

*Not Passed Per Schuylkill County Zoning*

TOWNSHIP OF SCHUYLKILL  
COUNTY OF SCHUYLKILL  
COMMONWEALTH OF PENNSYLVANIA

ORDINANCE NO. 2001-2

AN ORDINANCE OF THE TOWNSHIP OF SCHUYLKILL, COUNTY OF ~~SCHUYLKILL~~ SCHUYLKILL, COMMONWEALTH OF PENNSYLVANIA AMENDING THE TOWNSHIP OF SCHUYLKILL ZONING ORDINANCE (AS ENACTED IN JULY, 1977 AND AS AMENDED) REGULATING ANTENNAE, TOWERS, COMMERCIAL COMMUNICATION TOWERS AND WIRELESS TELECOMMUNICATIONS SERVICES FACILITIES AS PERMITTED USES AND/OR SPECIAL EXCEPTION USES IN I-1 (LIGHT INDUSTRIAL), I-2 (GENERAL INDUSTRIAL), C (COMMERCIAL), E (EXTRACTIVE), OSC (OPEN SPACE CONSERVATION) AND AR (AGRICULTURAL RESIDENTIAL) ZONES.

WHEREAS, it is the purpose and intention of this Ordinance to inter alia: preserve the open space, rural character and scenic areas of the Township, consider and promote the general safety, health, welfare and quality of life of the residents in Township of Schuylkill while allowing adequate telecommunications services to be developed as it is acknowledged that police, fire, emergency medical services and the township residents rely upon wireless telecommunications services for business and personal use; protect residential areas and lands by minimizing adverse impacts of towers and antennae; control the growth of the total number of antennae and towers in the community; to protect against the disadvantages of uncontrolled proliferation and placement of antennae and towers; ensure that antennae and towers are located in areas that minimize adverse impacts; ensure that towers and antennae are configured in a way that minimizes adverse visual impacts by careful design; appropriate siting, landscape screening and innovative camouflaging techniques; ensures that location of antennae and towers do not adversely impact property values; promote the right of citizens to access and use new technologies and to enhance telecommunication services to the community effectively and efficiently; avoid damage to adjacent properties from antennae and tower failure through careful engineering and locating of antennae and tower structures; and to encourage the attachment of antennas and towers to existing structures; and

WHEREAS, it is also the purpose and intention of this Ordinance is to reasonably control the location, construction, operation and maintenance of wireless telecommunications services facilities in order to encourage the siting of wireless telecommunications services facilities on properties and areas which are not used primarily for residential purposes while not unreasonably discrimination or limiting competition among service communication providers and to promote a service provider's right to exercise free trade in an open market.

## SECTION I-REVISIONS TO EXISTING ZONING ORDINANCE

1. This ordinance revises and repeals a portion of Section 4.301 of the existing Township of Schuylkill Zoning Ordinance (Supplementary Regulations-Height) as that section deals with "radio, television and communication towers and similar attached and free-standing structures", and, instead, replaces such portions of Section 4.301 with the regulations outlined in this Ordinance.

2. This Ordinance adds another type of permitted use to various zones of the existing Township of Schuylkill Zoning Ordinance (sections 3.202, 3.702, 3.802, 3.902, 3.1002, 3.1102) and adds another type of special use (also known as a special exception use) to various zones of the existing Township of Schuylkill Zoning Ordinance (Sections 3.204, 3.704, 3.804, 3.904, 3.1004) adds a new Section 3.1106 and expands and/or adds to the definitions found in the existing zoning ordinance (Article IX).

3. This Ordinance does not specifically address air traffic hazards or airport approaches as no antennae or tower over 160 feet in height (from the ground) is permitted.

4. This ordinance now outlines and prescribes the standards that must be met prior to the construction of a wireless communication service facility, tower or antenna or the addition of a tower or antenna to an existing structure, building or service facility.

## SECTION II-DEFINITIONS (for the purposes of this Ordinance the following definitions shall apply):

**ADEQUATE COVERAGE:** Coverage for personal wireless service facility is considered to be adequate within area surrounding a base station where the predicted or measured median field strength of the transmitted signal is greater than - 90dBm for at least 75% of the intended coverage area. It is acceptable for there to be holes within the intended coverage area where the signal strength is less than 90dBm provided the signal regains its strength further away from the base station. For the limited purpose of determining whether the use of a repeater is necessary or desirable, there shall be deemed inadequate coverage within said holes. The outer boundary of the area of adequate coverage however is that location past which signal does not regain a strength of equal to or greater than - 90dBm.

**ADEQUATE CAPACITY:** Capacity is considered to be adequate if ninety-eight percent (98%) or more of the calls made are able to connect to the base station of a wireless telecommunications services facility for at least fifty percent (50%) of the days in the preceding month of application as measured using direct traffic measurement of the personal wireless service facility where call blocking is due to frequency connection at the antenna.

Where capacity is to be determined for the installation of a proposed personal wireless services facility, adequate capacity shall be determined on the basis of twenty percent (20% of all covered traffic occurring within the busiest hour of the day) with total daily traffic based on aggregate estimates of the expected traffic in the coverage area.

If different coverage or capacity criteria are routinely used by an applicant, adequate coverage and adequate capacity may be determined using the applicant's criteria provided that:

1. the applicant shows that such coverage and/or capacity criteria are used for the applicant's other facilities; and
2. the applicant provides a complete description of the applicant's coverage and/or capacity criteria in a form suitable for review; and
3. the Township Zoning Hearing Board, in its discretion, determines that the use of such criteria is reasonable and does not discriminate against other providers to functionally equivalent services.

**AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI):** A national organization which formulates guidelines and standards. ANSI standards are recognized as authoritative by the FCC.

**ANTENNA:** Any device used for the transmission or re-transmission of radio, television, microwave, am/fm, telephone (including cellular, digital, wireless, mobile phone or pager), pager, commercial mobile radio service or any other wireless communications signals, including without limitation omnidirectional or whip antennas and directional or panel antennas, owned or operated by any person or entity licensed by the Federal Communications Commission (FCC) to operate such device, including a repeater as defined herein. This definition shall not include private residence mounted satellite dishes or television antennas or amateur radio equipment including without limitation ham or citizen band radio antennae which are used for non-commercial purposes by the owners or tenants of the residence, but, is meant to include commercial or business uses of such devices.

**APPLICANT:** Person or entity who makes application for a permit under this ordinance, provided that person or entity has a valid and current FCC construction permit or FCC station license.

**BUILDING:** includes structure as defined herein and shall be construed as if followed by the phrase "or part thereof".

**CELLULAR TELEPHONE:** A system providing portable telephone service to specific subscribers. The system works on a line of sight principle. Each company must set up a grid system of antennas on hilltops to provide complete coverage. A cellular telephone may also be referred to as a wireless telephone.

**CHANNEL:** A segment of a frequency band assigned to a specific user.

**CO-LOCATION OR SHARED USE:** The placement of one (or more) antenna or equipment upon an existing tower or the sharing of the use of an existing tower, antenna or wireless telecommunications services facility.

**COMMERCIAL COMMUNICATIONS TOWER:** A structure or tower of any type, partially or wholly exterior to a building, used for mounting antennae.

**CONSTRUCTION PERMIT:** A document issued by the FCC to a broadcast applicant giving permission to construct a radio or TV broadcast station. It is not the same as a station license.

**ELECTROMAGNETIC RADIATION (EMR):** A technical term for the nature of energy emitted by a transmitting antenna.

**EXISTING FACILITIES INVENTORY:** Records and documents including, but not limited to, a map showing exact location and maximum allowable output of all existing wireless telecommunications services facilities, antennae, towers, and repeater as further defined herein. Existing Facilities Inventory shall also include a current listing of Owner/Applicant Representative Contacts. The Township Zoning Officer shall be responsible for the maintenance of the Existing Facilities Inventory.

**FAA:** The Federal Aviation Administration. The federal government agency responsible for regulating air travel in the United States

**FCC:** Federal Communications Commission. The federal government agency responsible for regulating telecommunications in the United States.

**FALL ZONE:** The area on the ground within a prescribed radius from the base of any tower as defined in this Ordinance. The fall zone is the area within which there is potential hazard from the blowing and falling of ice, debris, or the collapsing of a commercial communications tower, tower or antenna. The fall zone shall be established by a professional engineer registered in the Commonwealth of Pennsylvania, which engineer is retained by the owner of the proposed commercial communications tower, antenna or tower.

**FM/TELEVISION BROADCASTING:** Transmission of radio and/or television programs intended for reception by the general public. A FM/television broadcasting tower shall mean a tower maintaining the primary or main transmitter of a FCC licensed broadcast station.

**GUYED TOWER:** A monopole or lattice tower that is tied to the ground or other surface(s) by diagonal cables or wires.

**HEIGHT ABOVE AVERAGE TERRAIN (HAAT):** A technical term used by the FCC to determine the effective height of an antenna by considering the effects of terrain variations in the coverage area provided by the antenna.

**HEIGHT OF TOWER:** The overall height of the tower from the base of the tower to the highest point of the tower, including, but not limited to, antennae, transmitters, satellite dishes or any other structures or equipment affixed to or otherwise placed on the tower. If the base of the tower is not on ground level, the height of the tower shall include the base of the building or structure (affixed to the ground) to which the tower is attached. It is the intent of this definition that the tower height shall be measured from the ground upwards.

**INTERMODULATION:** A technical term referring to the possible mixing of two transmitted signal which creates unwanted and potentially interfering signals.

**LAND-MOBILE SYSTEMS:** radio communications service for mobile or stationary units in which each user is assigned a particular frequency. It includes conventional two-way radio, special mobile radio service and one-way paging.

**LATTICE TOWER:** A type of structure, which is self-supporting with multiple legs and cross bracing of structural steel.

**LEASE TOWER:** A tower whose owner, operator or service provider who either sells, leases or otherwise permits the use or the leasing of tower or antenna space to another user(s).

**LICENSED CARRIER:** A company authorized by the FCC to build and operate a commercial mobile radio services system.

**LOCATION:** References to site location as the exact longitude and latitude, to the nearest tenth of a second, with bearing or orientation referenced to true North.

**MHz:** Megahertz. A measure of electromagnetic radiation equaling one million hertz.

**MONOPOLE:** A freestanding pole having a single point of location on the ground comprising a part of a wireless telecommunications services facility. For purposes of the Ordinance, the term monopole shall include, in addition to the pole, all other equipment or components of the wireless telecommunications services facility.

**OPERATOR:** A provider of telecommunications services, wireless or otherwise.

**OWNER:** Any person or entity that has any type of proprietary interest in any wireless telecommunications services facility, antenna or tower (or in the land upon which the same are situate) whether by lease, equitable ownership, or legal ownership.

**PERSON:** shall include a corporation, unincorporated association, joint venture, partnership, sole proprietorship and any other entity as well as an individual.

**POINT-TO-POINT MICROWAVE:** Communication between specific points being frequencies above 900 MHz., normally transmitted between two towers optimally located for the line-of-sight transmission. Uses low power levels.

**PUBLIC UTILITY:** Persons or entitles supplying gas, electricity, water, power, transportation, cable, television or telephone services to the general public including wireless telecommunications services which are regulated separately under this Ordinance.

**RADIAL PLOTS:** Radial plots are the result of drawing equally-spaced lines (radials) from the point of the antenna, calculating the expected signal and indication this graphically on a map. The relative signal strength may be indicated by varying the size or color at each point being studied along the radial; a threshold plot uses a mark to indicate whether that point is strong enough to provide adequate coverage – i.e., the points meeting the threshold of adequate coverage. The drawback is the connection of points close to the antenna and the divergence of points far from the site near the ends of the radials.

**RADIATED-SIGNAL PROPAGATION STUDIES OR OVERAGE PLOTS:** Computer generated estimates of the signal emanating, and prediction of coverage, from antennas or repeaters sited on a specific tower or structure. The height above the ground, power input and output, frequency output, type of antenna, antenna gain, topography of the site and its surroundings are all taken into account to create these simulations. They are the primary tools for determining whether a site will provide adequate coverage for the telecommunications facility proposed for the site.

**REPEATER:** A small receiver/relay transmitter of not more than twenty (20)Watts output designed to provide service to areas which are not able to receive adequate coverage directly from a base or primary station.

**RF INTERFERENCE:** Distribution in reception caused by intruding signals or electrical current.

**SERVICE:** The providing of any type of antenna, tower, commercial communications tower, or telecommunications signal, wireless or otherwise, as described in this Ordinance.

**SERVICE PROVIDER:** An operator or any person or entity who provides a service.

**SIGN:** Any device, placard, billboard or similar object designed to advertise, inform or attract the attention of others (whether on or off the premises) to the premises in question.

**STRUCTURE:** Any combination of materials (or part thereof) forming any construction which requires location on the ground or attachments to something having location on the ground and shall include any signs, fences, walls, porches, garages, or similar structures; private, public, commercial or industrial building; tower, tanks (empty or filled, whether for water, oil, gas and the like); silo; smokestack; cooling tower, utility pole; or other man-made design(s) or construction (s) which may be evaluated and found structurally adequate to support antenna and associated tower without collapsing.

**STRUCTURAL INTEGRITY OR CAPACITY:** A term describing the physical ability of a tower and associated antenna to withstand stresses and design loading without collapsing.

**TILED COVERAGE PLOTS:** Tiled plots result from calculating the signal at uniformly spaced locations on a rectangular grid or tile of the area of concern. Unlike radial plots, tiled plots provide a uniform distribution of points over the area of interest, usually the same grid will be used as different sites are examined, and it is not necessary that the transmitter site be within the grid or area of interest. As with radial plots, the graphic display or plot can be either signal strength or adequate threshold. This method requires substantially more topographic data and longer (computer) execution time than radial plots, but is preferable for comparative analysis.

**TOWER:** shall mean any structure designed and constructed primarily for the purpose of supporting one or more antennae, including leased towers, self-supporting lattice towers, guyed towers or monopole towers. The term includes radio, am/fm and television transmission towers, microwave towers, common carriers, towers, cellular telephone towers, commercial communications tower and other similar structures. This term also includes any antenna or antenna array attached to the tower structure.

**WIRELESS TELECOMMUNICATIONS SERVICES:** The providing of wireless telecommunications services, including those more commonly referred to as "cellular telephones", which services are regulated by the Federal Communications Commission (FCC) in accordance with and as the term "personal wireless services" is defined in the Communication Act of 1934, as amended by the telecommunications Act of 1966, 47 U. S. C. Section 332 (c) (7) (C), or as hereafter amended.

**WIRELESS TELECOMMUNICATIONS SERVICES FACILITY:** Any equipment used in connection with the commercial operation of a wireless telecommunications services, as defined herein, and as the term "personal wireless services facilities" is defined in the telecommunications Act of 1996, 47 U.S.C. Section 332 (c) ( 7 ) ( C ), or hereafter amended, to transmit and/or receive frequencies, including but not limited to commercial communications, towers, antennae, towers, equipment, appurtenances, structures or buildings. At times this ordinance will refer to same as only as a "service facility" or simply "facility".

### **SECTION III – ZONES AND USES**

**1. Towers, antenna and wireless telecommunications services facilities shall not be located in the following zones and area:**

- (a) R-1 (Low density residential)**
- (b) R-2 (Medium density residential)**
- (c) R-3 (Medium/high density residential)**
- (d) GFP (General Flood plain)**
- (e) VC (Village center)**
- (f) Wetlands**
- (g) Any historic area or property listed (or which may be eligible to be listed) on the State or National Register of Historic Places.**

**2. Towers, antennae and wireless telecommunications services facilities may be located in the following zones and shall be considered either "Permitted Uses" or "Special Uses" as generally defined by Sections 3.101 or 3.102 of the existing Township of Schuylkill Zoning Ordinance.**



3. The new construction of a tower, antenna or service facility will be considered a Special Use in the following zones and the following sections have been added to the existing Township of Schuylkill Zoning Ordinance.

- (a) I-1 (Light Industrial)-Section 3.804C
- (b) I-2 (General Industrial)-Section 3.904I
- (c) C (Commercial)-Section 3.704M
- (d) E (Extractive)-Section 3.1004D
- (e) OSC (Open Space Conservation)-section 3.1106
- (f) AR (Agricultural Rural Residential)-except areas having been registered with the Commonwealth of Pennsylvania as "state farmland preservation" areas-Section 3.204L.

4. The co-location or shared use of a tower, antenna or service facility will be considered a Permitted Use in the following zones and the following sections have been added to the existing Township of Schuylkill Zoning Ordinance:

- (a) I-1 (Light Industrial)-Section 3.802K
- (b) I-2 (General Industrial)-Section 3.902M
- (c) C (Commercial)-Section 3.702P
- (d) E (Extractive)-Section 3.1002I
- (e) OSC (Open Space Conservation)-Section 3.1102D
- (f) AR (Agricultural Rural Residential)-except areas having been registered with the Commonwealth of Pennsylvania as "state farmland preservation" areas-Section 3.202L.

5. A wireless telecommunications services facilities will be considered the principal use of the lot or property. No other principal use shall be permitted (or consideration given as an Accessory Use) except as may be allowed under the terms, conditions and provisions of this ordinance.

6. Wireless telecommunications services facilities are permitted on the same lot as a tower or antennae subject to the following conditions:

- (a) No more than (1) single wireless communications services facility containing equipment and control devices for the continuing operation of a tower or antenna may be located on the lot.
- (b) No wireless telecommunications services facility may be used as an office or as a broadcast studio. No building or facility may be used for long term vehicle storage or for other outdoor or indoor storage.
- (c) No on-site employees shall be permitted to utilize any wireless telecommunications services facility as an office. Employees are permitted to visit the site as often as necessary for maintenance and inspection of the tower or antenna and its accessory uses.
- (d) Wireless telecommunications services facilities may be lighted for security or for maintenance purposes. Any such lighting shall be shielded and no lights shall be emitted upward or spill over or glare onto adjacent properties. Upward lighting will be permitted only on a temporary basis as may be required for emergency tower or antenna maintenance or repair.
- (e) Lighting or parking areas and wireless telecommunications services facilities shall comply with the specifications contained in this Ordinance as well as any other standards which may be imposed by the Township Zoning Hearing Board and as may be recommended by the Township Zoning Officer.

- (f) The design of antennae, towers and telecommunications support facilities shall use materials, colors, textures, screening and landscaping that create compatibility with the natural setting and surrounding structures.
- (g) Signs shall be limited to those signs required for cautionary or safety purposes only. Advertising signs of any kind is prohibited.
- (h) Compliance with all other terms, conditions and provisions of this Ordinance.

#### **SECTION IV – APPLICATION FOR PERMIT AND FEES; GENERAL APPLICATION REQUIREMENTS:**

1. Except as may be otherwise provided herein, the permit application fees delineated in the existing Township of Schuylkill Resolution No. 98-06 and procedures for Permitted Uses and Special Uses as delineated in the existing Township of Schuylkill Zoning Ordinance, Sections 6.3-6.301F and 6.4-6.406 and permit fees (Section 6.7) shall apply to this Ordinance.

2. General requirements as to all applications:

(a) The owner, applicant or service provider must demonstrate the need for the location of a tower or antenna at a specific date.

Documentation must be provided to show that the applicant has contacted (by certified mail, return receipt requested) all tower, antenna and service facility owners or providers within a two (2) mile radius of the proposed tower and that any existing towers cannot support the proposed or new antenna or equipment. The Township may deny an application to erect a new tower if the applicant has not made a good faith effort to determine the suitability of existing towers, antennae or service facilities.

(b) The owner, applicant or service provider shall provide a comprehensive plan for service coverage for the township before submitting any applications for facility, towers, or antennae installations. This comprehensive plan shall include but not be limited to showing how coverage is provided to adjoining areas of adjoining townships.

(c) The owner, applicant or service provider shall provide a property value impact study, which shall employ recognized appraisers who are utilized by local banks and are knowledgeable about towers and their impact on real-estate values. The selected appraisers are subject to approval by the Board of Supervisors. The owner, applicant or service provider shall include a compensatory plan for any property values adversely impacted by the presence of a wireless telecommunications services facility or tower.

(d) In writing and by certified mail, return receipt requested and prior to the Zoning Hearing Board meeting date, the owner, or applicant or service provider shall notify all residents within five hundred (500) feet radius of proposed site and the Appalachian Trail Conference, P. O. Box 807, Harpers Ferry, WV 25425-0807 and publish such notice of the meeting in a newspaper or general circulation within the Township and in accordance with this Ordinance and the PA Municipalities Code public notification procedures. This notification requirement shall not apply if the application is for a Permitted Use.

3. An application for permission to erect a new tower in the Township also shall include:

(a) A copy of applicant's FCC construction permit (for broadcast use) or FCC station license (for other uses).

(b) A detailed site plan as per Section V of this Ordinance.

(c) A technical description of the capacity of the tower including the number and types of antennas that it can accommodate.

(1) A description of the tower and the technical and other design factors of the tower.

(2) A description of the capacity of the tower, including the number and types of antennas that it can accommodate.

(d) A statement from the FCC, FAA, and state aeronautics division that the proposed tower complies with applicable regulations or that the tower is exempt from those regulations.

(e) An intermodulation analysis certified by a professional communications engineer which demonstrates that the proposed new equipment will not cause undue RF interference to existing towers or transmitting facilities or communications service reception by other property owners. The applicant shall be responsible to resolve all instances of interference caused by the actual operation of the tower that occurs after its the installation.

(f) The application shall be required to comply with all other specifications and requirements of this Ordinance.

4. An application for permission to construct a lease tower in the Township shall also demonstrate that the existing tower(s) owned by the applicant, or any affiliate or subsidiary of the applicant, cannot reasonably accommodate the telecommunications antenna or equipment planned for the proposed tower. In addition to any other evidence presented by the applicant, the applicant shall submit:

(a) A wind loading analysis, certified by a licensed professional communications engineer or licensed professional civil/structural engineer, which demonstrates that the proposed telecommunications antenna or equipment will exceed the structural capacity of the existing tower and that the existing tower (whose structural capacity would be exceeded by the applicant's proposed antenna or equipment) cannot be structurally reinforced to accommodate the applicant's proposed antenna or equipment at a reasonable cost;

(b) A study that combining existing equipment and/or duplexing existing equipment is not reasonable or reasonably suitable for the new proposed antenna or equipment;

(c) An intermodulation analysis certified by a professional communications engineer which demonstrates that the proposed new equipment will not cause undue RF interference to existing communications services on the existing tower. If applicant demonstrates (a) and (b) to the satisfaction of the Zoning Hearing

- (g) architectural elevation drawings of the proposed tower and any other telecommunications support facilities;
- (h) site topography;
- (i) parking
- (j) a landscape plan showing specific landscape materials;
- (k) the method of fencing, finished color and, if applicable, the method of camouflage and illumination;
- (l) tree cover by specie on the subject property and all adjacent properties;
- (m) outline of all existing buildings, including purpose (e.g., residential buildings, garages, accessory structures, so forth) on subject property and all properties adjacent to subject property;
- (n) contours at two-foot intervals, using MSL as zero data.
- (o) the location and type of any proposed lighting and/or signs, if any.

8. Sight line representations and photographs as described below:

- (a) A sight line representation shall be drawn from the closest façade of each building (viewpoint) included on the Site Plan to the highest point (visible point) of the proposed tower. Each sight line shall be depicted in profile, drawn at one inch equals 40 feet. The profiles shall show interviewing trees and buildings.
- (b) Each sight line shall be illustrated by one four-inch by six-inch color photograph of what can currently be seen from the building.
- (c) Each of the existing condition photographs shall have the proposed tower and any accessory structures superimposed on it to show what will be seen from the buildings if the proposed tower is built.

9. A one-inch equals 20 feet site plan showing the following:

- (a) The entire subject property, including property lines and roads (public and private) adjacent to the property.
- (b) All existing buildings, including accessory structures.
- (c) All existing vegetation, by mass or individually by diameter (four feet from the ground) of each stand-alone tree or shrub. Tree masses or individual stand-alone trees shall be identified by species.
- (d) Proposes security fence barrier, indicating type and extent as well as point of controlled entry.
- (e) All proposed changes to the existing property, including grading, vegetation removal and temporary or permanent roads and driveways.

10. Siting elevations, or views at-grade, from the north, south, east and west for a distance of 50 feet beyond any installations, including landscaping around the proposed facility plus from all existing public and private roads that serve the subject property. Elevations shall be at either one-quarter inch equals one foot or one eighth inch equals one foot scale and show the following :

- (a) Towers, antennae, mounts and equipment;
- (b) Security barrier. A cut away shall be made to show the view behind the barrier;

6.501-6.506A) shall continue to apply to all other applications that are not related to this Ordinance. Every applicant for a Special Use shall provide the Zoning Officer with:

1. A site plan prepared by a civil engineer, surveyor, land planner, architect or other competent person.
2. All data including map book, lot and block (taken from the latest tax records), the name and address of the owner(s) of the property (taken from the latest deed), the deed book reference and the name and address of the person and organization preparing the site plan.
3. The date, north point and written and graphic scale.
4. The existing contours with intervals of five (5) feet or less, areas subject to flooding, soil erosion/sedimentation or storm water overflow, location of existing watercourses, marshes, wooded areas, rock outcrops and other significant existing natural features.
5. The first application for a permit by a service provider or an applicant for a service provider or owner shall include an inventory of all that service provider's existing towers, antennas or sites approved for towers or antennae that are either within the township or within three (3) miles of the border thereof and the provider shall also comply with the inventory and tracking requirement of this section.
6. A one inch equals 40 feet vicinity plan showing adjacent land uses, adjacent existing development existing utilities (including underground), existing wells and septic systems and the existing zoning within one thousand (1,000) including those in adjacent municipalities.
7. A one inch equals 40 feet set of plans containing the following information:
  - (a) location (in longitude and latitude, to degrees, minutes and seconds to the nearest tenth) and legal description of the proposed site;
  - (b) property lines of all properties adjacent to the subject property;
  - (c) type and height of the proposed tower;
  - (d) on-site land uses and zoning;
  - (e) location of all roads (public and private) on the subject property and on all properties adjacent to the subject property, including the proposed access to service the communication facility. To the extent practicable, service roads or driveways shall follow the contour of the land, and be constructed within fringe of wooded areas and not in open fields. Moreover, access shall be provided by means of a public street or an adequate easement within an improved cartway.
  - (f) setbacks from property lines;

- (c) Any and all structures on the subject property;
- (d) Existing trees and shrubs at current height and proposed trees and shrubs at proposed height at time of installation with ghost image at maturity;
- (e) Grade changes, or cuts and fills, to be shown as original grade and new grade line.

#### SECTION VI – SETBACK REQUIREMENTS

1. No wireless telecommunications services facility, antenna or tower, including guy-wire anchors and protective fencing, shall be located.
  - (a) closer than five hundred (500) feet horizontally to any structure existing at the time of application which is used as a primary or secondary residence.
  - (b) closer than five hundred (500) feet horizontally from any historic area or property listed (or may be eligible to be listed) on the State or National Register of Historic Places.
  - (c) closer than 500 feet horizontally, but in no case less than 2 times the tower height as measured from the outer extremities of the tower structure which would be from guywire ground anchors (whenever guywire design is utilized) to any boundary of the site on which the tower is located.
2. No repeater shall be located closer than three hundred (300) feet horizontally to a primary or secondary residential dwelling, nursing home, hospital or school nor less than thirty five (35) feet above the ground.

#### SECTION VII – PARKING REQUIREMENTS

Two (2) off-street, paved parking spaces per tower shall be required. The parking spaces shall conform to the parking design standards of the existing Township of Schuylkill Ordinance.

#### SECTION VIII – NOISE

Noise-producing equipment shall be sited and/or insulated to the maximum extent practicable to minimize any increase in noise above ambient levels measured at the property line. Any operating sounds and sounds such as emergency generators or guywire vibrations shall not be discernible at a distance of 150 feet from nearby dwellings; this shall include dwellings down wind in prevailing direction in winds up to 10 mph. This may require below ground installation of some equipment.

#### SECTION IX – UTILITY SERVICE

Electrical and land-based telephone lines extended to serve the wireless telecommunications services facility sites shall be installed underground.

#### SECTION X – RF INTERFERENCE TO EXISTING FACILITIES

The applicant shall demonstrate that the proposed transmitting facility will not

cause RF Interference to any existing communications services (included but not limited to other towers or transmitting facilities, communications services, reception by other property owners, so forth) in accordance with the FCC requirements for the applicant's class of operation.

#### **SECTION XI – EMR COMPLIANCE**

The applicant shall demonstrate that the proposed RMS Field intensity of EMR from applicant's antenna measured at the nearest point on the boundary of the applicant's site from the proposed antenna will not exceed the levels allowed under ANSI Standard C95.3.

#### **SECTION XII – ENVIRONMENTAL IMPACT**

All new wireless telecommunications services facilities and all new towers proposed in the Township shall conform to the following Environmental Impact Guidelines:

1. Existing on-site vegetation shall be preserved to the maximum extent practical.
2. If the proposed tower is exempt from any special FAA marking requirements, the tower shall be painted silver above the tree-line level, and painted green below the tree-line level. Whenever possible, "natural style structures shall be utilized, such as those designed to look surrounding vegetation, shrubs, trees, and so forth.
3. No external lighting is permitted, except for manually operated emergency lights for use only when operating personnel are on site.
4. Where the site abuts a street or a lot that is either zoned residential or used for a residential use, and/or where the base of the tower can be seen from the public street or form a dwelling on the residential lot, the site perimeter shall be buffered by planting natural screening which blends in with existing vegetation to provide an effective screen. An "effective screen" is defined as including but not limited to the following: Minimum planted height eight (8) feet, mature height sixty (60) feet.
5. All vegetation must be properly maintained and cared for as long as the tower remains in place. Trees shall be planted on 10 feet to 20 feet triangular pitch, depending upon species, and the width of the plantings around the facility shall be a minimum on twenty feet.
6. Existing vegetation, fences or walls may be used if the Township Zoning Hearing Board finds:
  - (a) They achieve about the same degree and effect of the effective screening as herein above referred.
  - (b) New plantings would not have a detrimental effect on the stability.

security or maintenance of the guy wires.

(c) They are needed for surveillance and security of structures to be erected on the lot.

7. The applicant/provider shall prepare a visual impact assessment of the proposed wireless telecommunications services facility or tower based upon appropriate modeling, photography and other pertinent analytical techniques as required by the Township Zoning Hearing Board including, but not limited to, a map identifying the zone of visibility. Landscaping and/or screening and mitigation, including but not limited to architectural treatment, and alternative construction, structural, and transmission technologies, such as antennas attached to or disguised as a tree or other features, shall be required to minimize the visual impact of such facility from public thoroughfares, important viewsheds and vantage points and surrounding properties to the extent practicable as determined by the Township Zoning Hearing Board. No signs (other than as may be required by the Zoning Hearing Board for security, traffic direction or safety purposes) shall be erected on any wireless telecommunications services facility or tower.

8. The owner or applicant shall establish a base line environmental condition report before a transmitter/receiver goes into service, after it goes into service, one (1) year after going into service, and one (1) year after each 10% increase in power input. The environmental condition report shall include the effect, if any, upon residents, wildlife and domestic animals, electronic equipment, so forth. This report shall be in writing and filed with the Township Zoning Officer.

#### **SECTION XIII \_ OBSERVATORY TELESCOPE OF SIGHT CLEARANCE**

There shall be maintained an unobstructed 20 degrees line of sight measured from the horizontal plain surrounding any observatory telescope where the observatory telescope has a greater than 25 cm aperture and the observatory facility is erected for the public use for research and/or educational purposes.

#### **SECTION XIV – LOCATION AND ACCESS**

Wireless telecommunications services facilities, antennae and towers shall be located in accordance with the following priorities. The applicant, owner or service provider shall evaluate and demonstrate the feasibility of the highest priority locations before considering the next lower priority:

1. Locations with existing wireless telecommunications services facilities or other existing communications towers which are used exclusively for public or quasi-public agencies or service providers;
2. Parcels or right-of-ways used exclusively for public utilities or watershed lands;
3. Locations or facilities of commercial or non-residential use;
4. Other locations or facilities.

#### **SECTION XV – TOWER AND ANTENNA DESIGN AND INSTALLATION GENERAL REQUIREMENTS**



1. For any tower or antenna higher than 50 feet, the applicant shall provide certification from a registered professional engineer stating that the tower or antenna meets the wind resistance stated in the latest version of the BOCA national building code. The registered professional engineer shall also certify to the overall structural integrity of the tower or antenna and/or base structure and building supporting the tower or antenna and certify to the determination of the fall zone.
2. If a non self-supported tower or "monopole" is proposed, the applicant must use a guy wire configuration that is at least the minimum specified by the tower or pole manufacturer,
3. All new towers permitted after the effective date of this section must be engineered to accommodate additional new users.
4. A secure fence with a minimum height of 8 feet shall surround the base of the tower.
5. The tower design and installation shall also comply with any additional federal, state and local regulations as may apply including the Specific Additional Requirements as per Article XVI and the Insurance/Indemnification Requirements as per Article XIX of this Ordinance.

#### SECTION XVI – TOWER CLASSIFICATIONS AND SPECIFIC ADDITIONAL REQUIREMENTS FOR EACH TOWER CLASSIFICATION

A Wireless telecommunications services facility may be permitted for the following uses if they comply with all of the requirements of this section and the other specifications, terms, conditions, and provisions of this Ordinance:

1. FM/television broadcasting
2. Land mobile systems
3. Cellular telephone
4. Fixed point-to-point microwave
5. Lease tower
6. Any other communications use not specifically listed or covered in any of the above five categories.

1. FM/television broadcasting use. An applicant proposing to erect a new tower for an FM/Television broadcasting use as defined herein shall also comply with the following standards:

- (a) No FM/television broadcasting tower shall exceed a height of 160 feet.
- (b) Applicant shall request the minimum antenna height above ground level which will satisfy the HAAT requirements stipulated on the applicant's FCC construction permit provided the requested height of the tower does not exceed 160 feet above the ground.

2. Land mobile radio use. An applicant proposing to erect a new tower for land mobile radio use as defined herein shall also comply with the following:

- (a) Applicant shall demonstrate that the requested location can be reasonably expected to provide the signal coverage deemed necessary by the applicant.

(b) Applicant shall request the minimum antenna height above ground level which will satisfy the antenna height requirements stipulated on the applicant's FCC license, provided the requested height of the tower does not exceed 160 feet above ground level.

3. Cellular telephone use. The first application for a permit by a provider or an application for a provider shall include an inventory of all that provider's existing towers, antennae or sites approved for towers or antennae that are either within the township or within three (3) miles of the border thereof and the provider shall also comply with the inventory and tracking requirement of this Ordinance. An applicant proposing to erect a new tower for cellular telephone use shall also comply with the following:

(a) A cellular telephone tower shall not exceed 160 feet above ground level.

(b) Applicant shall demonstrate that existing structures within a 4-mile radius of the proposed operation will not accommodate the applicant's proposed operation. The Township may deny the application to erect a new tower if the applicant has not made a good faith effort to mount the antenna or equipment on an existing structure.

(c) Applicant shall request the minimum tower height necessary to satisfy its function in the company's grid system, provided the requested height of the tower does not exceed 160 feet above ground level.

(d) The applicant shall provide a statement listing the existing and maximum future projected measurements of RF radiation from the proposed facility, for the following situations:

(1) Existing or ambient measurements of RF radiation;

(2) Existing plus proposed maximum estimate of the RF radiation from the proposed facility.

(3) Certification, signed by a RF engineer stating that the RF radiation measurements are accurate and meet the FCC Guidelines as specified in the radio frequency.

(e) Power output, output frequency, number of channel power input and maximum power output per channel. Radial or tiled coverage plots showing each of the facility sites in #2 above, as they exist, shall be provided.

(f) Applicant shall demonstrate with written documentation that they have analyzed the feasibility or repeaters in conjunction with all facility sites listed to provide adequate coverage and/or adequate capacity for the Township. Radial or tiled coverage plots of all repeaters considered for use in conjunction with these facility sites shall be provided as part of the application.

(g) All applications shall be accompanied by a written five-year plan for utilization of the proposed facilities. This plan should include justification for capacity in excess of immediate needs, as well as plans for any further development within or for the Township.

(h) Copy of a portion of the most recent U.S.G.S. Quadrangle map, at a scale of 1:25,000, and showing the area within at least three miles from the proposed tower site. Indicate the tower location and the exact latitude and longitude (degrees, minutes and seconds to the nearest tenth).

(i) The Zoning Officer shall compile a list of towers and record their locations on an appropriate map, and shall maintain and update the same from information furnished by all service providers.

(j) Notwithstanding any other provisions in this Ordinance, the following shall also apply to cellular telephone use since each cellular telephone system is set up in a unique system of antennas to create a network for complete and adequate service:

(1) A Cellular telephone tower or antenna may be located on a lot with additional principal uses or buildings as long as all requirements of this section (Cellular telephone use) are met.

(2) Minimum yard requirements of the existing Township of Schuylkill Zoning Ordinance shall be met if any cellular telephone tower is constructed within 500 feet of a lot zoned in the R-1, R-2 or R-3 zoning districts pertaining to residential lot lines. The Zoning Hearing Board may require screenings and vegetation.

(3) Cellular telephone towers located in the I-1, I-2, C, E, OSC and AR zoning districts shall be set back a distance equal to 100% of the highest of any proposed tower.

4. Point-to-Point Microwave Use. An applicant proposing to erect a new tower for point-to-point microwave use shall comply with the following:

(a) No tower shall exceed a height of 160 feet above ground level.

(b) Applicant shall request the minimum tower height necessary to satisfy line of sight requirements to the next relay links in the microwave system, provided the requested height of the tower does not exceed 160 feet above ground level.

5. Lease Tower Use. An applicant proposing to erect a lease tower shall comply with the following:

(a) No lease tower shall exceed a height of 160 feet above ground level.

(b) Applicant shall request the minimum antenna height above ground level which will reasonably accommodate the antenna height requirements of prospective users, provided the requested heights of the tower does not exceed 160 feet above ground level.

6. Requirements for Any Other Use. An applicant proposing to erect a new tower for any other use shall also comply with the following:

(a) No tower shall exceed a height of 160 feet.

(b) The height of any antennas, or other associated equipment, structurally mounted as part of a wireless telecommunications services facility shall not exceed by more than fifteen (15) feet the highest point of the existing structure on which such antennae or equipment are affixed. In no case should the combined height of the antenna(s) or other associated equipment and the existing structure be higher than 160 feet above ground level.

(c) Applicant must request the minimum antenna heights above ground level which will satisfy the antenna height requirements stipulated on the applicant's FCC license provided the requested height of the tower does not exceed 160 feet above ground level.

7. Co-location and shared use requirements as noted in Section XVII.

## SECTION XVII -CO-LOCATION AND SHARED USE REQUIREMENTS

1. The shared use of existing public utility, tower, antenna and wireless telecommunications

services facilities shall be strongly encouraged. The Township shall maintain an inventory of existing towers, antenna and wireless telecommunications services facilities including public utilities that are obligated under the Federal Telecommunications Act of 1996 to provide wireless communication service carriers with nondiscriminatory access to their facilities.

2. While co-location and shared use shall be considered a Permitted Use as hereinabove referred, nonetheless and prior to the installation of an antenna or other equipment on an existing tower or service facility, an applicant shall make application for a zoning permit from the Township Zoning Officer. The application for such permit shall include:

- (a) A wind-loading analysis, certified by a licensed professional communications engineer, or licensed professional civil/structural engineer, which demonstrates that the proposed telecommunications antenna or equipment will not exceed the structural capacity of the existing tower or facility.
- (b) An intermodulation analysis which demonstrates that the proposed transmitting facility will not cause RF interference to any existing communications services (including, but not limited to, other towers or transmitting facilities, communications services reception by other property owners, so forth) in accordance with the FCC requirements for the applicant's class of operation. The applicant shall be responsible to resolve all instances of interference caused by the actual operation of the tower, and any additional antennas or equipment, after installation.
- (c) Information demonstrating that the RMS field intensity of EMR from the existing tower or service facility (with all existing and proposed antenna and equipment) measured at the nearest point on the boundary of applicant's site from the proposed antenna or equipment will not exceed the levels allowed under ANSI standard C95.3.
- (d) While a site plan shall not be required, the applicant shall comply with all other specifications, terms, conditions and provisions of this Ordinance.

#### **SECTION XVIII – REMOVAL OF WIRELESS TELECOMMUNICATIONS SERVICES FACILITY, TOWER OR ANTENNA**

1. If a wireless telecommunications services facility, tower or antenna remains unused for a period of twelve (12) consecutive months, the applicant, owner or service provider shall dismantle and remove the wireless telecommunications services facility, tower or antenna within six (6) months of written notice to do such by the Township Zoning Officer or Township Code Enforcement Officer. The applicant, owner or service provider must provide to the satisfaction of the Township a written agreement (approved by the Township Solicitor and suitable for filing with the Township) to ensure the dismantling, removal, and restoration of such an abandoned wireless telecommunications services facility, tower or antenna. Removal and site restoration includes, but is not limited to the following:

- (a) Safe, timely and complete removal of the entire wireless telecommunications services facility, tower and antenna and any portion thereof including any portion above the height of the tower or antenna.
- (b) Re-vegetation of area to eliminate all traces and evidence of the wireless telecommunications services facility, tower and antenna ever having been there.
- (c) A financial surety (acceptable to the Township Solicitor and the Township) to cover the cost of the remediation of any damage to the landscape which occurs during the cleaning of the site.

(d) A financial surety (acceptable to the Township Solicitor and the Township ) to cover the cost of maintaining landscape plantings.

(e) The financial sureties and security referenced in this Section shall continue in full force and effect as long as the tower, antenna or facility is in existence.

2. Further, as a condition precedent to the grant of any permit or use, the applicant, owner or service provider shall enter into the written agreement noted in No. 1 of this Section and post security (in a form acceptable to the Township Solicitor and the Township) and in favor of the Township of Schuylkill in an amount sufficient to cover the facility, tower and antenna removal and complete site clean up costs (plus and additional 15%). In the event that the applicant, owner or service provider of the facility, tower or antenna fails to remove the facility, tower or antenna within six (6) months of written notification by the Township Zoning Officer or Township Code Enforcement Officer, the Township shall utilize the security to effect removal of the facility, tower or antenna in a manner consistent with the regulations set forth in this Ordinance.

## SECTION XIX – INDEMNIFICATION AND INSURANCE REQUIREMENTS

1. **Release and Indemnification.** The Township shall not grant any permit or use and shall not authorize an antenna or tower location or service facilities construction until and unless the Township obtains an adequate indemnification from such applicant, owner or service provider. This indemnification must provide at the minimum:

(a) A general release of the township from and against any and all liability and responsibility in or arising out the construction, operation, maintenance or repair of the wireless telecommunications services facility, tower or antenna. Each applicant, owner and service provider must further agree not to sue or seek any money or damages from the Township in connection with the above;

(b) Indemnify and hold harmless the Township, its elected and appointed officers, agents, servant and employees, from and against any and all claims, demands, or causes of action of whatsoever kind of nature, and the resulting losses (including personal injury, property damage or death), costs, expenses, reasonable attorney's fees, liabilities, damages, orders, judgments or decrees, sustained by the Township or any third party arising out of, or by reason of, or resulting from any act (or failure to act) by an applicant, owner or service provider or their duly authorized servants, agents, employees or designated representatives; and,

(c) Provide that the covenants and representatives relating to the indemnification provision shall be incorporated into a written agreement and continue in full force and effect as long as the tower antenna or facility is in existence.

2. **Insurance.** The Township shall not grant any permit or use and shall not authorize a tower or antenna location or service facilities construction until and unless the Township obtains assurance that the applicant, owner or service provider has adequate insurance as determined by the Township Zoning Officer. At a minimum, the following insurance requirements shall be satisfied.

(a) A wireless telecommunications services facility applicant, owner or service provider shall not commence construction of a tower or antenna or service facility without obtaining all insurance required under this section and approval of such insurance by the Township Zoning Officer nor shall any contractor or sub-contractor be permitted to commence

work on its contract or sub-contract until all such similar insurance required of the same has been obtained and approved by the Township Zoning Officer. The required insurance must be obtained and maintained for the entire period the wireless telecommunications services facility, tower or antenna is in existence. If the applicant, owner or service provider, its contractors or sub-contractors, do not have the required insurance, the Township may order such entities to cease operation of the wireless telecommunications services facility, tower, or antenna until such insurance is obtained and approved.

(b) Certificate(s) of such insurance, reflecting evidence of the required insurance and adding the Township as additional insured, shall be filed with the Township Zoning Officer. The certificate(s) shall be filed prior to the commencement of construction and once a year for each succeeding year thereafter and as provided below in the event of a lapse in coverage.

(c) The certificate(s) of insurance shall contain a provision that coverages afforded under such policies shall not be cancelled until at least thirty (30) days prior written notice has been given to the Township. All insurance policies shall be issued by companies authorized to do business under the laws of the Commonwealth of Pennsylvania.

(d) Where applicable and in the event that the insurance certificate provided indicates that the insurance shall expire, terminate or lapse, then, in that event, the wireless telecommunications services facility applicant, owner or service provider shall furnish, at least thirty (30) days prior to the expiration, termination or lapse of the date of such insurance, a renewed certificate of insurance as proof that equal and like coverage remains in effect for the balance of the existence of the service facility, tower or antenna.

3. A wireless communications services facility, tower or antenna applicant, owner or service provider, and its contractors or subcontractors engaged in work on their behalf, shall maintain minimum insurance, in the amounts determined by the Township Zoning Officer, to cover liability, workers' compensation, bodily injury and property damage. Such coverage shall be written on an occurrence basis. In addition, a Township of Schuylkill annual contractor's work permit shall be obtained from the Township.

## SECTION XX – FEES, INSPECTIONS, REPORTS AND MONITORING

1. There shall be annual license fees payable to the Township for antenna, towers, or wireless telecommunications services facilities. First annual license fee is due upon approval of the application and issuance of the permit by the Township and is due annually thereafter. Licensing fees are payable by the applicant, owner or service provider of the wireless telecommunications services facility, tower or antenna as follows:

(a) \_\_\_\_\_ for a freestanding wireless telecommunications services facility, antenna or tower.

(b) \_\_\_\_\_ for any antenna or equipment installed on any pre-existing tower or structure.

(c) These fees are for engineering, consultative, administrative and/or legal fees incurred in review of the annual inspection documents and any related correspondence, memos, phone calls or other action incidental thereto.

2. Wireless telecommunications services facilities, tower or antenna owners, applicants or service providers shall annually submit a report to the Township Zoning Officer certifying the

unconstitutional, illegal or invalid term, condition or provision not been included herein.

#### SECTION XXIII - REPEALER

The terms, conditions and provisions of any other ordinances, which are inconsistent herewith, shall be deemed vacated and/or repealed; but any other terms, conditions or provisions or ordinances, which are not inconsistent herewith, shall remain in full force and effect.

THIS ORDINANCE, being duly represented by motion and duly seconded, was adopted by the Board of Supervisors of Township of Schuylkill at a public meeting held this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ and shall become effective five (5) calendar days therefrom.

BOARD OF SUPERVISORS,  
TOWNSHIP OF SCHUYLKILL,  
SCHUYLKILL COUNTY, PA

ATTEST: \_\_\_\_\_  
Secretary

\_\_\_\_\_  
Chairperson  
of the Board of Supervisors