage of the horizontal distance of the surface.

Slope Instability: The tendency of a slope to cave in, slump, collapse, or otherwise fail.

Soil: Unconsolidated mineral or organic material that overlies bedrock, on the immediate surface of the earth, that serves as a medium for the growth of plants, and can be readily excavated.

Solar Collection System: A panel, array of panels or other solar energy device, the primary purpose of which is to provide for the collection, inversion, storage, and distribution of solar energy for electricity generation, space heating, space cooling or water heating. These systems can include photovoltaic devices, concentrating solar power devices and other systems for the collection of solar energy. Such systems may provide power primarily to the principal use on a property and considered accessory to the principal use, or the facility may be the principal use of a property.

Solar energy farm: A group of interconnected solar collection systems connected to a public or private utility system through a system of transformers, distribution lines, which may include a substation. Operation, control, and maintenance functions are often centralized through a network of computerized monitoring systems, supplemented by visual inspection. This definition does not apply to solar collection systems that are constructed to serve an individual residential, commercial or industrial property not involved with electric power production. Offices, maintenance facilities, and equipment storage are not considered part of a solar energy farm.

Specified Anatomical Areas: Anatomical areas consisting of:

- A. Less than completely and opaquely covered human genitals, pubic region, buttock, anus, or female breast(s) below a point immediately above the top of the areola; and
- B. Human male genitals in a discernibly turgid state, even if completely and opaquely covered.

Specified Sexual Activities: Activities consisting of the following:

- A. Actual or simulated sexual intercourse, oral copulation, anal intercourse, oral-anal copulation, bestiality, direct physical stimulation of unclothed genitals, flagellation or torture in the context of sexual relationship, or the use of excretory functions in the context of a sexual relationship, and any of the following sexually-oriented acts or conduct: anilingus, buggery, coprophagy, coprophilia, cunnilingus, fellatio, necrophilia, pederasty, pedophilia, piquerism, sapphis, zooerasty; or
- B. Clearly depicted human genitals in the state of sexual stimulation, arousal or tumescence; or
- C. Use of human or animal ejaculation, sodomy, oral copulation, coitus, or masturbation; or

- D. Fondling or touching of nude human genitals, pubic region, buttocks, or female breasts; or
- E. Situations involving a person or persons, any of whom are nude, clad in undergarments or in sexually revealing costumes, and who are engaged in activities involving the flagellation, torture, fettering, binding or other physical restraint of any such persons; or
- F. Erotic or lewd touching, fondling, or other sexually-oriented contact with an animal by a human being; or
- G. Human excretion, urination, menstruation, vaginal or anal irrigation.

State Building Code: The Minnesota State Building Code, setting forth standards for the construction, addition, modification, and repair of buildings and other structures for the purpose of protecting the health, safety and general welfare of the public.

Steep Slope: Land where agricultural activity or development is either not recommended or described as poorly suited due to slope steepness and the site's soil characteristics, as mapped and described in available county soil surveys or other technical reports, unless appropriate design and construction techniques and farming practices are used in accordance with the provisions of this Ordinance. Where specific information is not available, steep slopes are lands having average slopes over twelve (12) percent over horizontal distances of fifty (50) feet or more that are not bluffs.

Streambank: The boundary of protected waters and wetlands, or the land abutting a channel at an elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape; commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial. For watercourses, the streambank shall be at the elevation of the top of the bank of the channel.

Street: See Road.

Structure: (1)Anything constructed or erected on the ground or attached to the ground or on-site utilities, including, but not limited to, buildings, factories, sheds, detached garages, cabins, manufactured homes, travel trailers/vehicles not meeting the exemption criteria specified in Section 9.04 (A,3) of this ordinance and similar items. (2) Works of improvement for agricultural land stabilization to prevent erosion, sediment, or flood damage that include, but are not limited to, gully control structures, grass waterways, rip-rap, sediment basins, flood retention dams, diversions, and the lining of channels with rock, concrete, or other materials.

Structure, Accessory: See Accessory Structure.

Structure Alteration: Any changes in the supporting members of any building, such as bearing walls, columns, beams or girders, or any substantial change in the roof and exterior walls.

Structure, Non-Conforming: See Non-Conforming Structure.

Structure, Principal: See Principal Structure.

Structure, Temporary: See Temporary Structure.

Sub-Standard Shoreland Use: Any use in the shoreland district existing prior to the date of enactment of this zoning ordinance which was permitted but does not meet the minimum lot area and length of water frontage, structure setbacks, or other dimensional standards of the shoreland district.

Substantial Damage: Damage of any origin sustained by a structure where the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial Improvement: Within any consecutive 365-day period, any reconstruction, rehabilitation (including normal maintenance and repair), repair after damage, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures that have incurred "substantial damage" regardless of the actual repair work performed. The term does not, however, include either:

- A. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.
- B. Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure." For the purpose of this ordinance, "historic structure" is as defined in 44 Code of Federal Regulations, Part 59.1.

Supervised Living Facility: A facility providing lodging plus supervision, counseling, or rehabilitative services to five or more persons and licensed as such under the Minnesota State Health Code.

Surface Water-Oriented Commercial Use: The use of land for commercial purposes, where access to and use of a surface water feature is an integral part of the normal conduct of business. Marinas, resorts, and restaurants with transient docking facilities are examples of such use.

Swimming Pool, Private: A structure, not located within a completely enclosed building, for swimming or bathing purposes, which is capable of containing water at a depth of one and one half (1 1/2) feet or greater.

Swimming Pool, Above Grade: A swimming pool whose exposed sides have a height of four (4) feet or greater above the natural ground located adjacent to said swimming pool.

Swimming Pool, Below Grade: A swimming pool whose exposed sides have a height of less than four (4) feet above the natural ground located adjacent to said swimming pool.

Temporary Building or Structure: A building or structure without any foundation or footings and which shall be removed when the designated time period, activity or use for which the temporary building or structure was erected has ceased.

Temporary Use: A use established for a fixed period of time with the intent to discontinue such use upon the expiration of the designated time period, activity, or use for which the temporary building or structure was erected.

Through Lot: A lot having frontage on two (2) parallel roads or which fronts upon two streets which do not intersect at the boundaries of the lot.

Toe of the Bluff: The lower point of a 50 foot segment with an average slope exceeding 18 percent.

Top of the Bluff: The higher point of a 50 foot segment with an average slope exceeding 18 percent.

Tower: Any ground or roof mounted pole, spire, structure, or combination thereof taller than 15 feet, including supporting lines, cables, wires, braces, and masts, intended primarily for the purpose of mounting an antenna, meteorological device, or similar apparatus above grade.

Two Family Dwelling: See Dwelling, Two Family.

Unit: See either Animal Unit or Dwelling Unit.

Use: The purpose or activity for which land or buildings are designed, arranged or intended, or for which land or buildings are occupied or maintained.

Use, Accessory: See Accessory Use.

Use, Conditional: See Conditional/Interim Use.

Use, Non-Conforming: See Non-Conforming Use.

Use, Permitted: See Permitted Use.

Use, Principal: See Principal Use.

Use, Temporary: See Temporary Use.

Variance: A modification or variation of the strict provisions of this zoning ordinance, as applied to a specific piece of property, in order to provide relief for a property owner because of undue hardship or particular difficulty imposed upon him by this ordinance. A variance shall normally be limited to height, bulk, density and yard requirements. A modification in the allowable uses within a district shall not be considered a variance.

Water Oriented Accessory Structure or Facility: A small above ground building or other improvement, except stairways, fences, docks, and retaining walls, which, because of the relationship of its use to a surface water feature, reasonably needs to be located closer to public waters than the normal structure setback. Examples of such structures and facilities include boathouses, gazebos, screen houses, fish houses, pump houses, and detached decks.

WECS, large (LWECS): A large wind energy conversion system (LWECS) as defined in Minnesota Statute 116C, as amended ("... any combination of WECS with a combined nameplate capacity of 5,000 kilowatts or more").

WECS Meteorological Tower: A tower which is erected primarily to measure wind speed, density, and direction along with other data relevant to siting WECS.

WECS, small (SWECS): A small wind energy conversion system (SWECS) as defined in Minnesota Statute 116C ("... any combination of WECS with a combined nameplate capacity of less than 5,000 kilowatts").

WECS, Small non-utility: A facility consisting of a single WECS which is incidental and subordinate to a permitted use on the same parcel and that has a rated generating capacity of 100 kW or less which supplies electrical power for on-site use, except that when a parcel on which the system is installed also receives electrical power supplied by a utility company, generated electrical power may be transferred to the utility company.

WECS, Small utility: A SWECS with more than one WECS; or any SWECS which is intended to produce electricity primarily for sale to a rate-regulated or non-regulated utility, or primarily for use off site; or any SWECS that has a combined generating capacity of more than 100 kW and less than an LWECS. The SWECS is considered a primary use of the site.

Wetland: A surface water feature classified as a wetland in the United States Fish and Wildlife Service Circular No. 39 (1971 edition).

Width: See Lot Width:

Wind energy conversion system (WECS): A wind energy conversion system as defined in Minnesota Statute 116C, as amended ("... any device such as a wind charger, windmill, or wind turbine and associated facilities that converts wind energy to electrical energy").

Wind turbine: A machine used to produce electricity by converting the kinetic energy of wind to electrical energy. A turbine consists of a rotor, nacelle and tower.

Woodland: an area with a stand of trees that has a canopy cover as shown on the most recent aerial photographs of at least fifty (50%) percent, being at least one (1) acre in size and having a minimum width measured along the ground surface of at least one hundred and thirty-two (132) feet and where at least fifty-one (51%) percent of the trees are classified as a hardwood variety.

Yard: A required open space on a lot which is unoccupied and unobstructed by a building from its lowest ground level to the sky except as expressly permitted in this ordinance. A yard shall extend along a lot line and at right angles to such a lot line to a depth or width specified in the yard regulations for the district in which such lot is located.

Yard, Front: A yard extending across the full width of the lot, the depth of which is the minimum horizontal distance between the front lot line and a line parallel thereto on the lot.

Yard, Interior Side: The side yard abutting another lot.

Yard, Rear: A yard extending across the full width of the lot between the rear line and the nearest line of the principal building.

Yard, Side: A yard extending from the front yard to the rear yard, the width of which is the minimum horizontal distance between the side lot line and a line parallel thereto on the lot.

Yard, Side Street: A side yard abutting a road or street right-of-way.

Youth Facility: A public playground, public swimming pool, public library, or licensed day care facility.

Zoning Administrator: Person appointed by the Board to administer the zoning ordinance for Rock Dell Township.

Zoning Certificate: A document signed by the Zoning Administrator required in the zoning ordinance as a condition precedent to the commencement of a use or the erection, construction, reconstruction, restoration, alteration, conversion, or installation of a structure or building, which acknowledges that such use, structure or building complies with the provisions of this zoning ordinance or authorized variance there from.

Zoning District: A specifically delineated area in the county within which regulations and requirements uniformly govern the use, placement, spacing and size of land and structure.

Zoning Map: See Official Zoning Map.

ARTICLE III – ADMINISTRATION

Section 3.00 **ZONING ADMINISTRATOR**:

The Zoning Administrator of Rock Dell Township shall have the power and duty to administer and advise on enforcement this ordinance. The Zoning Administrator may designate others to act upon his behalf to administer and advises on enforcement of this ordinance subject to reasonable conditions required by the board.

Section 3.02 **ZONING ADMINISTRATOR, SPECIFIC POWERS AND DUTIES:**

The Zoning Administrator shall have the following powers and duties in addition to any others he may now have or hereafter be given. The Zoning Administrator shall:

- A. Advise on enforcement and administer this ordinance;
- B. Issue zoning certificates and any other permits as required by the terms of this ordinance;
- C. Conduct inspections of the use of buildings and land to determine compliance with the terms of this ordinance;
- D. Maintain permanent and current records of this ordinance, including but not limited to all maps, amendments, and Conditional/Interim Uses, variances, appeals and applications therefor;
- E. Receive, publish legal notices, research and report upon all applications for appeals, variances, Conditional/Interim Uses, amendments, and other matters to the designated official bodies;
- F. Assist the Town Board and Board of Adjustment upon matters of land use development and regulations;
- G. Assist in instituting in the name of the township, any appropriate actions or proceedings against a violator.

Section 3.04 **COMPLIANCE REQUIRED**:

It shall be the duty of all property owners, architects, contractors, subcontractors, builders and other persons involved in the use of property, the erecting, altering, changing or remodeling of any building or structure, including tents and mobile homes, before beginning or undertaking any such use or work, to see that such work does not conflict with and is not in violation of the provisions of this ordinance; and any such property owner, architect, builder, contractor or other person using property, or doing or performing any such work and in violation of the provisions of this ordinance shall be held accountable for such violation.

Section 3.06 **ZONING CERTIFICATE**:

It shall be unlawful to use, occupy or permit the use or occupancy of any building or premises or part thereof, hereafter, created, erected, changed, converted, altered, or enlarged in its use or structure until a zoning certificate shall have been issued by the Zoning Administrator stating that the use of the building or land conforms to the requirements of this ordinance. Where a non-conforming use or structure is extended or substantially altered, the zoning certificate shall specifically state the manner in which the non-conforming structure or use differs from the provisions of this ordinance.

Section 3.08 **VIOLATIONS**:

Any property, building or structure being used, erected, constructed or reconstructed, altered, repaired, converted or maintained in a manner not permitted by this Ordinance, shall be prohibited. The Zoning Administrator or others designated on behalf of Rock Dell Township may institute appropriate actions or proceedings to prevent, restrain, correct or abate such violations or threatened violations. In addition, violations of this Ordinance occurring in flood plain or shoreland areas will be forwarded to the Commissioner of Department of Natural Resources.

In responding to a suspected violation, the Zoning Administrator and Town Board may utilized the full array of enforcement actions available to it including but not limited to prosecution and fines, injunctions, after-the-fact permits, orders of corrective measures or a request to the National Flood Insurance Program for denial of flood insurance availability to the guilty party. The Township must act in good faith to enforce these official controls and correct ordinance violations to the extent possible so not to jeopardize its eligibility in the National Flood Insurance Program.

Section 3.10 **PENALTIES**:

Any person, firm, corporation or entity violating the provisions of this ordinance shall be guilty of a misdemeanor. Each day that violation is committed or permitted to exist shall constitute a separate offense. The imposition of any fine or sentence shall not exempt the offender from compliance with the requirements of this ordinance; and the Township may pursue, by appropriate actions or proceedings, any or all additional other remedies.

Section 3.12 **RECORDS**:

The Zoning Administrator shall maintain a record of the elevation of the first floor (including basement) of all new structures or additions to existing structures in the FFA and FFB flood fringe districts. A record of the elevations and flood-proofing measures to which structures or additions are flood-proofed shall also be maintained.

Section 3.14 **BOARD OF ADJUSTMENT**:

- A. The Board of Adjustment is established in accordance with Minnesota Statutes Section 462.354 and as hereafter amended.
- B. The Board of Adjustment shall consist of five (5) members, appointed by the Town Board, of which three (3) may be Town Supervisors and two shall be members of the public residing in Rock Dell Township.
- C. Members of the Board of Adjustment shall be subject to removal, for cause, upon majority vote by the Town Board, after notice and opportunity for hearing before the Board.
- D. Members whose terms have expired shall continue to serve as members of the Board of Adjustment until their replacements have been appointed.
- E. Meetings of the Board of Adjustment shall be scheduled monthly at a regular time and location but shall be held only at the call of the chairman and at such other times as the Board, in its rules of procedure, may specify.
- F. The Board of Adjustment shall elect a chairman and vice chairman from its members and shall appoint a secretary who need not be a member of the Board. It shall adopt rules for transaction of its business and shall keep a public record of its transactions, findings, and determinations. Staff services for the Board of Adjustment shall be furnished by the Township.
- G. The Board of Adjustment shall act upon all questions as they may arise in the administration of this zoning ordinance; and it shall hear and decide appeals from, and review any order, requirement, decision, or determination made by an administrative official charged with enforcing this zoning ordinance. Such appeal may be taken by any person aggrieved or by any officer, department, board or bureau of a town, municipality, county or state. The appeal procedures are indicated in Section 4.06 of this zoning ordinance.
- H. The Board of Adjustment shall also have the authority to grant variances to the provisions of this zoning ordinance under certain conditions. The conditions and procedures for issuance of a variance are indicated in Section 4.08 of this zoning ordinance. Appeal from an adverse decision of the Board of Adjustment on variance applications or appeals shall be made to the Olmsted County District Court.

ARTICLE IV -- ZONING PROCEDURES

Section 4.00 **AMENDMENTS:**

The Town Board may adopt, by a majority vote of all members of the Board, amendments to the zoning ordinance and to the official zoning map, which meet the goals and policies of the Township as reflected in the Comprehensive Plan or changes in conditions in the Township.

A. Types of Amendments:

- 1. A change in district boundaries (rezoning);
- 2. A change in district regulations;
- 3. A change in any other provision of this ordinance.
- B. **Initiation of Proceedings**: The procedure for amending the zoning ordinance shall be initiated by at least one of the following three methods:
 - 1. By petition of an owner or owners of property which is proposed to be rezoned or for which district regulations changes are proposed;
 - 2. By action of the Board.
- C. **Amendment Procedures-Property Owners:** The procedures for a property owner to initiate an amendment to the ordinance are as follows:
 - 1. The applicant shall obtain the application and necessary forms from the Zoning Administrator.
 - 2. The applicant shall submit the application to the zoning administrator, together with any necessary supporting documents or exhibits, which may include:
 - a) an accurate legal description
 - b) maps drawn to a minimum scale of one (1) inch per one hundred (100) feet
 - c) any maps showing contours should comply with section 2.00 Topographic Map Scales.
 - 3. After review of the application and any research required the Zoning Administrator shall submit the application with recommendations to the Board. The Zoning Administrator shall set a date for the public hearing at the next Town Board meeting that would allow adequate time to publish the legal notices and the mailing of such notices to surrounding property owners in accordance with applicable Minnesota Statutes. Failure of any property owner or occupant to receive such notice shall not invalidate the proceedings, provided a bona-fide attempt to give such notice has been made. All amendments to this Ordinance pertaining to the Floodway, Flood Fringe (FFA and FFB) and the Flood Plain Districts shall be submitted to and approved by the Commissioner of Natural Resources and FEMA prior to their adoption. Changes to the Official Zoning Map pertaining to the Floodway, Flood Fringe (FFA and FFB) and the Flood

- Plain Districts are require prior approval by the Federal Insurance Administration.
- 4. The Board shall hold a public hearing in accordance with Minnesota Statutes, Section 462.357. The Board shall adopt findings based upon the evidence established during the hearing and act upon the application within sixty (60) days of the Board's scheduled public hearing date.
- 5. No application of a property owner for an amendment to the text of this zoning ordinance or the Official Zoning Map shall be reconsidered by the Town Board within the one (1) year period following a denial by the Town Board of such request, except the Town Board may permit a new application, including new fee, if in the opinion of the Town Board new evidence or a change of circumstances warrant it.
- D. **Amendment Procedures Town Board of Supervisors:** The procedures for the Town Board to initiate a rezoning or an amendment to this ordinance are as follows:
 - 1. The Board shall pass a motion recommending an amendment to this ordinance.
 - 2. The Zoning Administrator shall set a date for the public hearing before the Town Board in accordance with the public hearing requirements, Section 462.357 of the Minnesota Statutes. Failure of any property owner or occupant to receive such notice shall not invalidate the proceeding, provided a bona-fide attempt to give such notice has been made. Town-wide amendments to this zoning ordinance need not be mailed to property owners or surrounding property owners affected by such an amendment.
 - All amendments to this zoning ordinance pertaining to the Floodway, Flood Fringe (FFA and FFB) and the Flood Plain Districts shall be submitted to and approved by the Commissioner of Natural Resources prior to their adoption. Changes to the Official Zoning Map pertaining to the Floodway, Flood Fringe (FFA and FFB) and the Flood Plain Districts also require prior approval by the Federal Insurance Administration.
 - 3. The Board shall hold the public hearing, adopt findings based upon the evidence established during the hearing and provide a recommendation to the Board in accordance with State Statutes.
 - 4. The Board shall adopt findings and act upon the application in accordance with State Statutes.
- E. Amendment Procedures: Sections 10.20 and 10.21: In addition to the procedures outlined above, any proposed amendment to the text addressing Sections 10.20 and 10.21 shall be referred to the Olmsted County Soil and Water Conservation District Board for comment prior to action by the Town Board initiating the amendment.
- F. General Development Plan (GDP)
 - 1. **Purpose:** Rock Dell Township considers vital, the orderly, integrated, compatible development of the limited land area within the township. The Olmsted County General Land Use Plan establishes general land use policy. The

zoning ordinance establishes detailed policies, regulations and standards for the township. General development plans are necessary to:

- a) insure that the landowner and developer investigates the broad effects development of property will have on the site and also on adjacent properties and the public infrastructure;
- b) guide the future growth and development of those portions of the township identified for development in accordance with the land use plan;
- protect the natural, social and economic character of the township by encouraging orderly development that assures appropriate timing and sequencing;
- d) ensure that public facilities and services are available concurrent with development and will have a sufficient capacity to serve the proposed development(s);
- e) prevent the pollution of water bodies and groundwater; assure the adequacy of drainage; and establish protection for and wise management of natural resources in the township
- f) provide for open spaces through the efficient design and layout of the land:
- g) avoid and remedy the problems associated with inappropriately subdivided lands, including premature subdivision and scattered subdivision

2. A GDP is required:

- a) for any land use plan amendment., zone change, or subdivision of land requiring plating on land located within an Urban Service Area
 - 1) A GDP shall not be required for any portion of an area for which a GDP has previously been approved by the Town Board
 - 2) A GDP may be waived by the Town board based on the factors of subsection 2(b)(1-6)
- b) In the review and approval of a proposed zoning district amendment in the Suburban Development Area the Town Board shall first determine whether a general land use plan shall be required, based on the following factors:
 - 1) consistency with the land use plan policies;
 - 2) the size of the subject property and parcels adjacent thereto;
 - the potential for street, surface water runoff and drainage system, and open space connections from the subject property to adjacent property, developed or undeveloped;
 - 4) the amount of undeveloped land in the vicinity and amount that borders the subject property; whether proposed development is infill development;
 - 5) onsite and adjacent property site characteristics including floodplain, shoreland, public waters, blufflands, and public streets and street pattern;
 - 6) adjacency to the Rock Dell Urban Service Area:

- sufficiency of public facilities and services serving the proposed development area, and appropriate timing of and location of development.
- c) The Town board shall have the authority to initiate a GDP for a parcel or area located within the Rock Dell Urban Service Area or the Suburban Development Area as designated on the Olmsted County General Land Use Plan.
- 3. **A GDP shall be acted on** the Town Board in accordance with the procedures of section 4.00 amendments. A GDP and zoning map and zoning map amendment may be reviewed at the same time in the hearing process. The action taken must be by separate motion of the Town Board.

4. A GDP should include:

- a) all current parcels proposed for subdivision and development under the rezoning;
- all other parcels abutting the property proposed for rezoning or within one half mile of the boundaries of the property proposed for rezoning located within the urban service area, urban reserve area or the suburban development area as delineated on the land use plan;
- c) all adjacent lands under the same ownership as the owner or applicant proposing the rezoning and
- d) all parcels needed to provide access to public roads.

5. The following physical and planning factors should be addressed in a GDP:

- a) existing and proposed land uses, densities, and general lot sizes and location;
- transportation and other infrastructure systems internal to the planning area including the street pattern and connections to the external street network and shared water supply and sewage treatment systems;
- c) the surface water drainage systems;
- d) the open space system that may include natural resource lands (unique habitat, outdoor recreation space, wooded areas, significant visual resource areas), and sensitive lands (shorelands, wetlands, floodplain, steep slopes, sinkhole concentrations and other features dependent on the site); and,
- e) the schedule for development of the infrastructure.

6. In the review of a GDP, the Town Board shall make findings indicating that:

- a) proposed land uses are in accord with the Olmsted County General Land Use Plan and Zoning Map;
- b) the street pattern is appropriate to serve properties under consideration;
- c) the proposal makes provision for planned capital improvements and streets based on the county capital improvement plan and Thoroughfare Plan;

- d) the proposal makes adequate provision for surface water drainage, soil erosion control, water supply, sewage treatment, consistent with State law and rule and Township or County ordinance;
- e) the lot, block and street layout is consistent with General Land Use Plan use, development and resource management policy, and subdivision design principles;
- f) unique natural resource features and sensitive areas are protected through the open space provision and appropriate lot layout.
- g) development will occur in an orderly fashion and
- h) connecting roads are adequate to handle projected traffic, or provision has been made to correct deficiencies.

H. Amendment Findings

- 1. the proposal is consistent with the policies of the General Land Use Plan;
- 2. the amendment is in the public interest;
- 3. the proposed development is timely based on surrounding land uses, proximity to development, and the availability and adequacy of infrastructure;
- 4. the proposal permits land uses within the proposed district that are appropriate on the property and compatible with adjacent uses and the neighborhood;
- 5. the proposal does not result in spot zoning;
- 6. the proposal is consistent with a GDP for the area, if one exists.

Section 4.02 **CONDITIONAL/INTERIM USE:**

The purpose of a Conditional/Interim Use permit is to allow a use that would not be appropriate generally but may be allowed with appropriate restrictions upon a finding that 1) The proposed use or development conforms to the Comprehensive Plan, and 2) is compatible with the existing adjacent areas, 3) is site appropriate.

A Conditional/Interim Use permit may be allowed only after an application for a permit has been heard before the Board Town and approved, except when there is an appeal to the Board of Adjustment and Appeals, and then, only after the approval of the Board of Adjustment and Appeals.

A. Criteria for Granting Conditional/Interim Uses: In granting a Conditional/Interim Use, the Town Board shall consider the effect of the proposed use on the Comprehensive Plan and upon the health, safety and general welfare of occupants of surrounding lands. Among other things, the Town Board shall consider the following:

- 1. The proposed use will not be injurious to the use and enjoyment of other property in the neighborhood and will not significantly diminish or impair the values of such property;
- 2. The proposed use will not impede the normal and orderly development and improvements of the surrounding property;
- 3. Adequate utilities, parking, drainage and other necessary facilities will be provided;
- 4. Adequate ingress and egress will be provided to minimize traffic congestion in the public streets;
- 5. Based on a traffic impact analysis, if required under Section 10.48 of this Ordinance, or (if required for a transportation impact analysis have been waived) considering the recommendation of the responsible road authority engineer as defined in that Section, either
 - The traffic generated by the proposed use can be safely accommodated on existing or planned street systems; and the existing public roads providing access to the site will not need to be upgraded or improved by the Township or County in order to handle the additional traffic generated by the use; or
 - a road agreement has been entered into specifying responsibility for improving and maintaining the roads of affected jurisdictions including remediation of damaged roads and specification of designated haul routes to limit heavy vehicle traffic to structurally adequate corridors;
- 6. Adequate measures have been taken or proposed to prevent or control offensive odor, fumes, dust, noise, vibration, lighting or storm water runoff, which would otherwise disturb the use of neighboring property.
- 7. The special criteria or requirements indicated in Article X, General Regulations, are complied with;
- 8. The water and sanitary systems are or would be adequate to prevent disease, contamination and unsanitary conditions.

When deciding on Conditional/Interim Uses to the Floodway, Flood Fringe (FFA and FFB) and the Flood Plain Districts, the following additional factors shall also be considered:

- 9. The danger to life and property due to increased flood heights or velocities caused by encroachments.
- 10. The danger that materials may be swept onto other lands or downstream to the injury of others.
- 11. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
- 12. The relationship of the proposed use to the flood plain management program for the area.

- 13. The safety of access to the property in times of flood for ordinary and emergency vehicles.
- 14. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site.
- 15. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.
- 16. The importance of the services provided by the proposed facility to the community.
- 17. The requirements of the facility for a waterfront location.
- 18. The availability of alternative locations not subject to flooding for the proposed use.
- 19. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.
- 20. Based upon technical evaluation of the designated engineer or expert, the Town Board shall determine the specific flood hazard at the site and evaluate the suitability of the proposed use in relation to the flood hazard.

When deciding on a Conditional/Interim Use to the A-1, A-2, A-3, and A-4 Agricultural Districts, the following additional factors shall be considered.

- 21. The amount of prime agricultural land with a crop equivalent rating of 60 or above that would be taken out of production as a result of the use.
- 22. The need for new public roads or the need for improvement to existing public roads is minimal.
- 23. A thorough evaluation of the waterbody and topographic, vegetation, and soils conditions on the site must be made to ensure:
 - a) The prevention of soil erosion or other possible pollution of public waters, both during and after construction
 - b) That the visibility of structures and other facilities as viewed from public waters is limited.
 - c) That the site is adequate for water supply and on-site sewage treatment.
 - d) That the types, uses, and numbers of watercraft that the project will generate are compatible in relation to the suitability of public waters to safely accommodate these watercraft.
- B. Additional Conditions: In permitting a new Conditional/Interim Use or the alteration of an existing Conditional/Interim Use, the Town Board may impose, in addition to those standards and requirements expressly specified by this ordinance, additional conditions which the Town Board considers necessary to protect the best interest of the surrounding area or the Township as a whole. These conditions may include, but are not limited to the following:
 - 1. Increasing the required lot size or yard dimension.

- 2. Limiting the height, size or location of buildings.
- 3. Controlling the location and number of vehicle access points.
- 4. Increasing the street width.
- 5. Increasing the number of required off-street parking spaces.
- 6. Limiting the number, size, location or lighting of signs.
- 7. Requiring diking, fencing, screening, landscaping or other facilities to protect adjacent or nearby property.
- 8. Designating sites for open space.
- 9. Limiting the hours of operation.
- 10. Limiting the length of time for which the Conditional/Interim Use may exist.
- 11. Increased setbacks from the ordinary high water level.
- 12. Limitations on the natural vegetation to be removed or the requirement that additional vegetation be planted.
- 13. Special provisions for the location, design, and use of structures, sewage treatment systems, watercraft launching and docking areas, and vehicle parking areas.
- 14. Additional storm water runoff controls.
- C. **Required Exhibits:** The following exhibits shall be required unless waived by the Zoning Administrator:
 - 1. A completed application form.
 - 2. An accurate boundary description of the property.
 - 3. A development plan of the property showing the existing or proposed buildings, streets, access roads, driveways, parking spaces and signs.
 - 4. Landscaping and screening plans.
 - 5. Drainage and Storm Water Runoff management Plans.

Conditional/Interim Uses pertaining to the Floodway, Flood Fringe (FFA and FFB) and Flood Plain Districts, Sections 9.02, 9.04, 9.06, and 9.08, shall, in addition to the previous exhibits, require the following:

- 6. Plans in triplicate drawn to scale (minimum scale is one (1) inch per one hundred (100) feet) showing the nature, location, dimensions and elevations of the lots, existing or proposed, fill, storage of materials, flood-proofing measures, and the relationship of the above to the location of the stream channel.
- 7. Specifications for building construction and materials, flood proofing, filling, dredging, grading, channel improvement, storage of materials, water supply and sanitary facilities.
- 8. Any additional information deemed necessary by the Commission to determine the suitability of the particular site for the proposed use.

- 9. State and Federal Permits. Prior to granting a permit or processing an application for a Conditional/Interim Use Permit the Zoning Administrator shall determine that the applicant has obtained all necessary State and Federal Permits.
- D. **Conditional/Interim Use Procedures:** The procedures for a property owner to obtain a Conditional/Interim Use are as follows:
 - 1. The applicant shall obtain the application and necessary forms from the Zoning Administrator.
 - 2. The applicant shall return the application to the Zoning Administrator along with the required exhibits and pay the fee established by the Board for processing the Conditional/Interim Use procedures (See Appendix A).
 - 3. Prior to the processing of the application for a Conditional/Interim Use pertaining to the Floodway, Flood Fringe (FFA and FFB) and Flood Plain Districts, the Zoning Administrator shall determine that the applicant has obtained all necessary state and federal permits pertaining to flood proofing and flood protection measures.

If the Conditional/Interim Use is with respect to either the Floodway, Flood Fringe (FFA and FFB) or the Flood Plain Districts, the Zoning Administrator shall transmit one (1) set of plans to a designated engineer or other expert person or agency acceptable to the county for technical assistance in evaluating the proposed project in relation to flood heights and velocities, the seriousness of flood damage to the use, the adequacy of the plans for protections, and other matters.

In addition, the Zoning Administrator shall submit by mail to the Commissioner of Natural Resources a copy of the application for proposed Conditional/Interim Use sufficiently in advance so that the Commissioner will receive at least ten (10) days notice of the hearing

- a) Upon receipt of an application for a Conditional/Interim Use Permit for a use within the General Flood Plain District, the applicant shall be required to furnish such of the following information as is deemed necessary by the Zoning Administrator for the determination of the Regulatory Flood Protection Elevation and whether the proposed use is within the Floodway or Flood Fringe District.
 - A typical valley cross-section showing the channel of the stream, elevation of land areas adjoining each side of the channel, cross-sectional areas to be occupied by the proposed development, and high water information.
 - 2) Plan (surface view) showing elevations or contours of the ground (contours per Topographic Map Scales, Sect 2.0); pertinent structure, fill, or storage elevations; size, location, and spatial arrangement of all proposed and existing structures on the site; location and elevations of streets; photographs showing existing land uses and vegetation upstream and downstream; and soil type.

- 3) Profile showing the slope of the bottom of the channel or flow line of the stream for at least 500 feet in either direction from the proposed development.
- b) The applicant shall be responsible to submit one copy of the above information to a designated engineer or other expert person or agency for technical assistance in determining whether the proposed use is in the Floodway or Flood Fringe District and to determine the Regulatory Flood Protection Elevation. Procedures consistent with Minnesota Regulations 1983, Parts 6120.5000--6120.6200 shall be followed in this expert evaluation. The designated engineer or expert is strongly encouraged to discuss the proposed technical evaluation methodology with the respective Department of Natural Resources' Area Hydrologist prior to commencing the analysis. The designated engineer or expert shall:
 - 1) Estimate the peak discharge of the regional flood.
 - 2) Calculate the water surface profile of the regional flood based upon a hydraulic analysis of the stream channel and overbank areas.
 - 3) Compute the floodway necessary to convey or store the regional flood without increasing the flood stages more than 0.2 foot. A cumulative stage increase less than 0.5 feet shall be required. If as a result of the additional stage increase, increased flood damages would result a lesser stage increase may be mandated. An equal degree of encroachment on both sides of the stream within the reach shall be assumed in computing floodway boundaries.
- c) The Zoning Administrator shall present the technical evaluation and findings of the designated engineer or expert to the Town Board. The Board must formally accept the technical evaluation and the recommended Floodway and/or Flood Fringe District Boundary or deny the permit application. The Town Board, prior to official action, may submit the application and all supporting data and analyses to the Federal Emergency Management Agency and the Department of Natural Resources for review and comment. Once the Floodway and Flood Fringe Boundaries have been determined, the permit application may be processed.
- 4. The Zoning Administrator shall set a date for the public hearing before the Town Board in accordance with the public hearing requirements in accordance with Minnesota Statutes. Failure of any property owner or occupant to receive such notice shall not invalidate the proceeding, provided a bona-fide attempt to give such notice has been made.
- 5. The Town Board shall hold the public hearing, adopt findings based upon the evidence established during the hearing and shall reach a decision upon the application in accordance with times set by State Statutes.
- 6. The Town Board's decision granting the Conditional/Interim Use with respect to the Floodway, Flood Fringe (FFA and FFB) and the Flood Plain districts shall be forwarded by mail to the Commissioner of Natural Resources within ten (10) days of such action.

- 7. The Zoning Administrator shall transmit a certified copy of an approved Conditional/Interim Use permit, along with the legal description of the property, to the County Recorder for recording.
- 8. A Conditional/Interim Use permit shall remain in effect for so long as the conditions of the permit are observed or complied with.
- 9. No application for Conditional/Interim Use shall be reconsidered by the Town Board within the one (1) year period following a denial of such request, except the Board may permit a new application if, in the opinion of the Board, new evidence or a change of circumstances warrant it.
- 10. Should no construction or use begin within one year from the date of approval, or should the approved Conditional/Interim Use be discontinued for a period of one year, the Conditional/Interim Use shall be void, except that the applicant may request a single one year extension from the Zoning Administrator.

Section 4.06 APPEAL OF THE ZONING ADMINISTRATOR'S DECISION:

A decision of the Zoning Administrator or any administrative official charged with enforcing this zoning ordinance may be appealed to the Board of Adjustment. Such appeal may be taken by any person aggrieved or by any officer, department, board or bureau of a town, municipality, county or state. An appeal stays all proceeding in furtherance of the action appealed, unless the Board of Adjustment certifies that there is imminent peril to life or property.

A. Appeal Procedures:

- 1. The appeal application shall be submitted to the Zoning Administrator within ten (10) days of the Zoning Administrator or administrative official's decision. The appellant shall pay the fee for processing the appeal as established by the Town Board of Supervisors (See Appendix A).
- 2. Within sixty (60) days after receipt of the appeal, the Town Board shall hold a public hearing and notify the appellant, the official from whom the appeal is taken, and the public in accordance with Minnesota Statutes Section 462.357. The Town Board shall adopt findings and shall act upon the appeal within sixty (60) days of the Town Board's scheduled public hearing date.

Section 4.08 **VARIANCES:**

The Board of Adjustment shall have the exclusive power to order the issuance of variances from the requirements of any official control including restrictions placed on nonconformities. Variances shall only be permitted when they are in harmony with the general purposes and intent of the official control and when the variances are consistent with the comprehensive plan. The Board of Adjustment may not permit as a variance any use that is not permitted for the property in the district where the affected person's land is located. The Board of Adjustment may impose conditions in the granting of variances. A condition must be directly related to and must bear a rough proportionality to the impact created by the variance.

Criteria for Granting a Variance: A variance may be granted only when the applicant for the variance establishes that there are practical difficulties in complying with the official control. Economic considerations do not constitute practical difficulties. The Board of Adjustment must find evidence that all of the following facts and conditions exist:

- 1. There are extraordinary conditions or circumstances, such as irregularity, narrowness, or shallowness of the lot or exceptional topographical or physical conditions which are peculiar to the property and do not apply to other lands within the neighborhood or the same class of zoning district;
- 2. The extraordinary conditions or circumstances are due to circumstances unique to the property not created by the landowner;
- 3. The variance is necessary to overcome practical difficulties in complying with the zoning ordinance so that the property can be used in a reasonable manner not permitted by the ordinance;
- 4. The variance will not be materially detrimental to the public welfare or materially injurious to other property in the area, and will not alter the essential character of the locality;
- 5. The variance is in harmony with the general purpose and intent of this ordinance; and
- 6. The terms of the variance are consistent with the Comprehensive Plan.
- B. Variances in a Floodway: When deciding a variance pertaining to Sections 9.02, 9.04, 9.06, and 9.08 Floodway, Flood Fringe (FFA and FFB) and the Flood Plain Districts, the following additional factors shall be considered:
 - 7. That the granting of such variance will not increase flood heights, create additional threats to public safety, necessitate extraordinary public expense, create nuisances, or increase the threat of damage to property or the environment from the volume or velocity of runoff.
- C. **Variances in Shoreland District:** When deciding a variance to the Shoreland District regulations, the following additional factors shall be considered:
 - 8. No variance to the standards of the shoreland district or river corridor distirct shall have the effect of allowing in any district uses prohibited in that district.
 - 9. No variance in the shoreland district shall permit a lower degree of flood protection than the Regulatory Flood Protection Elevation for the particular area.
 - 10. No variance in the shoreland district shall permit standards lower than those required by State law.

- 11. In areas where development exists on both sides of a proposed building site, water and road setbacks may be varied to conform to the existing established setbacks.
- 12. In areas of unusual topography or substantial elevation above the lake level, the water setback may be varied to allow a riparian owner reasonable use and enjoyment of his property.
- 13. Where homes incorporate a method of sewage disposal other than soil absorption, water setbacks may be reduced by one-third (1/3).
- 14. For existing developments, the application for variance must clearly demonstrate whether a conforming sewage treatment system is present for the intended use of the property. The variance, if issued, must require reconstruction of a nonconforming sewage treatment system.
- D. **Variance Procedures:** The procedures for a property owner to obtain a variance are as follows:
 - 1. The applicant shall obtain the application and necessary forms from the Rochester-Olmsted Planning Department.
 - 2. The applicant shall return the application and necessary forms to the Rochester-Olmsted Planning Department along with the required exhibits and pay the fee established by the Board. (See Appendix A).
 - 3. Whenever the variance is related to provisions of the Floodway, Flood Fringe (FFA and FFB) and the Flood Plain Districts, the Zoning Administrator shall submit to the Commissioner of Natural Resources a copy of all applications for variances so that the Commissioner receives at least ten (10) days notice of the hearing.

The Zoning Administrator shall notify the applicant in writing that:

- a) The issuance of a variance to construct a structure below the base of flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage, and
- b) Such construction below the flood protection elevation increases risks to life and property.
- 4. The Zoning Administrator shall set a date for the public hearing before the Board of Adjustment in accordance with the public hearing requirements, Minnesota Statutes Section 394.26. Failure of any property owner or occupant to receive such notice shall not invalidate the proceeding, provided a bona fide attempt to give such notice has been made.
- 5. The Board of Adjustment shall hold the public hearing. The Board of Adjustment shall table further action on any application which is not accompanied by a recommendation of the township. The tabling shall be until such time as a recommendation is received, but not to exceed thirty five (35) days. Failure of the township to act upon the application within thirty-five (35)

days of the Board's action tabling the request shall cause the township to forfeit its opportunity to comment on said application. The Board of Adjustment shall adopt findings based upon the evidence established during the hearing and shall act upon the variance within sixty (60) days from the date of the public hearing.

- 6. A certified copy of the approved variance shall be mailed to the petitioner.
- 7. A certified copy of an approved variance, along with the legal description of the property, shall be transmitted to the County Recorder for recording.
- 8. The Board of Adjustment's decision granting the variance to the Floodway, Flood Fringe (FFA and FFB), Flood Plain District and Shoreland District must be sent to the Commissioner or the Commissioner's designated representative and postmarked within at least ten (10) days of the public hearing.
- 9. The Zoning Administrator shall submit a copy of the decisions and summary of the public record/testimony and the findings of fact and conclusions for the Board of Adjustment's decision postmarked within ten (10) days of the decision.
- E. **Required Exhibits:** The following exhibits shall be required unless waived by the Zoning Administrator:
 - 1. A completed application form.
 - 2. An accurate boundary survey and site plan.

Section 4.10 **TEMPORARY CONSTRUCTION PERMITS:**

The temporary use of property, in any district, for a use customarily incidental to the construction of roads, buildings, utilities, or public projects may be allowed upon approval of a zoning certificate in the form of a temporary and revocable permit for not more than a 90-day period by the Zoning Administrator. The Zoning Administrator shall attach those conditions which will safeguard the public health, safety and general welfare. The permit may be renewed by the zoning administrator, provided that the total approved time shall not exceed one (1) year. Issuance of a permit shall be subject to, but not limited to, the following conditions:

- A. Reclamation of property to an acceptable condition.
- B. Reclamation of property prior to expiration date of permit.
- C. Performance bond posted with County Public Works Department.
- D. Show evidence of valid state and federal permits as required.
- E. Provide traffic safety devices in proximity of operation.
- F. Approval of the Olmsted County Health Department.

ARTICLE V -- AGRICULTURAL DISTRICTS

Section 5.02 A-2 AGRICULTURAL PROTECTION DISTRICT:

The purpose of this district is to maintain, conserve and enhance agricultural lands which are historically valuable for crop production, pasture land, and natural habitat for plant and animal life. This district in intended to encourage long-term agricultural uses and preserve prime agricultural farmland by restricting the location and density of non-farm dwellings and other non-farm land uses. The A-2 District does provide a slightly higher density of non-farm dwellings than the A-1 District and is intended to apply to those areas within the comprehensive Plan's "Agricultural Protection Area" and "Agricultural Area" where major agricultural investments, large farms and feedlots are more scattered and greater numbers on non-farm uses or small parcels are present. The definition of a farm for this district is "a lot used for agricultural or horticultural uses and comprised of at least thirty-five (35) acres".

A. Permitted Uses:

- 1. Dwellings:
 - a) Farm: One farm dwelling may be located on a farm. The definition of a farm for this district is; (1) "a lot used for agricultural or horticultural uses and comprised of either at least thirty five (35) acres or; (2) comprised of at least an undivided quarter-quarter section, less no more than five acres, including the abutting public road right-of-way to the centerline. However, if the right-of-way is owned by the road authority in fee simple, then abutting public right-of-way shall not be include in determining parcel area.
 - b) Non-Farm: One non-farm dwelling may be located upon a buildable non-farm lot (See Section 1.26, b, 2 & 3).
 - c) Farmstead dwelling: One farmstead dwelling may be located upon a non-farm lot in conformance with Section 5.02 D.
- 2. A second farm dwelling or mobile home may be placed on the same farmstead as another when the ownership of such farm exceeds a size of eighty (80) acres of contiguous land and provided that the residents of both dwellings are owners, operators or employees of said farm.
- 3. General farming, including the raising of crops, livestock, poultry, dairying, horticulture, apiculture, sod farming, forestry, and similar agriculturally related uses, provided that.
- 4. Animal feedlots shall not exceed 1,000 animal units.
- 5. Farm drainage systems, flood control and watershed structures and erosion control devices meeting all county, state and soil conservation district minimum regulations.
- 6. Railroad right-of-ways, but not including freight classification yards and buildings.

- 7. One seasonal roadside stand where the use is located on a farm, the volume of any road providing driveway access to the use is less than 1,500 vehicles per day, and the posted speed limit on any road providing driveway access to the use is 60 mph or less, provided that:
 - * adequate off-street parking is available; and
 - * the road authority approves of the access and location.

No more than one thirty-two (32) square foot sign advertising the stand shall be permitted for each street or road frontage.

- 8. Forest and game management areas.
- 9. Home occupations as regulated in Section 10.02.
- 10. Accessory structures and uses customarily incidental to any of the above permitted uses when located on the same property.
- 11. A non-utility small wind energy conversion system (SWECS) with or without a meteorological tower.
- 12. WECS meteorological towers.
- 13. The following residential uses: State licensed residential facilities serving six or fewer persons; Licensed family adult foster care home or foster care for adults with five or fewer beds as permitted in MS 245.11, Subd. 2a. No more than one four (4) square foot sign advertising the facility shall be permitted at the primary driveway entrance.
- 14. The following non-residential uses: State licensed non-residential facility or day care facility serving 12 or fewer persons, and a group day care facility serving 14 or fewer children. No more than one four (4) square foot sign advertising the facility shall be permitted at the primary driveway entrance.
- B. Conditional/Interim Uses: (See Section 4.02, Conditional/Interim Use)
 - 1. One mobile home as a second dwelling on a lot, under one or more of the following circumstances:
 - a) When there is a need to provide services to residents of either of the dwellings for reasons of physical or mental condition; or
 - b) When all adult residents of either of the dwellings are sixty (60) years of age or older; or;
 - c) When at least one of the adult occupants of each dwelling is employed at least seasonally in general farming activities carried out on the parcel; or
 - d) When at least one of the adult occupants of each dwelling has at least a partial ownership interest in the parcel.
 - 2. Public utility buildings such as substations, transformer stations and regular stations without service or storage yards.
 - 3. Public parks and buildings.

- 4. Churches and community buildings, including chapels, temples, synagogues, cemeteries and normal accessory buildings for education and living quarters.
- 5. Personal-use airports, as defined in Minnesota Rules, including landing fields and platforms, hangars, masts, and other facilities for the operation of aircraft not engaged in air commerce. [Private airports for restricted or public use are addressed as a conditional use in the Agricultural/Resource Commercial Land Intensive Low Impact District].
- 6. Communications towers and structures, including radio and television and commercial wireless telecommunications services and towers.
- 7. One seasonal roadside stand not meeting the criteria described in Section 5.02 A (7), provided that:
 - * adequate off-street parking is available, and
 - * the road authority approves of the access and location.

No more than one thirty-two (32) square foot sign advertising the stand shall be permitted for each street or road frontage

- 8. Temporary uses not to exceed one year.
- 9. Any new or expanding feedlot exceeding 1000 animal units as regulated in Section 10.26. No animal feedlot shall exceed 2000 animal units.
- 10. Kennels
- 11. Stables for the commercial boarding of animals on parcels under 35 acres.
- 12. Riding academies.
- 13. Private parks and open space uses, including hiking areas, trails for cross-county skiing, picnic facilities, and similar activities, but not to include camping or other overnight lodging, nor motorized recreational vehicles, such as dirt bikes, motorcycles, snowmobiles, and so on.
- 14. Licensed Shooting Preserves.
- 15. Landspreading sites provided the following standards are complied with:
 - a) The applicant and landspreading site comply with MPCA Rules, Chapter 7040, as administered by the Minnesota Pollution Control Agency.
- 16. Accessory structures and uses customarily incidental to any of the above Conditional/Interim Uses when located on the same property.
- 17. Bed and Breakfast, provided that it is located within the principal dwelling of an existing farmstead, as an accessory use on a parcel of which the principal use is general farming, and that it is located at least ¼ mile from a feedlot not located on the farm parcel. If the parcel is smaller than 35 acres, the operator shall demonstrate that the parcel with the proposed use is part of a commercially viable agricultural operation. The minimum lot size for the proposed use shall be 5 acres.
- 18. Licensed farm winery as a seasonal accessory use on a parcel of which the principal use is viticulture.

- 19. Other uses similar to those uses described as permitted or Conditional/Interim Uses in Section 5.00 (A) or (B).
- 20. Small utility wind energy conversion system (SWECS). Meteorological towers may be a part of the system.
- 21. Home business as regulated in Section 10.02 where Section 10.02 directs consideration as a conditional use permit.
- 22. Solar energy farm (photovoltaic systems).
- C. Standards for Non-Farm Dwellings: Non-farm lots or dwellings shall be permitted only when they comply with all of the following standards:
 - 1. No more than one (1) dwelling unit (non-farm) per quarter-quarter section (approximately 40 acres) of land shall be allowed. Should a lot of record that qualifies as a buildable lot for a non-farm dwelling exist within a quarter-quarter section or within one-quarter (1/4) mile, no additional non-farm dwelling shall be allowed. Non-farm dwellings existing prior to the effective date of the ordinance shall be permitted uses and not non-conforming uses within the meaning of Sections 1.26 and 1.28.
 - 2. Any non-farm lot shall contain at least one (1) acre of land that is wooded, permanent pasture or has soil with a crop equivalent rating of fifty-five (55) or less.
 - 3. No dwelling unit shall be permitted in areas identified as wetlands, flood plain, peat and areas of poor drainage, unless said area is properly tiled or otherwise treated or altered to alleviate wet soil problems.
 - 4. No dwelling unit shall be permitted which would require a new public dedicated street.
 - 5. No dwelling unit shall be permitted which would be located within one-half (1/4) mile of an existing animal feedlot. This measurement shall be made from the part of the confined feedlot space nearest the proposed structure to the nearest point of that structure.
 - 6. Lots of record existing prior to the effective date of this ordinance shall be considered conforming non-farm lots if the lot meets minimum size and design requirements of the Board of Health Regulations for wells and septic systems.

Commentary: The purpose of the following section is to permit an existing farm dwelling to be subdivided from a farm subject to the limitations listed as "standards" in the following section:

- D. **Standards for Farmstead Dwellings:** A farmstead dwelling may be created provided the following standards are complied with:
 - 1. A habitable farm dwelling must have legally existed on the farm in a habitable condition as of April 16, 1983.
 - 2. The farmstead dwelling is located within a farmstead boundary.

- 3. Each parcel containing a farmstead dwelling must contain a minimum area of five (5) acres including the abutting public road right-of-way, if any.
- 4. A parcel containing a farmstead dwelling shall not contain more than five (5) acres of prime cropland with a CER of 60 or greater. (Land that is wooded, permanent pasture or has a crop equivalent rating of fifty-five (55) or less, is *not* considered prime cropland.)
- 5. No more than one (1) farmstead dwelling is permitted per farm.
- 6. If a farm contains more than one dwelling, only one of the dwellings may become a farmstead dwelling; the remaining dwelling or dwellings must remain on a farm parcel or be removed from the parcel.
- 7. Parcels containing farmstead dwellings shall conform with the yard, area, lot width and access requirements of this ordinance.
- 8. If at the time this ordinance is adopted a parcel containing 40 contiguous acres or more has two (2) dwellings, one of those dwellings shall be considered a farmstead dwelling and the other shall be considered a farm dwelling.

E. General District Regulations:

1. Height Regulations: None

2. Front Yard Regulations:

a) A minimum front yard depth of not less than forty-five (45) feet shall be provided.

3. Side Yard Regulations:

- a) A minimum side street yard width of not less than forty-five (45) feet shall be provided.
- b) A minimum interior yard width of not less than twenty-five (25) feet shall be provided.

4. Rear Yard Regulations:

a) A minimum rear yard depth of not less than twenty-five (25) feet shall be provided.

5. Lot Area Regulations:

a) Each lot shall have an area of not less than two (2) acres, except when additional area is required in order to place an individual sewage treatment system as required by the Township SSTS Ordinance.

6. Lot Width Regulations:

- a) Each lot shall have a minimum width of one hundred and fifty (150) feet at the proposed building site.
- b) Each lot shall be provided with either thirty-three (33) feet of frontage along a public road or a recorded private easement of not less than thirty-three (33) feet for access to the building site.

7.	Dwelling/Road Regulations:								
	a) No dwelling shall be permitted that would require a new public road.								

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ARTICLE VII -- RURAL SERVICE CENTERS

Section 7.00 R.S.D. RURAL SERVICE CENTER DISTRICT:

The purpose of this district is to provide for limited opportunities for residential, commercial and industrial development that will not be detrimental to the character or to other uses of the rural service centers.

A. Permitted Uses:

- 1. One single-family detached dwelling per lot.
- 2. Home occupation as regulated in Section 10.02.
- 3. Public parks.
- 4. Accessory structures and uses customarily incidental to any of the above listed uses when located on the same property.
- 5. The following residential uses: State licensed residential facilities serving six or fewer persons; Licensed family adult foster care home or foster care for adults with five or fewer beds as permitted in MS 245.11, Subd. 2a. No more than one four (4) square foot sign advertising the facility shall be permitted at the primary driveway entrance.
- 6. The following non-residential uses: State licensed non-residential facility or day care facility serving 12 or fewer persons, and a group day care facility serving 14 or fewer children. No more than one four (4) square foot sign advertising the facility shall be permitted at the primary driveway entrance.
- B. Conditional/Interim Uses: (Also See Section 4.02, Conditional/Interim Use.)
 - 1. One mobile home per lot.
 - 2. Private or quasi-public facilities including but not limited to schools, churches, cemeteries, and community buildings.
 - 3. Public utility buildings such as substations, transformer stations, and regulator stations, without service or storage yards.
 - 4. Certain commercial uses including: Drug and gift stores, gasoline service stations, grocery and other food stores, hardware, feed and seed stores, building material, lawn and garden simply stores and nurseries, offices, governmental buildings, restaurants and taverns.
 - 5. Certain industrial uses including: Creamery, grain elevator, meat locker, welding shop, and auto body shop.
 - 6. Accessory structures and uses customarily incidental to any of the above Conditional/Interim uses when located on the same property.

- 7. Solar energy farm (photovoltaic systems).
- 8. Small non-utility wind energy conversion system.

C. General District Regulations:

1. Height Regulations:

a) No residential buildings used for dwellings shall hereafter be erected or structurally altered to exceed thirty-five (35) feet in height.

2. Lot Area Regulations:

a) Each lot shall have an area of not less than two (2) acres, except when additional lot area is required to meet the Township SSTS Ordinance regulations.

3. Front Yard Regulations:

- a) A minimum front yard depth of not less than forty-five (45) feet shall be provided on all lots adjoining federal, state and county roads.
- b) A minimum front yard depth of not less than thirty (30) feet shall be provided on lots adjoining local roads and streets.

4. Side Yard Regulations:

- a) A minimum side street yard width of not less than forty-five (45) feet shall be provided on all lots adjoining federal, state, and county roads.
- b) A minimum side street yard width of not less than thirty (30) feet shall be provided on all lots adjoining local roads and streets.
- c) A minimum interior side yard width of not less than eight (8) feet shall be provided.

5. Rear Yard Regulations:

a) A minimum rear yard depth of not less than twenty-five (25) feet shall be provided.

6. Lot Width Regulations:

- a) Each lot shall have a minimum width of one hundred (100) feet at the front building line, except when the lot is served by public or centralized sewage collection and treatment system, then sixty (60) feet shall be the minimum lot width at the front building line.
- 7. **Off-Street Parking Regulations:** See Section 10.04.

8. **Bufferyard Regulations:** See Section 10.08

D. Wind Energy Conversion System Standards:

- 1. The height of the WECS including the blades shall be limited to 120 feet, except as specified in the RC district
- 2. The setback is established in Section 10.50(C)(1). The wind turbine is not permitted to be located in a front or side street side yard.
- 3. No lighting shall be permitted on the wind turbine, unless required by the Federal Aviation Administration.
- 4. The wind turbine shall meet the standards set forth in Section 10.50(E).

ARTICLE VII 71 **May 11, 2015**

ARTICLE VIII - COMMERCIAL AND SPECIAL DISTRICTS

Section 8.09 AGRICULTURAL/RESOURCE COMMERCIAL DISTRICT – Aggregate Extraction and Reuse

The purpose of this district is to provide a suitable location for agricultural and resource uses within the Resource Protection Area of the Olmsted County Land Use Plan and in undeveloped areas in urban service areas and suburban subdivision areas with significant geologic resources. The application of this district will be considered in areas with significant geologic resources where access or traffic generated by the site will not adversely impact the safety or operation of a federal or state highway or intersections on the County State Aid System. Uses located within this district should support agricultural and resource uses, prevent destruction or disruption of significant habitats, and avoid conflicts with agricultural and residential uses. These uses should not require additional public investment in infrastructure as a result of establishment of the use, except where provided at the applicant's expense. This district should be applied where the potential for commercial and industrial uses following restoration of an aggregate-related use is limited by access, location, impacts on residences or other sensitive uses, impacts on natural habitats, or other considerations.

A. General Standards:

- 1. Unless specified below, the minimum lot size for uses in this district is 5 acres.
- 2. Development of the use shall involve the minimum grading necessary to conduct the use. Runoff shall be controlled so that there is no net increase in the amount or rate of runoff from the site following development. For sites for which the use prior to approval of development is cropland or pasture, runoff shall be controlled to a level equivalent to ungrazed grassland.
- 3. Front yard and side street side yard setbacks shall be a minimum of 45' from the road right of way line, or, if it results in a deeper setback, 45' from a line measured from and parallel to the road centerline as shown in the following table

Roadway Design Classification	Expressv	2	Super	Other Arterials and Collectors		Other County and State Roads	Other Roads	
Volume (ADT)	< 10,000	> 10,000		All	< 10,000	> 10,000	All	All
Setback from ROW	45'	45'		45'	45'	45'	45'	45'
Setback from Centerline	95'	105'		100'	95'	100°	95'	78'

- 4. Side and rear yard setbacks shall be determined by bufferyard requirements (Section 10.08), but not less than 50 feet.
- 5. No building shall exceed thirty-five (35) feet in height; provided, however, such height may be increased one (1) foot for each two (2) feet by which the building is set back in excess of the required side and rear yard setback regulations.
- 6. Each lot shall have a minimum width of two hundred (200) feet at the front building line.
- 7. Height Regulations for WECS: There shall be no height regulation placed on a WECS. The WECS located in this district shall comply with the setback requirements of Section 10.50.

B. Permitted Uses:

1. Uses permitted in Section 5.00 A, excluding feedlots.

C. Conditional Uses:

		Minimum Lot Size	A. Other Standards	A. Other Standards
1.	Tree and brush disposal facilities		No closer than ¼ mile from an existing residence or residentially zoned property.	
2.	Telecommunications towers and transmitters including radio, television, and commercial wireless telecommunications.	none		
3.	Asphalt concrete or concrete plants producing road-surfacing material	none	located on the same property as a gravel pit or other source of aggregate providing at least 50% of the aggregate used in processing	No closer than ¼ mile from an existing residence or residentially zoned property; equipped with best available odor and emission control equipment
4.	Extraction of sand and gravel, quarrying		Hours of operation, especially hauling and blasting, may be restricted based on impact on neighbors	
5.	Archery and gun clubs and shooting ranges as a post-restoration reuse of sand and		Hours of operation may be restricted based on impact on	No closer than ¼ mile from an existing residence or

		Minimum Lot Size	A. Other Standards	A. Other Standards
	gravel pits or quarries		neighbors	residential zone
6.	Golf courses as a post-restoration reuse of sand and gravel pits or quarries.	40		
7.	Non-motorized outdoor recreation uses as a post- restoration reuse of sand and gravel pits or quarries.		Hours of operation may be restricted based on impact on neighbors	No closer than ¼ mile from an existing residence or residential zone
8.	Public utility service buildings and yards, electrical transformer stations, substations, and gas regulator stations.	none		
9.	Motocross race tracks and other motorized outdoor recreation uses as a post-restoration reuse of sand and gravel pits or quarries.		Hours of operation may be restricted based on impact on neighbors	No closer than ½ mile from an existing residence or residential zone
10.	Small Utility Wind Energy Conversion System		No closer than ¼ mile from a residence or residential district.	
11.	Solar Energy Farm (photovoltaic systems)			

D. Criteria for Consideration in approval of Conditional Uses:

In addition to the criteria contained within Section 4.02 of this Ordinance, the following shall be found to exist prior to the approval of any conditional use within this district:

- That waste generated from the uses shall be disposed of in a manner approved by the Olmsted County Environmental Commission. Animal feedlot waste shall be permitted as regulated by the MPCA.
- 2. If travel accessibility to the site from population centers in the County is afforded primarily by the Principal Arterial system (as defined under the rules of the US Department of Transportation), the intersection of the Principal Arterial and the lower-class highway on which the site fronts should be grade-separated,

Access points and the first adjacent at-grade intersections where county or state highways cross the highway on which the site has access should be.

a. capable of functioning at a Level of Service B or higher after development of the proposed use,

b. have adequate stopping and intersection sight distance for the type of traffic anticipate

No more than one access shall be provided to a site unless it can be shown additional access would be beneficial to the safety and operation of the highway;

Direct site access should be from the local street system where the site has frontage on a local street;

The applicant shall be responsible for providing:

- a. necessary auxiliary lanes including left and right turn lanes, acceleration and deceleration lanes, or bypass lanes;
- b. necessary improvements for the control of traffic movement such as curbs or raised medians.
- 3. Uses permitted shall be those which necessitate the use of large amounts of open storage of inventory.
- 4. Buildings associated with a non-agricultural use shall not exceed an area of 10,000 square feet.
- 5. Consideration of extraction of sand and gravel, and quarrying uses shall be guided primarily by availability, need, location of geologic resources.

Section 8.09.2 AGRICULTURAL/RESOURCE COMMERCIAL DISTRICT – Land Intensive Low Impact Uses

The purpose of this district is to provide for certain uses within the Resource Protection Area of the Olmsted County Land Use Plan that are land intensive, generate low traffic volumes, entail low levels of sewage generation, and that do not normally require urban services. The application of this district will be considered in areas having proximity to major highways where access or traffic generated by the site will not adversely impact the safety or operation of a federal or state highway or intersections on the County State Aid System. Uses located within this district should support agricultural and resource uses, prevent destruction or disruption of significant habitats, and avoid conflicts with agricultural and residential uses, and should be uses that by their nature require large amounts of open space, or that require a remote rural setting. These uses should not require additional public investment in infrastructure as a result of establishment of the use.

A. General standards:

- 1. Unless specified below, the minimum lot size for uses in this district is 5 acres.
- 2. Development of the use shall involve the minimum grading necessary to conduct the use. Runoff shall be controlled so that there is no net increase in the amount or rate of runoff from the site

- following development. For sites for which the use prior to approval of development is cropland or pasture, runoff shall be controlled to a level equivalent to ungrazed grassland.
- 3. Front yard and side street side yard setbacks shall be a minimum of 45' from the road right of way line, or, if it results in a deeper setback, 45' from a line measured from and parallel to the road centerline as shown in the following table:

Roadway Design Classification	Expressway		2	Super	Other Arterials and Collectors		Other County and State Roads	Other Roads
Volume (ADT)	10,000	> 10,000		All	< 10,000	> 10,000	All	All
Setback from ROW	45'	45'		45'	45'	45'	45'	45'
Setback from Centerline	95'	105'		100'	95'	100'	95'	78'

- 4. Side and rear yard setbacks shall be determined by bufferyard requirements (Section 10.08), but not less than 50 feet.
- 5. Height Regulations for WECS: There shall be no height regulation placed on a WECS. The WECS located in this district shall comply with the setback requirements of Section 10.50.

B. Permitted Uses:

Uses permitted in Section 5.00 A, excluding feedlots.

C. Conditional Uses:

	. Minimum Lot Size	Other Standards
Tree and brush disposal facilities		No closer than ¼ mile from a residence or residential zone
2. Landfills and demolition landfills		No closer than ¼ mile from a residence or residential zone
Recyclable waste transfer facilities		No closer than ¼ mile from a residence or residential zone OR entirely within a

	. Minimum Lot Size	Other Standards structure
Telecommunications towers and transmitters including radio, television, and commercial wireless telecommunications.	None	Structure
5. Asphalt concrete or concrete plants producing road-surfacing material		Equipped with best available odor and emission control equipment; no closer than 1/4 mile from a residence or residential zone;
6. Extraction of sand and gravel, quarrying		
7. Archery and gun clubs and shooting ranges.		No closer than ¼ mile from an existing residence or residential zone
8. Golf courses or golf driving ranges	40	
Motocross and other motorized outdoor recreation uses		No closer than ½ mile from an existing residence or residentially zoned property; Hours of operation may be restricted based on impact on neighbors
10. Public utility service buildings and yards, electrical transformer stations, substations, and gas regulator stations.		
11. Commercial and industrial uses primarily intended to serve agricultural uses		
12. Livestock facilities such as experiment stations, stockyards, transfer stations, and breeding facilities		No closer than ¼ mile from an existing residence or residentially zoned property
13. Farm implement dealerships and sales yards. Automobile and truck sales lots are not permitted.		
14. Commercial greenhouses and landscape nurseries.		
15. Licensed farm winery as a year-round principal use.		Must be associated with and adjacent to a

	. Minimum Lot Size	Other Standards
		farm engaged in viticulture (vineyard)
16. Facilities for the sale and distribution of agricultural products; such as seed, fertilizer, pesticides. This does not include uses that are conducted as part of a farm operation		
17. Manufactured home sales		
18. Airports and landing fields and associated structures as described in Section 5.00 (B) (5), except not limited to the use of the owner.		No closer than ¼ mile from an existing residence or residentially zoned property
19. Building material storage yards excluding retail sales.		
20. Contractors' equipment storage yards.		
21. Home improvement trades excluding retail sales, including electricians, plumbers, building contractor shops and services, and other similar uses characterized by off-site work.		
22. Personal and household rental storage (mini-storage warehouses).		
23. Welding shops and equipment and vehicle repair facilities except routine automotive service		
24. Transmission repair shops		
25. Vehicle impound facilities		Screened from view in accordance with standards applicable to junkyards
26. Small utility wind energy conversion system (wind turbines)		no closer than ¼ mile from a residence or residential zone
27. Production of bio-diesel, ethanol, methanol, or similar biomass fuels by fermentation of agricultural crops or forest products		no closer than ¼ mile from a residence or residential zone
28. Solar energy farm (photovoltaic systems)		

	. Minimum Lot Size	Other Standards
29. Solar Energy		

D. Criteria for Consideration in approval of Conditional Uses:

In addition to the criteria contained within Section 4.02 of this Ordinance, the following shall be found to exist prior to the approval of any conditional use within this district:

- 1. That waste generated from the uses shall be disposed of in a manner approved by the Olmsted County Environmental Commission. Animal feedlot waste shall be permitted as regulated by the MPCA.
- 2. If travel accessibility to the site from population centers in the County is afforded primarily by the Principal Arterial system (as defined under the rules of the US Department of Transportation), the intersection of the Principal Arterial and the lower-class highway on which the site fronts should be grade-separated,

Access points and the first adjacent at-grade intersections where county or state highways cross the highway on which the site has access should be:

- a. capable of functioning at a Level of Service B or higher after development of the proposed use,
- b. have adequate stopping and intersection sight distance for the type of traffic anticipated;

No more than one access shall be provided to a site unless it can be shown additional access would be beneficial to the safety and operation of the highway;

Direct site access should be from the local street system where the site has frontage on a local street;

The applicant shall be responsible for providing:

- a. necessary auxiliary lanes including left and right turn lanes, acceleration and deceleration lanes, or bypass lanes;
- b. necessary improvements for the control of traffic movement such as curbs or raised medians.
- 3. Uses permitted shall be those which necessitate the use of large amounts of open storage of inventory.
- 4. In addition to these criteria, landfills of any type shall be located in the most geologically insensitive areas possible.

- 5. Buildings associated with a non-agricultural use shall not exceed an area of 10,000 square feet.
- 6. Consideration of extraction of sand and gravel, and quarrying uses shall be guided primarily by availability, need, location of geologic resources.
- 7. Lot Coverage Regulations: Not more than fifty (50%) percent of the lot shall be occupied by buildings or structures. In the Shoreland District, there shall not be more than thirty (30%) percent allowable lot coverage.
- 8. Off-Street Parking Regulations: (See Section 10.04)
- 9. Bufferyard Regulations: (See Section 10.08)

Section 8.10 **SPECIAL DISTRICTS:**

The purpose of the Special District is to permit the creation of special zoning districts in order to promote the public health, safety, and general welfare by allowing for a more flexible method of administration of land use regulations. The purposes and the conditions creating the desirability of such regulations are determined to be as stated in this section:

- A. Areas may exist where substantial public interests require that existing regulations be modified or supplemented to accomplish a special purpose.
 - 1. Compliance with Olmsted County Land Use Plan: Special Districts and the regulations established therein shall be in accord with and shall promote the purposes and policies set forth in the Land Use Plan.
 - 2. **Effect**: The effect of a special district designation shall be to establish land use regulations within a specific described area, which are unique to that area, and which are adopted by the Rock Dell Town Board
 - 3. **Procedure for establishment**: A special district designation shall be established by resolution in accordance with the following procedure:
 - a) A Special District proposal may be initiated by motion of the Town Board, or the Planning and Zoning Commission.
 - b) The Commission shall conduct a public hearing on the proposed Special District, after giving public notice in accordance with Minnesota Statutes;
 - c) The Commission shall, by motion, recommend in favor of or against establishment of a Special District, with or without modification;
 - d) The Town Board shall adopt findings and act upon the Commission's recommendation in the time frame defined by Statute.

ARTICLE IX -- FLOOD PLAIN AND SHORELAND DISTRICTS

Section 9.00 FLOOD PLAIN DISTRICT DESIGNATION:

Pertaining to all Flood Plain Districts including the Floodway (FW) District, FFA Flood Fringe District, FFB Flood Fringe District and the Flood Plain (FP) Districts are a set of regulations superimposed upon the other zoning districts, superseding existing underlying regulations only to the extent expressed in the flood plain provisions and having in effect, in all other respects, the regulations applicable to the underlying use district in which the land is situated.

The flood plain districts are identified upon the zoning map, which is hereby adopted by reference and declared to be part of this Zoning Ordinance. The Flood Insurance Study for Olmsted County, Minnesota, and Incorporated Areas, prepared by the Federal Emergency Management Agency, including the Flood Boundary and Floodway Maps (FBFM) and Flood Insurance Rate Maps (FIRM) dated February 4, 1998, and the Flood Plain Area Study for the South Fork Zumbro River and Tributaries dated March 21, 1978, and accompanying maps dated October, 1977, and the Soil Survey of Olmsted County, Minnesota, prepared by the United States Department of Agriculture, Soil Conservation Service, dated 1980, and any amendment thereto, are adopted (by reference) and declared to be part of this Ordinance. Should a conflict exist between these flood plain studies and other future state or federal flood plain study, the latest study and information pertaining to the floodway boundaries and regional flood heights shall apply.

The designation of the Floodway (FW), FFA Flood Fringe, and FFB Flood Fringe Districts are based on engineering and hydraulic studies consistent with flood plain management standards in Minnesota Statues 103.F. A studied area takes precedence over the use of soils to determine floodplain.

The designation of the Flood Plain District (FP) is based on alluvial soils which are water deposited soils representing the areas most often inundated by flood waters. Any land containing the following soils which are subject to flooding shall be deemed to be within the flood plain district.

Map	Soil
Symbol	Name
16	Arenzville
19	Chaseburg
25	Becker
252	Marshan
289	Radford
298	Richwood
313	Spillville
463	Minnieska

Map	Soil
Symbol	Name
465	Kalmarville
467	Sawmill
468	Otter
471	Root
486	Marchan
495	Zumbro
1846	Kato

Section 9.02 **FLOODWAY DISTRICT (FW):**

The purpose of the Floodway district is to assure retention of adequate space within the channel and adjoining flood plain to carry and discharge the regional flood and to restrict or prohibit uses which are dangerous to health or safety or result in economic loss in times of flood.

- A. **Permitted Uses:** The following uses, which have a low flood damage potential and which do not obstruct flood flows, are permitted within the floodway district to the extent that they are not prohibited by the underlying zoning district or any other ordinance and provided they do not require structures, fill or storage of materials or equipment. In addition no use shall adversely affect the capacity of the channel or floodways of any tributary to the main stream, drainage ditch or any other drainage facility.
 - 1. **Agricultural uses such as:** general farming, pasture, grazing, outdoor growing of nursery stock, horticulture, truck farming, forestry, sod farming, and wild crop harvesting, provided that such uses shall not include an animal feedlot.
 - 2. **Industrial-commercial uses such as:** loading areas, parking area, and airport landing strips.
 - 3. **Private and public recreational uses such as:** golf courses, driving ranges, picnic grounds, boat launching ramps, swimming area, parks wildlife and nature preserves, fishing areas, and recreational trails.
 - 4. **Residential uses such as:** lawns, gardens, parking areas, and play areas.
 - Railroads, streets, bridges, utility transmission structures, pipelines, marinas, docks and water control structures required to obtain Department of Natural Resources permit.
 - 6. Channel modifications requiring a DNR permit where there is no change in the flood profile.
- B. **Conditional/Interim Uses**: The following uses which involve structures (temporary or permanent), fill or storage of materials or equipment. These uses may be permitted in the floodway district only after the issuance of a Conditional/Interim Use permit as provided in Section 4.02.
 - 1. Structures accessory to open space or Conditional/Interim Uses, in accordance with Section 9.02(C, 2).
 - 2. Placement of fill.
 - 3. Extraction of sand, gravel and other minerals.
 - 4. Other railroads, streets, bridges, utility transmission lines and pipelines, not included as a permitted use in the previous section 9.02 (A, 5).
 - 5. Storage yards for equipment, machinery or materials, in accordance with Section 9.02 (C, 4).

- Levees, dikes, and floodwalls constructed to any height where the intent is to
 protect individual structures and levees or dikes where the intent is to protect
 agricultural crops for a frequency flood event equal to or less than the 10-year
 frequency flood event.
- C. General Floodway Regulations (FW): No structures (temporary or permanent); fill, including fill for roads and levees; deposit, obstruction, storage of materials or equipment; or other uses shall be allowed as a Conditional/Interim Use which, acting alone or in combination with existing or future uses, affects the capability of the floodway or increases flood heights. Consideration of the effects of a proposed use shall be an equal degree of encroachment extending for a significant reach on both sides of the stream. In addition, all floodway Conditional/Interim Uses shall be subject to the following regulations.

1. **Fill:**

- a) Any fill deposited in the floodway shall be no more than the minimum amount necessary to conduct the Conditional/Interim Use listed in Section 9.02 (B). Generally, fill shall be limited to that needed to grade or landscape for that use and shall not in any way obstruct the flow of flood waters.
- b) Such fill or other materials shall be protected against erosion by rip-rap, vegetative cover or bulk heading.
- c) Spoil from dredging or sand and gravel operations shall not be deposited in the floodway unless it can be done in accordance with Section 9.02 (C, 1, a).
- 2. **Structures:** Accessory structures (temporary or permanent) permitted as Conditional/Interim Uses may be allowed provided that such structures are:
 - a) Not designed for human habitation;
 - b) Designed to have low flood damage potential;
 - c) Constructed and placed on the building site so as to offer the minimum resistance to the flood or floodwaters;
 - d) Structurally dry floodproofed, without the utilization of dams, dikes, or levees, in accordance with the State Building Code.
 - 1. Whenever possible, structures shall be constructed with the longitudinal axis parallel to the direction of flood flow; and
 - 2. So far as practicable, structures shall be placed approximately on the same flood flow lines as those of adjoining structures.
 - e) Accessory structures shall be elevated on fill or structurally dry flood proofed in accordance with the FP-1 or FP-2 flood proofing classifications in the State Building Code. As an alternative, an accessory structure may be flood proofed to the FP-3 or FP-4 flood proofing classification in the State Building Code provided the accessory structure constitutes a minimal investment, does not exceed 600 square feet in size, and for a detached garage, the detached garage must be used solely for parking of vehicles and limited storage.

- f) Service facilities such as electrical and heating equipment shall be elevated or floodproofed.
- 3. Utilities, Railroad Tracks, Streets, and Bridges: Public utility facilities, roads, railroad tracks, and bridges within the floodway district shall be designed to minimize increases in flood elevations and shall be compatible with local comprehensive flood plain development plans. Protection to the flood protection elevation shall be provided where failure or interruption of these public facilities would result in danger to the public health or safety or where such facilities are essential to the orderly functioning of the area. Where failures or interruption of services would not endanger life or health, a lesser degree of protection may be provided for minor or auxiliary roads, railroads, or utilities.

4. Storage of Material and Equipment:

- a) The storage or processing of materials that are in time of flooding buoyant, flammable, explosive, toxic or could be injurious to human, animal, or plant life is prohibited.
- b) Storage of other material or equipment may be allowed if not subject to major damage by floods and firmly anchored to prevent floatation.
- c) Storage of other materials or equipment may be allowed if readily removable from the area within the time available after a flood warning and in accordance with a plan approved by the Governing Body.
- 5. **Garbage and Solid Waste Disposal**: No Conditional/Interim Use permits for garbage and waste disposal sites shall be issued for floodway areas; provided further, there shall be no further encroachment upon the floodway at existing sites.
- 6. **Structural Works for Flood Control**: Structural works for flood control such as levees, dikes, flood walls, and reservoirs shall be allowed only upon issuance of a Conditional/Interim Use permit and the following standards:
 - a) Any proposed structural work in the beds of public waters as defined in Minnesota Statutes, Chapter 105, which will change the course, current, or cross-section of the waters shall be subject to the provisions of Minnesota Statutes, Chapter 105, and other applicable statutes.
 - b) Obtain from the Army Corps of Engineers, when applicable, a permit under the Federal Water Pollution Control Act (commonly referred to as the Clean Water Act) and any other necessary permits.
 - c) A levee, dike, or floodwall constructed in the floodway shall not cause an increase to the 100 year or regional flood and the technical analysis must assume equal conveyance or storage loss on both sides of a stream.
 - d) Where the flooding potential is to be reduced as the result of a flood control project, the Federal Emergency Management Agency shall be notified and data required for a map revisions shall be submitted thereto.

Section 9.04 **FFA FLOOD FRINGE DISTRICT**:

The purpose of the flood fringe district is to guide development in currently developed areas in the flood fringe, consistent with the flood threat, in order to minimize loss of life and property, disruption of commerce and governmental services, extraordinary public expenditure for public protection and relief, and interruption of public transportation and communications, all of which adversely affect the public health, safety and general welfare; and to assure that the Township's lands are put to their most appropriate use.

- A. **Permitted Uses**: The following shall be permitted uses within the FFA flood fringe district to the extent that they are not prohibited by any other portion of the zoning ordinance or by any other ordinance, and that such uses will not adversely affect the capacity of the channels of any tributary to the main stream, or any other drainage facility or system.
 - 1. **Residential Uses**: New dwellings and additions shall be constructed on fill so that the lowest floor (including basement) is at or above the flood protection elevation. The finished fill elevation shall be no lower than one (1) foot below the flood protection elevation and shall extend at least fifteen (15) feet beyond the limits of any structure or building thereon.

No dwelling shall be permitted that does not have vehicular access and parking areas at or above an elevation two (2) feet below the flood protection elevation.

As an alternative to elevation on fill, accessory structures that constitute a minimal investment and that do not exceed 600 square feet for the outside dimension at ground level may be internally floodproofed in accordance with Section 9.02 (C,2).

- 2. **Residential Uses in the AO Zone**: New dwellings and additions shall be constructed on fill so that the lowest floor (including basement) is elevated above the highest adjacent grade at least as high as the depth number specified in feet on the Olmsted County Flood Insurance Rate Map.
 - a) Manufactured Homes and Manufactured Home Parks and placement of travel trailers and travel vehicles:

The placement of new or replacement manufactured homes in existing manufactured home parks or on individual lots of records that are located in flood plain districts will be treated as a new structure and may be placed only if elevated in compliance with Section 9.04 of this Ordinance. If vehicular road access for preexisting manufactured home parks is not provided in accordance with Section 9.04, then replacement manufactured homes will not be allowed until the property owner(s) develops a flood warning emergency plan acceptable to the Governing Body.

 All manufactured homes must be securely anchored to an adequately anchored foundation system that resists flotation, collapse and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to the anchoring requirements of Section 10.44 of this ordinance.

- 3. **Non-Residential Uses**: New structures and additions shall be elevated so that their first floor (including basement) is at or above the flood protection elevation. The finished fill elevation shall be no lower than one (1) foot below the flood protection elevation.
 - a) **Travel trailers and travel vehicles** that do not meet the exemption criteria specified below shall be subject to the provisions of this ordinance and as specifically spelled out in Section 9.04 (3, b & c) below.
 - 1) **Exception** Travel trailers and travel vehicles are exempt from the provisions of this Ordinance if they are placed in any of the areas listed in Section 9.04 (3, b) below and further they meet the following criteria:
 - i) Have current licenses required for highway use.
 - ii) Are highway ready meaning on wheels or the internal jacking system, are attached to the site only by quick disconnection type utilities commonly used in campgrounds and trailer parks and travel trailer/vehicle has no permanent structural type additions attached to it
 - iii) The travel trailer or travel vehicle and associated use must be permissible in any preexisting, underlying zoning district.

b) Area Exempted For Placement of Travel/Recreational Vehicles:

- 1) Individual lots or parcels of record.
- 2) Existing commercial recreational vehicle parks or campgrounds.
- 3) Existing condominium type associations.
- c) Travel trailers and travel vehicles exempted in Section 9.04 (3, a) lose this exemption when development occurs on the parcel exceeding 500 dollars for a structural addition to the travel trailer/travel vehicle or an accessory structure such as a garage or a storage building. The travel trailer/travel vehicle and all additions and accessory structures will then be treated as a new structure and shall be subject to the elevation/flood proofing requirements and the use of land restrictions specified in Section 9.04 of this ordinance.
- d) New commercial travel trailer or travel vehicle parks or campgrounds and new residential type subdivisions and condominium associations and the expansion of any existing similar use exceeding five (5) units or dwelling sites shall be subject to the following:
 - Any new or replacement travel trailer or travel vehicle will be allowed in the Flood Fringe districts provided said trailer or vehicle and its contents are placed on fill above the Regulatory Flood Protection Elevation and proper elevated road access to the site exists in accordance with Section 9.04 of this ordinance.
 - 2) All new or replacement travel trailers or travel vehicles not meeting the criteria of (1) above may, as an alternative, be allowed as a Conditional/Interim Use if in accordance with the following provisions

- and the provisions of Section 4.02 of this ordinance. The applicant must submit an emergency plan for the safe evacuation of all vehicles and people during the 100 year flood. Said plan shall be prepared by a registered engineer or other qualified individual and shall demonstrate that adequate time and personnel exist to carry out the evacuation. All attendant sewage and water facilities for new or replacement travel trailers or other recreational vehicles must be protected or constructed so as to not be impaired or contaminated during times of flooding in accordance with Section 9.04 (C,7) of this ordinance.
- 3) Non-Residential Uses in the AO Zone: New structures and additions shall be elevated so that their first floor (including basement) is elevated above the highest adjacent grade at least as high as the depth number specified in feet on the Olmsted County Flood Insurance Rate Maps, and together with attendant utility and sanitary facilities be completely flood-proofed in accordance with the state building code to the FP-1 or FP-2 classification.
- 4) Waste Treatment, Waste Disposal and Flood Control Structures; FFA District: Error! Bookmark not defined. Such structures and uses shall be in accordance with Section 9.04 (C, 7 & 8) and Section 9.02 (C).
- 5) Utilities, Railroad Tracks, Streets, and Bridges; FFA District: Error! Bookmark not defined. Such structures and uses shall be in accordance with Section 9.04 (C, 4).
- 6) **Accessory Structures**: Such structures shall be constructed on fill so that the lowest floor is at or above the flood protection elevation provided that such structures are:
 - i) Not designed for human habitation;
 - ii) Designed to have low flood damage potential;
 - iii) Constructed and placed on the building site so as to offer the minimum resistance to the flood or floodwaters;
 - iv) Structurally dry floodproofed, without the utilization of dams, dikes, or levees, in accordance with the State Building Code.
 - v) Service facilities such as electrical and heating equipment shall be elevated or floodproofed.
- 7) Accessory Land Uses: Accessory land uses such as storage yards and parking lots may be at elevations lower that the flood protection elevation; however, measures shall be taken to assure vehicular access to the property in time of floods in accordance with Section 9.04 (C, 2 & 3).
- B. **Conditional/Interim Uses:** Other uses are permitted only upon application to the Zoning Administrator and the issuance of a Conditional/Interim Use permit as provided in Section 4.02 and subject to the following provisions:
 - 1. **Residential Uses**: Where existing streets, utilities, or small lot sizes preclude the use of fill, other methods of elevating the first floor (including basement) above the flood protection elevation may be authorized, provided that the

- dwelling is floodproofed to the FP-1 classification in accordance with the State Building Code.
- 2. **Non-Residential Uses**: Structures that are not elevated at or above the flood protection elevation as referenced by Section 9.04 (A), Permitted Uses, shall achieve structurally dry floodproofing, without the utilization of dams, dikes, or levees, to the FP-1 or FP-2 classification as defined by the State Building Code.
- **C.** General Flood Fringe Regulations: All uses within this district are subject to the following regulations:
 - Manufacturing and Industrial Uses: Manufacturing and industrial buildings, structures and appurtenant works shall be protected to the flood protection elevation. Measures shall be taken to minimize interference with normal plant operations, especially for streams having prolonged flood duration's. Certain accessory land uses, such as yards and parking lots, may be at lower elevations.
 - 2. Storage of Materials: Materials that in time of flooding are buoyant, flammable, explosive, toxic, or materials that have significant flood damage potential, or could be injurious to human, animal, or plant life shall be stored at or above the flood protection level, floodproofed, or protected by structural measures consistent with the standards set forth herein. Furthermore, storage of materials which are likely to cause pollution of waters are defined in Minnesota Statutes, Section 115.01, if subject to flooding, are prohibited unless adequate safeguards approved by the Minnesota Pollution Control Agency are provided.
 - 3. Accessory Land Uses: Accessory land uses for non-residential uses, such as storage yards and parking lots that are at elevations below the flood protection elevation and are subject to flood velocities greater than four (4) feet per second or would be inundated to a depth greater than two (2) feet, shall not be permitted without a flood warning system that provides adequate time for evacuation of the area.
 - 4. Utilities, Railroad Tracks, Streets, and Bridges: Public utility facilities, roads, railroad tracks, and bridges within the flood fringe district shall be designed to minimize increases in flood elevations and shall be compatible with local comprehensive flood plain development plans. Protection to the flood protection elevation shall be provided where failure or interruption of these public facilities are essential to the orderly functioning of the area. Where failure or interruption of services would not endanger life or health, a lesser degree of protection may be provided for minor or auxiliary roads, railroads, or utilities.
 - 5. **Design and Certification**: The structure's design and as-built condition must be certified by a registered professional engineer or architect as being in compliance with the general design standards of the State Building Code, and, specifically, that all electrical, heating, ventilation, plumbing, and air conditioning facilities must be at or above the Regulatory Flood Protection Elevation or be designed to prevent flood water from entering or accumulating within these components during times of flooding. In addition, a registered land surveyor must certify the lowest floor elevation of the structure.
 - 6. **Fill**: Any fill shall be compacted and the slopes shall be protected by rip-rap or vegetative covering.

7. Waste Treatment and Waste Disposal:

- a) No new construction, addition or modification to existing waste treatment facilities shall be permitted within the flood fringe unless emergency plans and procedures for action to be taken in the event of flooding are prepared, filed with, and approved by the Minnesota Pollution Control Agency. The emergency plans and procedures must provide for measures to prevent introduction of any pollutant or toxic material into the flood waters.
- b) There shall be no disposal of garbage or solid waste materials within flood fringe areas except upon issuance of a permit approved by the Minnesota Pollution Control Agency and subject to the requirements of Section 9.02 (C, 5).
- 8. **Flood Control Works**: Flood control works shall be subject to the provisions of Section 9.02 (C, 6) and the following provisions:
 - a) The minimum height and design of any dikes, levees, floodwalls, or similar structural works shall be based upon the flood profile of the regional flood confined between the structures. The minimum height and design of structural works shall be at least three (3) feet above the elevation of the regional flood as confined by structures, or at the elevation of the standard project flood, whichever is greater.
 - b) Modifications and additions to existing structural works shall assure that the work will provide a means of decreasing the flood damage potential in the area.
 - c) Detailed plans shall be submitted to the zoning administrator for any new developments placed on the flood plain landward from dikes and levees. The plans must provide for ponding areas or other measures to protect against flooding from internal drainage.
 - d) Where the flooding potential is to be reduced as the result of a flood control project, the Federal Emergency Management Agency shall be notified and data required for a map revision shall be submitted thereto.

Section 9.06 FFB FLOOD FRINGE DISTRICT:

The FFB Flood Fringe District is established to guide development in generally undeveloped areas in the flood plain in such a manner as to reduce the loss of flood storage volume in the flood plain, in order to avoid increases in downstream flood levels and velocities; to minimize loss of life and property, disruption of commerce and governmental services, extraordinary public expenditures for public protection and communications, all of which adversely affect the public health, safety and general welfare; and to assure that the Township's lands are put to their most appropriate use.

- A. **Permitted Uses**: The following uses have a low flood damage potential and do not obstruct flood flows. These uses are permitted in the flood fringe district to the extent that they are not prohibited by the underlying zoning district or any other ordinance and provided they do not require structures, fill or storage of materials or equipment. In addition, no use shall adversely affect the capacity of the channel or floodways of any tributary to the main stream, drainage ditch or any other drainage facility. The following uses are permitted in this district and also subject to Section 9.04 (C) and 9.06 (C), General Regulations:
 - 1. **Agricultural Uses**: Agricultural uses such as general farming, pasture, grazing, outdoor growing of nursery stock, horticulture, truck farming, forestry, sod farming, and wild crop harvesting, but not including a feedlot of thirty (30) animal units or more.
 - 2. **Industrial-Commercial Uses**: Industrial-Commercial uses such as loading areas, parking areas and airport landing strips.
 - 3. **Private and Public Recreational Uses**: Private and public recreational uses such as golf courses, driving ranges, picnic grounds, boat launching ramps, swimming areas, parks, wildlife and nature preserves, fishing areas, and recreational trails.
 - 4. **Residential Uses**: Residential uses such as lawns, gardens, parking areas, and play areas.
- B. **Conditional/Interim Uses**: Other uses are permitted only upon application to the Zoning Administrator and the issuance of a Conditional/Interim Use permit as provided in Section 4.02 and subject to the following provisions:
 - 1. Uses permitted in Section 9.04 (A) Permitted Uses, and in Section 9.04 (B) Conditional/Interim Uses, (both included in the FFA Flood Fringe District) subject to provisions set fourth in Section 9.04 (C) except where superseded by the provisions set forth in Section 9.06 (C).
- C. **General Flood Fringe Regulations**: The deposition of any fill or spoil from dredging or sand and gravel operations, the construction of any structure, or the grading or paving of any areas shall require certification by a registered professional engineer or hydrologist that the following conditions have been met:
 - 1. **Fill** deposited in the flood fringe area shall be no more than the minimum amount necessary to conduct the use.

- 2. Minimal loss of capacity for surface storage of flood waters shall result from the activity, not to exceed loss of one (1%) percent per lot.
- 3. The effect of such activities in the FFB flood fringe district shall not result in an increase in erosion potential on the site after such activities are completed.

Section 9.08 FLOOD PLAIN DISTRICT (FP):

The purpose of the flood plain district is to guide development in the flood plain, consistent with the flood threat, in order to minimize loss of life and property, disruption of commerce and governmental services, extraordinary public expenditure for public protection and relief, and interruption of transportation and communications, all of which adversely affect the public heath, safety and general welfare; and to assure that the County's lands are put to their most appropriate use. Floodplain developments shall not adversely affect the hydraulic capacity of the channel and adjoining flood plain of any tributary watercourse or drainage system where a floodway or other encroachment limit has not been specified on the Official Zoning Map.

- A. **Permitted Uses**: The following uses, having a low flood damage potential and which do not obstruct flood flows, are permitted within the flood plain district to the extent that they are not prohibited by the underlying zoning district or any other ordinance and provided they do not require structures, fill, or storage of materials or equipment. In addition, no use shall adversely affect the capacity of the channel or floodways of any tributary to the main stream, drainage ditch or any other drainage facility.
 - 1. **Agricultural Uses**: Agricultural uses such as general farming, pasture, grazing, outdoor growing of nursery stock, horticulture, truck farming, forestry, sod farming, and wild crop harvesting, but not including a feedlot of thirty (30) animal units or more.
 - 2. **Industrial-Commercial Uses**: Industrial-Commercial uses such as loading areas, parking areas and airport landing strips.
 - 3. **Private and Public Recreational Uses**: Private and public recreational uses such as golf courses, driving ranges, picnic grounds, boat launching ramps, swimming areas, parks, wildlife and nature preserves, fishing areas, and recreational trails.
 - 4. **Residential Uses**: Residential uses such as lawns, gardens, parking areas, and play areas.
 - 5. Wildlife sanctuary, woodland preserve and arboretum.

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- Railroads, streets, bridges, utility transmission structures, pipeline, marinas, docks and water control structures required to obtain Department of Natural Resources permit.
- B. **Conditional/Interim Uses**: The following uses, which involve fill or storage of materials or equipment, may be permitted in the flood plain district only after the issuance of a Conditional/Interim Use permit as provided in Section 4.02 of this zoning ordinance, which applies to all flood plain Conditional/Interim Uses.

- 1. Placement of fill, except when fill is used as part of an approved soil conservation service drainage control structure.
- 2. Extraction of sand, gravel and other minerals.
- 3. Other railroads, streets, bridges, utility transmission lines and pipelines not included as a permitted use in the previous Section 9.08 (A, 6).
- 4. Storage yards for equipment, machinery or materials.
- 5. Other uses similar in nature to uses described in Section 9.08 (A), Permitted Uses, or 9.08 (B), Conditional/Interim Uses.
- C. General Flood Plain Regulations: No structures (temporary of permanent); fill, including fill for roads and levees; deposit, obstruction, storage of materials or equipment; or other uses shall be allowed as Conditional/Interim Uses which, acting alone or in combination with existing or future uses, unduly affects the capacity of the floodway or unduly increases flood heights. Consideration of the effects of a proposed use shall be based on a reasonable assumption that there will be an equal degree of encroachment extending for a significant reach on both sides of the stream. In addition, all flood plains Conditional/Interim Uses shall be subject to the following regulations:

1. Fill:

- a) Any fill deposited in the flood plain shall be no more than the minimum amount necessary to conduct a Conditional/Interim Use and shall not in any way obstruct the flow of flood waters.
- b) Such fill or other materials shall be protected against erosion by rip-rap, vegetative cover or bulk heading.
- c) Spoil from dredging or sand and gravel operations shall not be deposited in the flood plain unless it can be done in accordance with Section 9.08 (C, 1, a).
- 2. Utilities, Railroad Tracks, Streets, and Bridges: Public utility facilities, roads, railroad tracks, and bridges within the flood plain district shall be designed to minimize increases in flood elevations and shall be compatible with local comprehensive flood plain development plans. Protection to the flood protection elevation shall be provided where failure or interruption of these public facilities would result in danger to the public health or safety or where such facilities are essential to the orderly functioning of the area. Where failures or interruption of services would not endanger life or health, a lesser degree of protection may be provided for minor or auxiliary roads, railroads or utilities.

3. Storage of Material and Equipment:

- a) The storage or processing of materials that are in time of flooding buoyant, flammable, explosive, toxic, or could be injurious to human, animal, or plant life is prohibited.
- b) Storage of other material or equipment may be allowed if not subject to major damage by floods and firmly anchored to prevent flotation.

- 4. **Garbage and Solid Waste Disposal**: No Conditional/Interim Use permits for garbage and waste disposal sites shall be issued for floodway areas; provided further, there shall be no further encroachment upon the floodway at existing sites.
- 5. **Structural Works for Flood Control**: Structural works for flood control such as levees, dikes, floodwalls, and reservoirs shall be allowed only upon issuance of a Conditional/Interim Use permit and the following standards:
 - a) Any proposed structural work in the beds of public waters as defined in Minnesota Statutes Chapter 105 which will change the course, current, or cross-section of the waters shall be subject to the provisions of Minnesota Statutes Chapter 105 and other applicable statutes.
 - b) Obtain from the Army Corps of Engineers, when applicable, a permit for under the Federal Water Pollution Control Act (commonly referred to as the Clean Water Act), and any other necessary permits.
 - c) Where the flooding potential is to be reduced as the result of a flood control project, the Federal Emergency Management Agency shall be notified and data required for a map revision shall be submitted thereto.

Section 9.10 SHORELAND DISTRICT

- A. **POLICY:** The uncontrolled use of shorelands of Olmsted County, Minnesota, affects the public health, safety and general welfare not only by contributing to pollution of public waters, but also by impairing the local tax base. Therefore, it is in the best interests of the public health, safety and welfare to provide for the wise subdivision, use and development of shorelands of public waters. The Legislature of Minnesota has delegated responsibility to local governments of the state to regulate the subdivision, use and development of shorelands of public waters and thus preserve and enhance the quality of surface waters, conserve the economic and natural environmental values of shorelands, and provide for the wise use of waters and related land resources. This responsibility is hereby recognized by Olmsted County.
- B. **SHORELAND CLASSIFICATION SYSTEM**: The public waters of Olmsted County have been classified below consistent with the criteria found in Minnesota Regulations, Part 6120.3300, and the Protected Waters Inventory Map for Olmsted County, Minnesota.
 - 1. The shoreland area for the waterbodies listed below shall be as defined in section 2.02 and as shown on the Official Zoning Map.

LAKES

A. Protected Waters Inventory I.D.#

a) Natural Environment Lakes:

None

b) Recreational Development Lakes

None

c) General Development Lakes

None

RIVERS AND STREAMS

a) Remote Rivers:

None

b) Forested Rivers:

None

c) Transition Rivers:

NAME	FROM			ТО		
	Section Town Range			Section	Town	Range
North Branch Root River	10	105	13	21	105	12

d) Agricultural Rivers:

NAME	FROM			ТО		
	Section	Town	Range	Section	Town	Range
South Fork Zumbro River	7	105	15	17	106	14
North Branch Root River	6	104	15	33	105	15
North Branch Root River	26	105	14	10	105	13
North Branch Root River	21	105	12	36	105	12

e) Tributary Streams:

All protected watercourses in Olmsted County shown on the Protected Waters Inventory Map for Olmsted County, a copy of which is hereby adopted by reference, not given a classification in Items a - d above shall be classified as Tributary Streams.

NAME	FROM			ТО		
	Section	Town	Range	Section	Town	Range
Unnamed SFZR	6	105	15	6	105	15
Unnamed to SFZR	9	105	15	4	105	15
Unnamed to SFZR	15	105	15	1	105	15

C. PHYSICAL LIMITATIONS

1. Lot Area and Width Regulations:

a) Each unsewered lot shall have a lot area of not less than two (2) acres, except when additional lot area is required by the Olmsted County Planning Department to meet the well and septic requirements. In addition, the following lot width requirements must be met:

LOT WIDTH REQUIREMENTS	RIPARIAN LOT	NON-RIPARIAN LOT
(In Feet)	WIDTH	WIDTH
Natural Environment Lake	200	200
Recreational Development Lake	150	150
General Development Lake	100	150

b) Each lot in areas served by a public or centralized sewage collection and treatment system shall have a lot area and width of not less than the following:

Natural Environment Lake

	RIPARIAN LO	T	NON-RIPARIAN LOT	
DWELLING TYPE	AREA	WIDTH	AREA	WIDTH
	(square feet)	(feet)	(square feet)	(feet)
Single	40,000	125	20,000	125
Duplex	70,000	225	35,000	220
Triplex	100,000	325	52,000	315
Quad	130,000	425	65,000	410

Recreational Development Lake

	RIPARIAN LOT		NON-RIPARIAN LOT	
DWELLING TYPE	AREA	WIDTH	AREA	WIDTH
	(square feet)	(feet)	(square feet)	(feet)
Single	20,000	75	15,000	75
Duplex	35,000	135	26,000	135
Triplex	50,000	195	38,000	190
Quad	65,000	255	49,000	245

General Development Lake

	RIPARIAN LOT		NON-RIPARIAN LOT	
DWELLING TYPE	AREA	WIDTH	AREA	WIDTH
	(square feet)	(feet)	(square feet)	(feet)
Single	15,000	75	10,000	75
Duplex	26,000	135	17,500	135
Triplex	38,000	195	25,000	190
Quad	49,000	255	32,500	245

c) River/Stream segments must meet the underlying zoning district lot area requirements. In addition, the following lot width standards must be met:

Dwelling					Urban/Tributar	Urban/Tributar
Type					y	y
	Remote	Forested	Transition	Agricultura l	(unsewered)	(sewered)
Single	300'	200'	250'	150'	100'	75'
Duplex	450'	300'	375'	225'	150'	115'
Triplex	600'	400'	500'	300'	200'	150'
Quad	750'	500'	625'	375'	250'	190'

2. Additional Special Provisions:

a) Lots intended as controlled accesses to public waters or as recreation areas for use by owners of non-riparian lots may be platted as outlots. These lots do not need to meet the applicable lot area requirements; however, they must meet the minimum lot width standards set forth in this ordinance.

D. PLACEMENT, DESIGN, AND HEIGHT OF STRUCTURES

1. **Placement of Structures on Lots**: When more than one setback applies to a site, structures and facilities must be located to meet all setbacks. Where

structures exist on the adjoining lots on both sides of a proposed building site, structure setbacks may be altered without a variance to conform to the adjoining setbacks from the ordinary high water level, provided the proposed building site is not located in a shore impact zone or in a bluff impact zone. Structures shall be located as follows:

a) Structure and On-Site Sewage System Setbacks (in feet) from Ordinary High Water Level*:

Class of	Structures		Sewage Treatment
Public Water	Unsewere	Sewered	System
	d		
LAKES			
Natural Environment	150'	150'	150'
Recreational Development	100'	75'	75'
General Development	75'	50'	50'
RIVERS			
Remote	200'	200'	150'
Forested & Transition	150'	150'	100'
Agriculture, Urban & Tributary	100'	50'	75'

^{*}One water oriented accessory structure designed in accordance with the provisions of Section 9.10 (D,1,a) of this ordinance may be set back a minimum distance of ten (10) feet from the ordinary high water level.

b) **Additional Structure Setbacks**: The following additional structure setbacks apply, regardless of the classification of the waterbody.

Setback From:	Setback (in feet)
Top of Bluff	30
Unplatted Cemetery	50

c) **Bluff Impact Zones**: Structures and accessory facilities, except stairways and landings, must not be placed within bluff impact zones.

2. Design Criteria for Structures.

- a) High Water Elevations: Structures must be placed in accordance with any floodplain regulations applicable to the site. Where these controls do not exist, the elevation to which the lowest floor, including basement, is placed or flood-proofed must be determined as follows:
 - 1) For lakes, by placing the lowest floor at a level at least three (3) feet above the highest known water level, or three (3) feet above the ordinary high water level, whichever is higher;
 - 2) For rivers and streams, by placing the lowest floor at least three (3) feet above the flood of record, if data is available. If data is not available, by placing the lowest floor at least three (3) feet above the ordinary high

- water level, or by conducting a technical evaluation to determine effects of proposed construction upon flood stages and flood flows and to establish a flood protection elevation. Under all three approaches, technical evaluations must be done by a qualified engineer or hydrologist consistent with parts 6120.5000 to 6120.6200 governing the management of flood plain areas. If more than one approach is used, the highest flood protection elevation determined must be used for placing structures and other facilities; and
- 3) Water oriented accessory structures may have the lowest floor placed lower than the elevation determined in this item if the structure is constructed of flood resistant materials to the elevation, electrical and mechanical equipment is placed above the elevation, and if long duration flooding is anticipated, the structure is built to withstand ice action and wind driven waves and debris.
- b) Water oriented accessory structures: Each lot may have one water oriented accessory structure not meeting the normal structure setback in Section 9.10 (D,1,a) of this ordinance if this water oriented accessory structure complies with the following provisions:
 - 1) The structure or facility must not exceed ten (10) feet in height, exclusive of safety rails, and cannot occupy an area greater than 250 square feet. Detached decks must not exceed eight (8) feet above grade at any point;
 - 2) The setback of the structure or facility from the ordinary high water level must be at least ten (10) feet;
 - 3) The structure or facility must be treated to reduce visibility as viewed from public waters and adjacent shorelands by vegetation, topography, increased setbacks or color, assuming summer, leaf on conditions;
 - 4) The roof may be used as a deck with safety rails, but must not be enclosed or used as a storage area;
 - 5) The structure or facility must not be designed or used for human habitation and must not contain water supply or sewage treatment facilities; and
 - 6) As an alternative for general development and recreational development waterbodies, water oriented accessory structures used solely for watercraft storage, and including storage of related boating and water oriented sporting equipment, may occupy an area up to 400 square feet provided the maximum width of the structure is twenty (20) feet as measured parallel to the configuration of the shoreline.
- c) Stairways, Lifts, and Landings: Stairways and lifts are the preferred alternative to major topographic alterations for achieving access up and down bluffs and steep slopes to shore areas. Stairways and lifts must meet the following design requirements:
 - 1) Stairways and lifts must not exceed four (4) feet in width on residential lots. Wider stairways may be used for commercial properties or public open space recreational properties;

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- 2) Landings for stairways and lifts on residential lots must not exceed 32 square feet in area. Landings larger than 32 square feet may be used for commercial properties or public open space recreational properties;
- 3) Canopies or roofs are not allowed on stairways, lifts, or landings;
- 4) Stairways, lifts, and landings may be either constructed above the ground on posts or pilings, or placed into the ground, provided they are designed and built in a manner that ensures control of soil erosion;
- 5) Stairways, lifts, and landings must be located in the most visually inconspicuous portions of lots, as viewed from the surface of the public water assuming summer leaf on conditions, whenever practical; and
- 6) Facilities such as ramps, lifts, or mobility paths for physically handicapped persons are also allowed for achieving access to shore areas, provided that the dimensional and performance standards of subitems (1) to (5) are complied with in addition to the requirements of Minnesota Regulations, Chapter 1340.
- d) Significant Historic Sites: No structure may be placed on a significant historic site in a manner that affects the value of the site unless adequate information about the site has been removed and documented in a public repository.
- e) **Steep Slopes**: The zoning administrator must evaluate possible soil erosion impacts and development visibility from public waters before issuing a permit for construction of sewage treatment systems, roads, driveways, structures, or other improvements on steep slopes. When determined necessary, conditions must be attached to issued permits to prevent erosion and to preserve existing vegetation screening of structures, vehicles, and other facilities as viewed from the surface of public waters, assuming summer leaf on vegetation.

E. SHORELAND ALTERATIONS

Vegetation Alterations

- 1. Vegetation alteration necessary for the construction of structures and sewage treatment systems and the construction of roads and parking areas regulated by Section (9.10,F) of this ordinance are exempt from the vegetation alteration standards that follow.
- 2. Removal or alteration of vegetation, except for agricultural and forest management uses as regulated in Sections (9.10,H) is allowed subject to the following standards:
 - a) Intensive vegetation clearing within the shore and bluff impact zones and on steep slopes is not allowed. Intensive vegetation clearing for forest land conversion to another use outside of these areas is allowable as a Conditional/Interim Use if an erosion control and sedimentation plan is developed and approved by the soil and water conservation district in which the property is located.
 - b) In shore and bluff impact zones and on steep slopes, limited clearing of trees and shrubs and cutting, pruning, and trimming of trees is allowed to

provide a view to the water from the principal dwelling site and to accommodate the placement of stairways and landings, picnic areas, access paths, livestock watering areas, beach and watercraft access areas, and permitted water oriented accessory structures or facilities, provided that:

- The screening of structures, vehicles, or other facilities as viewed from the water, assuming summer leaf on conditions, is not substantially reduced;
- 2) Along rivers, existing shading of water surfaces is preserved, and
- 3) The above provisions are not applicable to the removal of tree limbs, or branches that are dead, diseased, or pose safety hazards.

Topographic Alterations / Grading and Filling

- Grading and filling and excavations necessary for the construction of structures, sewage treatment systems, and driveways under validly issued construction permits for these facilities do not require the issuance of a separate grading and filling permit. However, the grading and filling standards in this section must be incorporated into the issuance of permits for construction of the above mentioned items.
- 2. Public roads and parking areas are regulated by Section (9.10,F) of this ordinance.
- 3. Notwithstanding items 1 and 2 above, a grading and filling permit will be required for:
 - a) The movement of more than ten (10) cubic yards of material on steep slopes and shore and bluff impact zones; and
 - b) The movement of more than fifty (50) cubic yards of material outside of steep slopes and shore and bluff impact zones.
- 4. The following considerations and conditions must be adhered to during the issuance of construction permits, grading and filling permits, Conditional/Interim Use permits, variances and subdivision approvals:
 - a) Grading or filling within any wetland area must meet the applicable requirements of the Minnesota Wetlands Conservation Act.
 - Alterations must be designed and conducted in a manner that ensures only the smallest amount of bare ground is exposed for the shortest time possible;
 - Mulches or similar materials must be used, where necessary, for temporary bare soil coverage, and a permanent vegetation cover must be established as soon as possible;
 - d) Methods to minimize erosion and to trap sediments before they reach any surface water feature must be used;
 - e) Altered areas must be stabilized to acceptable erosion control standards consistent with Section 10.20 of the Olmsted County Zoning Ordinance.
 - f) Fill or excavated material must not be placed in a manner that creates an unstable slope;

- g) Plans to place fill or excavated material on steep slopes must be reviewed by qualified professionals for continued slope stability and must not create finished slopes of 30 percent or greater;
- h) Fill or excavated materials must not be placed in bluff impact zones;
- i) Any alterations below the ordinary high water level of public waters must first be authorized by the Commissioner under Minnesota Statutes, Section 105.42;
- Alterations of topography must only be allowed if they are accessory to permitted or Conditional/Interim Uses and do not adversely affect adjacent or nearby properties; and
- k) Placement of natural rock riprap, including associated grading of the shoreline and placement of a filter blanket, is permitted if the finished slope does not exceed three (3) feet horizontal to one (1) foot vertical, the landward extent of the riprap is within ten (10) feet of the ordinary high water level, and the height of the riprap above the ordinary high water level does not exceed three (3) feet.
- 5. Connections to Public Waters: Excavations where the intended purpose is connection to a public water, such as boat slips, canals, lagoons, and harbors, must be controlled by local shoreland controls. Permission for excavations may be given only after the Commissioner has approved the proposed connection to public waters.

F. PLACEMENT AND DESIGN OF ROAD, DRIVEWAYS, AND PARKING AREAS

- 1. Public and private roads and parking areas must be designed to take advantage of natural vegetation and topography to achieve maximum screening from view from public waters. Construction of roads and parking areas must be designed and constructed to minimize and control erosion to public waters consistent with the provisions of Section 10.20 of this ordinance.
- 2. Roads, driveways, and parking areas must meet structure setbacks and must not be placed within bluff and shore impact zones, when other reasonable and feasible placement alternatives exist. If no alternatives exist, they may be placed within these areas, and must be designed to minimize adverse impacts.
- 3. Public and private watercraft access ramps, approach roads, and access related parking areas may be placed within shore impact zones provided the vegetative screening and erosion control conditions of this ordinance are met.

G. STORMWATER MANAGEMENT

1. General Standards

- a) When possible, existing natural drainageways, wetlands, and vegetated soil surfaces must be used to convey, store, filter, and retain stormwater runoff before discharge to public waters.
- b) Development must be planned and conducted in a manner that will minimize the extent of disturbed areas, runoff velocities, erosion potential, and reduce

- and delay runoff volumes. Disturbed areas must be stabilized and protected as soon as possible.
- c) When development density, topographic features, and soil and vegetation conditions are not sufficient to adequately handle stormwater runoff using natural features and vegetation, various types of constructed facilities such as dikes, diversion, settling basins, and ponds may be used. Preference must be given to designs using surface drainage, vegetation, and infiltration rather than buried pipes and manmade materials and facilities.

2. Specific Standards

- a) Impervious surface coverage of lots must not exceed 25 percent of the lot area
- b) When constructed facilities are used for stormwater management, documentation must be provided by a qualified individual that they are designed and installed consistent with the local soil and water conservation district guidelines.
- c) New constructed stormwater outfalls to public waters must provide for filtering or settling of suspended solids and skimming of surface debris before discharge.

H. SPECIAL PROVISIONS FOR COMMERCIAL, INDUSTRIAL, PUBLIC, SEMIPUBLIC, AND AGRICULTURAL USES

1. Standards for Commercial, Industrial, Public, and Semipublic Uses:

- a) Surface water oriented commercial uses and industrial, public, or semipublic uses with similar needs to have access to and use of public waters may be located on lots or parcels with frontage on public waters. Those uses with water oriented needs must meet the following standards:
 - In addition to meeting the impervious coverage limits, setbacks, and other zoning district standards in this ordinance, the uses must be designed to incorporate topographic and vegetative screening of parking areas and structures:
 - 2) Uses that require short term watercraft mooring for patrons must centralize these facilities and design them to avoid obstructions of navigation and to be the minimum size necessary to meet the need; and
 - 3) Uses that depend on patrons arriving by watercraft may use signs and lighting to convey needed information to the public, subject to the following general standards:
 - No advertising signs or supporting facilities for signs may be placed in or upon public waters. Signs conveying information or safety messages may be placed in or on public waters by a public authority or under a permit issued by the County Sheriff;
 - b) Signs may be placed when necessary, within the shore impact zone if they are designed and sized to be the minimum necessary to convey needed information. They must only convey the location and name of the establishment and the general types of goods or services

- available. The signs must not contain other detailed information such as product brands and prices, must not be located higher than ten (10) feet above the ground, and must not exceed 32 square feet in size. If illuminated by artificial lights, the lights must be shielded or directed to prevent illumination out across public waters; and
- c) Other outside lighting may be located within the shore impact zone or over public waters if it is used primarily to illuminate potential safety hazards and is shielded or otherwise directed to prevent direct illumination out across public waters. This does not preclude use of navigational lights.
- 4) Uses without water oriented needs must be located on lots or parcels without public waters frontage, or, if located on lots or parcels with public waters frontage, must either be set back double the normal ordinary high water setback or be substantially screened from view from the water by vegetation or topography, assuming summer, leaf on conditions.

2. Agricultural Use Standards:

- a) General farming and related activities are permitted if steep slopes and shore and bluff impact zones are maintained in permanent vegetation or operated under an approved conservation plan from the local soil and water conservation district. The shore impact zone for parcels with permitted agricultural land uses is equal to a line parallel to and 50 feet from the ordinary high water level.
- b) Animal feedlots must meet the following standards:
 - 1) New feedlots must not be located in the shoreland of watercourses or in bluff impact zones and must meet a minimum setback of 300 feet from the ordinary high water level of all public waters basins; and
 - 2) Modifications or expansions to existing feedlots that are located within 300 feet of the ordinary high water level or within a bluff impact zone are allowed if they do not further encroach into the existing ordinary high water level setback or encroach on bluff impact zones.

I. WATER SUPPLY AND SEWAGE TREATMENT:

- 1. **Water Supply**: The water supply shall meet all applicable requirements of the Olmsted County Water Well and Water Supply Ordinance, and amendments thereto.
- 2. **Sewage Treatment**: Any premises used for human occupancy must be provided with an adequate method of treating the sewage which is generated on the premises. Treatment shall be provided as follows:
 - a) Publicly owned sewage treatment systems shall be used where available.
 - b) All new individual sewage treatment systems, including repairs or additions to existing systems, shall meet or exceed the requirements of Olmsted County Public Health Regulation # 41, and amendments thereto (sewage and wastewater treatment regulation).

- c) A new individual sewage treatment system, including repairs or additions to existing systems, shall be set back from the ordinary high water level in accordance with the setbacks contained in Section 9.10 (D) of this ordinance.
- d) Nonconforming individual sewage treatment systems shall be regulated and upgraded in accordance with Section 1.29 (C) of this ordinance.

J. LAND SUITABILITY

- 1. Each lot created through subdivision must be suitable in its natural state for the proposed use with minimum alteration. Suitability analysis by the local unit of government shall consider susceptibility to flooding, existence of wetlands, soil and rock formations with severe limitations for development, severe erosion potential, steep topography, inadequate water supply or sewage treatment capabilities, near shore aquatic conditions unsuitable for water based recreation, important fish and wildlife habitat, presence of significant historic sites, or any other feature of the natural land likely to be harmful to the health, safety, or welfare of future residents of the subdivision.
- Subdivisions must conform to all official controls of the community. A
 subdivision will not be approved where a later variance from one or more
 standards in the official controls would be needed to use the lots for their
 intended purpose.
- 3. Sufficient information must be submitted by the applicant for the local unit of government to make a determination of land suitability. The information should include at a minimum:
 - a) The surface water features required in Minnesota Statutes, Section 505.02, Subdivision 1, to be shown on plats, obtained from United States Geological Survey quadrangle topographic maps or more accurate sources;
 - b) Extent of anticipated vegetation and topographic alterations; near shore aquatic conditions, including depths, types of bottom sediments, and aquatic vegetation; and proposed methods for controlling stormwater runoff and erosion, both during and after construction activities;
 - c) Location of 100 year flood plain areas and floodway districts from existing adopted maps or data; and
 - d) A line or contour representing the ordinary high water level, the "toe" and "top" of bluffs, and the minimum building setback distances from the top of the bluff and the lake or stream.

K. NOTIFICATIONS TO THE DEPARTMENT OF NATURAL RESOURCES

- 1. Copies of all notices of any public hearings to consider variances, amendments, or Conditional/Interim Uses under local shoreland management controls must be sent to the Commissioner or the Commissioner's designated representative and postmarked at least ten (10) days before the hearings. Notices of hearings to consider proposed subdivisions/plats must include copies of the subdivision/plat.
- 2. A copy of approved amendments and subdivisions / plats, and final decisions granting variances or Conditional/Interim Uses under local shoreland

management controls must be sent to the Commissioner or the Commissioner's designated representative and postmarked within ten (10) days of final action.

Section 9.20 DECORAH EDGE OVERLAY DISTRICT

Section 9.21 INTENT AND APPLICATION

<u>Intent:</u> The intent of the Decorah Edge Overlay Zone (DEOZ) regulations is to guide development in the vicinity of the Decorah Edge in order to protect discharge, interflow, and infiltration and recharge processes taking place in the vicinity of the Decorah Edge; to protect water quality and quantity recharging the aquifers relied on for potable water supply; to prevent extraordinary public expenditure for remediation of damage to public infrastructure; and to protect the environmental quality of Decorah Edge wetlands and related natural habitats; all of which promote the public health, safety and general welfare.

The regulations of this district are superimposed upon other existing zoning districts, superseding the regulations of those other districts only to the extent that developments must meet the additional standards of this chapter as well as those of the underlying district in order to comply with this ordinance.

<u>Application:</u> The Decorah Edge Overlay Zone applies to unplatted lands zoned to accommodate commercial or industrial development or residential development at a density greater than four lots per quarter quarter section within the Decorah Edge as defined and mapped in accordance with the Olmsted County Wetland Conservation Ordinance. The Decorah Edge Overlay Zone does not apply to the development of residential or agricultural uses on existing lots of record in existence at the time of enactment of these provisions.

Section 9.22 DEFINITIONS SPECIFIC TO THIS CHAPTER

1.	Decorah Edge	For the purposes of this ordinance the Decorah Edge is the area so identified in the Olmsted County Wetland Conservation Ordinance, as updated.
2.	Edge Support Area	The term "Edge Support Area" shall include any area so identified in the Olmsted County Wetland Conservation Ordinance.
3.	Hydric Soil	A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (USDA NRCS "Hydric Soils – Introduction," available at http://soils.usda.gov/use/hydric/intro.html , accessed September 26, 2005). Hydric soils that occur in areas having hydrophytic vegetation and wetland hydrology are wetland soils.
4.	Wetland	An area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances supports a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.
5.	Groundwater	A wetland that is saturated predominantly by ground water, including

supported slope wetlands in the vicinity of springs or seeps. Such wetlands may be associated with highly organic peat-like soils such as Haverhill (474B)

and Palms (528B) soils.

6. Managed Open An area identified by easement or other mechanism that guarantees that the area will not be intentionally disturbed and that provides, at a

the area will not be intentionally disturbed and that provides, at a minimum, for access by a public agency or a qualified land trust for purposes of monitoring the condition of and maintaining the site.

Section 9.23 DEVELOPMENT STANDARD

Within the DEOZ, development shall be carried out in such a way as to minimize the loss of wetlands and Edge Support Areas, maintain the potential for attenuation of groundwater pollutants including nitrate, maintain or enhance the quantity and quality of infiltration into the St.Peter, Prairie du Chien and Jordan aquifers, and protect groundwater discharge, interflow, and recharge characteristics.

Section 9.24 METES AND BOUNDS SUBDIVISIONS

Except within the A-2 Districts, creation of a lot by metes and bounds shall require a site plan showing that the buildable area, sewage treatment facilities, and runoff from impervious surfaces will not affect wetlands and Edge Support Areas as defined in the Olmsted County Wetland Conservation Ordinance, unless approved under the Wetland Conservation Ordinance.

Section 9.25 GENERAL DEVELOPMENT PLAN

Except as provided below, all commercial and industrial development and all platted residential development in the DEOZ shall take place in accordance with an approved general development plan meeting the development standard of Section 9.23. The following are exempt from this requirement:

- 1. lots included in a plat recorded as of the effective date of this ordinance amendment;
- 2. lots included in a preliminary plat approved within two years prior to the effective date of this ordinance; or
- 3. lots included in a preliminary plat approved within two years after the effective date of this ordinance that are located in a general development plan that was approved prior to the effective date of this ordinance.
- 4. If within a general development plan for future platted residential development that was approved prior to the effective date of this ordinance and that does not meet the requirements of this Section, there remains an area that has not received approval of a preliminary plat within two years of the effective date of this ordinance, the general development plan for the remaining area must be revised to meet these requirements prior to or concurrent with consideration of a preliminary plat. Cambridge Hills, Boulder Ridge, Mayo Woodlands, and Hunter Point General Development Plans are exempt from the requirements of Section 9.23.

Section 9.26 R-1/DE DEVELOPMENT

Within the R-1/DE District, a conservation design development which provides for an overall gross density of up to one dwelling per 3.5 acres; a gross density for the area covered by buildable lots, sewage treatment and stormwater runoff control facilities, and roads of up to one lot per 1.5 acres; and a minimum single family home lot size of 30,000 square feet may be accommodated in parcels or combinations of parcels any part of which are located in the DEOZ. Such conservation design development is the preferred style of development for development in the DEOZ. A general development

plan for such development shall meet the following standards in addition to standards applying in the underlying R-1 Zone:

- 1. Avoidance of the Decorah Edge by roads, drains, pipelines, tiles, the building footprints of structures, other impervious surfaces, and sewage treatment systems to the maximum extent feasible, except where insufficient land area outside the Decorah Edge is included in the general development plan to accommodate the allowed density.
- 2. Complete avoidance of disturbance to groundwater supported slope wetlands and Edge Support Areas, except where provided for under the exemption and no-loss determination provisions or through the appeal process of the Olmsted County Wetland Conservation Ordinance.
- 3. Inclusion of wetlands in managed open space, to the maximum extent feasible, but in no case less than 75% of wetland areas. Wetland areas included as managed open space may provide for management through a conservation easement provided to the County prior to platting or through other mechanisms providing a similar level of protection and management oversight.
- 4. Provision for vegetative management of wetlands and Edge Support Areas, which shall include at a minimum, protection of such areas from disturbance, and which, at the discretion of the platting authority, may provide for posting or fencing of such areas, sustainable timber harvesting, restoration of native plant communities, or other vegetation management activities consistent with minimal disturbance and long term maintenance of natural vegetation. Vegetative management activities shall be documented in a vegetation management plan subject to the approval of the platting authority. The intent of this section is to maintain or augment nutrient uptake by deep-rooted vegetation.
- 5. Provision for storm water management and discharge/interflow/recharge management plans that provide for protection of offsite properties from damage related to drainage and for maintaining pre-development discharge, interflow, and recharge characteristics.
- Financial arrangements, deed restrictions, or other arrangements sufficient to provide for installation of sewage pretreatment, management of vegetation, and management and maintenance of multi-party sewage treatment and storm water management facilities in perpetuity.
- 7. <u>Density Bonus</u>: Density of development up to an overall gross density of one dwelling per 2.5 acres and a minimum single family home lot size of 14,000 square feet may be accommodated provided
 - A. roads, treatment facilities, drains, pipelines, tiles, the building footprints of structures, and driveways and other impervious surfaces avoid the Decorah Edge area to the maximum extent feasible; and
 - B. all wetland areas and Edge Support Areas are maintained in managed open space;
 - C. other areas of the original site in native vegetation, and other areas of the site on slopes over 18%, are maintained in managed open space to the maximum extent feasible, but in no case less than 50% of such areas; and
 - D. pretreatment or other nitrate reduction sewage treatment systems are installed resulting in a nitrate impact on groundwater equivalent to an overall 3.5-acre density of development.

Section 9.27 R-A/DE DEVELOPMENT

Within the R-A/DE District, a development which provides for a density of up to an overall gross density of one dwelling per five acres; a gross density for the area covered by buildable lots, sewage treatment and stormwater runoff control facilities, and roads of 2.5 acres per lot; and a minimum single family home lot size of 80,000 square feet may be accommodated in parcels any part of which are located in the DEOZ. A general development plan for such development shall meet the following standards in addition to standards applying in the underlying RA District:

- 1. Avoidance of the Decorah Edge by roads, drains, pipelines, tiles, the building footprints of structures, other impervious surfaces, and sewage treatment systems to the maximum extent feasible, except where insufficient land area outside the Decorah Edge is included in the general development plan to accommodate the allowed density.
- 2. Complete avoidance of disturbance to wetlands and Edge Support Areas, except where provided for under the exemption and no-loss determination provisions or through the appeal process of the Olmsted County Wetland Conservation Ordinance.
- 3. Inclusion in managed open space of wetlands, to the maximum extent feasible, but in no case less than 75% of wetland areas. Wetland areas included as managed open space may provide for management through a conservation easement provided to the County prior to platting or through other mechanisms providing a similar level of protection and management oversight.
- 4. Provision for vegetative management of wetlands and Edge Support Areas, which shall include at a minimum, protection of such areas from disturbance, and which, at the discretion of the platting authority, may provide for posting or fencing of such areas, sustainable timber harvesting, restoration of native plant communities, or other vegetation management activities consistent with minimal disturbance and long term maintenance of natural vegetation. Vegetative management activities shall be documented in a vegetation management plan subject to the approval of the platting authority. The intent of this section is to maintain or augment nutrient uptake by deep-rooted vegetation.
- 5. Provision for stormwater management and discharge / interflow / recharge management plans that provide for protection of offsite properties from damage related to storm water runoff and that provide for maintaining pre-development discharge, interflow, and recharge characteristics.
- Financial arrangements, deed restrictions, or other arrangements sufficient to provide for installation of sewage pretreatment, management of vegetation, and management and maintenance of multi-party sewage treatment and storm water management facilities in perpetuity.
- 7. Pasture management plans that guarantee sustainable pasture management and which protect wetlands and woodlands in the Decorah Edge portions of the site from grazing and from runoff from grazed areas.

Section 9.28 CONVENTIONAL DEVELOPMENT

If it is determined at the time of wetland delineation that portions of the areas mapped as Decorah Edge do not include wetlands or Edge Support Areas, a general development plan may proceed under conventional zoning and subdivision approaches for such portions of parcels. The area of parcels developed conventionally shall not be considered in the density calculations permitted under Sections 9.25 or 9.26 related to the development of other parcels included in the general development plan that contain wetlands or Edge Support Areas. For the purposes of this section, a portion of a parcel may be considered for conventional development when all of the following circumstances are met:

1. a reasonable use remains for any residual portions of the original parcel; and

- 2. all portions of the original parcel are included in the GDP; and
- 3. the portion of the parcel to be developed conventionally is contiguous; and
- 4. the portion of the parcel to be developed conventionally is at least 15 acres in area.

The determination that a reasonable use remains for residual portions of the original parcel shall reflect such attributes of the residual portions as contiguity, compactness, topography, developable area, and natural constraints on development for areas intended for development. Conservation easements or other means of preserving natural resource or open space uses of residual parcels may be considered to provide for reasonable use.

ARTICLE X -- GENERAL REGULATIONS

Section 10.00 **PURPOSE:**

The general regulations established in Article X are designed to encourage a high standard of development by providing assurance that neighboring land uses will be compatible. The general regulations are designed to prevent and eliminate those conditions that cause blight or detriment to the environment. Before any zoning certificate is issued, the Zoning Administrator shall determine whether the proposed use will conform to the general regulations. The developer or landowner shall supply the data necessary to demonstrate that the development or use will be in conformance.

Section 10.01 **SINGLE FAMILY DWELLING STANDARDS:**

The following regulations shall govern all single family dwellings located within the RSD Zoning district:

- A. The dwelling must have a supporting perimeter wall foundation, or the foundation system is screened by a perimeter wall system of either a finished masonry type, or the same exterior material as the exterior finish of the dwelling, and must extend from the base of the structure to the adjacent grade.
- B. If not constructed on site, the dwelling must meet the provisions of Minnesota Statutes, Chapter 327.31, Subd. 3 (Manufactured Home Building Code).
- C. All single family detached dwellings must have a minimum dimension of at least twenty two (22) feet at the first floor level over at least 50 percent of its length.

Section 10.02 HOME BUSINESSES:

The intent of the provisions providing for home businesses is to encourage new business uses by reducing the barriers to entry for new business enterprises, while maintaining a consistency with the residential or rural character of the districts that such uses locate in.

- **A.** In any zoning district where home businesses are authorized, a home business shall comply with the following regulations:
 - 1. Said use shall occupy an area no more than twenty five (25%) percent of the total floor area of the dwelling.
 - 2. No home business shall require substantial interior or exterior alterations of the dwelling exceeding 25% of the estimated building value as determined by the most current Olmsted County property records. No home business shall create emissions, surface or groundwater discharges, odor, dust, noise, electrical disturbances, glare or vibrations exceeding the standards of the MPCA as specified in Minnesota Rule.

- 3. Any parking generated by the conduct of the home occupation shall be provided for off the street, outside the required front yard and side street side yard.
- 4. Notwithstanding any other provision to the contrary, no adult establishment shall be allowed as a home business in any district.
- B. A home business allowed in the RSD Districts shall comply with the following regulations, in addition to the requirements of Section 10.02 A.
 - 1. No person shall be employed other than a member of the household residing on the premises.
 - 2. The home business shall be conducted entirely within buildings, including the dwelling and no more than one accessory structure, except for swimming pools, tennis courts, and similar outdoor recreational uses and except for outdoor facilities associated with day care, and may involve the use of no more than one accessory structure exclusively for storage.
 - 3. Signage shall be limited to one (1) non-illuminated identifying sign measuring not more than two square feet in area.
 - 4. Off-street parking shall be provided on a paved or gravel surface.
 - 5. No more than two vehicles used in connection with the home business shall be visible on the premises, limited to licensed and operable two-axle, sis-tire single unit vehicles as defined by the Federal Highway Administration (http://www.fhwa.dot.gov/policy/ohpi/vehclass.htm). No vehicle when visible on the premises.
 - 6. The following businesses may be permitted as a home business in the RSD Districts:
 - a) Permitted Uses:
 - Attorney, doctor, dentist, financial, insurance, real estate, engineering, advertising agencies, artist or photographic studios, and similar professional office uses.
 - ii. Personal services limited to the following uses: beauty shops, barber shops, clothing rental, fitness coaching, photographic studios, cleaning and garment services except dry cleaning and coin laundries.
 - iii. Production of apparel, fabric, quilts, furniture, and similar goods on the premises.
 - iv. Retail trade of goods produced on the premises, as an incidental use associated with another non-retail home business use, or as an office and storage use where sales activity is conducted off-premises (such as home-based distributorships).
 - v. Repair services typically conducted within dwellings, such as jewelry and watch repair.
 - vi. Offices and storage for plumbing, electrical, and similar trades.
 - b). Conditional/Interim Uses: All other home businesses not listed above as permitted uses shall be considered through the conditional or interim use process, except that no business shall be permitted as a home

business that is allowed as a conditional or interim use in the RC, CS, HC, A/RC (8.09), A/RC (8.09.2), MI, OR I districts of the Olmsted County Zoning Ordinance.

- C. A home business allowed in the A-2 Districts shall comply with the following regulations, in addition to the requirements of Section 10.02 A.
 - 1. The following businesses may be permitted as a home business:
- a) Permitted Uses:
 - i. Attorney, doctor, dentist, financial, insurance, real estate, engineering, advertising agencies, artist or photographic studios, and similar professional office uses.
 - ii. Veterinary service offices.
 - iii. Personal services limited to the following uses: beauty shops, barber shops, clothing rental, fitness coaching, photographic studios, cleaning and garment services except dry cleaning and coin laundries.
 - iv. Production of apparel, fabric, quilts, furniture, and similar goods on the premises.
 - v. Retail trade of goods produced on the premises, as an incidental use associated with another non-retail home business use, or as an office and storage use where sales activity is conducted off-premises (such as homebased distributorships).
 - vi. Repair services typically conducted within dwellings, such as jewelry and watch repair.
 - vii. Motor vehicle repair, body shops, welding and other repair services.
 - viii. Offices and storage for plumbing, electrical, and similar trades.
- b) Conditional/Interim Uses:
- i. A business allowed as a conditional/interim use in the RC, CS, HC, or I districts or in the district of residence shall be considered for approval as a home business only through conditional/interim use permit process.
- ii. All other home businesses not listed above as permitted uses shall be considered only through the conditional/interim use permit process.
- iii. Any business listed above proposing to have more than two vehicles used in connection with the home occupation stored or stopped on the premises, or any business proposing to use a vehicle other than a two-axle, six-tire single unit vehicle as defined by the Federal Highway Administration.
- D. A home business allowed as a permitted use on a parcel smaller than 35 acres in area in the A-2 Agricultural Districts shall comply with the following regulations in addition to the requirements of Section 10.02 A.
 - 1. No person shall be employed other than a member of the household residing on the premises.
 - 2. Said use shall not occupy an area of more than twenty five (25%) percent of the total floor area of the dwelling and not more than one accessory structure with a floor area of 2,400 square feet or less.
 - 3. Outside storage of material or equipment or display of merchandise is permitted only on paved surfaces and shall not exceed 2,000 square feet.
 - 4. The total impervious surface area devoted to the home business shall not exceed 5,000 square feet including outside storage, parking areas, and accessory structure.

- 5. Signage shall be limited to one (1) non-illuminated identifying sign measuring not more than 32 square feet in area.
- E. A home business allowed as a permitted use on a parcel of 35 acres or more in the A-2 Agricultural Districts shall comply with the following regulations
 - 1. No person shall be employed other than a member of the household residing on the premises.
 - 2. Said use shall not occupy an area of more than twenty five (25%) percent of the total floor area of the dwelling and not more than one accessory structure with a floor area of 5,000 square feet or less.
 - 3. Outside storage of material or equipment or display of merchandise is permitted only on paved surfaces, shall not exceed 5,000 square feet, and shall be screened from view from adjacent residences.
 - 4. The total impervious surface area devoted to the home business shall not exceed 10,000 square feet including the portion of the dwelling used for the home business, outside storage and parking areas, and the accessory structure.
 - 5. Signage shall be limited to one (1) non-illuminated identifying sign measuring not more than 32 square feet in area.
- F. A home business may be permitted as a Conditional/Interim use in the A-2 Agricultural Districts on a parcel smaller than 35 acres in area, provided it complies with the following regulations:
 - 1. No more than five full time equivalents (FTE) shall be employed who are not members of the household residing on the premises.
 - 2. Said use shall not occupy an area of more than twenty five (25%) percent of the total floor area of the dwelling and not more than one accessory structure with a floor area of 5,000 square feet or less.
 - 3. Outside storage of material or equipment or display of merchandise may be permitted on an unpaved surface, provided it is managed to control dust and is screened from view from adjacent residences.
 - 4. The total impervious surface area devoted to the home business including outside storage, parking areas, and accessory structure shall be limited to the minimum necessary to conduct the use, but not more than 20,000 square feet or 10% of the lot area, whichever is less.
 - 5. Signage shall be limited to one (1) non-illuminated identifying sign measuring not more than 32 square feet in area.
- G. A home business may be permitted as a Conditional/Interim use in the A-2 Agricultural Districts on a parcel of 35 acres or more, provided it complies with the following regulations:
 - 1. No more than five full time equivalents (FTE) shall be employed who are not members of the household residing on the premises.
 - 2. Said use shall not occupy an area of more than twenty five (25%) percent of the total floor area of the dwelling and not more than one accessory structure with a floor area of 5,000 square feet or less.

- 3. Outside storage of material or equipment or display of merchandise may be permitted on an unpaved surface, provided it is managed to control dust and is screened from view from adjacent residences.
- 4. The total impervious surface area devoted to the home business including outside storage, parking areas, and accessory structure shall be limited to the minimum necessary to conduct the use, but not more than 20,000 square feet or 10% of the lot area, whichever is less.
- 5. Signage shall be limited to one (1) non-illuminated identifying sign measuring not more than 32 square feet in area.

Section 10.04 **PARKING REQUIREMENTS:**

- A. **Parking Definitions**: The following parking definitions shall be used to determine the number of parking spaces required for each use:
 - 1. **Building Capacity:** The maximum number of persons who may be accommodated by the use as determined by its design or by fire code regulations, whichever is greater.
 - 2. **Employee(s):** The maximum number of employees employed at the facility, on the largest work shift, regardless of the time period during which this occurs.
 - 3. **Floor Area:** In the case of offices, merchandising, or service uses, "Floor Area" shall mean the gross floor area used or intended to be used by residents or for service to the public as customers, patrons, clients or patients, including areas occupied by offices, fixtures and equipment used for display or sale of merchandise. It shall not include areas used principally for non-public purpose, such as storage, incidental repair, processing or packaging of merchandise, for show windows, for toilet or restrooms, for utilities or for dressing rooms, fitting or alteration rooms.
 - 4. **Parking space:** An area of not less than one hundred sixty-two (162) square feet, exclusive of access drives or aisles and usable for the storage or parking of motor vehicles.
 - 5. **Place of Public Assembly-Benches:** In places of public assembly in which patrons or spectators occupy benches, pews, or other seating facilities, each twenty (20") inches of seating facilities shall be counted as one (1) seat for the purpose of determining requirements for off-street parking facilities under this ordinance.

B. Location of Parking Facilities:

- 1. One-family, single-family attached of three (3) dwellings or less, and two-family: Off-street parking stalls shall be provided on the same lot as the dwelling.
- 2. Multiple family and other single-family attached: Off-street parking shall be on lands owned by the same person who owns the building and located within two hundred (200) feet of the building.
- 3. Commercial and Industrial and other use: Off-street parking shall be on land owned or leased by the same person who owns the building and located within six hundred (600) feet of the building they are intended to serve.

- 4. No overnight parking is allowed on Township roads.
- 5. Parked vehicles must be removed from Township roads to allow for Township maintenance and snow removal. Vehicles not removed may be towed at the owner's expense.

C. Parking Setbacks:

- 1. Off-street parking in the Agricultural or Residential Districts may occupy all or part of any required side or rear yard but shall not be located in the front yard, except in an established driveway.
- 2. Off-street parking in the Commercial or Industrial Districts may occupy any required yards, except such parking shall be set back ten (10) feet from any road right-of-way.
- D. **Mixed Occupancies**: In the case of mixed uses, the total requirements for off-street parking facilities shall be the sum of the requirements for the various uses computed separately. Off-street parking facilities for one use shall not be considered as providing required parking facilities for any other use.
- E. **Required Number of Parking Spaces**: The amount of required off-street parking spaces for new uses, buildings and additions shall be as specified in the following table:

TABLE 1 REQUIRED PARKING SPACES		
USE	REQUIRED PARKING SPACES	
One family, single family attached, two family dwelling, and mobile home	Two (2) parking spaces for each dwelling unit.	
Multiple family dwellings.	One and one-half (1 1/2) parking spaces for each dwelling.	
Motels and hotels	One (1) parking space for each guest room, plus two (2) additional parking spaces	
Hospitals, Convalescent or Nursing Homes	One (1) parking space per four (4) beds.	
Fraternity, Boarding and Rooming Houses	One (1) parking space for each two (2) lodging units.	
Libraries, Art Galleries, Museums	One (1) parking space per 500 sq. ft. of floor area.	
Churches, Auditoriums and Places of Assembly	One (1) parking space for every five (5) seats.	
Elementary and Nursing Schools	One (1) parking space for every two (2) employees	
Junior and Senior High Schools	One (1) parking space for every two (2) employees plus one (1) parking space for every five (5) seats in the auditorium or stadium (whichever is larger).	
College, University or Trade School	One (1) parking space for every two (2) employees, plus one (1) parking space for every ten (10) students.	
Dance Halls, Places of Assembly and Exhibit Halls without fixed seating.	One (1) parking space for every five (5) persons allowed as maximum building capacity.	
Automobile or Machinery Sales	One (1) parking space for every 800 sq. ft. of floor area.	
Bowling Alleys	Four (4) parking spaces for every alley.	
Clinics	One (1) parking space for every 200 sq. ft. of floor area.	
Funeral Home	One (1) parking space for every five (5) seats.	
Furniture and Appliance Stores	One (1) parking space for every 600 sq. ft. of floor area.	
Offices, Banks, and Public	One (1) parking space for every 400 sq. ft. of floor area.	
Administration		
Restaurants	One (1) parking space for every four (4) seats, plus one (1) parking space for every two (2) employees.	
Retail Stores	One (1) parking space for every 150 sq. ft. of floor area.	
Service Garages and Car Washes	Five (5) parking spaces per stall.	
All Other Commercial	One (1) parking space for every 300 sq. ft. of floor area.	
Industrial and Warehousing	One (1) parking space per employee	

F. Development and Maintenance of Loading and Parking Areas:

- 1. **Surfacing and Drainage**: Off-street parking areas shall be improved with a durable surface. Such areas shall be graded and drained as to dispose of all surface water without damage to adjoining property.
- 2. **Lighting**: Any lighting used to illuminate any off-street parking area shall be arranged as to reflect the light away from residential uses on adjoining lots.
- 3. Access: There shall be adequate provisions for ingress and egress to all parking and loading spaces. Said access drive shall not be less than eight (8) feet in width in the case of a dwelling, and not less than eighteen (18) feet in width in all other cases; provided, however, that one-way aisles for either ingress or egress for uses other than dwellings may be reduced to not less than ten (10) feet in width.
- 4. Necessary curbs or other protections against damage to adjoining properties, roads, and sidewalks shall be provided and maintained.
- 5. It shall be the responsibility of the owner of the principal use or of the property to insure that the parking area is neat and maintained in a safe condition.
- G. **Parking of Trucks in R-Districts**: No trucks or commercial vehicles with a commercial (Y-type) license and of a rated gross vehicle weight of 12,000 pounds or more shall be parked on any residential premises in any R-district for any consecutive period of four (4) hours or more. This provision shall not prohibit the parking of any necessary construction vehicles during the construction period on the premises where construction is in progress.

Section 10.06 **LOADING REQUIREMENTS**

- A. **Required Loading Spaces**: On the premises with every building, structure, or part thereof, erected and occupied for manufacturing, storage, warehouse goods display, department store, wholesale store, market, hotel, hospital, mortuary, laundry, dry cleaning, or other uses similarly involving receipt or distribution of vehicles or materials or merchandise, there shall be provided and maintained on the lot adequate space for standing, loading, and unloading services in order to avoid undue interference with public use of the roads or alleys.
- B. Development and Maintenance of Loading Spaces: See Section 10.04 (F).

Section 10.08 **BUFFERYARDS**

A. **Purpose**: The purpose of the bufferyards is to separate different land uses from each other in order to eliminate or minimize potential nuisances such as dust, litter, noise, glare of lights, signs and buildings or parking areas, or to provide spacing to reduce adverse impacts of noise, odors or danger from fire or explosions or surface water runoff.

B. Required Bufferyards:

- 1. All new or major expansions of existing multiple family, commercial or industrial uses shall provide a bufferyard along the outer perimeter of the lot when such uses are adjacent to properties that are zoned R-A or R-1 (Residential) or A-4 (Agricultural) and designated for future residential use in the Comprehensive Plan.
 - A bufferyard shall also be provided when a new or major expansion of commercial or industrial use is adjacent to an R-2 (Low Density Residential) and R-3 (Medium Density Residential) District. A bufferyard may be required in the granting of a Conditional/Interim Use permit.
- 2. A major expansion for bufferyard purposes shall be considered to be an expansion or combination of expansions to buildings or other facilities, within the last five (5) years that exceeds fifty (50%) percent of its current market value according to the Olmsted County Assessor's records. The bufferyards shall be located on the outer perimeter of the lot, extending to the property line except when there exists a utility easement, in which case the bufferyard shall commence from the inner boundary of such utility easement. No bufferyard shall be located on any portion of an existing or dedicated public or private street right-of-way. Alternative bufferyards may be defined by the Commission.
- 3. The following table specifies the intensity of the bufferyard that is required. For example, if a property zoned I (Industrial) is located adjacent to a property zoned R-1 (Residential), the Industrial property is required to provide Bufferyard E along the outer perimeter of the lot which adjoins the R-1 (Residential) district. If the same properties are separated by an intervening arterial street, then Bufferyard B is required.
- 4. The town may require a bufferyard be placed between any two zoning district as a requirement of the rezoning or granting of a conditional/interim use permit. The type of bufferyard shall be determined during the rezoning or permitting process.

TABLE II BUFFERYARD REQUIREMENTS				
Zoning District	Adjacent Property R-A, R-1, R-2, & A-4 Districts	Adjacent Property R-A, R-1, R-2, & A-4 District Separated by Street*		arated
		Expressway, Freeway, & Arterial	Collector	Local
R-2 & R-3 Residential	С	A	В	В
RC, CS & HC Commercial	С	A	В	С
I (Industrial)	Е	E	С	С

^{*}The Currently Held Valid Official Thoroughfare Plan for Olmsted County shall be used to determine the classification of the street.

5. All bufferyards (A-E) permit four or five bufferyard widths, ranging from ten (10) to thirty (30) feet, and specify the number of plantings required for each bufferyard width. In bufferyards D and E, fences are required in addition to the plantings when a narrow bufferyard is to be used. The required fences are represented by the symbols F1, F2, and F3, and correspond to the illustration on fences. The property owner may select the width of bufferyard he will install and maintain.

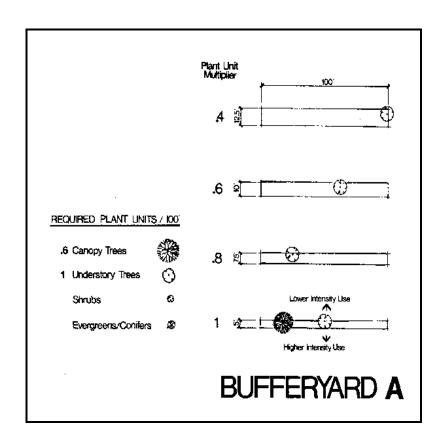
To determine the minimum number of plantings, refer to the appropriate bufferyard illustration, then choose the width of the bufferyard to be established, then multiply the "plant unit multiplier" by the lot dimension (feet) and by the "required plant units/100". For example, if a property owner were required to provide Bufferyard B along 200 feet of a lot dimension and choose to establish a 20 foot wide bufferyard, he would be required to provide one (1) canopy tree, two (2) understory trees and four (4) shrubs. The following calculations described how these figures were obtained:

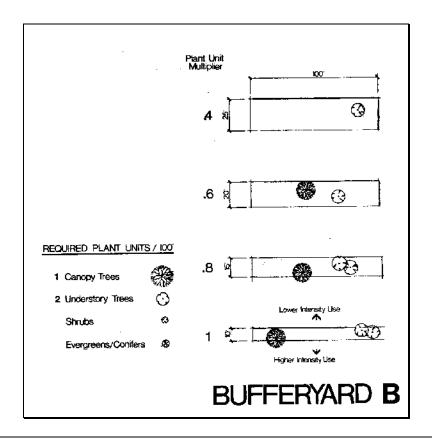
 0.6
 X
 200 Feet
 X
 1/100 "Canopy"
 =
 1.2 Canopy

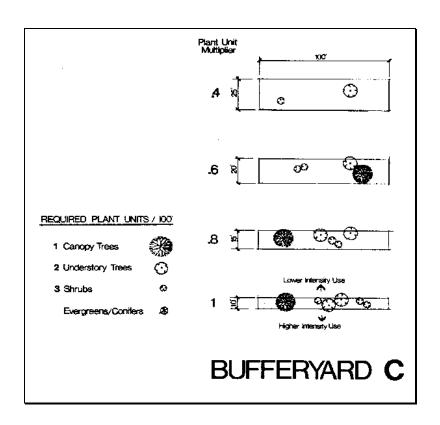
 ("Plant Unit
 ("Lot
 X
 2/100 "Understory"
 =
 2.4 Understory

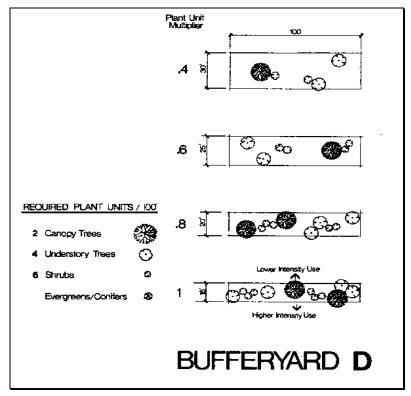
 Multiplier")
 Dimension")
 X
 3/100 "Shrubs"
 =

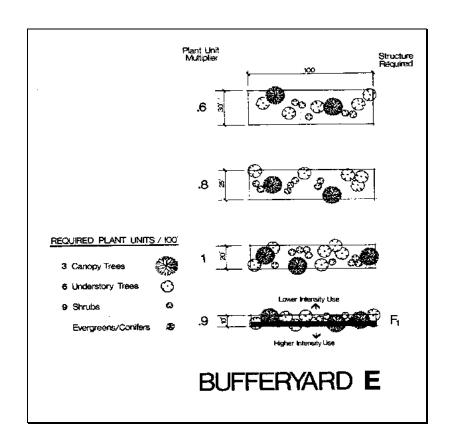
6. All bufferyards shall be landscaped with rock, bark, grass or other suitable materials.

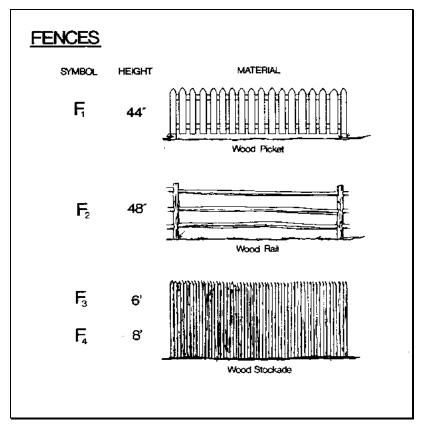












C. Existing Trees within Bufferyard:

- 1. Existing trees and shrubs may be counted as contributing to the required bufferyard, providing they meet the minimum plant size specified in Section 10.08 (F). Furthermore, any existing trees with a two and one-half (2.5) inch or greater caliper located within the bufferyard shall be preserved and maintained.
- 2. The Commission may permit the removal of existing trees as described previously when such trees are determined to be undesirable or such trees have a minimal value as a bufferyard.
- 3. Not with standing Section 10.08 (C, 1), the removal of trees seriously damaged by storms or other acts of God or diseased trees shall not be prohibited.
- 4. In all cases when existing trees are removed, the intensity of the vegetation in the bufferyard shall be retained as to the requirements specified in Section 10.08 (B, 4).

D. Plant Substitutions:

- 1. In all bufferyards evergreen shrubs, understory or canopy trees may be substituted for the required deciduous shrubs and trees.
- 2. A berm of at least four (4) feet in height may be substituted for the required shrubs.
- A. Fence Substitution: Other types of fences may be substituted, providing such fence is of equivalent or greater screening and height.
- B. Minimum Plant Size: Unless otherwise specifically indicated elsewhere in this zoning ordinance, all new plant materials shall meet the following minimum size standards:

Plant Material Type	Minimum Size
Canopy Tree	
Single Stem	1 1/2 inch caliper *
Multi-Stem	6 feet (height)
Understory Tree	4 feet (height)
Evergreen Tree	3 feet (height)
Shrub	
Deciduous	15 inches (height)
Evergreen	12 inches (height)

*Caliper: Designed as a measurement of the size of a tree equal to the diameter of its trunk measured six (6) inches above natural grade.

G. Bufferyard Maintenance:

1. All trees and shrubs shall be maintained in a healthy growing condition. If any plants should die, they shall be replaced within sixty (60) days in order to maintain the required number of plantings as specified in Section 10.08 (B, 4).

H. Financial Guarantee:

Prior to the issuance of a zoning certificate, the owner or contractor shall provide
to the Township Treasurer either a letter of credit, a performance bond or escrow
deposit to ensure that bufferyards are installed according to Section 10.08 (B, 4).
All financial guarantees shall be equal to the sum of one hundred (100%) percent
of the total cost, including materials and labor, for installation of the bufferyard,
The Townboard shall be entitled to reimburse itself out of said funds for any cost
and expense incurred by the Township for completion of the work in case of
default.

I. Bufferyard Uses:

- 1. A bufferyard may be used for passive recreation, it may contain a picnic area, paths, fences, etc., and may include a sign if located adjacent to a street; provided that no plant material is eliminated and that no building, parking, loading, or storage areas are permitted within the bufferyards.
- J. Plant Materials: Plant materials chosen for use within required bufferyards shall be suited to the existing climatic conditions of southeastern Minnesota, and shall be compatible with the existing soil types found on the site. Since the purpose of the bufferyard is to provided screening of objectionable elements for adjacent land uses, the following plant characteristics shall be encouraged in the selection of plant materials:
 - Density of Foliage: Species that exhibit more structural stability as a result of more rigid petioles have less leaf movement and thus appear more solid and dense, and these types are encouraged.
 - 2. **Growth Rate:** Species that have characteristically exhibited faster growth rates during the first 3-5 years of planting are desirable to establish the visual screening sooner.
 - 3. **Structure:** In the case of deciduous species, trees with a more emphatic branch structure and a more intricate twig structure will be preferred due to the fact that for up to six months of the year these species are without leaves and thus lose much of their screening ability.
 - 4. **Salt Tolerance:** In the case of bufferyards along existing streets and roads, the ability of species to withstand salt will result in their enhanced chance for survival, especially in the early years of growth.
 - 5. **Height:** In the case of understory trees and shrubs, those species with a projected height of at least 7 to 8 feet will be preferred to provide maximum screening for adjacent properties.
 - 6. **Representative List of Trees and Shrubs:** The following is a representative list of trees and shrub species that are suitable for the purposes of the bufferyard.

Other species of similar characteristics and which are suitable for this climate may be used.

CANOPY TREES		
DECIDUOUS	EVERGREEN	
Green Ash	Austrian Pine	
Hackberry	Black Hills Spruce	
Honey Locust	Colorado Spruce	
Horse Chestnut	Ponderosa Pine	
Linden	Scotch Pine	
Norway Maple	White Pine	
Oak	White Spruce	
Sugar Maple		
White Ash		

UNDERSTORY TREES		
DECIDUOUS	EVERGREEN	
Amur Manle	Arborvitae	
Black Alder	Iuniners	
Crab Apple		
Ohio Buckeve		
River Birch		
Russian Olive		
Russian Mulberry		
Service Berry		

SHRUBS AND HEDGES		
DECIDUOUS	EVERGREEN	
American Elder	Arborvitae.	
American Hazel	Iananese Yew	
Barherry	Iuniners	
Chokeberry		
Common Lilac		
Cotoneaster		
Dogwood		
Filonymous		
Honevsuckle		
Snow Berry		
Viburnums		

Section 10.10 EXTERIOR STORAGE AND VEHICLES

A. Exterior Storage-Residential Districts:

1. In residential districts, all lots shall be maintained and kept in a reasonably clean and neat condition. This requirement shall include the removal of dead trees and brush; the removal of inoperable machines, appliances, fixtures, and equipment so damaged, deteriorated or obsolete as to have no substantial value and which constitute junk; the removal of lumber piles and building materials not being used in actual construction on the premises.

B. Vehicles:

1. In Agricultural or Residential Districts, no person shall place, park, permit to remain, store or leave upon any premises, except in a completely enclosed building, any motor vehicle which does not have affixed thereto a valid current motor vehicle license, or any portions thereof or parts therefrom, when such motor vehicle, portions thereof or parts therefrom are in a rusted, wrecked, partially dismantled or junked condition or in an unoperative or abandoned condition; and the owner of such motor vehicle, portions thereof, or parts therefrom, and the owner and occupant of the premises upon which located shall be obligated to remove same to a duly licensed junk yard or other authorized place of deposit or storage.

Section 10.12 SALVAGE AND JUNK YARDS

- A. All salvage and junk yards shall obtain a Conditional/Interim Use permit and satisfy the criteria for granting a Conditional/Interim Use permit contained in Section 4.02. Salvage and junk yards, furthermore, shall meet the following:
 - 1. Salvage and junk yards shall be screened from any residential district and from any public road. Plans for such screening shall be submitted to the Commission for approval.
 - 2. Any storage or dismantling of vehicles and machinery shall be done in a manner so as not to pollute the surface or ground water in the County.
 - 3. Any existing salvage or junk yard shall comply with this Section (10.12) within one hundred twenty days (120) of the adoption of this ordinance.

Section 10.14 NOISE, HEAT, GLARE, VIBRATION, SMOKE, TOXIC WASTE, AND NOXIOUS FUMES:

Emission or creation of noise, heat, glare, vibration, smoke, toxic wastes, and noxious fumes shall conform to standards established by the Minnesota Pollution Control Agency.

Section 10.15 TELECOMMUNICATION TOWERS

- B. **PURPOSE:** Rock Dell Township acknowledges the legal right to wireless telecommunications providers to do business within the Township. However, the Township wishes to implement its legal authority to impose zoning requirements that are nondiscriminatory, not intended to prohibit telecommunications services, and not based on the health effects of radio frequency emissions. In order to establish predictable and balanced regulations that protect the public health, safety and general welfare of the community, these regulations are intended to:
 - Facilitate the provision of telecommunications services and facilities including commercial wireless telecommunication services in Rock Dell Township and Olmsted County;
 - 2. minimize adverse visual effects of towers through careful design and siting standards;
 - avoid potential damage to adjacent properties from tower or antenna failure and weather related occurrences through structural standards, careful siting, and setback requirements;
 - 4. encourage the placement of telecommunication towers on agricultural, commercial, or industrial property; and
 - 5. minimize the total number of existing and new towers and buildings needed to serve the communities, and maximize the use of existing towers and buildings.

C. TOWER HEIGHT:

All proposed towers and accessory structures or buildings shall meet the maximum height provisions of the underlying zoning district and Section 4.02 Conditional Use, except as may be permitted under Section 10.15 C. Tower Setback. In no case shall a tower or combined building/tower height exceed 199 feet where located within 1,000 feet of an existing residential subdivision or residential dwelling.

The height of towers shall be determined by measuring the vertical distance from the tower's point of contact with the ground or rooftop to the highest point of the tower, including all antennas or other attachments. When towers are mounted on top of other structures or buildings, the combined height of the structure or building and tower must meet the height requirements of the applicable zoning district.

D. TOWER SETBACK:

- 1. Towers proposed to be located in the A-2, and A/RC districts shall be set back from all property lines an amount equal to the height of the structure. In the A-2 zoning districts, proposed setbacks that are less than the tower height may be permitted under the criteria for granting conditional uses found in Section 4.02 (A). All towers shall have a setback equal to the tower height from any dwelling in a nonresidential zoning district. This setback requirement does not apply to the property on which the tower is placed.
- 2. Guy wires for towers shall be located no closer than 25 feet to any property line.

3. Suitable protective anti-climbing fencing shall be provided around any tower and the bases of guy lines. Where fences are used to control unauthorized climbing of towers the fences shall conform to the setback requirements for principal structures or buildings. Fences or walls shall be located between the plantings and the tower based on the standards of Section 10.08 Bufferyards.

E. TOWER LOCATION:

- 1. The Joint Airport Zoning Ordinance covering the Rochester International Airport shall determine height and location requirements within the airport zoning district. All towers shall have FAA approval prior to issuance of a building permit if within three miles of another public airport or heliport. All applicants shall demonstrate that the proposed tower will comply with FAA standards prior to issuance of a building permit if located within 3 miles of a private airport. The FAA must issue a "no hazard" determination to comply with this provision.
- 2. Towers shall not be permitted to be located within floodplains, or shorelands.

F. TOWER DESIGN REQUIREMENTS:

- 1. Towers and antennas shall blend into the surrounding environment through the use of color and camouflaging architectural treatment except where color is dictated by federal or state authorities. Within one quarter mile of a residential zoning district tower color shall be a solid color, not multi-colored, and shall be light blue, light beige, or unpainted and non-reflective.
- 2. Within one-quarter mile of a residential zoning district, new towers shall be a monopole design. Existing towers may be used for the placement of antennas and will not be required to be of a monopole design.
- 3. No tower shall have constructed thereon, or attached thereto, in any way, any platform, catwalk, crow's nest, or like structure, except during periods of construction or repair when the tower is located within one-quarter mile of a residential zoning district.
- 4. All guyed towers shall have placed on the supporting cables bird diverter devices with a design recommended by the Minnesota Department of Natural Resources.

G. ANTENNA CO-LOCATION:

All commercial wireless telecommunication towers erected, constructed, or located within the Rock Dell Township shall comply with the following requirements:

1. A proposal for a new tower shall not be approved unless the Rock Dell Township finds that the telecommunications equipment planned for the proposed tower cannot be accommodated on an existing or approved tower or building within a one mile search radius of the proposed tower or within one mile of the telecommunication company's search area for the proposed tower, whichever is greater, due to one or more of the following reasons:

- a) The planned equipment would exceed the structural capacity of the existing or approved tower or building, as documented by a qualified and licensed professional engineer, and the existing or approved tower cannot be reinforced, modified, or replaced to accommodate planned equipment at a reasonable cost;
- b) the planned equipment would cause interference materially impacting the usability of other existing or planned equipment at the tower or building as documented by a qualified and licensed professional engineer or qualified radio frequency engineer and the interference cannot be prevented at a reasonable cost;
- existing or approved towers and buildings within the search radius that are 60 feet or over in height that cannot accommodate the planned equipment at a height necessary to function reasonably or are not located so that the planned equipment will function reasonably, as documented by a qualified radio frequency engineer or licensed professional engineer;
- d) other unforeseen reasons that make it infeasible to locate the planned telecommunications equipment upon an existing or approved tower or building.

The applicant shall submit with the conditional use application written statements from the existing tower owners found within the search radius, or provide evidence of efforts to contact and obtain statements from existing tower owners. The information submitted shall explain the limitations on the use of the existing towers and the specific reasons the applicant cannot make use of the existing tower. If there are restrictions on placement of additional antennas on an existing tower within the search radius, the submittal shall be prepared by a licensed engineer.

- 2. Any proposed tower shall be designed, structurally, electrically, and in all respects, to accommodate both the applicant's antennas and comparable antennas for at least two additional users if the tower is over 100 feet in height, or for at least one additional user if the tower is over 60 feet in height. Towers must be designed to allow for future rearrangements of antennas upon the tower and to accept antennas mounted at varying heights.
- 3. Service providers shall provide proof of licensure by the Federal Communications Commission. Applicants that propose constructing telecommunications towers must provide proof that a contract exists with a licensed commercial telecommunications service for the use of the applicant's tower.

H. ANTENNAS MOUNTED ON EXISTING BUILDINGS OR TOWERS:

The placement of telecommunications antennas including wireless telecommunication antennas on existing buildings, towers, or structures, shall meet the requirements of the underlying zoning district and this section. A site plan and building plan shall be submitted to the County as part of the zoning certificate. A zoning certificate shall be required for the placement of antennas on existing buildings or towers.

The placement of telecommunications antennas including wireless telecommunication antennas on existing buildings, towers, or structures, shall meet the requirements of the underlying zoning district and this section. A site plan and building plan shall be submitted to the Rock Dell Township as part of the zoning certificate. A zoning certificate shall be required for the placement of antennas on existing buildings or towers.

I. ACCESSORY UTILITY BUILDINGS:

All buildings and structures to a tower shall:

- 1. Be constructed of material on the exterior of the building similar to the surrounding residential area when located adjacent to a residential zoning district in the county or within an abutting city;
- be buffered and screened from adjoining uses as established in the requirements of the underlying zoning district and Section 10.08 Bufferyards. For the purposes of this ordinance, zoning districts in the city most similar to the county district shall be used to determine the bufferyard;
- 3. meet the height and setback limitations as established for each zoning district.

A tower or group of towers located on a parcel shall be permitted to have only one accessory building per service company that is connected to a tower, and shall house only electronic equipment that is necessary for the functioning of the telecommunications system.

J. SIGNS AND ADVERTISING:

The use of any portion of a tower for signs other than warning or equipment information signs is prohibited.

K. TOWER LIGHTING:

Towers shall not be illuminated by artificial means and shall not have affixed or attached to it in any way except during time of repair or installation any lights, reflectors, flashers, or other illuminating device, except as required by the Federal Aviation Administration or the Federal Communications Commission or state agency. When incorporated into the approved design of the tower, light fixtures used to illuminate ball fields, parking lots, or similar areas may be attached to the tower.

White strobe lights may only be permitted for tower lighting where they are used during daylight hours. White strobe lights shall not be permitted for night time lighting of towers. In all cases where white strobe lights are used, the lights shall be shielded such that the lights are visible only from above the tower.

L. ABANDONDED OR UNUSED TOWERS:

Abandoned or unused towers and associated facilities shall be removed within 12 months of the cessation of operations at the site unless a time extension is approved by the zoning administrator. In the event that a tower is not removed within 12 months of the cessation of

operations at a site, the tower and associated facilities may be removed by the County and the costs of removal and associated administrative costs assessed against the property.

M. PUBLIC SAFETY TELECOMMUNICATIONS INTERFERENCE:

Commercial wireless telecommunications services shall coordinate with public safety telecommunications system operators 60 days before the introduction of new commercial wireless telecommunications services. The commercial wireless telecommunications provider shall be required to provide a copy of the FCC license application and the information on the frequencies and power levels of the proposed services to the Olmsted County Sheriff's Office, City of Rochester Police Department, and the City of Rochester Fire Department.

N. SECURITY:

All freestanding towers shall be required to control the unauthorized entry and climbing of towers. A fence or wall with a minimum height of six (6) feet shall be constructed around the entire perimeter of the tower base. Gates shall be locked. The bases of guy wires shall be fenced and the fence shall be 4 feet or more in height.

O. NONCONFORMING TOWERS:

In order to avoid requiring new towers and to minimize the number of towers needed to serve the township, the following provisions shall apply to nonconforming towers. In the A-2 district, telecommunications towers in existence at the time of this amendment may be permitted to increase tower height after being issued a conditional use permit. The Planning Advisory Commission shall consider the criteria listed in Section 4.02 and the following criteria as part of the conditional use process:

- 1. Tower safety concerns including tower collapse, falling ice, and airplane traffic;
- 2. land use character and history of the tower(s);
- 3. comparative visual impact to the surrounding lands of the proposed tower height increase:
- 4. disturbance or conflict with agricultural uses on the property;
- 5. other factors which tend to reduce conflicts or incompatible with the character and need of the area.

P. REGISTRATION OF COMMERCIAL WIRELESS TELECOMMUNICATION SERVICES AND TOWERS:

- 1. **Purpose of Registration.** The purpose of registration under this ordinance is to provide the township with accurate and current information concerning commercial wireless telecommunications services and towers who offer or provide services within the county or that own or operate such facilities within the county and to assist the county in the administration of this section of the ordinance.
- 2. **Registration and Application Requirements.** Commercial wireless telecommunications services and tower companies that offer or provide any

telecommunications services for a fee directly to the public or have facilities within the county shall register and provide to the county, pursuant to this ordinance the following information:

- a) The identity and legal status of the registrant, including affiliates;
- b) the name, address and telephone number of the officer, agent or employee responsible for the accuracy of the registration statement;
- c) a narrative and map description of registrants existing telecommunications facilities with the county and adjacent townships;
- d) such other information as the county may reasonably require.

Q. ADDITIONAL SUBMITTAL REQUIREMENTS:

In addition to the information required elsewhere, applications shall include the following information:

- 1. A report from a licensed professional engineer that describes the commercial wireless telecommunication service tower's capacity, including the number and type of antennas that it can accommodate;
- 2. a letter of intent from the commercial wireless telecommunication service tower owner committing the tower owner and successors to allow the shared use of the tower if an additional user agrees in writing to meet reasonable terms and conditions for shared use;
- 3. the location of all public and private airports or heliports within a 3 mile radius of the tower site.

Section 10.16 **EXTERIOR LIGHTING:**

Any light used for exterior illumination shall be diffused or directed away from adjoining properties or public roads.

Section 10.18 TRAFFIC VISIBILITY ZONE:

On any corner lot in the residential, commercial and industrial districts, there is established a traffic visibility zone at the intersection of two or more roads. The traffic visibility zone includes that part of a corner lot that is within an area bounded by the intersecting road right-of-way line and a diagonal line intersecting said road right-of-way lines at a distance of twenty-five (25) feet from the point of intersection of the right-of-way lines. In any traffic visibility zone, no fences, structure, earth bank, hedge, planting, or other obstruction shall be erected, planted, or maintained that exceeds a height of forty-two (42) inches, as measured from the center line elevation of the street.

Section 10.20 SOIL EROSION, SEDIMENTATION, RUNOFF, AND SLOPE STABILITY CONTROLS:

A. Definitions: For the purposes of this section, certain terms used herein shall be defined as follows:

Development: Any activity not directly related to general farming resulting in a disturbance of the natural condition or vegetative covering of the earth's surface of over 10,000 square feet in area.

Erosion, Channel or Gully: Erosion caused by the action of water flowing in a concentrated stream action against the soil confining its flow.

Erosion, Ephemeral: Erosion caused by the action of flowing surface water against the soil confining its flow, occurring in channels which are intermittently established in fields or on other open land, and for periods of short duration.

Erosion, Sheet Erosion Rate: The annualized amount of soil material lost from a lot due to sheet and rill erosion, expressed in tons of soil eroded per acre per year, and calculated according to the Universal Soil Loss Equation (U.S.L.E.) (see Appendix D, the Universal Soil Loss Equation).

Hydrologic Curve Numbers: A measure of the proportion of the rainfall hitting an area likely to produce runoff, reflecting the percentage of impervious surface area, the quality of vegetative cover, and underlying soil conditions (see Appendix E, Hydrologic Curve Numbers).

Sediment: Soil particles carried or deposited by flowing water.

- B. **Standards:** Any land disturbing activity initiated after the effective date of this ordinance must meet the following standards:
- 1. At no time shall a land disturbing activity cause the estimated sheet erosion rate to exceed five (5) tons per acre per year.
- 2. At no time shall a land disturbing activity within a shoreland area or within three hundred (300) feet of a wetland cause the estimated sheet erosion rate to exceed two (2) tons per acre per year.
- 3. At no time following the completion of a land disturbing activity shall the estimated sheet erosion rate exceed five tenths (0.5) tons per acre per year from the disturbed area.
- 4. No land disturbing activity shall cause ephemeral erosion to occur on adjoining parcels at any time during or following development, nor on the parcel disturbed at any time following development.
- 5. No land disturbing activity shall cause an increase in channel erosion in any stream, whether permanent or intermittent, at any time during or following development.
- 6. No land disturbing activity shall cause the creation of unstable slopes persisting after the completion of the activity.

- 7. No land disturbing activity shall cause the deposition of sediment on adjoining property.
- 8. Structural works necessary to meet these standards must meet applicable SCS standards and specifications.
- 9. All drainageways must be constructed and maintained in such a manner as to prevent soil erosion to the sides and bottoms of the drainageways, and to handle adequately the runoff generated from the watershed from a fifty (50) year rainfall event.
- 10. **Plan Review Coordination:** The purpose of this subsection shall be to require a coordinated review of and application of common standards for erosion and surface water runoff control measures. This review shall cover all site grading work located within the "Urban Service Area" as shown on the Olmsted County General Land Use Plan future land use map and outside the municipal limits of all cities in the county.
 - a) Where a "land disturbing activity" is proposed the county or applicable township shall not issue a waiver of the requirement to submit an erosion control and runoff control plan. This requirement shall apply to any land located within an Urban Service Area as identified on the Olmsted County General Land Use Plan Future Land Use Map.
 - b) Where a "land disturbing activity" is proposed on land within the Urban Service Area through a submittal of an erosion control and runoff control plan the plan shall be consistent with the applicable approved zoning district, general development plan, subdivision plat, approved site plan, or conditional use permit. Where the erosion control plan is not consistent with an approved development plan as specified above, or where no plan has previously been approved through the appropriate approval process, the plan shall be denied.
 - c) Where a "land disturbing activity" is proposed on land within the Urban Service Area the plan shall conform to all of the standards and related regulations of Olmsted County and the applicable township, including but not limited to floodplain and shoreland provisions of these ordinances.
 - d) Where a "land disturbing activity" is proposed on land within the Urban Service Area and where a GDP exists or has been submitted for public review, the erosion control and runoff control plan shall be reviewed by the township engineer and the city engineer for the adjacent city. Erosion control, runoff control, grading standards, and construction practices of the county, township, and adjacent city must be complied with by the applicant. Where the standards are not uniform the more restrictive standards shall apply. A determination of the more restrictive ordinance provisions shall be based on the standards that require the most control of erosion and surface water runoff.

- e) Where a "land disturbing activity" is proposed on land within the Urban Service Area in any zoning district, no plan shall be approved by the county or applicable township until all necessary applicable zoning and subdivision approvals have been obtained, including conditional use permits, variances, plats, and zoning certificates. If these approvals are not obtained the plan shall be denied.
- f) Where a "land disturbing activity" is proposed on land within the Urban Service Area the applicant must have submitted to the Minnesota Pollution Control Agency a plan and application for a National Pollutant Discharge Elimination System permit. A copy of the plan and application must accompany the erosion/runoff control application to the county or applicable township.
- g) These provisions shall not apply to "land disturbing activities" that are 1) improvements to a parcel that is part of and related to an active agricultural operation, 2) covered by an approved township zoning certificate, 3) covered by a township conditional use permit or variance, or 4) that are property improvements located on a lot in an existing residential subdivision or a nonfarm parcel with an established principal use and building.
- 11. The erosion and runoff control plan shall be consistent with the applicable approved zoning district, general development plan, subdivision plat, approved site plan, or conditional use permit. Where the erosion control plan is not consistent with an approved development plan, or where no plan has previously been approved through the appropriate approval process, the plan shall be denied. In no case shall an erosion and runoff control plan permit the construction of roads or other improvements within an agricultural, floodplain, or shoreland zoning district without first receiving approval for a permitted and approved use to develop the property.

C. Erosion Control:

- 1. **Erosion Control Plan Required:** No zoning certificate shall be issued nor shall any land disturbing activity commence for any development unless an erosion control plan has been approved by the Zoning Administrator, or a waiver of the erosion control plan requirement has been granted by the Zoning Administrator.
- 2. **Waiver of Erosion Control Plan:** The Zoning Administrator may waive the requirement for an erosion control plan in any of the following circumstances.
 - a) Where the development is of an emergency nature necessary for the preservation of lives or property;
 - b) Development consisting of the alteration, repair or maintenance of any lawful use of land existing as of April 15, 1983, or the expansion of such a use by less

than fifty percent (50%) of the current market value of buildings on the lot, as determined by the County Assessor's records;

- c) Development involving a temporary use when the use makes no surface discharge of waters;
- d) Development on lots in a subdivision for which an approved soil erosion control plan is in effect;
- e) Development on soil types in Appendix C(1);
- f) Development on soil types in Appendix C(2), when the applicant certifies that he will apply mulch at a uniform rate, covering at least fifty percent (50%) of the surface of the disturbed areas during construction and that permanent vegetative cover will be established following construction; or
- g) Development on soil types in Appendix C(3), when the applicant certifies that he will apply mulch at a uniform rate, covering at least seventy percent (70%) of the disturbed area during construction and that permanent vegetative cover will be established following construction.
- 3. **Erosion Control Plan Contents:** The erosion control plan shall be filed with the Zoning Administrator and shall include documentation setting forth the means by which the applicant intends to meet the standards of this section. In addition, the Zoning Administrator may require the following documentation:
 - a) A description of the soils on the site, including a map indicating soil types of areas to be disturbed and the susceptibility of those soil types to erosion; and
 - b) A description of the existing and proposed drainage of the site, showing the soils in drainageways and the type and location of any erosion control measures related to meeting the standards of this section addressing channel and ephemeral erosion.
- 4. **Erosion Plan Certification:** The applicant shall submit with any erosion control plan certification by a registered professional engineer, soils conservationist, or soils scientist that the soil erosion control measures specified in the erosion control plan will enable the development to meet the soil erosion standards of this section.

D. Runoff Control Plan:

1. **Runoff Control Plans Required:** No zoning certificate shall be issued nor shall any land disturbing activity commence for any development unless a runoff control plan has been approved by the Zoning Administrator, or a waiver of the runoff control plan has been granted by the Zoning Administrator.

2. Waiver of Runoff Control Plan:

- a) Circumstances described in Section 10.20 C, 2, a, b, and c;
- b) Developments on lots in a subdivision for which an approved runoff control plan is in effect;
- c) Developments which result in a proportion of impervious surface to total lot area of ten percent (10%) of less; or
- d) Developments which result in a proportion of impervious surface to total lot area of ten percent (10%) of less; or
- 3. **Runoff Control Plan Contents:** The runoff control plan shall be filed with the Zoning Administrator and shall include documentation setting forth the means by which the applicant intends to meet the standards of this section, and certification from a registered professional engineer or hydrologist stating that the development will meet the standards of this section. In addition, the Zoning Administrator may require the following documentation.
 - a) A map of the existing topography of the site with a contour interval appropriate to the topography of the land;
 - b) Proposed finished grading shown at the same contour interval;
 - A drainage description of the unaltered site, delineating in which direction and at what rate storm water is conveyed from the site and setting forth those areas of the unaltered site where storm water collects and is gradually percolated into the ground;
 - d) A proposed drainage plan of the developed site delineating in which direction and at what rate storm water will be conveyed from the site and setting forth the areas of the site where storm water will be allowed to collect and gradually percolate into the ground; and

- e) A description of and technical documentation related to any runoff measures for the site.
- E. **Plan Review:** Upon receipt of an erosion control or runoff control plan application and accompanying documentation, the Zoning Administrator shall assess the effectiveness of proposed erosion and runoff control measures in meeting the standards of this section, and on that basis shall approve or deny the application for plan approval. The Zoning Administrator may refer a plan to the Olmsted Soil and Water Conservation District office for its review and comment prior to taking action to approve or deny a plan. Any plan may be revised in the same manner as originally approved. Plan approval shall authorize commencement of a land disturbing activity.
- F. **Performance Bond:** Whenever the erosion control plan or runoff control plan calls for the implementation of measures to control erosion or runoff, the total cost of which exceeds one thousand dollars (\$1,000), the Zoning Administrator shall require the applicant to post a performance bond with the Rochester-Olmsted Planning Department sufficient to cover the entire cost of said works. This provision shall not apply to those measures associated with street construction associated with plats for which an approved erosion and runoff control plan is in effect. The cost of such measures shall then be included in the performance bond required under the Subdivision Ordinance for road improvements.
- G. **Responsibility:** Neither the issuance of a permit nor compliance with the conditions thereof, nor with the provisions of this section, shall relieve any person from any responsibility otherwise imposed by law for damage to persons or property; nor shall the issuance of any permit hereunder serve to impose any liability on the County of Olmsted or its officers or employees for injury or damage to persons or property. A permit issued pursuant to this section shall not relieve the permittee of the responsibility for complying with any other requirements established by law, ordinance, or regulation.

Section 10.21 **FARMLAND EROSION:**

A. **POLICY:** In some cases in Olmsted County, the use of land for agricultural purposes has caused excessive surface water runoff and accelerated the process of soil erosion and sediment deposition. This has resulted in the pollution of the waters of the state; increased storm water runoff and flooding; damage to agricultural, forestry, recreational, fish and wildlife, and other resources; threats to the long term and short term productivity of the County's soils; sediment damages to public and private property and water bodies; increased frequency and severity of flooding; reduced storage capacity of impoundments; damage to wetlands and other wildlife habitat; and other threats to the public health, safety, and general welfare.

This section addresses these concerns by adopting standards for soil erosion and by encouraging the development of conservation plans that identify conservation practices that reduce erosion to those standards, according to an approved schedule. It is intended that the plans developed under this section will apply to the properties

for which they are developed regardless of changes in ownership. Changes in practices on parcels with approved plans will require approval of amended plans. It is also the intent of this section to address both on site and off site erosion problems resulting from land management practices.

B. EFFECTIVE DATE AND AREA OF APPLICATION:

Effective since September 1, 1990, this section and referenced or related data or standards will apply to all unincorporated land within the Rock Dell Township not covered under section 10.20, including but not limited to agricultural land, woodland, and pastureland.

This section and referenced or related data or standards applies to all unincorporated land within the County not covered under Section 10.20, including but not limited to agricultural land, woodland, and pastureland.

C. **DEFINITIONS:**

For the purposes of this section, certain terms used herein shall be defined as follows:

Agricultural Uses: Use of land for forestry, pasture, or crop production, or for the production of livestock, poultry or poultry products, fur bearing animals, horticultural or nursery stock including sod, fruit, vegetables, forage grains, or bees and apiary products. Wetlands, pasture, and woodlands accompanying land in agricultural use are also defined as in agricultural use.

Agricultural Land Disturbing Activity: Any agricultural use resulting in a disturbance of the natural condition, vegetative surface or soil surface exceeding 10,000 square feet in area, including, but not limited to tilling, clearing, grading, excavating, grazing, and feedlots but not including such minor land disturbing activities as home gardens and individual landscaping and maintenance; and, any land disturbing activity over 10,000 square feet in area not covered by the definition of development under Section 10.20(A).

Bluff Impact Zone: A bluff and land located within 20 feet from the top of the bluff.

Conservation Plan: A resource management system plan prepared in accordance with the Natural Resources Conservation Service (NRCS) technical guide that will decrease soil erosion to or below the soil loss tolerance factor on a particular parcel of land according to a specified time schedule.

Conservation Practices: Practices and standards containing a definition, purpose, and conditions that the practice applies to, including design requirements and specifications containing a statement of details required for installing a conservation practice, including kinds, quality, and quantity of work and materials needed to meet the requirements of the technical guide. A conservation practice may be a permanent or temporary, vegetative or structural, measure that will aid the control of erosion. Permanent practices are those that have an effective life equal to or greater than ten (10) years and include grassed waterways, terraces, field windbreaks, water control structures, grade stabilization structures, sediment retention structures, strip cropping, tree planting, wildlife cover planting, and other permanent practices approved by the Minnesota State Soil and Water Conservation Board. Temporary practices include

conservation tillage, contour farming, grasses and legumes in rotation, emergency tillage and any other cultural practices approved by the District. Conservation practices are considered "adequate" if they result in an average annual soil erosion rate lower than or equal to the soil loss tolerance factors listed in Appendix G, Table 1.

District: The elected Board of the Olmsted County Soil and Water Conservation District organized under Minnesota Statutes, Chapter 40.

Drainageway: Any surface area over which water flows in a concentrated form, whether permanently, continually, occasionally, or intermittently, and including public waters, intermittent streams, and grassed waterways.

Erosion: Any process that removes soil away from the surface of the land by the action of water, wind, ice, or gravity.

Erosion, Gully: Erosion caused by the action of water flowing in a concentrated stream acting against the soil confining its flow, resulting in a channel that cannot readily be cultivated by customary farm machinery, and that is at least three (3) feet wide or has a cross sectional area of at least four (4) square feet. Gully erosion is distinguished from ephemeral erosion by its size and relative permanence, and from streambank erosion by the intermittent nature of the water flow.

Erosion, Ephemeral: Erosion caused by the action of flowing surface water against the soil confining its flow, occurring in channels with periods of short duration. Such channels are smaller in size than gullies, and can be readily eliminated by field cultivation using customary farm machinery.

Erosion, Sheet and Rill: Erosion caused by the general, as opposed to channeled, flow of water over a surface.

Erosion, Streambank: Erosion within a perennial stream or river which is caused by the action of water flowing in a concentrated stream acting against the soil confining its flow.

Erosion, Wind: Erosion caused by the action of wind on the soil surface and soil particles.

Estimated Sheet Erosion Rate: The annualized amount of soil material lost from a field or parcel of land due to sheet and rill erosion, expressed in tons of soil eroded per acre per year, and calculated according to the Universal Soil Loss Equation (U.S.L.E.) (see Appendix D, the Universal Soil Loss Equation).

Excessive Soil Loss: Soil loss that is greater than the standards set forth in this section of the ordinance. Excessive soil loss may be evidenced by sedimentation on the same parcel of land, on adjoining land, in wetlands or a body of water, or by ephemeral, gully, or streambank erosion; or by calculations using the U.S.L.E., and W.E.E., showing soil loss exceeding the soil loss tolerance factor.

Field Windbreak: A living barrier of trees, or a combination of trees and shrubs, located adjacent to a field, that is designed to reduce wind erosion by virtue of its location with regard to

the wind, and by the type of vegetation; and meeting the standards for field windbreaks in the Technical Guide.

Hydrologic Runoff Curve Number: An index developed by the Natural Resources Conservation Service that represents the combined hydrologic effect of soil, land use, agricultural land treatment class, hydrologic condition and antecedent moisture (See Appendix E).

Impoundment: A body of water artificially created by blocking the flow of surface runoff, and intended for runoff control, water supply, flood control, or recreation. The term is not intended to include farm ponds used for water supply for livestock, but does include any such pond if used for runoff control.

Karst: A geologic condition occurring over a large area where groundwater dissolves well jointed, crystalline, carbonate bedrock, typically limestone or dolomite.

Karst Feature: A topographic feature resulting from the occurrence of subsurface karst conditions that are so extensively developed and close to the surface, that surface drainage is affected. Typical karst features occurring in Olmsted County include dolines (sinkholes), disappearing streams, losing streams, blind valleys, springs, and caves.

Land Occupier: A person, firm, corporation, government entity, or other legal entity that holds title to or is in possession of any lands as owner, lessee, or otherwise. Land occupier includes both the owner and the occupier of the land if they are not the same.

Permanent Vegetative Cover: An area of wooded or perennial herbaceous plant materials, including pasture, hayland, and woodland, but excluding any area that is tilled, any over grazed pasture, and any area in which trampling by livestock results in a cover of less than ninety percent (90%) of the surface area.

Protected Waters: Any waters as defined in Minnesota Statutes 1980, Section 105.37, Subdivision 14 and 15.

Runoff: The portion of rainfall or other precipitation that leaves a parcel of land or field in the form of surface water.

Sediment: Soil particles in suspension, being transported, or moved from their original location by wind, water, gravity, or ice, or which has been deposited at another location, including any sediment related pollutants.

Slope: The deviation of a surface from the horizontal, expressing the change in elevation as a percent of the horizontal distance of the surface.

Soil: Unconsolidated mineral or organic material that overlies bedrock, on the immediate surface of the earth, that serves as a medium for the growth of plants.

Soil Loss Tolerance Factor: The maximum average annual amount of soil loss from erosion, as

estimated by the Universal Soil Loss Equation and the Wind Erosion Equation, and expressed in tons per acre per year, that is allowable on a particular soil (refer to Appendix G, Table 1).

Steep Slope: An area having a soil listed in the SOIL SURVEY OF OLMSTED COUNTY as being poorly suited for cultivation due to slope steepness.

Streambank: The boundary of protected waters and wetlands, or the land abutting a channel at an elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape; commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial. For watercourses, the streambank shall be at the elevation of the top of the bank of the channel.

Structure: Works of improvement for agricultural land stabilization to prevent erosion, sediment, or flood damage that include, but are not limited to, gully control structures, grass waterways, rip rap, sediment basins, flood retention dams, diversions, and the lining of channels with rock, concrete, or other materials.

Technical Guide: The guide developed by the USDA Natural Resources Conservation Service and adopted by the Olmsted County Soil and Water Conservation District, containing technical information including methods and procedures by which the various types of erosion can be measured, and conservation practice standards and specifications required in the application of soil and water conservation plans.

Waters of the State: Any waters, surface or underground, except those surface waters that are not confined to drainageways or streams but are spread and diffused over the land.

Wetland: An area classified as a type 3, 4, 5, 6, 7, or 8 wetlands as identified in the U.S. Fish and Wildlife Service Circular No. 39 (1971 edition).

Woodland: An area with a stand of trees that has a canopy cover as show on the most recent aerial photographs of at least fifty (50%) percent, being at least one (1) acre in size and having a minimum width measured along the ground surface of at least one hundred and thirty two (132) feet.

D. STANDARDS FOR SOIL LOSS AND SEDIMENTATION:

Commentary: Effective September 1, 1990, the following standards are intended to apply to all agricultural land in Olmsted County. In accordance with administrative procedures set forth in Section 10.21 E, below, areas will be identified as priority conservation areas on the basis of the degree of non-compliance with the standards. Land occupiers in those areas may be contacted to develop conservation plans and schedules which, over an appropriate period of time, will bring the property into compliance with the standards. Typically, but not in cases with severe or immediate erosion problems, the Zoning Administrator will proceed with a zoning violation only if a land occupier refuses to develop a conservation plan, or fails to abide by an approved plan after a plan is approved. Provisions addressing the development of conservation plans are included in Section 10.21 F, below.

1. **General Standard:** A land occupier shall ensure that proper management and conservation practices are being applied to all land in agricultural use. Land occupiers

operating according to an approved and completed conservation plan designed so that annual average soil erosion does not exceed the soil loss tolerance factors listed in Appendix G, Table 1, or operating in accordance with adequate conservation practices, shall be considered to have met the standards of this section.

- 2. **Sheet and Rill, and Wind Erosion:** Agricultural land disturbing activities shall be conducted in such a way that the sum of the estimated sheet and rill erosion rate and the estimated wind erosion rate does not exceed the soil loss tolerance factor identified in Appendix G, Table 1, except as provided in Section 10.21 (F,4).
- 3. **Ephemeral Erosion:** No agricultural land disturbing activity shall cause ephemeral erosion.
- 4. **Gully Erosion:** No agricultural land disturbing activity shall cause gully erosion. This standard is met where gully sideslopes, bottoms and heads are stabilized; however, agricultural land disturbing activities conducted to correct and improve upon the existing situation within the standards and specifications of the technical guide are considered to be in compliance. In any case, a land occupier shall be responsible for only that portion of the soil erosion in a gully that is caused by agricultural land disturbing activities conducted on land occupied by the land occupier.

5. Streambank Erosion:

- a) No drainageway or water channel shall be filled, dredged, graded or relocated except with the approval of the Minnesota Department of Natural Resources for protected waters, or in accordance with applicable standards and specifications of the technical guide for all drainageways or other waters.
- b) No agricultural land disturbing activity shall cause an increase in the erosion of any streambank located on the lands controlled by the land occupier or on any abutting lands.
- c) Bluffs, bluff impact zones, and other steep slopes within the shoreland district, or areas within fifty (50) feet of the normal high water level of protected waters shall be maintained in permanent vegetative cover unless included in an approved conservation plan.
- d) Properly managed pasture shall be considered to meet the standards of paragraphs b) and c) above.

6. **Conservation Plan and Practices:** Where a District approved conservation plan is in effect, a land occupier shall abide by said conservation plan and schedule and shall maintain all practices that are part of the conservation plan. The conservation plan and schedule and conservation practices shall not be altered except in accordance with the procedures outlined in paragraph 10.21 (F, 8).

7. Special Areas:

- a) **Wetlands:** In no case shall an agricultural land disturbing activity cause partial or complete removal of wetland vegetation or partial or complete draining of wetland.
- b) **Sinkholes and Other Karst Features:** Surface water runoff and artificial subsurface drainage shall not be directed by structural or nonstructural practices directly into a visible or known karst feature.
- c) Woodland Conversion: A conservation plan approved by the district and zoning administrator shall be required for conversion of woodland to non woodland agricultural uses, including but not limited to crop production, pasture, or other uses that require removal of the majority of woody material from a parcel of land such that the land no longer meets the definition of woodland. Partial removal of woody material in a woodland, if the cumulative effect would be contrary to this provision, shall also require the development of a conservation plan.
- 8. **Emergency Land Management Practices:** Emergency land management practices necessitated by and initiated during or immediately after fire, flood, windstorm, structural failure or other catastrophic events shall be exempt form these standards; however, reasonable care shall be taken to minimize soil erosion and sedimentation during the emergency land management practices.

E. ADMINISTRATION OF SOIL EROSION REQUIREMENTS:

1. **Conservation Committee:** The Conservation Committee is hereby established to assist in the administration of this section. The Committee shall consist of three members: a member of the Olmsted S.W.C.D. Board, a Townboard member, and a member of the Olmsted County Planning Advisory Commission (PAC) who has experience in agriculture. The PAC shall appoint a member to serve in this position.

The makeup of the Committee will change based on the location of the property where the erosion complaint is investigated. The Olmsted S.W.C.D. Board member on the Committee will be that Board member who represents the Township where the complaint is located. If that S.W.C.D. Board position is vacant, the S.W.C.D. Board shall appoint an alternate. The Townboard member on the Committee must be from the Township where the erosion complaint is located. If the Townboard does not appoint a member to the Committee within 30 days of the date that the Townboard is notified of the

- complaint, the Olmsted PAC shall select another of its members to serve in this function. The duties of the Committee shall be as described in Section 10.21 (E,4).
- 2. Identification of Priority Conservation Areas: Provisions of this paragraph are intended to provide a means for focusing enforcement efforts among those parcels not meeting the standards of Section 10.21 (E), on the most critical erosion areas in the County. For this purpose, the Zoning Administrator shall use the following criteria to set enforcement priorities identifying significant soil erosion problems and locations throughout the County. Priorities shall be set in accordance with the ranking system described in Appendix G.
 - a) Areas shall be ranked according to the average ratio of wind and sheet and rill erosion to the soil loss tolerance factor.
 - b) Areas shall be ranked according to total wind and sheet and rill erosion. This factor shall be considered to be the most important type of erosion problem.
 - c) The ranking shall reflect location in a watershed upstream of a structure in the P.L., 566 portion of the South Zumbro Watershed Project and/or location in a watershed draining into Lake Zumbro. A map of flood control project watersheds is included in Appendix G.
 - d) Areas shall be ranked according to hydrologic runoff curve number.

3. Complaints:

- a) Complaints of non-compliance with the standards of Section 10.21 (D) may be made by any adversely affected land occupier; by any elected or appointed official of Olmsted County, or any municipality or township within Olmsted County, or the District; or by appointed staff of the U.S. Natural Resources Conservation Service; or by the Zoning Administrator.
- b) Complaints of non-compliance with the standards of Section 10.21 (D) pertaining to wind erosion, sheet and rill erosion, sedimentation, and runoff shall be evaluated by the Zoning Administrator in accordance with the criteria listed above (10.21 [E, 2]). The Zoning Administrator may request information from the complainant detailing the basis for the suspected non-compliance, along with written information listing the impacts of any of the non-compliance on adjoining land occupiers, streams, and so on. If a complaint indicates the presence of a problem of sufficient severity to include the area as a critical erosion area, or if the complaint indicates non-compliance with the other standards of Section 10.21 (D), the Zoning Administrator shall request the District staff to investigate the use in accordance with the procedures of Section 10.21 (E, 4), below.

- 4. **Detailed Investigation:** Upon receipt of the enforcement priority listing or forwarded complaints from the Zoning Administrator, the District staff shall examine each area in order of its priority ranking starting with parcels receiving the highest point totals, on the basis of available data and on-site inspection to determine the level of compliance with the standards of Section 10.21 (D).
 - a) **Entry for Inspection.** The District staff and Conservation Committee, acting on behalf of the Zoning Administrator, shall make an inspection to determine soil erosion and to complete the report. The Zoning Administrator shall make a bona fide attempt to arrange with the land occupier on a mutually agreeable time and date for the inspection.
 - b) **Report.** The District staff shall complete and submit a report to the Zoning Administrator that contains the following information on any contiguous lands under common ownership or management: (1) a list of existing land uses; (2) an analysis of compliance or non-compliance with the standards of section 10.21 (D); and (3) an assessment of the impact of any non-compliance on adjoining land, water bodies, or karst features.

The Conservation Committee shall review the report and file a recommendation on the complaint with the Zoning Administrator who shall render a decision based on the record.

- c) Notification of Land Occupier: If it is determined that the soil erosion and overall management of the parcel will comply with all standards of this section, or that the parcel is not a critical erosion area, the Zoning Administrator shall remove the parcel from further consideration during the subject year and notify the land occupier accordingly. If it is determined that the parcel is a high priority conservation area, the Zoning Administrator shall notify the land occupier by certified or registered mail of the non-compliance with the standards of Section 10.21 (D), setting forth the nature of the erosion problems, and the remedies that will be pursued.
- 5. **Immediate Enforcement:** Where it is determined that the level or type of non-compliance with the standards of Section 10.21 (D), constitutes an immediate threat to the public health or safety, or that adjacent public or private property will be destroyed or its use and enjoyment significantly impaired if immediate corrective action is not taken, the Zoning Administrator shall treat the matter as a zoning violation and proceed according to the provisions of Article III or Section 10.21 (G) of this ordinance.
- 6. Conservation Planning: Except as provided in Section 10.21 (E,4), the Zoning Administrator shall direct land occupiers with parcels identified after on site investigation as high priority conservation areas to complete a conservation plan as provided for in Section 10.21 (F), covering the area of the farm constituting a high priority conservation area. Land occupiers shall complete such plans within sixty (60) days of receipt of the notice of non-compliance, except that the Zoning Administrator may grant an extension of up to sixty (60) days where the land occupier demonstrates

- that a bona fide effort has been made to complete a conservation plan and schedule in a timely fashion.
- 7. If the District is unable to provide technical assistance to complete the Conservation Plan within the required time period, the Zoning Administrator shall extend the planning period until such assistance is available.

F. AGRICULTURAL CONSERVATION PLANS AND SCHEDULES:

The following paragraphs explain the procedures and requirements for preparation and approval of Conservation Plans. It is intended that an approved plan would remain in effect, regardless of change in ownership or occupancy, until such time as it is amended in accordance with these provisions.

- 1. **Contents:** The Conservation Plan shall be drawn up on a form acceptable to the Zoning Administrator, and shall meet applicable content specifications of the Technical Guide. At a minimum, it shall include the following information.
 - a) A soil map of the site showing the locations of field boundaries;
 - b) An aerial photograph of the site at the same scale as the soil map, showing field and land use boundaries;
 - c) A detailed list of fields and land uses, with the area in acres for each field or land use, and a key referring to the aerial photo;
 - d) A detailed list of proposed practices for each field or land use, showing the Technical Guide number for each practice and the date of application, and the estimated soil loss after application of the practices for each field; and
 - e) Any agreements entered into by the land occupier involving any agency providing technical or financial assistance in the completion of the conservation practices including in the Conservation Plan.
- 2. **Annual Element:** When the Conservation Plan calls for use of practices that are eligible for cost sharing, or that require engineering data, the Zoning Administrator shall require the land occupier to submit an annual plan for that year, prior to commencing activities. The annual plan shall contain the following information.
 - a) Supplemental data, including engineering data, as may be requested by the Zoning Administrator to evaluate a practice; and
 - b) A copy of any application for cost sharing from applicable cost sharing agencies; or, if no cost sharing is applied for, a letter from the land occupier

stating that the land occupier will complete the practices according to the schedule in the Conservation Plan without cost sharing.

- 3. **Preparation:** The land occupier may arrange with the District to prepare a Conservation Plan, or may prepare the Conservation Plan without assistance, or may contract with another person or agency to prepare the Plan. If the Plan is not prepared by the District, the Zoning Administrator may require certification by a professional soils scientist or soils conservationist, or a registered professional engineer that it meets the standards of the Technical Guide for Conservation Plans, and that completion of the conservation practices included in the Plan will enable the land occupier to meet the standards of Section 10.21 (D), for the subject area. The Zoning Administrator may require proof from the preparer of the Plan that he or she is qualified to prepare such plans, and may require such additional documentation as is necessary to identify in detail the conservation practices planned for.
- 4. Continuation of Tillage: Conservation plans applying to any land which has been tilled within the five years previous to adoption of this section may not require conversion of that land to permanent vegetative cover, but must provide for continued tillage with the best practices feasible, compatible with the land occupier's operation, until the land changes ownership. This shall apply regardless of whether it is possible to reduce erosion levels to the soil loss tolerance factor with those practices. In such cases, the conservation plan shall indicate an alternate practice meeting the soil loss tolerance factor, and the conservation schedule shall indicate that the required date of implementing said alternate practice will be one year from the date of change in ownership.
- 5. **Conservation Schedule:** For each of the practices included in the Conservation Plan, the land occupier shall provide a schedule of application dates, meeting the following guidelines:
 - a) Provided that the necessary technical assistance is available from the District, the schedule shall provide that practices not listed in Section 10.21 (F, 5, d), below, are to be applied within the first three (3) years following approval of the conservation plans.
 - b) The schedule shall provide that practices listed in Section 10.21 (F, 5, d), below, shall be completed within five (5) years of approval of the Conservation Plan.
 - c) The schedule shall provide that substantial progress is made in each year of the plan toward meeting the standards of section 10.21 (D), and shall specify initiation and completion dates for each practice.

d) If the land occupier applies for cost sharing for eligible practices, described below, then the Zoning Administrator shall extend the schedule for applying those practices until such time as the cost sharing agency provides funds at the levels specified. Practices to which this provision applies, and the minimum levels of cost sharing for those practices, are specified below:

1) **Terracing:** 75%

2) **Waterways:** 75%

3) **Gully Control:** The funding agency, in cooperation with affected property owners, shall be responsible for the percentage of the costs reflecting the percentage of runoff entering the gully from lands not under the control of the land occupier.

4) Streambank Control: 75%

5) **Diversions:** 75%

- 6. **Annual Inspection:** The Zoning Administrator, or the District staff acting on behalf of the Zoning Administrator, shall conduct an annual inspection of completed work. Work not completed in accordance with the Conservation Plan shall be considered to constitute a zoning violation as provided in Section 10.21 (G).
- 7. **Approval:** The Zoning Administrator shall forward all completed plans completed under this section to the District for its review. The District shall review each plan, and shall recommend approval of all plans which meet the standards of Section 10.21 (D). If the District recommends approval of the Conservation Plan, the Zoning Administrator shall approve the Plan for the subject property, which shall be recorded with the County Recorder. If the District recommends denial of the Plan as submitted, it shall prepare a written report indicating the reasons the plan is deficient and suggesting ways by which to correct the deficiencies. The Zoning Administrator shall refer the report to the Conservation Committee for its comment.

The Conservation Committee shall comment upon the report within thirty five (35) days from the date of receiving the report. Failure to comment within that time shall cause the Conservation Committee to forfeit its opportunity to comment.

At the Conservation Committee's request, the Zoning Administrator shall provide up to an additional thirty (30) days to the land occupier to develop alternatives to the proposed Conservation Plan which will meet the standards of the ordinance. If the deficiencies are not corrected, or the land occupier fails to make a bona fide effort to correct the Conservation Plan, the Zoning Administrator may treat the matter as a zoning violation

- in accordance with the provisions of Section 10.21 (G). Such action may be appealed by the land occupier to the Zoning Board of Adjustment, as provided in Section 4.06.
- 8. **Amendments to an Approved Conservation Plan:** Amendments to an approved Conservation Plan shall be processed in the same manner as new Conservation Plans, provided that the original scheduled date of compliance with the standards of Section 10.21 (D), is not extended except as provided below:
 - a) In the event of a change in ownership of the land, except as provided in Section 10.21 (F,4), the Zoning Administrator shall grant an extension to the schedule of up to one (1) year from the date of change in ownership, provided that the cumulative effect of changes in ownership does not result in circumventing the intent of the ordinance.
 - b) In the event of a change in management of the land not involving a change in ownership, the Zoning Administrator shall grant an extension to the schedule of up to one (1) year from the date of change in management, provided that no more than one (1) such extension shall be granted within the period to which the conservation plan applies.

G. Violations:

- 1. **Types of Violation:** Failure to comply with the provisions of this section shall constitute a violation of the ordinance under the following circumstances:
 - a) Non-compliance with the standards of Section 10.21 (D,6), (D,7,a), (D,7,b), and (D,7,c), or non-compliance with any standards in a manner as described in Section 10.21 (E,5).
 - b) Refusal to complete a Conservation Plan and schedule within the time frame specified in Section 10.21 (E and F).
 - c) Failure to abide by the Conservation Plan and schedule approved by the Zoning Administrator, except where an extension has been granted in accordance with the provisions of Sections 10.21 (E, F, or G).
- 2. **Appeals and Variances:** Land occupiers found in violation of Section 10.21 of this ordinance may appeal the action of the Zoning Administrator in accordance with Section 4.06, or may request a variance from one or more of the provisions of Section 10.21 in accordance with Section 4.08. In the event that a land occupier files either an appeal or a variance request pertaining to Section 10.21, the Zoning Administrator shall notify the Clerk and Supervisors of any affected Township, the Conservation Committee, and the District, in addition to any other notification requirements. The Board of Adjustment shall consider and make findings responding to any written comments received from the

District staff, the Conservation Committee, and the Town Board, in addition to other required findings.

- 3. **Civil Proceedings:** Prior to initiating criminal proceedings provided under Article III, the Zoning Administrator shall request that the Olmsted County Board of Commissioners initiate a civil suit seeking a court injunction requiring compliance. Such action shall be pursued according to the following requirements.
 - a) **Report:** The Zoning Administrator shall prepare a written report to the Board of Commissioners stating the causes of action. The report shall include but shall not be limited to any reports of on-site investigation prepared as required in Section 10.21 (E), and shall review the record of any correspondence or other attempts to bring compliance. A copy of the report shall be sent to the land occupier, land occupiers adjoining the parcel in question, the Township Clerks and Supervisors of any affected Townships; the City Clerks of any affected Cities, the Conservation Committee, and the District.
 - b) **Notice:** The Zoning Administrator shall send to recipients of the report a notice of the time, date, and place that the Board will consider the request for civil proceeding.
 - c) **Board Action:** After considering any written or oral evidence, the Board may act in any of the following ways:
 - 1) To file a civil suit seeking an injunction compelling compliance.
 - 2) To instruct the Zoning Administrator to extend the time period for completion of a conservation plan and schedule for an additional period of not more than one hundred twenty (120) days;
 - 3) To direct the Zoning Administrator to allow a delay of up to two (2) years in the implementation of part or all of a conservation plan; or
 - 4) To direct the Zoning Administrator to proceed with actions authorized in Article III.

Section 10.22 ACCESSORY BUILDINGS

A. Applicable to all Accessory Building; Regulations Zoning Districts:

1. No accessory building shall be constructed or developed on a lot prior to the construction of the principal building.

2. Except as provided in Section 10.22 (B), accessory buildings shall be located only within the buildable area of a lot.

H. Accessory Building Regulations Applicable to the RSD:

1. In the RSD District accessory buildings may be located in the buildable area or within the rear yard. In the case of an accessory building located in the rear yard, such building may be located not less than five (5) feet from an interior side lot line and not less than eight (8) feet from a rear lot line. The maximum cumulative gross floor area (measured on the largest floor and including interior parking spaces) for accessory structures shall be according to the following schedule:

For lots with a lot area of less than one (1) acres -- One thousand (1,000) square feet

For lots with a lot area of at least one (1) acre but less than two (2) acres -- twelve hundred (1,200) square feet.

For lots with a lot area of two (2) acres or greater -- fifteen hundred (1,500) square feet.

- 2. Accessory buildings, when located in a rear yard, shall not occupy more than twenty five (25%) percent of the buildable area and/or rear yard.
- 3. No accessory building shall be located closer to a right of way than allowed in the front yard or side street yard regulations of the district wherein located.
- 4. No accessory structure shall exceed a building height of 15 feet.

Section 10.23 **SWIMMING POOLS, PRIVATE**

Swimming pools shall be allowed in any Residential Zoning District as an accessory use and subject to the following conditions and requirements:

- A. Exclusive Private Use: The pool is intended and is to be used solely for the enjoyment of the occupants of the principal building of the property upon which it is located and their guests.
- B. **Distance Requirements:** Swimming pools may be located in the buildable area or required rear yard but shall not be closer than ten (10) feet to any property line on which they are located; provided that pump installations shall be located no closer than twenty (20) feet to any property line.

C. Fencing and Access Control:

1. For a below grade swimming pool, the pool or the property upon which said pool is located, shall be enclosed by a fence of a type which effectively controls the

- entrance by children to the pool area, said fence to be at least four (4) feet in height. Wooden fences with boards placed vertically shall not have any opening wider than four (4) inches per opening and wooden fences with boards placed horizontally shall not have any opening wider than one (1) inch per opening.
- 2. Gates installed for access to the property or pool area shall be equipped with an automatic closing and latching device to protect against uncontrolled access to the property.
- 3. For an above grade swimming pool, the pool shall be equipped with an automatically retractable type ladder, a retractable ladder, or a removable ladder or shall be fenced in accordance with Section 10.23 (C,1), said ladder to be removed or retracted when said pool in not being attended.
- 4. If access to the pool is via a deck or porch, then no access from the ground is permitted to the deck area unless the property or the ground access to the deck is fenced in accordance with Section 10.23 (C, 1).
- 5. It shall be the responsibility of the property owner upon where said pool is located to maintain all fences, gates and closure devices in good operating condition.
- 6. Failure to maintain fences, failure to have gates closed, or failure to either remove or retract the ladder access to the pool shall constitute a violation of the Zoning Ordinance and therefore, be subject to the penalties contained therein.

Section 10.24 EXTRACTION OF MATERIALS AND MINERALS, OPEN PITS AND IMPOUNDING OF WATERS

- A. **Definition:** Excavation, as used in this subdivision, shall mean any artificial excavation of the earth within the Township which is dug, excavated, or made by the removal from the natural surface of the earth of soil, sand, gravel, stone or other matter or made by tunneling or breaking or undermining the surface of the earth. Excavations ancillary to other construction of any installation erected or to be erected, built or placed thereon contemporaneously with or immediately following such excavation and covering or to cover such excavation when completed are excepted if a permit has been issued for such construction or installation or if the excavation is ancillary to the construction or installation of essential services or a farming operation. Excavations not exceeding five hundred (500) square feet of surface area or two (2) feet in depth and excavations including impounding of water for agricultural or public utility purposes are exempted.
- B. Conditional/Interim Use Permit Required: No person shall hereafter dig, excavate, enlarge, make, maintain or allow to be maintained, upon property owned or used by him, any open pit or excavation or any impounded water, without first making an application for and obtaining from the Commission a Conditional/Interim Use permit (see Section 4.02 Conditional/Interim Use).
- C. **Conditions of Permit:** The Commission, as a prerequisite to the granting of a permit or after a permit has been granted, may require the applicant to whom such permit issues or the owner or user of the property on which the open pit or excavation or impounded waters are located to:

- 1. Properly fence any pits or excavation;
- 2. Slope the banks and otherwise properly guard and keep any pit or excavation in such condition as not to be dangerous from caving or sliding banks;
- 3. Properly drain, fill or level any pit or excavation, after created, so as to make the same safe and healthful as the Commission shall determine;
- 4. Keep any pit, excavation or impounded waters within the limits for which the particular permit is granted;
- 5. Remove excavated material from any pit or excavation, away from the premises, upon and along such highways, streets or other public ways as the Commission shall order and direct;
- 6. Provide screening and bufferyards for the purposes of eliminating or minimizing potential nuisances, noise, dust, and reduce adverse visual appearance of the property;
- 7. Maintain roads and loading areas in dust free condition;
- 8. Stabilize overburden material and minimize the area that is exposed to erosion;
- 9. Limit the hours of operation;
- 10. Limit blasting, crushing, or the mixing or materials allowed on the property;
- 11. Provide, for the purpose of retaining impounded waters, a container of sufficient strength and durability and maintain such container in safe and proper condition;
- 12. Grade site after extraction is completed, seeding where required to avoid erosion, so as to render the site usable and restore same to a condition similar to that of adjoining properties;
- 13. Any additional conditions intended to protect the general health, safety and welfare and reduce the adverse impact of such upon neighboring properties.
- 14. Storm water runoff shall be controlled per Paragraph 10.20 excepting that peak runoff shall be limited to that which would occur for a 10 year rainfall event. Runoff exceeding that amount must be temporarily detained on the premises and any detention facilities must be designed by a registered engineer.
- D. **Bond May Be Required**: The Commission may require either the applicant or the owner or user of the property on which the open pit or excavation of impounded waters is located to post a bond, in such form and sum as the Commission shall determine, with sufficient surety running to the Township, conditioned to pay the Township the extraordinary cost and expense of repairing, from time to time, any highways, streets, or other public ways where such repair work is made necessary by the special burden resulting from hauling and travel in removing materials from any pit, excavation or impounded waters, the amount of such cost and expense to be determined by the Commission; and conditioned further to comply with all the requirements of this subdivision and the particular permit, and to pay any expense the County or Township may incur by reason of doing anything required to be done by any applicant to whom a permit is issued.

Section 10.26 ANIMAL FEEDLOTS

- A. No new animal feedlots or manure storage facilities shall be located in a floodplain or shoreland district.
- B. No new animal feedlots or manure storage facilities shall be located within one-half (1/2) mile of an incorporated city limit boundary.
- C. Any animal feedlot requiring a Conditional/Interim Use permit shall, in addition to the criteria specified in Section 4.02, Conditional/Interim Uses, consider the following:
 - 1. All construction and design plans for manure handling, manure storage facilities and procedures of applying the manure to the land have been approved by the Soil and Water Conservation Board.
 - 2. The public road serving the feedlots is adequate and would not need to be upgraded or improved in order to service the feedlots.
 - 3. The proposed feedlot will not adversely affect the neighboring properties.
 - 4. A proposed new feedlot would be located one-quarter (1/4) mile or more from the nearest non-farm resident, nor closer than 1 mile from a residentially zoned parcel.

Section 10.28 ESSENTIAL SERVICES

Essential services shall be permitted as authorized and regulated by law and other ordinances, it being the intention hereof, to exempt them from the strict application of this ordinance.

Section 10.30 YARDS-HOW MEASURED

A. YARD, FRONT:

- 1. On Federal, State County and Township roads which have a right-of-way of less than one hundred (100) feet, such yard shall be measured from a point being fifty (50) feet from and parallel to the centerline of said highway.
- 2. On Federal, State, and County roads having a right-of-way of one hundred (100) feet or more and for all other roads and streets, such yard shall be measured from the right-of-way line of the street on which the lot fronts (the front lot line); provided, however, that if the proposed location of the right-of-way line of such street as established on the "Currently Held Valid Thoroughfare Plan for Rock Dell Township or on the "Official Map of the County of Olmsted" differs from that of the existing street, then the required front yard least depth shall be measured from the right-of-way line of such street as designated on said Thoroughfare Plan or Official Map.

B. YARD, SIDE STREET:

- 1. On Federal, State, County and Township roads which have a right-of-way of less than one hundred (100) feet, such yard shall be measured from a point being fifty (50) feet from and parallel to the centerline of said highway.
- 2. On Federal, State and County roads having a right-of-way of one hundred (100) feet or more and for all other roads and streets, such yard shall be measured from the right-of-way line of the street on which the lot fronts (the front lot line); provided, however, that if the proposed location of the right-of-way line of such street as established on the "Currently Held Valid Thoroughfare Plan for Rock Dell Township or on the "Official Map of the County of Olmsted" differs from that of the existing street, then the required front yard least depth shall be measured from the right-of-way line of such street as designated on said Thoroughfare Plan or Official Map.

C. THROUGH LOTS:

1. Lots having frontage on two non-intersecting streets need not provide a rear yard, but applicable front yards must be provided on both streets.

D. CORNER LOTS:

- 1. On corner lots, the applicant shall designate a front and side street yard.
- 2. For corner lots where potential front and side lot lines create a continuous curve, a perpendicular line intersecting the midpoint of the curve shall be deemed the breakpoint between yards.

Section 10.32 **FENCES, WALLS AND HEDGES:**

Fences, walls and hedges may be located in any required yard or buildable lot area, subject to the provisions of Section 10.18; but shall not exceed six (6) feet in height above the elevation of the surface of the ground at any point, except that in instances where public safety or security necessitate, the Zoning Administrator may authorize fences and walls to have a maximum height of not to exceed ten (10) feet above the elevation of the surface of the ground at any point. Fences adjacent to roads on corner lots shall not encroach upon the traffic visibility zone (Ref. Section 10.18).

Section 10.34 YARD ENCROACHMENT

Outside stairways, fire escapes, fire towers, porches, platforms, balconies, boiler flues, and other similar projections shall be considered as part of the building and not allowed as part of the required space for yards, courts, or unoccupied space; provided, however, that this provision shall not apply to one (1) fireplace or one (1) chimney, not more than eight (8) feet in length and projecting not more than thirty (30) inches into the allowable side yard space, nor cornices not exceeding sixteen (16) inches in width, nor to platforms, terraces, steps below the dirt floor level, nor to unenclosed projections not over one (1) story in height which may extend into a front or rear yard not more than ten (10) feet or into a side yard not more than two (2) feet.

Section 10.36 STRUCTURES, NOT INCLUDED IN HEIGHT OF BUILDING

Chimneys, cooling towers, elevator bulkheads, fire towers, drive-in movie theater screens, grain elevators, silos, windmills, antennas, monuments, cupolas, steeples, and mechanical appurtenances pertaining to and necessary to the permitted use of the district in which they are located shall not be included in calculating the height of the principal structure.

Section 10.38 **PRESERVATION OF OPEN SPACE:**

Open-space areas shall be maintained so that their use and enjoyment as open space are not diminished or destroyed. Open-space areas may be owned, preserved, and maintained as required by this section by any of the following mechanisms or combinations thereof:

- A. Dedication of open space to Rock Dell Township, Olmsted County or an appropriate public agency, if there is a public agency willing to accept the dedication.
- B. Common ownership of the open space by a homeowner's association which assumes full responsibility for its maintenance.
- C. Dedication of development rights of open space may be made to an appropriate public agency with ownership remaining with the developer or homeowner's association. Maintenance responsibility shall remain with the property owner or the homeowner's association.

In the event that any private owner of open space fails to maintain same according to the standards of this ordinance, Rock Dell Township may, in accordance with the Open-Space Plan and following reasonable notice and demand that deficiency of maintenance be corrected, enter the open space to maintain same. The cost of such maintenance shall be charged to those persons having the primary responsibility for maintenance of the open space. An open-space plan shall be submitted as a part of the application for a Conditional/Interim Use. This plan shall designate and indicate the boundaries of all open-space areas required by this ordinance. The plan shall:

- 1. Designate areas to be reserved as open space. The specific design of open-space areas shall be sensitive to the physical and design characteristics of the site.
- 2. Designate the type of open space which will be provided.
- 3. Specify the manner in which the open space shall be perpetuated, maintained, and administered.

Section 10.40 **PIPELINES:**

A. **Purpose:** Construction and operation of pipelines through rural areas of the Township have the potential for causing adverse impacts on the productive use of land by disrupting and compacting the soil, interfering with drainage tiles and drainage patterns, and by placement of associated facilities such as pump stations in such a manner as to interfere with agricultural operations. Construction and operation of pipelines also possess the potential for causing adverse impacts upon the maintenance and operation of publicly owned roads, streets, and utilities. The

Township further finds that it is both necessary and proper to enact these regulations pursuant to Minnesota Statutes Section 116, I.01 et. seq., which provides for the protection and restoration of cultivated agricultural land within the Township and which provides minimum depth requirements for construction and operation of pipelines. These regulations shall apply to all pipelines, not exempted pursuant to Minnesota Statutes Chapter 116, I, for which physical manipulation of the land within this Township commences after this zoning ordinance is adopted.

B. **Definitions:**

Construction: Any clearing of land excavation, or other action that would adversely affect the natural environment of a pipeline route but does not include changes needed for temporary use of a route for purposes other than installation of a pipeline, for securing survey or geological data, or for the repair or replacement of an existing pipeline within the existing right-of-way.

Landowners Grant of Easement: The legal document entered into between the property owner and pipeline company, which may contain specific requirements for the installation of the pipe. These requirements cannot be less stringent than the State or County regulations except in the area of minimum depth.

- C. **Filing Requirements:** The owner of the pipeline or its agent shall file with the Township Board prior to start of construction the following:
 - 1. Maps indicating the location, alignment of pipelines and all street, road and stream crossings.
 - 2. Type of service proposed including items to be carried in the pipeline.
 - 3. Copies of State and/or Federal Environmental Impact Statements.
 - 4. Copies of approval letters of agreement from all applicable State and Federal agencies.
 - 5. Copies of all negotiated Landowner Grants of Easement.
- D. **Pipeline Depth Requirements:** Any pipeline constructed or operated in this Township shall be buried to meet the following minimum level cover requirements, unless waived according to the procedure of Section 10.40(G) of this zoning ordinance.
 - 1. Four and one-half (4 1/2) feet minimum beneath the authorized depth of the right-of-way or any drainage facilities under the jurisdiction of this Township.
 - 2. Four and one-half (4 1/2) feet minimum beneath the right-of-way of any street, road, or highway under the jurisdiction of any political subdivision.
 - 3. Four and one-half (4 1/2) feet minimum beneath cultivated agricultural land in this Township.
 - 4. Vertical distance between field drainage tile and the pipeline shall be at least one (1) foot.

- E. **Pipeline Construction Practices:** The following construction practices shall be observed by any person constructing a pipeline in this Township:
 - 1. **Storage of Equipment and Material During Construction:** All materials and equipment must be stored and parked within the bounds of pipeline right-of-way so as to minimize interference with on-going agricultural operations or as set forth in the "Landowner's Grants of Easement".
 - 2. **Preservation of Top Soil:** As set forth in "Landowners Grant of Easement".
 - 3. **Prevention of Erosion:** As set forth in "Landowners Grant of Easement".
 - 4. **Protection of Tile Lines**: As set forth in "Landowners Grant of Easement".
- F. Location of Associated Facilities: Location of all above ground facilities associated with the operation of a pipeline, including but not limited to pump stations, shall be consistent with the following criteria:
 - 1. Associated facilities such as pump stations, check valves, and access points shall be required to be located so as to minimize interference with productive use of cultivated agricultural land, irrigation, etc., by placing in corners of fields, on fence lines, etc.;
 - 2. To minimize interference with existing roads, highways.
- G. **Waiver of Depth Requirements:** Waiver of depth requirements shall be permitted consistent with Minnesota Statutes Section 116, I.06, Subdivisions 2 and 3.
- H. **Inspection Fee:** Any person proposing to construct a pipeline in this Township shall pay to the Township Treasurer a fee in accordance with Minnesota Statutes Section 116, I.06, Subdivision 6.
- I. **Enforcement**: Any person violating the provisions of this zoning ordinance is guilty of a misdemeanor for each offense and may be subject to civil liability consistent with Minnesota Statutes Section 116, I.06, Subdivision 10. consistent with Minnesota Statutes Section 116, I.06, Subdivision 8, this zoning ordinance may be enforced by injunction, action to compel performance or other appropriate equitable relief in the district court of Olmsted County.

Section 10.44 MOBILE HOME SKIRTING AND ANCHORING:

- A. All mobile homes shall be securely anchored to the ground in such a manner as to withstand wind pressures specified for mobile homes by the State Building Code.
- B. All mobile homes shall be completely skirted.

Section 10.46 **ADVERTISING SIGNS:**

A. **PURPOSE:** The purpose of this section is to protect the traveling public from distraction and maintain the natural and scenic beauty and attractiveness of the County. By the construction of public roads, the public has created views to which

the public retains a right-of-view and it is the intent of these standards to prevent the taking of that right.

- B. **ZONING CERTIFICATE:** No advertising sign shall hereafter be erected within Rock Dell Township until such sign has been reviewed by the zoning administrator and a zoning certificate issued for that sign.
- C. **DIRECTIONAL ADVERTISING SIGN STANDARDS:** One directional advertising sign may be erected adjacent to a township road, subject to the following standards:
 - 1. Must not exceed dimensions totaling twenty four (24) square feet of area.
 - 2. Must provide direction only to a use that is located within Olmsted County
 - 3. The business being advertised must be one permitted by this zoning ordinance.
 - 4. Such signs shall be located not less than ten (10) feet from any road right-of-way.
 - 5. Such signs shall contain not more than two (2) faces, and shall not exceed a height of ten (10) feet above the ground.
 - 6. Written permission from the property owner upon which said sign is to be located must accompany any application for a zoning certificate for the sign.
- D. **GENERAL ADVERTISING SIGNS:** General Advertising signs shall be subject to the following standard;
 - 1. The following provisions shall apply to all roads located within Rock Dell Township. These provisions apply to all Federal, State, County, Township, and private roads.
 - 2. No general advertising sign shall exceed dimensions totaling an area of 600 square feet.
 - 3. No general advertising sign shall be located within five hundred (500) feet of an existing dwelling.
 - 4. The following provisions shall apply only to County, Township, and private roads.
 - a) No general advertising sign shall exceed a total height of 30 feet above the surface of the adjacent roadway.
 - b) general advertising signs may only be located upon lands zoned commercial or industrial by Rock Dell Township.
 - c) No general advertising sign shall be erected within a distance of 1320 feet from another General Advertising Sign.
 - d) No general advertising sign may be erected within a distance of 1320 feet of lands zoned residential by any political jurisdiction

- e) No general advertising sign shall be erected on lands designated as a Shoreland district or within 1320 feet of lands designated as a Shoreland district
- f) No general advertising sign shall be erected as the principle use on a property.
- g) General advertising signs shall maintain all yard and setback requirements equal to the requirements of the zoning district where located.
- 5. All General Advertising Signs existing as of March 10, 1998 shall be exempt from the provisions of this Section. These signs may be altered, rebuilt, reconstructed, or replaced on the same property with another General Advertising Sign of the same square footage.

Section 10.48 TRANSPORTATION IMPACT REPORTS

- I. **Purpose:** The intent of this section is to provide the information necessary to allow decision-makers to assess the transportation implications of traffic associated with a proposed development in relation to safety, the existing and proposed capacity and condition of the street system, congestion, and the quality of life of neighboring residences. This section establishes requirements for the analysis and evaluation of transportation impacts associated with proposed developments. Traffic studies should identify what improvements, if any, are needed to:
 - 1. insure safe ingress to and egress from a site;
 - 2. maintain adequate street capacity on public streets serving the development;
 - 3. ensure safe and reasonable traffic operating conditions on streets and at intersections in the vicinity of a proposed development;
 - 4. avoid creation of or mitigate existing hazardous traffic conditions;
 - 5. minimize the impact of non-residential traffic on residential uses in the vicinity; and
 - 6. protect the public investment in the existing street system.
- J. When Required: Except for temporary uses associated with road construction, a development proposals with any of the following traffic or land use characteristics shall be accompanied by a traffic impact report prepared consistent with the provisions of this section unless the requirement is waived by the relevant road authority under the provisions of 10.48.C. No application shall be considered complete unless accompanied by such a report if required.
 - Uses that generate more than 500 vehicle trips per day according to the Institute of
 Transportation Engineers most recent Trip Generation Manual or 30 heavy vehicle trips
 per day based on the best available data. Where the development proposed cannot be
 adequately described by ITE, trip generation should be estimated based on data collected
 from other developments of similar size and scope, with a minimum of three independent
 data samples provided.

- 2. Proposed land use plan amendments from the Resource Protection designation to the Suburban Development designation or Urban Service Area designation or from the Resource Protection designation or Suburban Development designation to the Urban Service Area designation. Traffic impact studies for land use plan amendments to the Urban Service Area designation shall identify the road system investments to the County and State road systems necessary to serve anticipated urban development in the Urban Service Area.
- 3. Zone change requests to zoning districts which include uses (other than conditional uses) whose trip generation exceeds 500 total vehicle trips per day according to the Institute of Transportation Engineers most recent Trip Generation Manual, or which may generate more than 30 heavy vehicle trips per day according to the best available truck trip generation information.
- 4. Residential General Development Plans with 25 or more dwellings whose primary access beyond the limits of the development will be a gravel surfaced road, or 50 or more dwellings where the primary access beyond the limits of the development will be a paved road.
- 5. Developments having direct access onto existing or planned Interstate, Interregional, Strategic Arterial or Major Arterial highway as designated by the adopted Functional Designation Map in the ROCOG Long Range Transportation Plan.
- K. **Jurisdictional Responsibility:** The Engineer of the road authority for the access road shall have the final authority for determining the need and adequacy of the Transportation Impact Report, except that:
 - 1. If a County road is part of any of the identified haul routes, the County Engineer shall have the final authority for determining the need for and adequacy of a Transportation Impact Report for that part of the haul route; and
 - 2. Any road authority having authority over a portion of a haul route may require a road use agreement covering that part of the haul route, whether or not that road authority has jurisdictional responsibility for determining the need for and adequacy of the Transportation Impact Report.
- L. Waiver: The requirement for a Transportation Impact Report may be waived by the Road Authority Representative with responsibility for the public access road, after consulting with Road Authority Representatives with roads comprising any designated haul routes (the County Highway Engineer for affected County roads in Olmsted County, the County Highway Engineer for affected County roads in adjacent counties, the City Engineer for an affected City, the District Engineer of Mn/DOT District 6 for State or Federal Highways, or the Town Board or its Designee for township roads), if it is determined:
 - that a Transportation Impact Report is not necessary to determine needed road
 improvements on access roads or the portions of haul routes under their jurisdiction, and
 that for access roads and the intersections along haul routes under their jurisdiction, no
 unsafe or hazardous conditions will be created by the development as proposed; or.

- 2. the applicant has provided performance bonds or other guarantees providing adequate assurance that anticipated damage to roads can be mitigated and/or that unsafe conditions can be mitigated or avoided; or
- 3. the use is a seasonal use with peak daily trip generation that exceeds the thresholds in Section B, but whose annual average trip generation does not pose a risk to the road infrastructure or traffic safety of the facility and adjacent road network based on evaluation of the cumulative pavement impact expected and geometric design of the roadway.

This waiver shall not preempt the authority of the Minnesota Department of Transportation to require a traffic study under the requirements of the State Access Management Guidelines on any state or federal highway nor the authority of an affected jurisdiction to require a traffic study under an applicable access management ordinance.

- M. Complete Application: No application for a development identified as requiring a Traffic Impact Report will be determined to be complete unless it is accompanied by an appropriate traffic study except if a waiver has been granted by the road authority Engineer after consultation with affected Road Authority Representatives.
- N. **Contents:** All roads and intersections serving a proposed use must be determined to be capable of handling the estimated share of projected traffic generated by the use. A Traffic Impact Report shall include the following:
 - 1. An analysis of traffic operations and intersection improvement needs at all site access points under projected traffic loads. This operational evaluation shall include on-site circulation as it may affect access, on-site and off-site turn lanes and required storage, the potential need for signalization or other traffic control, and review of sight distance and other intersection safety aspects. The proposed access plan should be consistent with the standards of the Olmsted County Access Management Ordinance for county roads or with other Access Management regulations that may apply for other roads.
 - 2. An analysis of the impact of site-generated traffic on the level of service of affected intersections and public streets in the vicinity of the site. Affected intersections are any road segment or intersection where the additional traffic volume created by the proposed development is at least 250 vehicles per day and greater than 10 percent of the current traffic volume (for road segments) or the current entering volume (for intersections). The Road Authority representative may choose to waive study of certain intersections.
 - 3. For developments expected to generate more than 30 heavy vehicle trips per day, the applicant must identify any routes to be used by heavy vehicles entering or leaving the site in as much detail as possible. For each segment of a haul route or public road used for access, the applicant must prepare
 - A geometrics and traffic analysis of the intersections and road segments these heavy vehicles would use to reach the year-round ten ton route system from the site, addressing structural capacity, impacts of slow moving vehicles on roadway safety,

- adequacy of sight distance at intersections and railroad crossings, and the need for intersection operation improvements to accommodate heavy vehicle traffic; and
- To determine structural adequacy, the applicant must prepare an analysis of existing and projected cumulative equivalent single axle loads (ESALs) using the Minnesota Local Road Research Board (LRRB) Pavement Impacts of Large Traffic Generators methodology; and
- iii. To determine adequacy of bridges and culverts, a structural analysis shall be completed for any bridge or culvert along a public road used for a haul or access route if identified as at risk for structural failure due to increased ESAL loadings from the proposed use.
- iv. For any public road used for access or haul routes identified as part of the application, if the ratio of projected equivalent single axle loads with the development to the projected ESALs without the development of 1.2 or greater over the projected life of the development, the applicant must prepare a mitigation plan addressing measures to mitigate or prevent road damage.
- v. Analyses of structural adequacy must be conducted for any public road used as a haul route regardless of road authority or of location within Olmsted County or in an adjacent county, unless waived by the relevant road authority.
- 4. An analysis of the impact of the proposed development on residential streets in the vicinity of the site to identify any potential adverse effects of the proposed development and mitigation measures to address any impacts. Examples of possible effects include, but are not limited to, non-residential traffic impacts on residential neighborhoods, pedestrian and bicyclist safety hazards (especially at points where haul routes intersect with facilities having high levels of pedestrian or bicycle traffic), traffic noise, or turning movements conflicts with other driveways or local access roads.
- 5. A detailed list of the transportation infrastructure improvements needed to meet access management standards of the applicable road authority (or those of the Olmsted County Access Management Ordinance, if a road authority has not adopted an Access Management Ordinance) and to mitigate the impact of the development and estimated costs of these improvements.
- 6. A list of roadbed, ride surface, or drainage improvements that are needed to increase the structural stability of roads and any substructure, superstructure or deck improvements needed to increase the structural stability of bridges and culverts.
- O. **Preparation:** The applicant may choose to have a traffic study prepared by a Traffic or Transportation Engineer, or other qualified professional with experience in the preparation of such analysis, or may choose to have the Zoning Administrator prepare a report once the development application is submitted. At his or her discretion, the Zoning Administrator may decline to prepare the study. When the applicant chooses to have the Zoning Administrator prepare the study, and the Zoning Administrator agrees to prepare the study, the application triggering the need for a TIR shall be considered incomplete until 45 days after the request is made to the Zoning Administrator to complete the TIR, in order to provide time to prepare the study. The applicant shall be responsible for the costs of preparation of the traffic study incurred by the Zoning Administrator, as identified in the Fee Schedule.
- P. **Traffic Service Standards:** The standards for traffic service that shall be used to evaluate the findings of traffic impact reports are:

1. **Capacity:** The following table shall be used to assess the impact of the proposed development on the capacity of the roadway system. Development traffic when combined with projected 20 year background traffic growth shall not cause the volume to capacity (V/C) ratio to be exceeded. The listed ADT (Average Daily Traffic) capacity should be used as a first test to determine whether V/C limits might be approached; if so, a more detailed analysis of V/C should be completed using methods in the Highway

Capacity Manual or similar techniques.				
Land Use Area (1)	V/C Ratio	Roadway Type	Road Character	ADT Capacity
Rural	0.55	2 Lane Highway	Level with shoulders	4800
			Rolling or Level with limited or no shoulders	2900
Urban Influence	0.60	2 Lane Highway	Level	6500
			Rolling or Level with limited or no shoulders	5000
Developing Area	0.70	2 Lane Highway	Level	8700
			Rolling or Level with limited or no shoulders	7100
All Areas	NA	Local Collector Road	All	1200
All Areas	NA	Local Residential Road	All	800

⁽¹⁾ Land Use Areas are defined in Chapter 4A of the ROCOG Long Range Transportation Plan

2. Level of Service: The Level of Service Standard for all highway corridor operations (including freeway mainline, merging areas and ramp junctions, and arterial and collector intersections or corridors) should meet the Level of Service standards listed in the table below. Level of Service should be calculated using the Highway Capacity manual or equivalent techniques. Where the existing Level of Service is below these standards, a traffic impact report shall identify those improvements needed to maintain the existing level of service, and what additional improvements would be needed to raise the level of service to the standards indicated.

Level of Service

Land Use "Zone"		
(ROCOG LRTP)	Land Use "Area"	Level of Service

Developing Areas	Small cities	Mid C
	Rochester	C/D Midpoint
Urban Influence Area	Rochester	B/C Midpoint
Rural Area	All	B/C Midpoint

- 3. **Number of Access Points:** The number of access points shall be the minimum needed to provide adequate access capacity for the site. The spacing of access points shall be consistent with the road authority's access management ordinance. If the road authority has not adopted an access management ordinance, then there shall be 500 feet, or the maximum available distance if less than 500 feet, between access points and the nearest adjoining intersection or driveway on adjacent parcels and 200 feet between driveways on the same parcel.
- 4. **Residential Street Impact:** Non-residential development shall contribute no more than 20% of the traffic on any local street for which residentially zoned property makes up more than 50% of the street frontage.
- 5. **Vehicle Storage:** The capacity of storage bays and auxiliary lanes for turning traffic shall be adequate to insure turning traffic will not interfere with through traffic flows on any public street.
- 6. **Internal Circulation:** On-site vehicle circulation and parking patterns shall be designed so as not to interfere with the flow of traffic on any public street and shall accommodate all anticipated types of site traffic.
- 7. **Safety:** Access points shall be located and designed to provide for adequate intersection and stopping sight distance and appropriate facilities to accommodate acceleration and deceleration of site traffic. The geometric design of access points shall meet the standards of the Olmsted County Access Management Ordinance, or the Access Management Ordinance adopted by the Road Authority, if applicable.

Section 10.50 **WIND ENERGY CONVERSION SYSTEMS:**

A. Purpose: Olmsted County promotes the use of wind energy conversion systems and to balance the need for clean and renewable energy with the need to protect the public health, safety, and general welfare. In furtherance of this purpose submittal requirements and standards are established to ensure that wind turbines and wind energy conversion systems, that are a combined nameplate capacity of less than 5,000 kilowatts, are appropriately sited, designed, installed, operated and maintained. In no case shall the provision of this ordinance guarantee wind rights or establish access to the wind.

- B. Site Testing: A person may establish a WECS Meteorological Tower on a single or multiple parcels of land for up to a period of one year by obtaining a zoning certificate. The purpose of the tower shall be primarily to measure wind speed, direction, and to determine capacity factor and collect related data necessary to determine suitability of the site for the establishment of a WECS.
- C. Location and Setback Requirements: All wind turbines shall meet or exceed the setbacks or separation distance established in this section.
 - 1. Setback from property lines: Unless a project site includes multiple properties all wind turbines shall be setback 1.1 times the total height of the wind turbine. Where Small Utility WECS are proposed that include multiple properties, wind turbine setbacks shall be the project area boundaries as described in the application. WECS Meteorological Towers shall be setback 1.1 times the total height. The guy anchor locations for guyed towers where Small Non-utility WECS are constructed shall be a minimum of 8 feet from any property line.

2. Separation Distance:

- a) For Small Utility WECS the distance separation from state wildlife management areas and other MNDNR lands, Public Waters and Types 3-5 wetlands shall be 600 feet. The distance separation from Lake Zumbro, county parks, state forestland, or the Whitewater Wildlife Management Area shall be ¼ mile.
- b) For Small Utility WECS the separation distance from on-site dwellings shall be 1.1 times the total height of the wind turbine and 750 feet from dwellings on adjacent property. For Small Utility WECS separation distance from residential zoning districts shall be ½ mile.
- c) Structures not a part of the Small Utility WECS project and located on the project site shall be setback from the tower base a distance equal to one rotor diameter.
- 3. Setbacks for accessory structures and facilities: Substations, facility buildings and other structures that are part of the Small Utility WECS shall meet the setback requirements for the zoning district in which the project is located.

D. Aesthetic and Environmental Requirements:

- 1. Tower type: For Small Utility WECS the wind turbine towers shall be freestanding and of tubular construction.
- Color and finish: All wind turbines and towers that are part of a WECS shall be a neutral color including white, grey, light blue, or other non-obtrusive color. Blades may be black in order to facilitate deicing. Finishes shall be non-reflective.
- 3. Lighting: The site shall comply with all FAA lighting requirements. White strobe lights are not permitted unless required by the FAA. White strobe lights shall not be used between dusk and dawn. Red strobe lights are required for all

towers located on the perimeter of the site for nighttime illumination to reduce impacts of migrating birds. Interior towers shall not be lit unless required by the FAA standards. Simultaneously pulsing strobe lights are required for the perimeter lights.

- 4. Signage: The manufacturers or owner's company name and/or logo may be placed upon the nacelle of the wind turbine. Warning signs shall be placed on fencing surrounding on-site substations.
- 5. Location: Wind energy conversion systems shall not be located within floodplain districts as regulated in Section 9.00-9.08, the Shoreland district as regulated in Section 9.10 of the zoning ordinance, or wetlands as regulated under MR Chapter 8420.
- 6. Waste: All previously used parts and equipment shall be removed from the site and properly disposed. All hazardous waste generated by the operation and maintenance of the WECS shall be removed from the site and recycled or disposed of properly as required under Minnesota statutes and rules.
- 7. Height: Wind turbine height shall be as specified in the zoning district within which the WECS is located.

E. Noise and Safety Standards:

- 1. Noise: Except during short-term events including utility outages and severe wind events, a WECS shall be designed, installed and operated so that the noise generated does not exceed 60 dBA at the property line.
- 2. Automatic Overspeed Controls: All wind turbines shall be equipped with manual and automatic overspeed controls to limit the blade rotation speed to within unit design limits. A professional engineer must certify that the wind turbine is equipped with rotor and overspeed controls.
- 3. Blade Clearance: No portion of a wind turbine blade in a small utility WECS shall extend closer to the ground than 50 feet. Blade clearance for Small Non-utility WECS shall be no less than 20 feet.
- 4. Climbing Apparatus: All climbing apparatus located outside of the tower shall be located at least 15 feet above the ground. All towers shall have controlled access and doors shall be locked.
- 5. Intra-project Power and Communication Lines: All power lines used to collect power from individual wind turbines and all communication lines shall be buried underground.
- F. Decommissioning of Small Utility WECS: The applicant and future owners shall ensure that facilities are decommissioned upon the end of project life or facility abandonment. A decommissioning plan shall be submitted with the project application. Decommissioning shall include: removal of all structures and electrical transmission components, to a depth of 4 feet, restoration of the soil and vegetation

- to avoid temporary or long term soil erosion consistent with Section 10.20 of this ordinance.
- G. Application Requirements: All applicants shall complete a zoning certificate or conditional use permit application form and supply all information required on the application. For a single wind turbine that meets the definition of a Small Utility WECS and is located in the A-1, A-2, or A-3 districts the submittal requirements for a conditional use shall include #1-5,7, and 12 listed in this subsection.

For a Small Utility WECS the following additional information is required for a conditional use permit application:

- 1.a site plan to scale detailing the location of the project area boundaries, property lines, leased land, easements on the site and easements obtained for the project, wind turbine locations, internal roads, transmission lines, transformers and substations, communication lines, interconnection with the utility system, ancillary equipment and structures, access to the public road system, and site topography/elevations;
- 2.a description of the project, including but not limited to the number of turbines, rated capacity, height of towers, rotor diameter and height of tower and rotor combined, turbine and tower color, manufacturers of the equipment, and schedule/phasing of project including expected date of commercial operation;
- 3. current land use and land cover on the project site and on the adjacent parcels;
- 4. identification and location of floodplain, flood-prone soils, surface water bodies, public waters and shoreland, and wetlands on the project site;
- 5. distance of turbines from all property lines and to the nearest dwellings and other structures on the project property and adjacent property;
- 6.engineering certification of tower and foundation design suitability for wind turbine, soils, geology, and site topography;
- 7. grading and erosion control plan;
- 8. decommissioning plan;
- 9.evidence of electric power purchase contracts and power transmission contracts, or documentation that the power will be utilized on-site, and control of wind easements in the project area;
- 10. identification, location, and description of neighboring small utility WECS and wind easements;
- 11. certification that the project has or will obtain liability insurance; and
- 12. separation distance from structures, land uses and resource features as listed in subsection C of Section 10.50.

Section 10.52 **SOLAR ENERGY FARMS:**

Q. **Purpose:** Olmsted County supports the use of solar collection systems and the development of solar energy farms. The development of solar energy farms should be balanced with the protection of the public health, safety, and welfare. The following standards intend to ensure that solar energy farms can be constructed within Olmsted County while also protecting public safety and the existing natural resources of the county. The provisions of this section of the ordinance shall apply within all zoning districts. In no case shall the provisions of this ordinance guarantee rights to solar access.

R. Location and Site Design Requirements:

- 1. General District Regulations: All elements of the solar energy farm shall meet or exceed all general district regulations based on the applicable zoning district.
- The applicant must submit evidence that the solar power farm can connect to the off-site power transmission system, and evidence of electric power purchase contracts and power transmission contracts, or documentation that the power will be utilized on-site.
- 3. The land area within the solar energy farm must minimize soil erosion by complying with the standards of Section 10.20 of the zoning ordinance.
- 4. Solar energy farms shall not be located within the Shoreland District or Floodway District. Solar energy farms located in either a Flood Fringe or Flood Plain District shall be elevated to the flood protection elevation.
- 5. Solar energy farms that utilize concentrating solar power (CSP) devices shall not be permitted to be located within Zones A, B, or C, the Horizontal Zone, the Conical Zone, or the Precision Instrument Approach Zone as designated in the Rochester International Airport Zoning Ordinance #5 as amended.
- 6. Solar energy farms that utilize concentrating solar power (CSP) devices shall not abut or be located across a road from a land management unit of the Minnesota Department of Natural Resources, Olmsted County, or private conservation organization, county or city park, Type 3, 4 or 5 wetlands, or residential zoning district.
- 7. All power lines used to collect power from the solar panels and all communications lines shall be buried underground compliant with the National Electrical Code or the standards and requirements of the National Electrical Safety Code where applicable. Where existing site conditions preclude the burial below the existing grade of the site the communications and power lines may be placed at ground level and buried with fill material that will permit re-vegetation or that does not cause or generate soil erosion.

The connection of the solar energy farm distribution system load center (transformer, substation) to the electrical utility may be located above ground.

- 8. All unenclosed electrical conductors located above ground must be contained within structures that control access or must be protected from entry by a six foot fence. All electrical connections to the utility system must meet the National Electrical Safety Code.
- 9. Solar energy farms utilizing concentrated solar power devices (CSP) shall be required to provide a bufferyard "E" where located abutting or across a road from any residential zoning district.
- 10. Decommissioning of Solar Farms: The applicant and future owners shall ensure that facilities are decommissioned upon the end of project life or facility abandonment. A decommissioning plan shall be submitted with the project application. Decommissioning shall include removal of all structures and electrical transmission components, and where buried remove all construction above and below grade, and restoration of the soil and vegetation to avoid temporary or long term soil erosion consistent with Section 10.20 of this ordinance.
- S. Conditional Use Review Criteria: In addition to the criteria identified in Section 4.02, the following additional criteria shall be applied:
 - 1. To issue a conditional use permit, the Planning Advisory Commission must find that the design, construction and operation of a solar energy farm, taking into account mitigation, are not likely to result in a significant adverse impact to the general public, adjacent properties and to natural resources.
 - a) The site design must be consistent with the provisions of Section 8.09.2A for farms utilizing concentrated solar power devices.
 - b) Where concentrated solar power devices utilizing mirrors are proposed the project will be designed to reduce the likelihood of significant adverse effects to birds. The operation must avoid the creation of bird habitat or habitat for bird prey. The proposed project has been designed and will be operated to protect public safety, and specifically to prevent public access. That portion of the property developed within the solar energy farm must be fenced and gated.
 - c) The proposed facility utilizing concentrated solar power devices has been designed and operated to prevent the misdirection of concentrated solar radiation onto adjacent or nearby property, public roads or other areas open to the public.

- d) The applicant must show that the solar collector system is properly located and aligned or adequately screened from view from the public right of way so as to preclude any glare from the equipment which would adversely impact the vision of motorists on the public right of way.
- e) A bufferyard to screen the system may be required as a part of the conditions of approval. It shall be based on the proximity of residential buildings and the solar collection system to the abutting public rights of way. The vegetation shall consist of canopy and conifer trees.
- 2. In addition to the exhibits required under Section 4.02C, the applicant must submit the following exhibits with the conditional use application unless waived by the Zoning Administrator:
 - a) Maintenance plan for grounds surrounding the solar collection systems.
 - b) Plan for use, storage and disposal of chemicals used in the cleaning of the solar panels or mirrors.
 - must submit the site plan for review to the Minnesota Department of Natural Resources. A statement from the MNDNR addressing wildlife and habitat impact must accompany the application.
 - d) Submit information explaining how glare generated from the solar collector system will be screened from adjacent properties or that glare will not be created by the system.
 - e) A decommissioning plan.

Section 10.60 Dumping and Disposal of Waste Material

The deposit, dumping, burning, or disposal of rubbish, or other refuse, or of industrial ashes, fly ash, products containing fly ash, slag, sludge or other wastes or byproducts is not permitted on land within Rock Dell Township, except under a temporary or interim use permit which may be issued in appropriate cases upon the filing of application and payment of fee, accompanied by suitable agreement or bond that such dumping or disposal will not pollute the waters of the Township or cause stagnant water to collect or leave the surface of the land, at the expiration of such permit, in an unacceptable condition or unfit for growing of turf or for other permitted land uses. The application methods such as surface spread and direct injection will be considered as part of the temporary use permit. The application of agricultural manure generated upon the landowners own agricultural property or rented property shall be permitted

without the need of a permit; however land owners purchasing or acquiring waste from other sources must apply for a temporary use permit. The burning of brush generated upon the landowner's own property shall be permitted with a burning permit. The pumping and spreading of individual septic systems upon the owners' agricultural land needs no permit from the township, other permits and regulations may apply. The application of waste to personal gardens does not require a permit from the township.

APPENDIX A -- FEE SCHEDULE

Fees will be established by resolution of the Rock Dell Townboard. available from the Zoning Administrator.	The fee schedule in effect will be

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APPENDIX B CROP EQUIVALENT RATING FOR SOILS

IN OLMSTED COUNTY

Numerical List of Correlated Names

5/19/81

		CER
Symbol	Approved Name	RATING
24	0.4	05
2A	Ostrander silt loam, 0-2% slopes	95
2B	Ostrander loam, 2-6% slopes	85
11C	Sogn loam, 4-12% slopes	25
16	Arenzville silt LOAM	80
19	Chaseburg silt loam	45
23	Skyberg silt loam	75
24	Kasson silt loam	85
25	Becker loam	55
27A	Dickinson sandy loam, 0-1% slopes	65
27B	Dickinson sandy loam, 2.6% slopes	55
27C	Dickinson sandy loam, 6-12% slopes	55
30B	Kenyon loam, 1-6% slopes	85
42E	Saliday gravelly sandy loam, 12-35% slopes	15
73F	Bellechester loamy sand, 25-45% slopes	30
99B	Racine silt loam, 1-6% slopes	85
99C	Racine silt loam, 6-12% slopes	65
99D2	Racine loam, 12-18% slopes, eroded	45
131B	Massbach silt loam, 2-6% slopes	80
131C	Massbach silt loam, 6-12% slopes	70
131D	Massbach silt loam, 12-18% slopes	55
1438	Eleva sandy loam, 2-6% slopes	50
143C	Eleva sandy loam, 6-12% slopes	45
173F	Frontenac loam, 15-35% slopes	20
176	Garwin silty clay loam	60
176dr.	Garwin silt clay loam	90
203	Joy silt loam, 1-4% slopes	85
209A	Kegonsa silt loam, slopes greater than 4%, 0-2% slopes	65
209B	Kegonsa silt loam, 2-6% slopes	60
216B	Lamont sandy loam, 2-6% slopes	55
244C	Lilah sandy loam, 6-12% slopes	20
251F	Marlean silt clay loam, 25-40% slopes	15
251G	Marlean silty clay loam, 40-80% slopes	15
252	Marshan silt loam	60
252dr.	Marshan silt loam	85
283B	Plainfield loamy sand, 0-6% slopes	25
283C	Plainfield sand, 6-12% slopes	15
283E	Plainfield sand, 12-30% slopes	10

285A Port Byron, silt loam, 1-2% slopes 95 285B Port Byron, silt loam, 1-2% slopes 95 285C Port Byron, silt loam, 5-9% slopes 85 289 Radford silt loam 70 295 Readlyn loam 85 298 Richwood silt loam, 1-2% slopes 85 299A Rockton loam, 0-1% slopes 65 299C Rockton loam, 1-6% slopes 55 301B Lindstrom silt loam, 2-6% slopes 95 301C Lindstrom silt loam, 2-6% slopes 75 309C Schapville silty clay loam, 6-12% slopes 45 309D Schapville silty clay loam, 12-25% slopes 46 312B Shullsburg silt loam, 2-6% slopes 75 312C Shullsburg silt loam, 2-6% slopes 75 312D Timula silt loam, 1-12% slopes 60 313 Spillville silt loam 90 322D Timula silt loam, 18-30% slopes 55 323D Timula silt loam, 18-30% slopes 55 333 Vasa silt loam, 16 8lopes			CER
285B Port Byron, silt loam, 1-2% slopes 95 285C Port Byron, silt loam, 5-9% slopes 85 289 Radford silt loam 70 295 Readlyn loam 85 298 Richwood silt loam, 1-2% slopes 100 299A Rockton loam, 0-1% slopes 85 299B Rockton loam, 1-6% slopes 65 299C Rockton loam, 6-12% slopes 55 301E Lindstrom silt loam, 2-6% slopes 75 301C Lindstrom silt loam, 6-15% slopes 75 309C Schapville silty clay loam, 6-12% slopes 45 309D Schapville silty clay loam, 2-6% slopes 45 312B Shullsburg silt loam, 2-6% slopes 75 312C Shullsburg silt loam, 1-12% slopes 60 313 Spillville silt loam, 1-12% slopes 70 322D Timula silt loam, 1-12% slopes 55 322E Timula silt loam, 1-6% slopes 45 340C Whalan loam, 1-6% slopes 55 340C Whalan loam, 4-12% slopes 55	Symbol	**	RATING
285C Port Byron, silt loam 70 289 Radford silt loam 70 295 Readlyn loam 85 298 Richwood silt loam, 1-2% slopes 100 299A Rockton loam, 0-1% slopes 85 299B Rockton loam, 6-16% slopes 65 299C Rockton loam, 6-12% slopes 55 301B Lindstrom silt loam, 2-6% slopes 75 301C Lindstrom silt loam, 6-12% slopes 45 309C Schapville silty clay loam, 6-12% slopes 45 309D Schapville silty clay loam, 6-12% slopes 40 312B Shullsburg silt loam, 2-6% slopes 75 312C Shullsburg silt loam, 6-12% slopes 60 313 Spillville silt loam 90 322D Timula silt loam, 12-18% slopes 55 322E Timula silt loam, 12-18% slopes 55 322E Timula silt loam, 6-12% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 6-12% slopes 55 369B<	285A		100
289 Radford silt loam 70 295 Readlyn loam 85 299A Richwood silt loam, 1-2% slopes 100 299A Rockton loam, 0-1% slopes 85 299B Rockton loam, 1-6% slopes 65 299C Rockton loam, 6-12% slopes 55 301B Lindstrom silt loam, 2-6% slopes 95 301C Lindstrom silt loam, 6-15% slopes 75 309D Schapville silty clay loam, 12-25% slopes 40 312B Shullsburg silt loam, 6-12% slopes 75 312C Shullsburg silt loam, 6-12% slopes 75 312C Shullsburg silt loam, 6-12% slopes 70 322D Timula silt loam, 12-18% slopes 55 322E Timula silt loam, 18-30% slopes 45 322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 65 340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 54 80 378	285B	Port Byron, silt loam, 1-2% slopes	95
295 Readlyn loam 85 298 Richwood silt loam, 1-2% slopes 100 299A Rockton loam, 0-1% slopes 85 299B Rockton loam, 1-6% slopes 65 299C Rockton loam, 6-12% slopes 55 301B Lindstrom silt loam, 2-6% slopes 95 301C Lindstrom silt loam, 6-15% slopes 75 309C Schapville silty clay loam, 6-12% slopes 45 309D Schapville silty clay loam, 12-25% slopes 40 312B Shullsburg silt loam, 2-6% slopes 75 312C Shullsburg silt loam, 6-12% slopes 60 313 Spillville silt loam 90 322C Timula silt loam, 12-18% slopes 70 322D Timula silt loam, 12-18% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 65 340C Whalan loam, 1-6% slopes 55 369B Waubeek silt loam, 1-6% slopes 95 369C Waubeek silt oam, 4-12% slopes 75	285C	Port Byron, silt loam, 5-9% slopes	85
298 Richwood silt loam, 1-2% slopes 85 299A Rockton loam, 0-1% slopes 85 299B Rockton loam, 1-6% slopes 65 299C Rockton loam, 6-12% slopes 55 301B Lindstrom silt loam, 6-15% slopes 95 301C Lindstrom silt loam, 6-15% slopes 75 309C Schapville silty clay loam, 6-12% slopes 45 309D Schapville silt clay loam, 12-25% slopes 40 312B Shullsburg silt loam, 2-6% slopes 75 312C Shullsburg silt loam, 6-12% slopes 60 313 Spillville silt loam, 6-12% slopes 70 322D Timula silt loam, 12-18% slopes 55 322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam 90 340C Whalan loam, 1-6% slopes 65 340C Whalan loam, 6-12% slopes 95 369B Waubeek silt loam, 6-12% slopes 75 378dr. Maxfield silty clay loam 60 401C Mt. Carroll silt loam, 6-12% slopes	289	Radford silt loam	70
299A Rockton loam, 0-1% slopes 65 299B Rockton loam, 1-6% slopes 55 301B Lindstrom silt loam, 2-6% slopes 95 301C Lindstrom silt loam, 6-15% slopes 75 309C Schapville silty clay loam, 6-12% slopes 45 309D Schapville silt clay loam, 12-25% slopes 40 312B Shullsburg silt loam, 2-6% slopes 75 312C Shullsburg silt loam, 6-12% slopes 60 313 Spillville silt loam 90 322C Timula silt loam, 6-12% slopes 55 322B Timula silt loam, 12-18% slopes 55 322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 55 369B Waubeek silt loam, 1-6% slopes 55 369B Waubeek silt loam, 6-12% slopes 75 378dr. Maxfield silty clay loam 60 401B Mt. Carroll silt loam, 6-12% slopes 75 401C Mt. Carroll silt loam, 6-12% slopes, eroded <td>295</td> <td>Readlyn loam</td> <td>85</td>	295	Readlyn loam	85
299B Rockton loam, 1-6% slopes 55 301B Lindstrom silt loam, 2-6% slopes 95 301C Lindstrom silt loam, 6-15% slopes 75 309C Schapville silty clay loam, 6-12% slopes 45 309D Schapville silty clay loam, 12-25% slopes 40 312B Shullsburg silt loam, 2-6% slopes 75 312C Shullsburg silt loam, 6-12% slopes 60 313 Spillville silt loam 90 322C Timula silt loam, 6-12% slopes 70 322D Timula silt loam, 12-18% slopes 55 322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 65 340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 6-12% slopes 95 369C Waubeek silt loam, 2-6% slopes 75 378 Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 6-12% slopes 75 401C Mt. Carroll silt loam, 6-12% slopes	298	Richwood silt loam, 1-2% slopes	100
299C Rockton loam, 6-12% slopes 55 301B Lindstrom silt loam, 2-6% slopes 95 301C Lindstrom silt loam, 6-15% slopes 75 309C Schapville silty clay loam, 6-12% slopes 45 309D Schapville silty clay loam, 12-25% slopes 40 312B Shullsburg silt loam, 2-6% slopes 75 312C Shullsburg silt loam, 6-12% slopes 60 313 Spillville silt loam 90 322D Timula silt loam, 6-12% slopes 55 322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 6-6% slopes 65 340C Whalan loam, 1-6% slopes 55 369B Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 401B Mt. Carroll silt loam, 2-6% slopes 75 401C Mt. Carroll silt loam, 6-12% slopes 75 401C Mt. Carroll silt loam, 6-12% slopes 75 401D Mt. Carroll silt loam, 6-12% slopes	299A	Rockton loam, 0-1% slopes	85
301B Lindstrom silt loam, 2-6% slopes 95 301C Lindstrom silt loam, 6-15% slopes 75 309C Schapville silty clay loam, 6-12% slopes 45 309D Schapville silty clay loam, 12-25% slopes 40 312B Shullsburg silt loam, 2-6% slopes 75 312C Shullsburg silt loam, 6-12% slopes 60 313 Spillville silt loam 90 322C Timula silt loam, 6-12% slopes 55 322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam, 18-30% slopes 45 340B Whalan loam, 1-6% slopes 55 340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 378dr. Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 2-6% slopes 75 401C Mt. Carroll silt loam, 6-12% slopes 75 401C Mt. Carroll silt loam, 12-18% slopes 60 401D Mt. Carroll silt loam, 1	299B	Rockton loam, 1-6% slopes	65
301C Lindstrom silt loam, 6-15% slopes 75 309C Schapville silty clay loam, 6-12% slopes 45 309D Schapville silty clay loam, 12-25% slopes 40 312B Shullsburg silt loam, 2-6% slopes 75 312C Shullsburg silt loam, 6-12% slopes 60 313 Spillville silt loam 90 322C Timula silt loam, 6-12% slopes 70 322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 65 340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 1-6% slopes 95 369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes 75 401D Mt. Carroll silt loam, 12-18% slopes 60 401D Mt. Carroll silt loam, 12-18% s	299C	Rockton loam, 6-12% slopes	55
309C Schapville silty clay loam, 6-12% slopes 45 309D Schapville silty clay loam, 12-25% slopes 40 312B Shullsburg silt loam, 2-6% slopes 75 312C Shullsburg silt loam, 6-12% slopes 60 313 Spillville silt loam 90 322C Timula silt loam, 6-12% slopes 70 322D Timula silt loam, 12-18% slopes 55 322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 65 340C Whalan loam, 6-12% slopes 55 369B Waubeck silt loam, 6-12% slopes 75 378C Maxfield silty clay loam 60 378dr. Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 2-6% slopes 75 401C Mt. Carroll silt loam, 6-12% slopes 75 401C Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes, eroded 70 401D Mt. Carroll silt loam	301B	Lindstrom silt loam, 2-6% slopes	95
309D Schapville silty clay loam, 12-25% slopes 40 312B Shullsburg silt loam, 2-6% slopes 75 312C Shullsburg silt loam, 6-12% slopes 60 313 Spillville silt loam 90 322C Timula silt loam, 6-12% slopes 55 322E Timula silt loam, 12-18% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 65 340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 6-12% slopes 95 369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 378dr. Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 6-12% slopes 75 401C Mt. Carroll silt loam, 6-12% slopes 75 401C Mt. Carroll silt loam, 6-12% slopes 75 401D Mt. Carroll silt loam, 12-18% slopes 60 401D2 Mt. Carroll silt loam, 12-18% slopes 50 463 Minnieska loam, occasionally flooded	301C	Lindstrom silt loam, 6-15% slopes	75
312B Shullsburg silt loam, 2-6% slopes 75 312C Shullsburg silt loam, 6-12% slopes 60 313 Spillville silt loam 90 322C Timula silt loam, 6-12% slopes 55 322D Timula silt loam, 12-18% slopes 55 322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 55 340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 1-6% slopes 95 369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 378dr. Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 2-6% slopes 75 401C Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes, eroded 55 401 Mt. Carroll silt loam, 12-18% slopes 50 463 Minnieska loam, occasionally f	309C	Schapville silty clay loam, 6-12% slopes	45
312C Shullsburg silt loam, 6-12% slopes 60 313 Spillville silt loam 90 322C Timula silt loam, 6-12% slopes 70 322D Timula silt loam, 12-18% slopes 55 322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 65 340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 1-6% slopes 95 369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes 60 401D Mt. Carroll silt loam, 12-18% slopes 55 401E Mt. Carroll silt loam, 12-18% slopes 50 401E Mt. Carroll silt loam, 12-18% slopes 50 463 Minnieska loam, occasionally flo	309D	Schapville silty clay loam, 12-25% slopes	40
313 Spillville silt loam 90 322C Timula silt loam, 6-12% slopes 70 322D Timula silt loam, 12-18% slopes 55 322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 55 340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 1-6% slopes 95 369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 378dr. Maxfield silt olay loam 90 401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes 70 401D Mt. Carroll silt loam, 12-18% slopes 60 401D Mt. Carroll silt loam, 12-18% slopes 60 401E Mt. Carroll silt loam, 18-25% slopes 50 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if v	312B	Shullsburg silt loam, 2-6% slopes	75
322C Timula silt loam, 6-12% slopes 70 322D Timula silt loam, 12-18% slopes 55 322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 55 340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 1-6% slopes 95 369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 378dr. Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes 60 401D2 Mt. Carroll silt loam, 12-18% slopes, eroded 55 401E Mt. Carroll silt loam, 18-25% slopes 50 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill	312C	Shullsburg silt loam, 6-12% slopes	60
322D Timula silt loam, 12-18% slopes 55 322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 65 340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 1-6% slopes 95 369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes 60 401D Mt. Carroll silt loam, 12-18% slopes, eroded 55 401E Mt. Carroll silt loam, 12-18% slopes, eroded 55 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill silty clay loam 60 467dr. Sawmill silty clay loam 60 472B Channahon loam,	313	Spillville silt loam	90
322E Timula silt loam, 18-30% slopes 45 333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 65 340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 1-6% slopes 95 369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 378dr. Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes, eroded 55 401E Mt. Carroll silt loam, 18-25% slopes 50 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill silty clay loam 60 467dr. Sawmill silty clay loam 90 468 Otter silt loam, channeled 40 471 Root silt loam, channeled 40 </td <td>322C</td> <td>Timula silt loam, 6-12% slopes</td> <td>70</td>	322C	Timula silt loam, 6-12% slopes	70
333 Vasa silt loam 90 340B Whalan loam, 1-6% slopes 65 340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 1-6% slopes 95 369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 378dr. Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes, eroded 55 401E Mt. Carroll silt loam, 12-18% slopes, eroded 55 401E Mt. Carroll silt loam, 18-25% slopes 50 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill silty clay loam 60 467dr. Sawmill silty clay loam 90 468 Otter silt loam, channeled 40 471 Root silt loam, channeled </td <td>322D</td> <td>Timula silt loam, 12-18% slopes</td> <td>55</td>	322D	Timula silt loam, 12-18% slopes	55
340B Whalan loam, 1-6% slopes 65 340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 1-6% slopes 95 369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 378dr. Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes, eroded 55 401E Mt. Carroll silt loam, 12-18% slopes, eroded 55 401E Mt. Carroll silt loam, 18-25% slopes 50 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill silty clay loam 60 467dr. Sawmill silty clay loam 90 468 Otter silt loam, channeled 40 471 Root silt loam 10 472B Channahon loam, 1-6% slope	322E	Timula silt loam, 18-30% slopes	45
340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 1-6% slopes 95 369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 378dr. Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes 60 401D2 Mt. Carroll silt loam, 12-18% slopes, eroded 55 401E Mt. Carroll silt loam, 18-25% slopes 50 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill silty clay loam 60 467dr. Sawmill silty clay loam 90 468 Otter silt loam, channeled 40 471 Root silt loam 10 472C Channahon loam, 6-12% slopes 30 473D Dorerton loam, 12-25% slopes 25 473B Backbone sandy loam, 1-6% slop	333	Vasa silt loam	90
340C Whalan loam, 6-12% slopes 55 369B Waubeek silt loam, 1-6% slopes 95 369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 378dr. Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes 60 401D2 Mt. Carroll silt loam, 12-18% slopes, eroded 55 401E Mt. Carroll silt loam, 18-25% slopes 50 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill silty clay loam 60 467dr. Sawmill silty clay loam 90 468 Otter silt loam, channeled 40 471 Root silt loam 10 472C Channahon loam, 6-12% slopes 30 473D Dorerton loam, 25-40% slopes<	340B	Whalan loam, 1-6% slopes	65
369B Waubeek silt loam, 1-6% slopes 95 369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 378dr. Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes 60 401D2 Mt. Carroll silt loam, 18-25% slopes 50 401E Mt. Carroll silt loam, 18-25% slopes 50 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill silty clay loam 60 467dr. Sawmill silty clay loam 90 468 Otter silt loam, channeled 40 471 Root silt loam 10 472C Channahon loam, 1-6% slopes 30 473D Dorerton loam, 25-40% slopes 15 474B Hayerhill siltyclay loam, 1-8% slop	340C		55
369C Waubeek silt loam, 6-12% slopes 75 378 Maxfield silty clay loam 60 378dr. Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes 60 401D2 Mt. Carroll silt loam, 12-18% slopes, eroded 55 401E Mt. Carroll silt loam, 18-25% slopes 50 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill silty clay loam 60 467dr. Sawmill silty clay loam 90 468 Otter silt loam, channeled 40 471 Root silt loam 10 472C Channahon loam, 1-6% slopes 30 473D Dorerton loam, 25-40% slopes 25 473F Dorerton loam, 25-40% slopes 15 474B Hayerhill siltyclay loam, 1-8% slopes 20 475C Backbone sandy loam,	369B		95
378dr. Maxfield silty clay loam 90 401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes 60 401D2 Mt. Carroll silt loam, 12-18% slopes, eroded 55 401E Mt. Carroll silt loam, 18-25% slopes 50 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill silty clay loam 60 468 Otter silt loam, channeled 40 471 Root silt loam 10 472B Channahon loam, 1-6% slopes 40 473D Dorerton loam, 2-12% slopes 25 473F Dorerton loam, 25-40% slopes 15 474B Hayerhill siltyclay loam, 1-8% slopes 20 475B Backbone sandy loam, 1-6% slopes 55 476B Frankville silt loam, 1-6% slopes 70	369C	·	75
401B Mt. Carroll silt loam, 2-6% slopes 90 401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes 60 401D2 Mt. Carroll silt loam, 12-18% slopes, eroded 55 401E Mt. Carroll silt loam, 18-25% slopes 50 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill silty clay loam 60 467dr. Sawmill silty clay loam 90 468 Otter silt loam, channeled 40 471 Root silt loam 10 472B Channahon loam, 1-6% slopes 40 473D Dorerton loam, 12-25% slopes 25 473F Dorerton loam, 25-40% slopes 15 474B Hayerhill siltyclay loam, 1-8% slopes 20 475B Backbone sandy loam, 1-6% slopes 55 476B Frankville silt loam, 1-6% slopes 70	378	Maxfield silty clay loam	60
401C Mt. Carroll silt loam, 6-12% slopes 75 401C2 Mt. Carroll silt loam, 6-12% slopes, eroded 70 401D Mt. Carroll silt loam, 12-18% slopes 60 401D2 Mt. Carroll silt loam, 12-18% slopes, eroded 55 401E Mt. Carroll silt loam, 18-25% slopes 50 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill silty clay loam 60 467dr. Sawmill silty clay loam 90 468 Otter silt loam, channeled 40 471 Root silt loam 10 472B Channahon loam, 1-6% slopes 40 473D Dorerton loam, 25-40% slopes 25 473F Dorerton loam, 25-40% slopes 15 474B Hayerhill siltyclay loam, 1-8% slopes 20 475B Backbone sandy loam, 6-12% slopes 55 475C Backbone sandy loam, 6-12% slopes 45 476B Frankville silt loam, 1-6% slopes 70	378dr.	Maxfield silty clay loam	90
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401E Mt. Carroll silt loam, 18-25% slopes 50 463 Minnieska loam, occasionally flooded 50 465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill silty clay loam 60 467dr. Sawmill silty clay loam 90 468 Otter silt loam, channeled 40 471 Root silt loam 10 472B Channahon loam, 1-6% slopes 40 472C Channahon loam, 6-12% slopes 30 473D Dorerton loam, 12-25% slopes 25 473F Dorerton loam, 25-40% slopes 15 474B Hayerhill siltyclay loam, 1-8% slopes 20 475B Backbone sandy loam, 1-6% slopes 55 475C Backbone sandy loam, 6-12% slopes 45 476B Frankville silt loam, 1-6% slopes 70	401D	Mt. Carroll silt loam, 12-18% slopes	60
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465 Kalmarville silt loam 40 (10 if very wet) 467 Sawmill silty clay loam 60 467dr. Sawmill silty clay loam 90 468 Otter silt loam, channeled 40 471 Root silt loam 10 472B Channahon loam, 1-6% slopes 40 472C Channahon loam, 6-12% slopes 30 473D Dorerton loam, 12-25% slopes 25 473F Dorerton loam, 25-40% slopes 15 474B Hayerhill siltyclay loam, 1-8% slopes 20 475B Backbone sandy loam, 1-6% slopes 55 475C Backbone sandy loam, 6-12% slopes 45 476B Frankville silt loam, 1-6% slopes 70	401E	Mt. Carroll silt loam, 18-25% slopes	50
467 Sawmill silty clay loam 60 467dr. Sawmill silty clay loam 90 468 Otter silt loam, channeled 40 471 Root silt loam 10 472B Channahon loam, 1-6% slopes 40 472C Channahon loam, 6-12% slopes 30 473D Dorerton loam, 12-25% slopes 25 473F Dorerton loam, 25-40% slopes 15 474B Hayerhill siltyclay loam, 1-8% slopes 20 475B Backbone sandy loam, 1-6% slopes 55 475C Backbone sandy loam, 6-12% slopes 45 476B Frankville silt loam, 1-6% slopes 70	463	Minnieska loam, occasionally flooded	50
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468 Otter silt loam, channeled 40 471 Root silt loam 10 472B Channahon loam, 1-6% slopes 40 472C Channahon loam, 6-12% slopes 30 473D Dorerton loam, 12-25% slopes 25 473F Dorerton loam, 25-40% slopes 15 474B Hayerhill siltyclay loam, 1-8% slopes 20 475B Backbone sandy loam, 1-6% slopes 55 475C Backbone sandy loam, 6-12% slopes 45 476B Frankville silt loam, 1-6% slopes 70	467dr.	Sawmill silty clay loam	90
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475BBackbone sandy loam, 1-6% slopes55475CBackbone sandy loam, 6-12% slopes45476BFrankville silt loam, 1-6% slopes70	474B		20
475CBackbone sandy loam, 6-12% slopes45476BFrankville silt loam, 1-6% slopes70	475B		55
476B Frankville silt loam, 1-6% slopes 70	-		45
			70
Trankine sit ivani, v-12/0 sivpes vv	476C	Frankville silt loam, 6-12% slopes	60

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		CER
Symbol	Approved Name	RATING
477A	Littleton silt loam, 0-1% slopes	100
477A	Littleton silt loam, 0-1% slopes	90 (flooded)
477B	Littelton silt loam, 1-4% slopes	85
478B	Coggon silt loam, 2-6% slopes	80
479	Floyd silt loam, 1-4% slopes	85
483A	Waukee loam, 0-2% slopes	80
483B	Waukee loam, 2-6% slopes	75
484C	Eyota sandy loam 6-12% slopes	65
484E	Eyota loamy sand, 12-25% slopes	50
485	Lawler loam	85
486	Marshan silt loam, depressional	40
487	Hoopeston sandy loam	70
488F	Brodale flaggy loam, 24-40% slopes	10
488G	Brodale flaggy sandy loam, 40-80% slopes	10
489A	Atkinson loam, 0-1% slopes	90
489B	Atkinson loam, 1-6% slopes	85
491B	Waucoma loam, 2-6% slopes	85
492B	Nasset silt loam, 2-6% slopes	85
492C	Nasset silt loam, 6-12% slopes	65
493B	Oronoco loam, 2-6% slopes	85
493C	Oronoco loam, 6-12% slopes	65
493D	Oronoco loam, 6-12% slopes	55
495	Zumbro loamy sand	50
516B	Dowagiac loam, 0-2% slopes	60
516B	Dowagiac silt loam, 2-6% slopes	55
516C	Dowagiac sandy loam, 6-12% slopes	40
528B	Palms muck, 1-6% slopes	35
593D	Elbaville silt loam, 12-18% slopes	50
593E	Elbaville silt loam, 18-30% slopes	40
898F	Brodale-Bellechester comples,25-60% slopes	10
973D	Brodale-Sogn comples, 12-25% slopes	20
1013	Pits, quarry	0
1029	Pits, gravel	0
1039	Urban land	0
1078	Udorthents	0
1811B	Lamont-Racine complex, 2-6% slopes	70
1812	Terril loam, sandy substratum,1-6% slopes	80
1819G	Dorerton-Rock outcrop complex, very steep	10
1832C	Ostrander-Dowagiac loams, 6-12% slopes	65
1846dr.	Kato silty clay loam, depressional	70
1846	Kato silty clay loam	40
	Water	0
	Highway	0
	Pit	0
	Urban area	0

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APPENDIX C1

SOILS FOR WHICH EROSION PLAN MAY BE WAIVED BY ADMINISTRATOR

		SOIL LOSS RATE	RATE WITH	RATE WITH	ACRES
		WITH NO	50% MULCH	70% MULCH	SOIL IN
		MULCH		& SEED	COUNTY
25	BECKER	2.70	.54	.16	3,695
27A	DICKINSON	2.70	.54	.16	1,820
252	MARSHAN	3.78	.75	.22	880
298	RICHWOOD	3.78	.75	.22	2,805
313	SPILLWOOD	4.20	.84	.25	1,715
463	MINNEISKA	3.78	.75	.22	500
465	KALMARVIL	3.78	.75	.22	3,600
	LE				
467	SAWMILL	3.78	.75	.22	3,125
483A	WAUKEE	3.60	.72	.21	5,435
485	LAWLER	3.78	.75	.22	1,715
486	MARSHAN	3.36	.67	.20	800
485	ZUMBRO	2.29	.45	.13	535
1013	PITS	.00	.00	.00	300
1029	PITS	.00	.00	.00	235
1039	URBAN	.00	.00	.00	1,220
1078	UDORTHENT	.00	.00	.00	440
	S				
1846	KATO	3.78	.78	.22	2,930
TOTAL	L	.00	.00	.00	31,750

APPENDIX C2

SOILS FOR WHICH EROSION PLAN MAY BE WAIVED BY ADMINISTRATOR IF MULCH APPLIED AT 50 PERCENT

		SOIL LOSS RATE	RATE WITH	RATE WITH 70% MULCH AND	ACRES OF SOIL IN
SOIL	NAME	WITH NO MULCH	50% MULCH	SEED	COUNTY
25	OSTRANDER	5.88	1.17	.35	2,010
2B	OSTRANDER	22.26	4.45	1.33	1,015
16	ARENZVILE	6.10	1.22	.36	5,860
19	CHASEBRUG	11.10	2.22	.66	9,805
23	SKYBERG	7.77	1.55	.46	3,210
24	KASSON	10.56	2.11	.63	7,315
27b	DICKINSON	14.10	2.82	.84	1,145
30b	KENYON	22.26	4.45	1.33	9,275
99b	RACINE	10.56	2.11	.63	9,740
131b	MASBACH	22.56	4.51	1.35	895
143	BELEVA	15.48	3.00	.92	2,575
176	GARWIN	5.04	1.00	.30	10,570
203	JOY	10.50	2.10	.63	7,795
209A	KEGONSA	5.76	1.15	.34	1,260
209B	KEGONSA	22.56	4.51	1.35	1,335
216	BLAMONT	10.08	3.81	1.14	910
283B	PLAINFIELD	6.63	1.32	.39	2,050
285A	PORTBYRON	6.72	1.34	.40	20,795
285B	PORTBYRON	18.24	3.64	1.09	4,890
289	RADFORD	5.04	1.00	.30	4,685
295	READLYN	7.20	1.44	.43	2,680
299A	ROCKTON	5.88	1.17	.35	7,145
299	BROCKTON	24.36	4.87	1.46	6,600
312B	SHULLSBURG	19.20	3.84	1.15	1,240
333	VASA	12.96	2.59	.77	1,135
378	MAXFIELD	5.04	1.00	.30	9,560
468	OTTER	8.40	1.68	.50	11,150
471	ROOT	9.60	1.92	.57	2,380
475B	BACKBONE	16.92	3.38	1.01	1,400
476B	FRANKVILLE	20.64	4.12	1.23	2,620
479	FLOYD	13.68	2.73	.82	9,055
483B	WAUKRR	16.92	3.38	1.01	3,925
487	HOOPESTON	19.74	3.94	1.18	515
489A	ATKINSON	5.88	1.17	.35	3,120
489B	ATKINSON	19.74	3.94	1.18	3,840
491B	WAUCOMA2	4.36	4.87	1.46	2,175
492B	NASSET	20.64	4.12	1.23	920
493B	ORONOCO	20.64	4.12	1.23	1,455
516A	DOWAGIAC	5.04	1.00	.30	610

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516B	DOWAGIAC	19.74	3.94	1.18	1,715
528B	PALMS	11.98	2.39	.71	665
1811B	LAMONT-	22.56	4.511	.35	2,425
	RACINE				
1812B	TERRIL	13.92	2.78	.83	3,240
TOTAL	Ĺ	.00	.00		186,705

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APPENDIX C3

SOILS FOR WHICH EROSION PLAN MAY BE WAIVED BY ADMINISTRATOR IF MULCHED AND SEEDED AT 70%

		SOIL LOSS		RATE WITH	ACRES OF
		RATE WITH	RATE WITH	70% MULCH	SOIL IN
SOIL	NAME	NO MULCH	50%	AND SEED	COUNTY
			MULCH		
11C	SOGN LOAM	41.58	8.31	2.49	1,835
27C	DICKINSON	30.00	6.00	1.80	1,965
42E	SALIDA	52.50	10.50	3.15	1,645
99C	RACINE	52.80	11.61	3.48	1,060
131D	MASSBACH	62.40	12.48	3.74	485
143C	ELEVA	39.60	7.92	2.37	900
244C	LILAH	28.50	5.70	1.71	945
283C	PLAINFIELD	28.05	5.61	1.68	575
285C	PORT/BYRON	43.20	8.64	2.59	4,650
299C	ROCKTON	46.20	9.24	2.77	1,380
301B	LINDSTROM	25.44	5.08	1.52	6,430
309C	SCHAPVILLE	38.12	16.22	4.86	755
312C	SHULLSBURG	57.60	11.52	3.45	2,070
340B	WHALEN	27.84	5.56	1.67	5,000
340C	WHALEN	58.081	1.61	3.48	2,970
369B	WAUBEEK	27.84	5.56	1.67	3,995
369C	WAUBEEK	62.40	12.48	3.74	2,320
401B	MT. CARROLL	27.84	5.56	1.67	35,415
401C	MT. CARROLL	62.40	12.48	3.74	13,025
401C2	MT. CARROLL	80.64	16.12	4.83	14,475
472B	CHANNAHON	33.30	6.66	1.99	7,705
472C	CHANNAHON	45.51	9.10	2.73	7,105
474B	HAVERHILL	34.41	6.88	2.06	1,125
476C	FRANKVILLE	58.08	11.61	3.48	4,790
477A	LITTLETON	48.00	9.60	2.88	4,430
477B	LITTLETON	27.94	5.56	1.67	4,310
478B	COGGON	25.55	5.08	1.52	3,290
484C	EYOTA	36.30	7.26	2.17	630
492B	NASSET	58.08	11.61	3.48	840
493C	ORONOCO	48.00	9.60	2.88	1,405
493D	ORONOCO	82.80	16.56	4.96	210
516D	DOWAGIAC	30.00	6.00	1.80	2,050
1832C	OST. DOWAGIAC	42.00	8.40	2.52	1,510
TOTAL		.01	00	.00	144,200

APPENDIX C4

SOILS NEEDING EROSION PLAN IN ALL CASES

		SOIL LOSS	RATE	RATE WITH	ACRES OF
		RATE WITH	WITH 50%	70% MULCH	SOIL IN
SOIL	NAME	NO MULCH	MULCH	AND SEED	COUNTY
11C	SOGN LOAM	41.58	8.31	2.49	1,835
27C	DICKINSON	30.00	6.00	1.80	1,965
73F	BELLECHESTER	216.00	43.20	12.96	705
99D2	RACINE	120.00	24.00	7.20	695
173F	FRONTENAC	444.00	88.80	26.64	2,215
251F	MARLEAN	324.00	64.80	19.44	7,595
251G	MARLEAN	1,008.00	201.60	60.48	1,905
283E	PLAINFIELD	114.75	22.95	6.88	480
301C	LINDSTROM	134.40	26.88	8.05	1,405
309D	SCHAPVILLE	202.80	40.41	12.12	275
322C	TIMULA	8.80	17.76	5.32	6,360
322D	TIMULA	138.75	27.75	8.32	3,995
322E	TIMULA	227.55	45.51	13.65	830
401D	MT.CARROLL	144.00	28.80	8.64	2,860
401D2	MT.CARROLL	120.00	24.00	7.20	2,310
401E	MT.CARROLL	240.00	48.00	14.40	840
473D	DORERTON	254.40	50.88	15.26	4,005
473F	DORERTON	480.00	96.00	28.80	2,710
484E	EYOTA	115.80	23.16	6.94	3,170
488F	BRODALE	300.00	60.00	18.00	2,695
488G	BRODALE	840.00	168.00	50.40	1,455
593D	ELBAVILLE	156.00	31.20	9.36	3,955
593E	ELBAVILLE	288.00	57.60	17.28	2,095
898F	BRODALE-BELL	480.00	96.00	28.80	835
973D	BRODALE-BELL	180.00	37.80	11.34	1,260
1819G	DORERTON-ROC	1,344.00	268.80	80.64	565
TOTAL		.14	.02	.00	55,215

APPENDIX D -- THE UNIVERSAL SOIL LOSS EQUATION

The Universal Soil Loss Equation is a formula used by soils scientists and soils conservationists to estimate soil loss from sheet and rill water erosion from sites. The equation calculates expected soil loss in tons per acre per year (A) as the product of:

- 1. A basic factor reflecting the impact of normal rainfall in the area (R);
- 2. A factor reflecting the erodability of the soil on the site (K);
- 3. A factor reflecting the length and steepness of slope on the site (LS);
- 4. A factor reflecting the vegetative or other cover conditions on the site (C); and
- 5. A factor reflecting practices applied to reduce soil loss, such as diversions, terraces, and sediment traps

The form of the equations, using the symbols described above, is:

$$A=(R)(K)(LS)(C)(P).$$

The following is an example of the application of this formula to a site in Southeastern Minnesota, on Port Byron soils with an average slope of seven (7%) percent, and a slope length of one hundred fifty (150) feet, in a bare ground condition, with no erosion control practices applied.

A (soil loss rate in tons per acre per year)

= 150 (rain fall factor in Southeastern Minnesota)

X 0.32 (K factor for Port Byron Soils)

X 0.43 (cover factor for bare soil with no mulch cover)

X 0.90 (LS factor for a slope of 7% that is 150 feet long)

X 1.00 (practice factor for no control measures)

= 18.58 tons per acre per year.

Applying mulch at seventy (70%) percent cover rate to this same property would change the result to:

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$A = 150 \times 0.32 \times 0.08 \times 0.90 \times 1.0 = 3.46 \text{ tons per acre per year.}$

Information on K and average LS factors for soils occurring in Olmsted County is available from the Zoning Administrator. Cover factors for various rates of mulching and seeding are available from the U.S. Soil Conservation Service District Office.

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APPENDIX E -- HYDROLOGIC CURVE NUMBERS

The average "hydrologic curve number" or "runoff curve number" is a measure of the likelihood that rain falling on a site will leave the site in the form of runoff. The development of urban uses frequently results in an increase in impervious surface area, and thus in increased rates of runoff. This, in turn, causes downstream flooding to increase in frequency and severity.

Table E-1 presents typical hydrologic curve numbers for different types of land areas. The steps used to determine the change in average Curve Number for a development site are as follows:

- 1. Determine the acreage of each existing combination of soil and land cover combination.
- 2. Group the soil and land cover combinations by combinations of land cover and hydrologic soil group (obtainable in the Olmsted County Soil Survey, or from the Rock Dell-Olmsted Planning Department, and total the acreage in each classification.
- 3. Compute the weighted average curve number, using the values from Table E-1, by multiplying the appropriate curve number by the acreage in the classification, totaling for all classifications and dividing by the total acreage of the site.
- 4. Repeat steps (1) through (3) for the land cover and soil type in the development site, using curve numbers from Table E-1.
- 5. Divide the result of step (4) by the result of step (3) to determine the percentage change in curve numbers.

The following example illustrates the application of this process to a development site. The site has the following combinations of soil type and land cover:

Step 1:

	Soil Type	Land Cover	Acres
283B	Plainfield	cropland, not treated	16.8
283C	Plainfield	cropland, not treated	3.2
1812B	Terril	cropland, not treated	13.6
465	Kalmarville (undrained)	woodland, good cover	6.4
	Total		40.0

Step 2:

Grouped by hydrologic soil type, the soil has the following characteristics:

Hydrologic Soil Group	Land Cover	Curve Number	Hydrologic Acres
A	untreated cropland	72	20.0
В	untreated cropland	81	13.6
С	woodland, good cover	70	6.4

Step 3

The weighted average hydrologic curve number is derived as follows:

$$(72 \times 20.0) + (70 \times 6.4) + (81 \times 13.6)$$

$$= (144.0 \times 448.0 \times 1101.6)$$

= (2989.6) divided by total area of 40 acres

= 74.8 average curve number.

Step 4

If the site is to be developed as a residential subdivision with two-acre lots, the analysis of expected runoff curves might proceed as follows:

Soil Group	Land Cover	Curve Number	Acres	
Any	Impervious (paved and roof areas)	98	1.6	
A	Gravel Areas	76	0.9	
D	Woodland (not grazed 77	77	6.4	
A	Lawn Areas	39	17.5	
	Lawn Areas	61	13.6	
Total:				

Repeating the calculation above:

Step 5

To determine the percentage change in curve number, divide 55.8 by 74.8. The result is .75, representing a 25% reduction in the curve number for the site.

LAND USE DESCRIPTION			ROLO L GRO		
		A	В	C	D
Cultivated Land ⁽¹⁾ :					
Without conservation treatment		72	81	88	91
With conservation treatment		62	71	78	81
Pasture or Range Land:					
Poor condition		68	79	86	89
Good condition		39	61	74	80
Meadow:					
Good condition		30	58	71	78
Wood for Forest Land:					
Thin stand, poor cover, no mulch		45	66	77	83
Good cover (2)		25	55	70	77
Open Spaces, Lawns, Parks Golf	Courses, Cemeteries, etc.				
Good conditions: grass cover on 7	5% or more of the area	39	61	74	80
Fair condition: grass cover on 50% to 75% of the area			69	79	84
Commercial and Business Areas					
(85% impervious)		89	92	94	95
Industrial Districts					
(72% impervious)		81	88	91	93
Residential:(3)					
Average Lot Size	Average % Impervious ⁽⁴⁾				
1/8 acre or less	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
Paved Parking Lots, Roofs, Drive	ways, etc. ⁽⁵⁾	98	98	98	98
Streets and Roads:					
Paved with curbs and storm sewer	rs. ⁽⁵⁾	98	98	98	98
Gravel		76	85	89	91
Dirt	-	72	82	87	89

- 1) For a more detailed description of agricultural land use curve numbers, refer to National Engineering Handbook, Section 4, Hydrology, Chapter 9, Aug., 1972.
- 2) Good cover is protected from grazing and litter and brush cover soil.
- 3) Curve numbers are computed assuming the runoff from the house and driveway is directed towards the street with a minimum of roof water directed to lawns where additional infiltration could occur.
- 4) The remaining pervious areas (lawn) are considered to be in good pasture condition for these curve numbers.
- 5) In some warmer climates of the county a curve number of 95 may be used.

APPENDIX F -- WIND EROSION EQUATION

The Wind Erosion Equation (WEE) used in the administration of this ordinance is a series of formulas derived from tables and nomographs published by the Soil Conservation Service in December, 1975 (Minnesota USDA, SCS, Technical Guide Section III-A, Par II). The WEE relates wind erosion to five factors, including the following:

- 1. **Soil Erodibility Index (I)**, a factor reflecting the texture and other characteristics which determine the tendency of bare, level smooth soil to erode;
- 2. **Ridge Roughness** (**K**), a factor reflecting non-vegetative surface obstructions to wind erosion resulting form tillage practices;
- 3. **Climate** (**C**), reflecting the probability that the weather will be dry enough and windy enough for soil to dry out and erode;
- 4. **Length of Unsheltered Distance** (L), reflecting the distance from the nearest obstruction to wind flow; and
- 5. **Vegetative Cover (V)**, a factor reflecting the percentage of the surface covered by residues. The factor reflects the quality, quantity, and the orientation of the residue, and is expressed in terms of tons of "equivalent flat small grain residue."
- A. The formulas relied on in the administration of this ordinance replicate the results obtained from the nomographs. The overall formula has the form:

B. WEE =
$$I' * R * D * Y$$
, where

C.
$$I' = I * K * C / 100$$
,

D.
$$R = \{In I' * .030207 + .75\} \{V/250)1.65\}$$

E.
$$D = In L * .241 + \{1 - (I'' * -0.105146 = 9.235) * .241\}$$

- F. Y = a rotation factor reflecting the percentage of the rotation in which the soil is exposed to wind erosion.
- G. When WEE is above five tons, an additional adjustment formula is applied: WEE' = SE * 1.088.
- H. The I factor is derived directly from published soils data. The C factor for Olmsted County has a value of eight (8). K and V vary with tillage practices. For the purposed of estimating wind erosion using grid cell computer maps, average K and V values were assigned to each of the twelve (12) cropland types identified in land cover mapping. L values were assigned on the basis of the location of the soil type in the landscape, and on the type of cropland identified in land cover mapping.

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APPENDIX G -- IDENTIFICATION OF PRIORITY CONSERVATION AREAS

The identification of priority conservation areas relies on a computer system to evaluate two types of erosion (wind and sheet and rill erosion) and the potential for runoff problems. In addition, in order to protect the flood control project reservoirs from excessive sedimentation, a factor reflecting location in a flood control watershed is reflected.

The system relies on computerized maps of both soils and land cover to estimate the factors related to soil erosion. The Universal Soil Loss Equation and a computerized version of the SCS Wind Erosion Equation are applied to the map data, with the resulting estimates compared to the tolerable soil loss factors (see Table 1). Those areas not meeting tolerable loss are then ranked in order of the degree to which they are not in compliance with the standards of Section 10.21. The ranking system assigns points and weights for three types of non-compliance, as follows:

- 1. **Total Erosion:** Three levels of noncompliance are scored. For the worst ten (10) percent of noncomplying parcels, a score of eighteen (18) points is assigned. The next worse ten (10) percent is assigned a score of twelve (12) points. The following thirty (30) percent of non-complying parcels are assigned six (6) points.
- 2. **Ratio of Total Erosion to Tolerable Soil Loss:** For the worst ten (10) percent of non-complying parcels, a score of three (3) points is assigned. The next worse ten (10) percent is assigned a score of two (2) points. The following thirty (30) percent of non-complying parcels are assigned one (1) point.
- 3. **Excessive Rates of Runoff:** Sites having a hydrologic curve number over 81 are assigned a score of three (3) points. That curve number is the highest level that applies to well-managed cropland. In addition, sites identified from aerial slides as poorly managed pasture are assigned three (3) points.
- 4. **Flood Control Project Watershed:** Sites within the watershed of the PL 566 portion of the South Zumbro Watershed Project are assigned nine (9) points.

It should be emphasized that this ranking system will be used to identify sites for on-site investigation only, and not as a basis for immediate enforcement efforts. If on-site investigation confirms the existence of a problem, then the procedures outlined in Sections 10.21 E and F will be initiated.

The method was tested by applying the formulas to sites included in the 1982 National Resources Inventory (NRI) and matching the resulting erosion values against the values arrived at manually. Comparing estimates with site specific values yields the following results:

Estimates exceeding NRI values by 1 ton or more:	0%
Estimates within 1 ton of NRI values:	77%
Estimates within 1.5 tons of NRI values:	96%
Underestimates of NRI by more than 1 ton:	23%
Underestimates of NRI by more than 1.5 ton:	4%

Soils professionals assisting with this project have concluded that the method provides a reasonable basis for determining priorities for on site inspection of potential erosion problems.

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TABLE-G-1

SOIL LOSS TOLERANCE FACTORS FOR SOILS IN OLMSTED COUNTY

SYMBOL	APPROVED NAME	TONS/ACRE/YEAR
2A	Ostrander Silt Loam, 0-2% Slopes	5
2B	Ostrander Loam, 2-6% Slopes	5
11C	Sogn Loam, 4 - 12% slopes	1
16	Arenzville silt LOAM	5
19	Chaseburg silt loam	5
23	Skyberg silt loam	5
24	Kasson silt loam	5
25	Becker loam	4
27A	Dickinson sandy loam, 0 -1% slopes	4
27B	Dickinson sandy loam 2 - 6% slopes	4
27C	Dickinson sandy loam 6 - 12% slopes	4
30B	Kenyon loam, 1 - 6% slopes	5
42E	Salida gravelly sandy loam, 12 - 35% slopes	3
73F	Bellechester loamy sand, 25 - 45% slopes	5
99B	Racine silt loam, 1 - 6% slopes	5
99D	Racine loam, 6 - 12% slopes	5
99D2	Racine loam, 12 - 18% slopes, eroded	5
131B	Massbach silt loam, 2 - 6% slopes	4
131D	Massbach silt loam, 12 -18% slopes	4
143B	Eleva sandy loam, 2 - 6% slopes	4
143C	Eleva sandy loam, 6 - 12% slopes	4
173F	Frontenac loam, 15 - 35% slopes	4
176	Garwin salty clay loam	5
203	Joy silt loam, 1 - 4 % slopes	5
209A	Kegonsa silt loam, slopes greater than 4%, 0 - 2% slopes	4
209B	Kegonsa silt loam, 2 - 6% slopes	4
216B	Lamont sandy loam, 2 - 6% slopes	5
244c	Lilah sandy loam, 2 - 6% slopes	2
251F	Marlean silt clay loam, 25 - 40% slopes	2
251G	Marlean silty clay loam, 40 - 80% slopes	2
252	Marshan silt loam	4
283B	Plainfield loamy sand, 0 - 6% slopes	5
283C	Plainfield sand, 6 - 12% slopes	5
283E	Plainfield sand, 12 - 30% slopes	5
285A	Port Byron, silt loam, 0 - 1% slopes	5-4
285B	Port Byron, silt loam, 1 - 2% slopes	5-4
285C	Port Byron, silt loam, 5 - 9%	5-4
289	Radford silt loam	5
295	Readlyn loam	5
298	Richwood silt loam, 1 -2% slopes	5
299A	Rockton loam, 0 - 1%	4

SYMBOL	APPROVED NAME	TONS/ACRE/YEAR
299B	Rockton loam 1 - 6%	4
299C	Rockton loam, 6 - 12% slopes	4
301B	Lindstrom silt loam, 2 - 6% slopes	5
301C	Lindstrom silt loam. 6 - 15% slopes	5
309C	Schapville siltyclay loam, 6 - 12% slopes	2
309D	Schapville siltyclay loam, 12 - 25% slopes	2
312B	Shullsburg silt loam. 2 - 6% slopes	4
312C	Shullsburg silt loam, 6 - 12% slopes	4
313	Spillville silt loam	5
322C	Timula silt loam, 6 - 12% slopes	5-4
322D	Timula silt loam, 12 - 18% slopes	5-4
322E	Timula silt loam, 18 - 30% slopes	5-4
333	Vasa silt loam	5
340B	Whalan loam, 1 - 6% slopes	4
340C	Whalan loam, 6 - 12% slopes	4
369B	Waubeek silt loam, 1 - 6% slopes	5-4
369C	Waubeek silt loam, 6 - 12% slopes	5-4
378	Maxfield siltyclay loam	5
401B	Mt. Carroll silt loam, 2 - 6% slopes	5-4
401C	Mt. Carroll silt loam, 6 - 12% slopes	5-4
401C2	Mt. Carroll silt loam, 6 - 12% slopes, eroded	5-4
401D	Mt. Carroll silt loam, 12 - 18% slopes	5-4
401D2	Mt. Carroll silt loam, 12 - 18% slopes, eroded	5-4
401E	Mt. Carroll silt loam, 18 - 25% slopes	5-4
463	Minnieska loam, occasionally flooded	5
465	Kalmarville silt loam	5
467	Sawmill silty clay loam	5
468	Otter silt loam, channeled	5
471	Root silt loam	4
472B	Channahon loam, 1 - 6% slopes	2-1
472C	Channahon loam, 6 - 12% slopes	2-1
473D	Dorerton loam, 12 - 24% slopes	2
473F	Dorerton loam, 25 - 40% slopes	2
474B	Haverhill siltyclay loam, 1 - 8% slopes	4
475B	Backbone sandy loam, 1 - 6% slopes	4
476B	Frankville silt loam, 1 - 6% slopes	4
476C	Frankville silt loam, 6 - 12% slopes	4
477A	Littleton silt loam, 0 - 1% slopes	5
477B	Littleton silt loam, 1 - 4% slopes	5
478B	Coggon silt loam, 2 - 6% slopes	5-4
479	Floyd silt loam, 1 - 4% slopes	5
483A	Waukee loam, 0 - 2% slopes	4
483B	Waukee loam, 2 - 6% slopes	4
484C	Eyota sandy loam 6 - 12% slopes	5
484E	Eyota loamy sand, 12 - 25% slopes	5
485	Lawler loam	4
486	Marshan silt loam, depressional	4

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SYMBOL	APPROVED NAME	TONS/ACRE/YEAR		
487	Hoopeston sandy loam	4		
488F	Brodale flaggy loam, 24 - 40% slopes	2		
88G	Brodale flaggy sandy loam 40 - 80% slopes	2		
489A	Atkinson loam, 0 - 1% slopes	4		
489B	Atkinson loam, 1 - 6% slopes	4		
491B	Waucoma loam, 2 - 6% slopes	4		
492B	Nasset silt loam, 2 - 6% slopes	4-3		
492C	Nasset silt loam,. 6 - 12% slopes	4-3		
493B	Oronoco loam, 2 - 6% slopes	5-4		
493C	Oronoco loam, 6 - 12% slopes	5-4		
493D	Oronoco loam, 6 - 12% slopes	5-4		
495	Zumbro loamy sand	5		
516B	Dowagiac loam, 0 - 2% slopes	4		
516B	Dowagiac silt loam, 2 - 6% slopes	4		
516C	Dowagiac sandy loam, 6 - 12% slopes	4		
528B	Palms muck, 1 - 6% slopes			
593D	Elbaville silt loam, 12 - 18% slopes	4		
593E	Elbaville silt loam, 18 - 30% slopes	4		
898F	Brodale-Bellechester complex, 25 - 60% slopes			
	Brodale	2		
	Bellechester	5		
973D	Brodale-Sogn complex, 12 - 25% slopes			
	Brodale	2		
	Sogn	1		
1013	Pits, quarry	0		
1029	Pits, gravel	0		
1039	Urban land	0		
1078	Udorthents	0		
1811B	Lamont	5		

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