AN ORDINANCE REGULATING THE PLACEMENT OF TELECOMMUNICATION TOWERS AND ANTENNA.

THE CITY COUNCIL OF THE CITY OF OAK PARK HEIGHTS, WASHINGTON COUNTY, MINNESOTA DOES HEREBY ORDAIN:

1410.010 Purpose.

In order to accommodate the communication needs of residents and businesses (while protecting the public health, safety, and general welfare of the community), the council finds that these regulations are necessary in order to:

(1) Minimize adverse visual effects of towers through artful design and siting standards; and

(2) Avoid potential damage to adjacent properties from tower failure through structural standards and setback requirements; and

(3) Maximize the use of existing and approved towers, structures and buildings to accommodate multiple antennas in order to reduce the number of towers needed to serve the community.

1410.020 Definitions.

The terms defined in this ordinance have the meanings given them.

(1) Amateur Radio Antenna. Any equipment or device used to transmit, receive or transmit/receive electromagnetic signals for "Amateur Radio Service" communications as defined in 47 C.F.R. Part 97.3(4), and as used in 47 C.F.R. Part 97.15(a).

(2) Antenna. Any device, which by use of any means, is designed to transmit or receive any electromagnetic, microwave, radio, television, or other frequency energy waves, of any type, for any purpose.

(3) Antenna, Accessory and/or Secondary Use. Those antenna including radio and television receiving antennas, satellite dishes, TVROs two (2) meters or less in diameter, short-wave radio dispatching antennas, or those necessary for the operation of electronic equipment such as radio receivers, ham radio transmitters and television receivers that are

customary and incidental to allowed principal uses within the various zoning districts of the City.

(4) Antenna, Camouflaged Structure. A monopole in which the pole is hidden from view.

(5) Antenna, Co-Location: Locating more than one antenna or set of antennas on the same antenna mount.

(6) Antenna, Guyed Tower. A communication tower that is supported, in whole or in part, by guy wires and ground anchors.

(7) Antenna, Height. The vertical distance measured from the base of the antenna mount at grade to the highest point of the antenna.

(8) Antenna, Lattice Tower. A self-supporting communications tower consisting of an open work structure made of crossing bars or rods forming a network used for support.

(9) Antenna, Monopole. A self-supporting communication tower consisting of a single pole.

(10) Antenna, Mount. Any structure which supports an antenna including communication towers, alternative tower structures, and the roofs or walls of buildings.

(11) Antenna, Public Utility Microwave: A parabolic dish or cornucopia shaped electromagnetically reflective or conductive element used for the transmission and/or reception of point to point UHF or VHF radio waves in wireless telephone communications, and including the support structure thereof.

(12) Antenna, Radio and Television, Broadcast Transmitting. A wire, set of wires, metal or carbon fiber rod or other electromagnetic element used to transmit public or commercial broadcast radio, or television programming, and including the support structure thereof.

(13) Antenna, Radio and Television Receiving. A wire, set of wires, metal or carbon fiber element(s), other than satellite dish antennas, used to receive radio, television, or electromagnetic waves, and including the support structure thereof.

(14) Antenna, Satellite Dish: A device incorporating a reflective surface that is solid, open mesh, or bar configured and is in the shape of a shallow dish, cone, horn, or cornucopia. Such device is used to transmit and/or receive radio or electromagnetic waves between terrestrially and/or

orbitally based uses. This definition shall include, but not be limited to, what are commonly referred to as satellite earth stations, TVROs (television, receive only) and satellite microwave antennas and the support structure thereof.

(15) Antenna, Satellite Dish Height: The height of the antenna or dish measured vertically from the highest point of the antenna or dish when positioned for operation, to the top of the foundation which supports the antenna.

(16) Antenna, Short-Wave Radio Transmitting and Receiving. A wire, set of wires or a device, consisting of a metal, carbon fiber, or other electromagnetically conductive element used for the transmission and reception of radio waves used for short-wave radio communications, and including the support structure thereof.

(17) Antenna, Support Structure. Any building or other structure other than a tower which can be used for location of antennas.

(18) Antenna Tower. A self-supporting lattice, guyed or monopole structure constructed from grade which supports personal wireless service antennas. The term tower shall not include amateur radio operators' equipment, as licensed by the FCC.

(19) Antenna, Temporary Mobile. Any mobile tower, pole, or structure located on a trailer, vehicle, or temporary platform intended primarily for the purpose of mounting an antenna or similar apparatus for personal wireless services, also commonly referred to as Cellular on Wheels (COW).

(20) FAA. This shall mean the Federal Aviation Administration.

(21) FCC. This shall mean the Federal Communications Commission.

(22) Personal Wireless Service. A device consisting of metal, carbon fiber, or other electromagnetically conducive rods or elements, usually arranged in a circular array on a single supporting pole or other structure, and used for the transmission and reception of wireless communication radio waves including cellular, personal communication service (PCS), enhanced specialized mobilized radio (ESMR), paging and similar services and including the support structure thereof.

(23) Structure, Public. An existing tower edifice or building of any kind, or any piece of work artificially built up or comprised of parts jointed together in some definite manner which is owned, or rented and operated by a federal, state, local government agency or public/semi-public utility.

(24) Registered Engineer. An engineer that is registered in accordance with the laws of the State of Minnesota.

(25) Wireless Communication Site: A tract, parcel of land or location that contains wireless communication facilities consisting of the antennas, support structure, and related equipment like storage buildings or equipment cabinets.

1410.030 Preferences for Antenna and Support Structure Locations.

When selecting sites for the construction of new Antenna Support Structures and/or for the placement of new antenna, the following preferences shall be followed in order of listing:

(1) Preferred land use areas.

A. Public land and existing structures.

B. Industrial zoned property

C. Freeway development corridors in non-residential areas, at least 1,000 feet from the edge of the road right of way to the antenna support structure.

D. Athletic complexes, public parks, and golf courses.

E. Parking lots if the monopole replicates, incorporates or substantially blends with the overall lighting standards of the lot.

F. Private open land when such a structure is in accordance with the Comprehensive Plan.

G. Other land use areas where towers and antenna have been defined as conditional uses upon the grant of a special use permit, as designated in the community zoning and land use code.

(2) Preferred support structures.

A. Existing power, lighting or phone poles.

B. Co-location on existing public utility or antenna support structures.

C. Church steeples.

D. Sides of buildings - over two stories high.

(3) Prohibitions.

A. No new support structures shall be approved, at any location other than a "preferred land use area," unless the applicant shows to the reasonable satisfaction of the City that such locations are not feasible from an engineering standpoint.

B. No new support structures shall be approved for construction, unless the applicant shows, to the reasonable satisfaction of the City, that a "preferred support structure" is not feasibly available for use from an engineering standpoint.

1410.040 Dimensional Requirements.

(1) Zoning Districts. In addition to the districts specified below, any proposed antenna or tower must meet the requirements of any zoning district and any zoning overlay district, e.g., flood zone and the Lower St. Croix Bluffland/Shoreland Management Ordinance. Where in conflict the provisions of this Ordinance and the preferences established hereby shall be construed to have priority over the provisions of the zoning code.

A. Residential Districts. Towers are not preferred in any Residential District. Subject to the priorities and preferences established herein antenna may be allowed if not greater that 15 feet higher than the supporting structure. The total height of the antenna and structure shall not exceed 35 feet.

B. Business Districts. Towers are not preferred in any Business District. Antenna, if placed on the roof or exterior of the building must not be greater than 15 feet higher than the supporting structure. The total height of the supporting structure and antenna shall not exceed 45 feet.

C. Industrial District. Towers under 45 feet are preferred in this District. Towers over 45 feet are allowed with a Conditional Use Permit. Towers over 150 feet are not allowed. Antenna are allowed if the height of the supporting structure plus the antenna is not greater than 60 feet. Any proposed antenna where the antenna plus the supporting structure would be greater than 60 feet and less than 150 feet requires a Conditional Use Permit.

D. Agricultural District. Towers under 45 feet are allowed in this district. Towers over 45 feet are allowed with a Conditional Use Permit. Towers over 150 feet are not allowed. Antenna are allowed if the height of the supporting structure plus the antenna is not greater

than 60 feet. Any proposed antenna where the antenna plus the supporting structure would be greater than 60 feet and less than 150 feet requires a Special Use Permit.

E. Open Space District. Towers are not allowed in districts designated as open space(O).

(2) Exceptions to Maximum Height Restrictions. The maximum height restrictions in sub-paragraph (1) shall not apply to public structures used as an antenna support structure. Additionally, no antenna may extend more than fifteen (15) feet above its antenna support structure.

(3) Setback Requirements. In all districts, all antenna support structures shall be setback from the nearest property line at least a distance equal to the height of the antenna support structure. This provision does not apply to existing antenna support structures unless said structure is enlarged or structurally modified.

(4) Minimum land Requirements. Minimum land area for freestanding monopoles on vacant properties in residential districts shall be five (5) acres.

(5) Distance from Residences.

A. Antenna support structures of up to one hundred fifty (150) feet in height shall not be constructed within three hundred (300) feet of any residential structure.

B. Antenna support structures of over one hundred fifty (150) feet in height shall not be constructed within five hundred (500) feet of any residential structure.

1410.045 Tower Design.

General wireless communication structures shall be designed so as to reduce the visible impact on the Oak Park Heights skyline and impact to surrounding residents and businesses. All wireless communication structures shall reflect a high quality of design when viewed from near or far by using designs compatible with their surroundings. The following requirements apply to all wireless communication towers or structures:

A. General wireless communication towers shall be of a monopole design unless the City Council determines that an alternative design requested by the applicant would better blend into the surrounding environment. This provision does not apply to amateur radio towers or commercial and public radio or television towers.

B. If the equipment cabinets or storage buildings contain machinery that

produces noise, the cabinet, or building shall be designed so that the noise is not perceptible outside the structure.

C. The equipment cabinets shall be buried, screened by landscaping, or the storage buildings constructed so as to be similar to buildings found in the area.

D. Access to the site shall be similar to driveways typically required or found in the area.

E. When the equipment, monopole, or stealth structure is not longer needed or being utilized, they shall be removed.

F. New structures (monopoles, stealth towers) shall be designed to permit future co-locations (placing additional antennas owned by different providers on the same structure).

G. Wireless communication sites on or in existing structures such as buildings, communication towers, water towers, signs, clock towers, bell towers, and light standards shall comply with the following standards:

(1) Antennas requiring roof mounts or side mounts attached to buildings and structures like clock towers are to be screened, camouflaged, used as a decorative element to blend in with the structure, or otherwise blend in with the structure.

(2) Antennas on signs or light standards shall be placed inside the sign whenever possible or mounted so as to be accessory to the structure not overwhelming the primary use.

(3) The equipment cabinets are also to be screened, camouflaged, hidden, or placed in a manner similar to other types of mechanical equipment associated with the structure.

H. Wireless communication sites consisting of shorter monopoles located where the existing topography, vegetation, buildings, or other structures provided screening shall be hidden among trees or buildings to allow the antennas to transmit while hiding the pole.

I. Wireless communication sites that cannot be screened or camouflaged shall utilize stealth towers constructed to resemble more commonly accepted structures, such as church steeples, light poles, bell towers, clock towers, gateway elements, and monuments for the purpose of hiding antennas, shall comply with the following:

(1) When the stealth structure is part of an existing building like

adding a steeple to a church, the construction of the tower and equipment cabinet enclosure should complement and match the existing building.

(2) When the stealth structure is independent of an existing building, it should fit the context of its surroundings and look as though it could serve the purpose of the real structure. The equipment cabinets or storage building should be integrated into the structure or located with similar structures.

J. Shorter monopoles with low profile antenna arrays like cross polarized antennas which can blend in with other structures or resemble more commonly accepted utility poles:

(1) The antennas should have a low profile, such as being close to the pole.

(2) The monopoles should closely resemble utility poles in height and size and not require security fencing or blend in with other structures, such as flag poles or light standards.

(3) Equipment cabinets should be buried or resemble cabinets associated with other utilities; storage buildings should resemble similar buildings in the area. Storage buildings may need to be placed away from the pole to keep from drawing attention to the pole.

K. Wireless communication towers in historic districts shall follow established review procedures for construction or alteration.

L. Wireless communication towers in areas subject to design guideline provisions shall follow established review procedures for construction or alteration.

1410.050 Permit Requirements.

(1) General Rule. Except as indicated below, Conditional Use Permits are required before any antenna or antenna support structure is installed or constructed. Applications for Conditional Use Permits shall be made on forms available from the City and shall be processed in the manner as are other Conditional Use Permits pursuant to the City's Zoning Ordinance. In reviewing an application, the City Council shall consider the advice and recommendations of the planning and zoning commission and the effect of the proposed use upon the health, safety, convenience, and the general welfare of occupants of surrounding lands, the effect on property values of

property in the surrounding areas, and the effect of the proposed use on the comprehensive plan. The Council shall maintain a written record regarding the basis for its determination for each application and shall issue its determination to each applicant in writing.

(2) Administrative Permits. A Building permit may be issued by the City Administrator to any applicant whom the City Administrator determines has complied with all of the terms, requirements, regulations and conditions of this Ordinance for the following:

A. Antennas to be constructed or collocated on a public structure.

B. Satellite dish antennas larger than two (2) meters but smaller than six (6) meters in size.

C. Antennas or antenna support structures erected temporarily for test purposes or for emergency communications. "Temporary" shall mean that the antenna or support structure is removed within seventy-two (72) hours following the termination of testing or emergency communication needs.

Any person aggrieved by the City Administrator's decision shall be entitled to appeal that decision to the City Council.

(3) No Permits Required. No permits are required for the following:

A. Household television antennas extending less than fifteen (15) feet above the highest point of a residential structure.

B. Satellite dish antennas two (2) meters or less in size for residential use purposes.

C. Adjustment, repair or replacement of the elements of an antenna, provided that such work does not constitute a clear safety hazard.

D. Antennas and antenna support structures used by the City for City purposes.

1410.060 Antenna Regulations in All Districts.

(1) The following standards shall apply to all antennas and antenna support structures:

A. All obsolete and unused antennas and antenna support structures shall be removed within twelve (12) months of cessation of operation at

the site, unless an exemption is granted by the Zoning Administrator. After the facilities are removed, the site shall be restored to its original or an improved condition. The City may require that a Letter of Credit be posted with the City to guarantee compliance with this provision.

B. All antenna shall be constructed in compliance with City building and electrical codes.

C. Structural design, mounting and installation of the antenna shall be in compliance with manufacturer's specifications. The plans shall be approved and certified by a registered professional engineer at the owner's expense.

D. When applicable, written authorization for antenna erection shall be provided by the property owner.

E. No advertising message shall be affixed to the antenna structure.

F. The height of the antenna shall be the minimum necessary to function satisfactorily, as verified by a registered electrical engineer.

G. Antennas shall not be artificially illuminated and must not display strobe lights unless required by law or by a governmental agency to protect the public's health and safety. When incorporated into the approved design, the tower may not support light fixtures used to illuminate ball fields, parking lots, or other similar areas.

H. When applicable, proposals to erect new antenna shall be accompanied by any required federal, state, or local agency licenses.

I. No new antenna support structures shall be constructed if it is feasible to locate the proposed new antenna(s) on existing support structures. "Feasibility" shall be determined according to generally accepted engineering principles. If a new antenna support structure is to be constructed, it shall be designed structurally and electrically to accommodate both the applicant's antennas and comparable antennas for at least two (2) additional users if the antenna support structure is over one hundred (100) feet in height, or for at least one (1) additional user if the tower is over sixty (60) feet in height. Any antenna support structure must also be designed to allow for future re-arrangement of antennas upon the tower and to accept antennas mounted at different heights. Other users shall include, but not be limited to, other cellular communication companies, Personal Communication Systems companies, local police, fire and ambulance companies.

J. Antenna support structures shall be constructed and painted to reduce visual impact and according to all applicable F.A.A. requirements.

K. The use of guyed towers is prohibited. Towers must be self-supporting without the use of wires, cables, beams or other means. The design should utilize an open framework or monopole design. Permanent platforms or structures, exclusive of antennas, are prohibited.

L. The base of any tower shall occupy no more than five hundred (500) square feet and the top of the tower shall be no larger than the base.

M. Antennas and antenna support structures must be designed to blend into the surrounding environment through use of color and camouflaging architectural treatment, except in instances where the color is dictated by federal or state authorities. All locations should provide the maximum amount of screening from off-site views as is feasible. Existing on-site vegetation shall be preserved to the maximum extent practicable.

N. The base of all antenna support structures shall be landscaped according to a plan approved by the City Engineer. Accessory structures shall be designed to be architecturally compatible with the principal antenna support structure.

O. Antennas shall be subject to state and federal regulations pertaining to non-ionizing radiation and other health hazards related to such facilities. If new, more restrictive standards are adopted, antennas shall be brought into compliance with the new standards by the owner and operator. The cost of verification of compliance shall be borne by the owner and operator of the antenna.

P. Except as approved by the City as to public utilities, no part of any antenna or support structure, nor any lines, cable, equipment, wires, or braces shall at any time extend across or over any part of any right-of-way, public street, highway, sidewalk, or property line.

Q. All metal towers (and all necessary components) shall be constructed of, or treated with, corrosive resistant material.

R. All antennas and support structures shall be reasonably insured for injury and property damage caused by collapse or other catastrophic failure.

S. All new antenna support structures shall be constructed to provide space for the installation of a City emergency/fire siren in such a fashion that it will not interfere with any antennas. Said space shall be available for said use by the City at no cost to the City.

(2) The following regulations shall apply to all antennas and antenna support structures for which a Conditional Use Permit, Building Permit or Site Plan is required under this Ordinance:

A. The applicant shall demonstrate by providing a coverage/interference analysis and capacity analysis prepared by a registered professional engineer that location of the antennas as proposed is necessary to meet the frequency reuse and spacing needs and to provide adequate coverage and capacity to areas which cannot be adequately served by locating the antennas in a less restrictive district. Said analysis shall also demonstrate to the reasonable satisfaction of the City that the proposed use will not interfere with the radio, television, telephone and other similar services enjoyed by the properties in the area.

B. Transmitting, receiving and switching equipment shall be housed within an existing structure whenever possible. If a new equipment building is necessary for transmitting, receiving and switching equipment, it shall be situated in the rear yard of the principal use and shall be screened from view by landscaping.

C. 1. Unless the antenna is mounted on an existing structure, at the discretion of the City, a security fence not greater than eight (8) feet in height with a maximum opacity of fifty (50) percent shall be provided around the support structure.

2. All antenna support structures shall be reasonably protected against climbing.

D. At least annually, and at each time a new user is added to an antenna support structure, the owner or operator shall provide to City a report from a registered engineer that the antenna(s) comply with all applicable regulations regarding emission of radiation and electromagnetic waves.

E. The base of all antenna support structures shall be posted with signs stating "Danger High Voltage" on all sides.

1410.070

(1) Exemptions.

Antennas and antenna support structures for federally licensed amateur radio operators are hereby exempted from the provisions of this ordinance.

(2) Site Plan.

No amateur antenna support structures shall be constructed unless Site Plan approval has been given by the City Administrator. Any person aggrieved by the City Administrator's decision shall be entitled to appeal that decision to the City Council.

(3) Support Structure Construction.

Amateur radio support structures (towers) must be installed in accordance with the instructions furnished by the manufacturer of that tower model. Because of the experimental nature of the amateur radio service, antennas mounted on such a tower may be modified or changed at any time so long as the published allowable load on the tower is not exceeded and the structure of the tower remains in accordance with the manufacturer's specifications.

1410.080 Effect on Existing Towers.

Antennae and towers in existence prior to the enactment of this ordinance which do not conform or comply with this section are subject to the following provisions:

(1) Towers may continue in use for the purpose now used and as now existing but may not be replaced or structurally altered without complying in all respects with this section.

(2) If such towers are hereafter damaged or destroyed due to any reason or cause whatsoever, the tower may be repaired and restored to its former use, location, and physical dimensions upon obtaining a building permit thereafter, but without otherwise complying with this section. However, If the cost of repairing the tower to the former use, physical dimensions, and location would be 50% or more of the cost of a new tower of like kind and quality, then the tower may not be repaired or restored except in full compliance with this section.

1410.090 Inspections and Violations.

All towers, monopoles, antennas and the like must obtain a building permit and are subject to inspection by the city building official to determine compliance with construction standards. Any person who shall do or commit any act that is forbidden by the provisions of this ordinance shall be guilty of a misdemeanor.