TELECOMMUNICATIONS TOWERS REGULATIONS

SECTION 1 BACKGROUND AND PURPOSE

Recent advances in wireless communications technology have resulted in a new generation of telecommunication services. These new services transmit electromagnetic waves of such a frequency and power that will likely require numerous antenna locations. These antennas may be located on buildings, water towers and other similar structures but will also frequently be located on new or enlarged towers. This requires that the village / town of ________ regulate these wireless communication system facilities in a different manner than conventional television and radio transmission towers which are able to transmit their signals at much greater distances.

The Federal Communications Commission has recently licensed a number of providers of wireless communication services and additional providers are expected to be licensed in the near future. These firms are expected to pursue antenna sites within the village/town of __________ and these efforts are expected to include requests to construct new communication towers and/or structures as well.

The intent of this proposed regulation is to provide for the establishment and/or expansion of wireless telecommunication services within the village/town of ___________ while protecting neighborhoods and minimizing the adverse visual and operational effects of wireless telecommunications facilities through careful design, siting and screening. More specifically this regulation has been developed in order to:

• Maximize use of existing and approved towers and other structures to accommodate new antennas and transmitters in order to reduce the number of communication towers needed to serve the village;

• Encourage providers to co-locate their facilities on a single tower;

The Town, City, Village of ______has undertaken a deliberate process to establish policy, standards and procedures related to the siting of tower structure and antenna arrays for wireless telecommunications as contained herein. In doing so, the municipality attempted to:
• Preserve property values and development opportunities
• minimize the visual impact of towers
• minimize the number of towers and their heights
• promote safety, general welfare and quality of life
• assure adequate access to wireless communication service for the community

SECTION 2  DEFINITIONS

ANTENNA: A system of electrical conductors that transmit or receive radio frequency waves. Such waves shall include, but not be limited to, radio, television, cellular, paging, personal communication services, and microwave communications. The frequency of these waves generally range from 10Hertz to 300 megahertz, but can be higher as technology advances.

BTS (base transceiver station): the central cell facility that contains all the receivers, transmitters and other apparatus needed for cellular/PCS operation.

CAPACITY: The number of mobile users that can realistically be serviced by a BTS.

COVERAGE: The general term that describes the ability of a BTS to send and receive wireless signals of sufficient strength to provide reliable cellular/PCS service.

CO-LOCATION means locating wireless communications facilities from more than one wireless communications services provider on a single site.

EAF: Environmental Assessment Form

EPA: The Environmental Protection Agency

FAA: The Federal Aviation Administration

FCC: The Federal Communications Commission

GUYED TOWER: A construction technique that uses stabilizing cable to provide lateral support for a tower.

HEIGHT OF TOWER: means the vertical distance measured in feet from the average existing level of the ground surrounding the tower and within 10 feet thereof to the top point of the tower including any antenna or other appurtenances. The existing elevation shall mean the actual or approved elevation of the property at the time of application.
INTERFERENCE: Any electromagnetic radiation or noise that is not the desired signal.

LATTICE TOWER: Description of the type of tower construction typified by cross-bracing between three posts that constitute a rigid antenna support structure.

MONOPOLE TOWER: A unified self-supporting structure typified by a smooth tapered steel pole similar to roadway light supports.

NETWORK: The general term used to describe all the BTS facilities and equipment required to provide cellular/PCS services.

NIER: Non-Ionizing Electromagnetic Radiation

PATH LOSS: The attenuation experienced by the radio waves as they propagate from the BTS to the mobile phone or from the mobile phone to the BTS. Path loss will be the same for either direction over short periods of time.

SATELLITE ANTENNA: Shall be any parabolic dish, antenna or other device or equipment of whatever nature or kind, the primary purpose of which is to receive television, radio, light, microwave, or other electronic signals, waves and/or communications from space satellites.

SEQR: State Environmental Quality Review as described in 6 NYCRR Part 617.

TELECOMMUNICATIONS: The transmission and reception of audio, video, data, and other information by wire, radio, light, and other electronic or electromagnetic systems.

TELECOMMUNICATION TOWER: A structure intended to support wireless communications equipment used to receive and/or transmit electromagnetic waves. Design examples of towers might include but may not be limited too (a) self-supporting lattice (b) guyed and (c) monopoles structures (d) water towers.

TOWER OPERATOR: The owner, manager and/or management firm of a telecommunication tower.

WIRELESS TELECOMMUNICATION SERVICES means licensed wireless telecommunications services including, but not necessarily limited to: cellular, personal communications services (PCS), specialized mobilized radio (SMR), enhanced specialized mobilized radio (ESMR), paging and other types of telecommunications services that are or may be marketed to the general public.
WIRELESS TELECOMMUNICATION SITE means a facility operated by a licensed wireless telecommunication service provider which consists of the equipment and structures involved in receiving or transmitting electromagnetic waves associated with wireless telecommunications services.

SECTION 3 APPLICATION PROCEDURES

A. No communication installation, transmission tower, telecommunication tower, communication tower, accessory facility or structure, free-standing tower and/or pole or transmission reception antenna shall henceforth be erected, moved, changed or altered other than replacement in kind except after the approval in conformance with the provisions of these regulations.

B. No existing structure shall be modified to serve as a transmission tower, telecommunication tower, communication tower accessory facility or structure freestanding tower, antenna and/or pole unless in conformity with this local law and other laws of the Town/Village/City.

C. Applicant must provide a copy (in applicants name) of the certificate of need OR appropriate FCC License issued by the FEDERAL COMMUNICATIONS COMMISSION to provide the telecommunication services that the proposed tower is designed to support. If the appropriate applicant FCC license has not been issued, applicant must show proof that the application has been filed and accepted by the Federal Communications and is under review for the granting of applicants license. "Speculative" applications of any type shall not be considered or acted upon by the town or village planning board.

D. All applications for installation of a new telecommunications tower shall be accompanied by a report containing the information hereinafter set forth. The report, shall be signed by the tower operator, and contain the following information:

1. Name (s) and address (s) of person(s) preparing the report

2. Name (s) and address (s) of the property owner, operator and the applicant

3. Postal address and tax map page, block and lot or parcel number of the property

4. Zoning District in which the property is situated

5. Size of the property on which the proposed construction is to occur and the location of all adjoining lot lines within 500 feet.

6. Location of nearest residential structure measured in feet;
7. Location of nearest occupied residential structure measured in feet.

8. Location of all structures existing and proposed on the property, which is the subject of this application.

9. Location, size and height of all proposed and/or existing antennae and all appurtenant structures;

10. Type, size and location of all proposed and existing mitigating landscaping

11. The number, type, and design of the tower and antenna (e) proposed and the basis for the calculations of tower and system capacity.

12. The make, model and manufacturer of the Communications Tower and antenna(e) with supporting construction details.

13. A description of the proposed tower and antenna(e) and all related fixtures, structures, appurtenances and apparatus, including but not limited to, height above grade materials, color and lighting.

14. The frequency, modulation and class of service of radio equipment

15. Applicant's proposed tower maintenance and inspection procedures and records systems.

16. Certification that NIER levels at the proposed site are within threshold levels adopted by the FCC

17. Certification to the Town/Village/City that the tower and attachments both are designed and constructed ("As Built") to meet all State and Federal structural requirements for loads, wind, ice, etc.

18. A professionally prepared contour radio propagation map showing anticipated coverage from the site proposed.

D. The applicant shall submit a complete long EAF, pursuant to SEQR, Type I/II and a complete Visual Environmental Assessment form (visual EAF addendum). The Town / Village Planning Board, as lead agency may require submission of a more detailed visual analysis based on the results of the Visual EAF. In addition the applicant shall address the environmental flight path of area species.

SECTION 4 SITING PREFERENCES
A. Shared use of existing towers

At all times, shared use of existing towers shall be preferred to the construction of new towers. An applicant shall be required to present an adequate report inventorying existing towers within a reasonable distance of the proposed site and outlining opportunities for shared use of existing facilities as an alternative to a proposed new tower.

1. An applicant proposing to share use of an existing tower shall be required to document intent from an existing tower owner to allow shared use.

2. The Board shall consider a new telecommunication tower where the applicant adequately demonstrates that shared usage of an existing tower or other structure is impractical. The applicant shall be required to submit a report demonstrating good-faith efforts to secure shared use from existing towers as well as documentation of the physical and/or financial reasons why shared usage is not practical. Written requests and responses for shared use shall be provided.

B. Shared usage of site with new tower (clustering)

Where shared usage of an existing tower is found to be impractical, the applicant shall investigate shared usage of an existing tower site for its ability to accommodate a new tower and accessory uses. Documentation and conditions shall be in accordance with Subsections A (1) and A (2) above.

C. New Tower at a New Location

The Board shall consider a new telecommunications tower on a site not previously developed with an existing tower. The applicant shall adequately demonstrate that shared usage of an existing tower site is impractical and shall submit a report demonstrating good-faith efforts to secure shared use from existing tower, as well, as documentation of the physical and/or financial reasons why shared usage is not practical. (Written requests and responses for shared use inquiries shall be provided.) Information regarding the required need for the new telecommunications tower shall be required to the form of empirical data illustrating said need.
D. Future shared usage of new towers

The applicant must examine the feasibility of including a telecommunication tower in his proposed plan that will accommodate future demand for reception and transmitting facilities.

The Board reserves the right to impose reasonable conditions regarding reservation of tower space for future antennae including height, orientation and power and restriction or elimination of restrictive use covenants as part of tower use contracts and preservation of reasonable fee structures as part of the contract.

SECTION 5 STANDARDS APPLICABLE TO NEW TOWERS

A. Siting Considerations

There will be no approval granted to proposals to construct new telecommunications towers and/or accessory structures or facilities within 1500 feet of the following areas of County-wide and inter-community significance:

1. Seaway Trail (measurement from the road centerline)
2. NYS Wildlife Management Areas (measurement made from property line or official designation boundary.)
3. State or County Forests (measurement made from property line or official designation boundary.)
4. Federal/State designated Historic Districts (measurement made from property line or official designation boundary.)
5. Shorelines of the St. Lawrence River, Racquette Lake, Oswegatchie River, Grasse River, Racquette River, Black Lake or Cranberry Lake (measurement made from the shoreline, as determined on USGS 7.5" quadrangle topographic maps.)
6. The following resource areas as defined by the Town / Village of __________:
   - 
   - 
   - <<< Insert local community resources here >>>.
B. Lot size and setbacks for new towers

1. All proposed telecommunication tower and accessory structures shall be located on a single parcel and a set back from abutting residential parcels, public property or street lines a distance sufficient to contain on-site substantially all ice-fall or debris from tower failure and preserve the privacy of the adjoining residential properties.

2. Lot size of parcels containing a tower shall be determined by the amount of land required to meet the setback requirements; if the land is to be leased, the entire lot required shall be leased from a single parcel.

3. All tower bases shall be located at a minimum setback from any property line a minimum distance equal to one and one half (1-1/2) time the height of the tower.

Accessory structures shall comply with the minimum setback requirements in the underlying zoning district.

C. Visual impact assessment

The Board shall require the applicant to undertake a visual impact assessment of any proposed new towers or any proposed modification of an existing tower. The visual impact assessment shall include:

1. A "Zone of Visibility Map", provided in order to determine location where the tower may be seen.

2. Pictorial representatives of "before and after" views from key viewpoints both inside and outside of the town, including but not limited to state highways and other major roads, state and local parks, and areas of aesthetic interest.

3. Alternative tower designs and color schemes.

4. Description of visual impact of the tower base, guy wires and foundations, accessory buildings and overhead utility lines from abutting properties and streets/roads.
D. New tower design

Alternative designs shall be considered for new towers, including lattice and single pole structures. The design of a proposed new tower shall comply with the following:

1. Towers and antennas shall be designed to withstand the effects of the wind according to the standards designated by the American National Standards institute as prepared by the engineering departments of the Electronics Industry Association and Telecommunications Industry Association.

2. Unless specifically required by FAA or APA regulations, all towers shall have a finish compatible with the surrounding area that shall minimize the degree of visual impact.

3. The maximum height of any tower intended to be used as a telecommunication tower, shall not exceed that which shall permit operation without artificial lighting of any kind or nature in accordance with municipal, state and/or federal law and/or regulation.

4. The Board may request a review of the application by a qualified engineer for the evaluation of need for the design of any new tower.

5. Facilities shall maximize the use of building materials, colors and textures designed to blend with the ambient surroundings.

6. No portion of any tower or related structure shall be used for advertising purposes

E. Screening

Deciduous or evergreen tree plantings may be required to screen portions of the tower and accessory structures from nearby residential property as well as from public sites known to include important views or vistas. Where a site abuts a residential property or public property, including streets, screening shall be required.

F. Access

Adequate emergency and service access shall be provided. Maximum use of existing roads, public or private, shall be made. Road construction shall, at all times, minimize grounds disturbance and vegetation cutting to within the toe of fill, the top of cuts or no more than ten (10) feet beyond the edge of
any pavement. Road grades shall closely follow natural contours to assure minimal visual disturbance and reduce soil erosion potential.

G. Fencing

Sites of proposed new towers and sites where modifications to existing towers are proposed shall be adequately secured to prevent unauthorized access by the general public. Specifically:

1. all antennae communication towers, antenna towers, monopoles and other supporting structures including guy wires, shall be made inaccessible to children and constructed or shielded in such a manner that they cannot be climbed or run into and

2. transmitters and communication control points shall be installed such that they are accessible only to persons authorized by the licensee to operate or service them and

H. Signage:

1. Telecommunication towers/facilities shall be permitted one sign no larger than two (2) square feet to provide adequate notification to persons in the immediate area of the presence of an antenna that has transmit capabilities. The sign shall also contain the names (s) of the owner(s) and operator (s) of the antenna(e) as well as emergency phone number(s).

2. The sign shall be located so as to be visible from the primary access point to site. No other signage shall be permitted on any antenna(e), antenna(e) supporting structure, monopole, or communication tower, structure unless required by Federal or State regulation.

I. Color, Shape and Camouflage

1. In scenic or historic area, companies are required to camouflage each tower, for example by putting it inside an artificial tree, a clock tower, a church steeple, silos or a flag pole.

2. Wireless towers are required to paint wireless devices or supporting structures in a neutral color designed to blend in with the background. Large dish antennas (e.g. over six feet in diameter) are prohibited. Existing trees must be left as a buffer and additional trees may be required to be planted around the entire facility in order to provide screening.
J. Health Concerns – Testing and Reporting

Section 704 of the federal Telecommunications Act of 1996 allows localities to regulate wireless facilities on the basis of environmental or health effects. The tower company may be required to pay for regular inspections (annually) if such structure is located within 1000 feet of a residence or occupied structure and provide the local governments with a copy of the inspection report to assure continued compliance with FCC emissions standards.

K. NOTIFICATION

Applicants must notify landowners within a mile of proposed towers and/or antennas. Areas within 1,500 feet of the Seaway Trail, the applicant must notify the Seaway Trail Organization. Towns and villages having an approved Waterfront Revitalization Law must be notified prior to any discussions with landowners that own a site being considered within the Waterfront Overlay Area.

SECTION 6 REVIEW PROCESS AND DECISIONS

A. PROCEDURE

Within 62 days of receipt of a complete preliminary application as defined above, the Planning Board may approve the preliminary application or schedule a public hearing. If a public hearing is held, the Planning Board shall within 62 days of the completion of the hearing approve, approve with modifications or disapprove the preliminary application. Under the referral provisions of Section 239 of General Municipal Law, the Planning Board may not take final action on the application until a copy of the application has been forwarded to the St. Lawrence County Planning Board and that Board has taken action on it pursuant to Section 239-m of New York State General Municipal Law.

If a preliminary application is approved, the applicant and the Enforcement Officer shall be notified in writing by the Planning Board and a building permit issued within 10 days of receipt thereafter of a request from the applicant. The applicant shall not have to file a final site plan if the preliminary site plan is approved without modifications.

If the Planning Board approves the preliminary application with modifications the applicant shall submit a final detailed site plan to the Planning Board for final approval. Within 62 days of receipt of the application for final site plan approval, the Planning Board shall render a written decision to the applicant and Enforcement Officer, and such decision shall be signed by the Chairperson of the Planning Board.
B. PUBLIC HEARINGS

All public hearings shall be conducted in compliance with the provisions of the NYS Open Meeting Laws.

C. TIME LIMITATIONS

The time periods within which Planning Board actions are required to act are the maximum times allowable. The Planning Board shall make every effort to act as quickly as possible in reviewing applications in order to minimize delays to the applicant.

D. JUSTIFICATION AND NOTICE

1. The Planning Board shall apply all of the review standards described in this Local Law in reviewing site plans.

2. Decisions of the Planning Board shall be in writing and may include reasonable conditions to further the intent of this Local Law. Reasons for disapproval shall be clearly stated.

3. Decisions of the Planning Board shall be filed within five days in the office of the Town Clerk and a copy mailed to the applicant by certified mail, with return receipt requested.

4. Approval of a Site Plan by the Planning Board shall be valid for a period of one year from the date thereof for the purpose of obtaining a building permit. Failure to secure a building permit during the period shall cause the Site Plan approval to become null and void. No building permit shall be issued and no site work shall commence until all necessary permits and approvals from Town, County and State agencies are obtained and any required performance bond is filed with the Town Clerk.

SECTION 7 COMPATIBILITY WITH APPLICABLE STATE OR FEDERAL LAWS

All towers approved must comply with all other regulations of the State or Federal government, including Federal Communications Commission (FCC) regulations applicable to environmental and health effects of both transmitters and receivers.

SECTION 8 REMOVAL OF TOWERS

The applicant will provide a bond equal to the estimated cost of construction for the removal of such tower(s) due to nonuse for a period of six months or for noncompliance or discontinuance of use as determined by the municipality.
SECTION 9 EXCEPTIONS

Residential accessory uses (e.g. television antennae, satellite dishes, ham radio, citizens band radio) under 60 feet in height are not affected. Specifically, exceptions to these regulations are:

1. new use that are accessory to residential uses; and

2. approved uses existing prior to the effective date of these regulations.

SECTION 10 PENALTY FOR NON-COMPLIANCE

The burden will be placed upon the applicant to prove the facility clearly meets all the requirements of this local law. Monetary penalties for noncompliance will be imposed of up to $100.00 per day. In addition the facility could be subject to closure after due process. Any modifications to the use or configuration of a tower shall constitute the need to obtain a new permit (this includes increases in tower height or installation of bulky antennas or work platforms on a tower). The company must provide evidence of general liability and property damage insurance.