

Town of Lyme
TELECOMMUNICATIONS FACILITIES ORDINANCE

SECTION I – AUTHORITY AND PURPOSE

This ordinance shall be known as the Town of Lyme Telecommunications Ordinance. The regulations in this ordinance shall overlay and supplement the regulations in the Town of Lyme Zoning Ordinance, and shall be considered part of the Zoning Ordinance for the purposes of administration and appeals under state law. If any provision of this ordinance differs or appears to conflict with any provision of the Zoning Ordinance or other ordinance or regulation, the provision imposing the greater restriction or more stringent standard shall be controlling.

The purpose of this ordinance is to:

- A. Define the authority of the Town of Lyme to regulate wireless telecommunications facilities.
- B. Provide standards and requirements for the operation, siting, design, appearance, construction, monitoring, modification, and removal of telecommunication facilities.
- C. Protect the historic, cultural, natural, and aesthetic resources of the Town of Lyme and property values therein by minimizing the adverse impacts of telecommunication facilities.
- D. Locate telecommunication facilities and/or antennas in a manner which promotes the general safety, health, welfare, and quality of life of the residents of the Town of Lyme and those who visit.
- E. Encourage the use of collocation, camouflaged facilities, monopoles, stealth facilities, and construction of facilities with the ability to serve multiple providers.

SECTION II – DEFINITIONS

Amateur Radio Operator: An individual who sends and receives radio signals on radio frequencies reserved for amateur radio operation.

Amateur Radio Facility: Any tower and appurtenances or building-mounted structure intended for communication purposes by a person operating in compliance the Federal Communications Commission requirements for amateur radio operations.

Antenna: A device for transmitting and/or receiving electromagnetic waves.

Average Tree Canopy Height: The average height found by inventorying the height above ground level of all trees over 20 feet in height for a radius of 150 feet.

Camouflaged: Telecommunication facilities that are disguised, hidden, part of an existing or proposed structure, or placed within an existing or proposed structure.

Channel: The segment of the radiation spectrum to or from an antenna which carries one signal. An antenna may radiate on many channels simultaneously.

Collocation: Locating the telecommunication equipment of more than one provider on a single structure.

Communication Tower: A guyed or self-supporting telecommunication facility constructed as a free-standing structure or in association with a building, other permanent structure, or equipment, containing one or more antennas intended for transmitting and/or receiving television, AM/FM radio, digital, microwave, cellular, telephone, or similar forms of electronic communication.

Conditional Use Approval: An approval for a use that, because of special requirements or characteristics, may be allowed in a particular zoning district only after review by the Planning Board and granting of conditional use approval imposing such conditions as necessary to make the use compatible with other uses permitted in the same zone or vicinity. Conditional use approvals are issued for uses of land and are transferred from one owner of the land to another. (See NH RSA 674:21 II.)

dBm: Unit of measure of the power level of a signal expressed in decibels above 1 milliwatt.

Equipment Shelter: A structure located at a base station designed principally to enclose equipment used in connection with telecommunication facility transmissions.

FAA: Federal Aviation Administration.

Fall Zone: A safety area surrounding a ground mounted wireless facility.

FCC: Federal Communications Commission.

Fresnel zone: The envelope around a line-of-sight radio signal which should be free of interfering objects, such as branches, to minimize interference with a radio signal.

Ground-mounted: Mounted on the ground.

Guyed Telecommunication Facility: A lattice or monopole telecommunication facility that is secured to the ground or other surface by diagonal cables for lateral support.

Mast-mounted Antenna: A component of a telecommunications facility mounted on a supporting mast or pipe attached to a structure or base.

Mount: The structure or surface upon which antennas are mounted, including the following types of mount: ground-mounted, roof-mounted, side-mounted, and structure-mounted.

Monopole: A single self-supporting vertical pole with no guy wire anchors, usually consisting of a galvanized or other unpainted metal or a wooden pole with below grade foundations.

Non-Conforming Telecommunication Facility: Any telecommunication facility which is not in conformance with the requirements of this ordinance, but that existed lawfully prior to the adoption, revision, or amendment of this ordinance.

Permit: Written authorization by the Town of Lyme to an operator to own, construct, maintain, and operate a facility within the boundaries of the municipality.

Provider: An entity providing telecommunication services to individuals or institutions.

Radiofrequency (RF) Engineer: An engineer specializing in electrical or microwave engineering, especially the study of radio frequency.

RFR: (Radiofrequency Radiation): The emissions from telecommunication facilities.

RFI: (Radiofrequency Interference): The emissions from telecommunication facilities, which can affect the normal operation of electronic devices.

Receiving Antenna: A device used for receiving radio frequency signals.

Roof-mounted: Mounted on the roof of a building.

Scenic View: A wide angle or panoramic field of sight that may include natural and/or human-made structures and activities. A scenic view may be from a stationary viewpoint or be seen as one travels along a roadway, waterway, or path. A view may be to a far away object, such as a mountain, or a nearby object, such as an historic building.

Side-mounted: Mounted on the side of a building.

Stealth Facility: Any communications facility that is designed to blend into the surrounding environment. Examples of stealth facilities may include architecturally screened roof-mounted antennas, building-mounted antennas painted to match the existing structure, antennas integrated into architectural elements, antenna structures designed to look like light poles, and structures designed to resemble natural features such as trees or rock outcroppings.

Structurally Able: The determination that a tower or structure is capable of carrying the load imposed by the proposed equipment under all reasonable predictable conditions as determined by a professional structural engineering analysis.

Structure-mounted: Mounted on a structure other than a building.

Telecommunications Facility: Any antenna, tower, or other structure intended for use in connection with the transmission or reception of radio or television signals or any other electromagnetic transmission/reception. It includes all accessory structures and improvements

(e.g. roads, parking areas, fencing, equipment buildings, etc.). Amateur radio facilities, as defined in FCC regulations, are excluded from this definition unless an amateur radio facility is proposed as a location for a Class 1 or 2 telecommunications facility.

Telecommunication Facility Classification:

Class 1 Telecommunications Facility: A communication tower for cellular telephone services and/or to act as a hub for broadband wireless services. Towers in this class must be located on land either leased to or owned by the tower owner, may have an accessory building located adjacent to them and must have a dedicated electrical service. Towers in this class may have a tower face dimension in excess of 14” and are to be designed for collocation of wireless services to the greatest possible degree.

Class 2 Telecommunications Facility: A telecommunication facility for broadband wireless internet signal reception to service the property upon which the telecommunication facility is located (on-site service), and which has the capacity to relay or retransmit the broadband wireless internet signal for service to another property (off-site service).

Class 3 Telecommunications Facility: A telecommunication facility for broadband wireless internet signal reception to service solely the property upon which the telecommunication facility is located (on-site service), and which does *not* have the capacity to relay or retransmit a broadband wireless internet signal for service to another property (off-site service).

Temporary Telecommunication Facility: Any tower, pole, antenna, etc., designed for use while a permitted permanent wireless facility is under construction or repair, or for a special event or conference.

Tower: Means any structure that is designed and constructed primarily for the purpose of supporting one or more antennas.

Vantage Point: A point located on a public roadway, waterway, or path from which a proposed telecommunication facility will be visible.

SECTION III - DISTRICTS PERMITTED BY CONDITIONAL USE APPROVAL

Class I and Class II Telecommunications Facilities use, shall be permitted by Conditional Use Approval in the following districts subject to all applicable local, state, and federal regulations and Site Plan Review.

Telecommunication Facility construction in Conservation Districts (defined in section 3 of the zoning ordinance) is subject to the provisions of Article IV of the zoning ordinance.

Table 3.1

Zoning District	New Tower Construction	Collocation on Existing Tower	Collocation on Existing Structure
Lyme Center	N	CA	CA
Lyme Common	N	CA	CA
Commercial	CA	CA	CA
Rural	CA	CA	CA
East Lyme	CA	CA	CA
Skiway	CA	CA	CA
Mountain & Forest	CA	CA	CA

- Y Permitted provided that all other requirements of federal and state law and the zoning ordinance have been met and a zoning permit has been issued.
- CA Use permitted by conditional use approval provided that all other requirements of Federal, State, and Town laws, rules, ordinance, and regulations have been met and approval has been granted by the Planning Board.
- N Not permitted.

SECTION IV - STANDARDS FOR TELECOMMUNICATIONS FACILITIES

4.1 General: All Class 1 Telecommunication Facilities shall be subject to all provisions of this ordinance. Class 2 Telecommunication Facilities are exempt from certain provisions of this ordinance where noted. Tower-mounted Class 3 facilities require a conditional use approval if they are visible from a town road or waterway, otherwise, they are not subject to this ordinance. Any upgrade of a Class 2 or 3 telecommunication facility makes it subject to all provisions of this ordinance.

4.2 Federal and State Requirements: All Class 1 Telecommunication and Class 2 Telecommunication Facilities must meet or exceed current standards and regulations of the FAA, FCC, and any other agency of the federal or state government with the authority to regulate such facilities. If such standards and regulations are changed, the owners of facilities governed by this Ordinance shall bring these into compliance within six (6) months of the effective date of the changes, unless a more stringent compliance schedule is mandated by the controlling agency. Failure to bring facilities into compliance with any changes shall constitute grounds for the removal of the tower or antenna at the owner's expense.

4.3 Safety Standards: Installation plans for Class 1 telecommunication facilities shall be stamped by a licensed professional engineer. All Class 1 Telecommunication Facilities shall be inspected every two years by licensed professional engineer approved by the Town, with the cost to be paid by the owner. The engineer shall submit a report to the Board of Selectmen's designated representative(s). If the report concludes that a structure fails to comply with applicable codes and/or generally accepted standards and constitutes a danger to persons or property, the facility owner will receive notice that he/she has 30 days to correct the deficiencies. If the owner fails to comply within 30 days, such action shall constitute abandonment in accordance with Section VII.

All classes of telecommunication facilities must be installed in conformance with national electrical code requirements and to generally accepted engineering and installation safety standards such that, if inspected by a professional engineer, they would be deemed to be safe and well installed. The towers of Class 2 and Class 3 telecommunications facilities cannot have a tower face width of more than 14 inches. If a Class 2 or Class 3 towers must be located so that part of its fall zone is outside of the boundary of the subscriber's property, it is subject to the fall zone requirements of this ordinance. Class 2 Telecommunication Facilities may be made subject to inspection at the discretion of the Board of Selectmen or its designated representative(s).

4.4 Additional Requirements for Telecommunications Facilities: Use of trees for constructing Class 2 facilities is prohibited.

4.4.1 Setbacks: All telecommunication facilities shall comply with the setback provisions of the zoning district in which the facility is located as provided in Article V of the zoning ordinance.

4.4.2 Conservation Districts: All telecommunication facilities shall comply with the provisions of the conservation districts in which the facility is located as provided in Article IV in the zoning ordinance.

4.4.3 Fall Zones:

- A. Fall Zones for Existing and New-Ground Mounted Facilities: To ensure public safety, the minimum distance of any ground-mounted Class 1 or Class 2 Telecommunications Facility to any property line, habitable dwelling, business, right-of-way, or institutional or public building shall be no less than 125% of the height of the facility, including antennas or vertical appurtenances. This setback shall be referred to as a fall zone. The fall zone may cross property lines, so long as the applicant secures a recorded fall zone easement from the affected property owner(s). The area of the easement shall be shown on all applicable plans submitted to the Town, and the terms of the easement shall be provided as part of the Site Plan review.
- B. Fall Zones for Non-Ground-Mounted Facilities: In the event that an existing structure such as a building, barn silo, church steeple, or utility pole is proposed as a mounting for a Class 1 or Class 2 telecommunication facility, a fall zone shall not be required unless the Planning Board determines that under the circumstances a fall zone is required.

4.4.4 Height Limitations: This section supercedes section 5.21 of the zoning ordinance.

- A. Height Limitations for Ground-Mounted Facilities/Towers: In order to protect public safety and to preserve the scenic character and appearance of the area, the height limit for a any class telecommunication facility, in all districts shall not exceed twenty (20) feet above the average height of the tree line within one hundred fifty (150) feet of the base of the facility. Notwithstanding the above, an additional height may be approved upon a finding by the Planning Board as part of their review, that the additional height is necessary in order to provide adequate coverage to create an appropriate Fresnel zone or to provide for collocation, and that the additional height will not have an adverse visual impact on the scenic character or appearance of the area.
- B. Height Increase for Existing Structures and Buildings: In the event that an existing structure (other than a telecommunication tower) is proposed as a mount for a Class 1 or Class 2 telecommunication facility, the height of the original structure shall not be increased by more than fifteen (15) feet above the highest point of a flat or mansard roof or fifteen (15) feet above the height at the midpoint between the peak and the eave of other roof styles, unless the facility is completely camouflaged (for example, a facility within a flag pole, steeple or chimney). Any increase in height shall be in scale and proportionality to the structure as originally configured. A provider may locate a telecommunication facility on a building that is legally non-conforming with respect to height, provided that the provisions of this section are met.

4.4.5 Camouflaging Facilities: To the greatest extent feasible, all telecommunication facilities shall be designed to blend into the surrounding environment through the use of existing vegetation, landscaping and screening, the use of compatible materials and colors, or other camouflaging techniques.

- A. Camouflage for Ground-Mounted Facilities/Towers: All Class 1 or Class 2 telecommunication facilities which may be in public view shall have buffer planting around them to screen the facility from view. The Planning Board shall have the authority to decrease, relocate, or alter the required buffer based on site conditions and

add other conditions to the permit regarding screening and landscaping. The easement or lease shall specify that the trees within the buffer shall be maintained and shall not be removed or trimmed, unless the trees are dead or dying and present a hazard to persons or property, or approval is granted by the Planning Board.

- B. Camouflage for Facilities on Existing Buildings or Structures – Roof-Mounts: When any class telecommunication facility extends above the roof height of a building on which it is mounted, every effort shall be made to conceal or camouflage the facility within or behind existing or new architectural features to limit its visibility from public ways. Facilities mounted on a roof shall be stepped back from the front facade in order to limit their impact on the building's silhouette.
- C. Camouflage for Facilities on Existing Buildings or Structures – Side-Mounts: Telecommunication facilities that are side-mounted shall be camouflaged to greatest practical degree.
- D. Camouflaging for Equipment Shelters: Equipment shelters shall be camouflaged or made architecturally harmonious with surrounding structures to the greatest practical degree. Such camouflage may be achieved with planting or fencing, as approved by the Planning Board as part of Site Plan review. If mounted on a rooftop, the equipment shelter shall be concealed or camouflaged so that the shelter either is not visible at grade or appears to be part of the original structure.

4.4.6 Lighting:

- A. Telecommunication Facility Lighting: Telecommunication facilities shall not be illuminated by artificial means and shall not display lights unless such lighting is specifically required by the FAA or other federal or state authority for a particular telecommunication facility because of its height. If any lighting is required solely because of the height of the facility, the applicant must demonstrate that it has or will request the least visually obtrusive marking and/or lighting scheme in the FAA applications. The Planning Board, as part of Site Plan review, may review the plan to determine if the lighting requirement can be eliminated by a reduced height or a change in location of the facility.
- B. Ground Lighting: Emergency, safety, or security ground lighting may be utilized when there are people at the site. All ground lighting shall be shielded and directed downward towards the facility and away from neighboring properties.

4.4.7 Bulk, Height, and Glare: All telecommunication facilities shall be designed in such a manner as to minimize the visual impact of height, mass, and guy wire supports for the intended use. Materials utilized for the exterior of any structure shall be of a type, style, and location so as to minimize glare and to minimize visual impact from any historic or scenic view, public vantage point, or abutting properties.

4.4.8 Finish: New Class 1 and Class 2 telecommunication facilities shall have a corrosion resistant matte finish unless otherwise required. The Planning Board, as part of its Site Plan review, may require the telecommunication facility to be painted or otherwise camouflaged to minimize the adverse visual impact.

4.4.9 Fencing: The area around any ground-mounted Class 1 telecommunication facility and communications equipment shall be completely fenced and gated for security. Fencing shall be chosen to minimize visual impact and be consistent with its intended safety purpose.

4.4.10 Signs: All ground-mounted Class 1 telecommunication facilities shall be identified with a sign no greater than six (6) square feet stating the name of the facility's owner and a 24-hour emergency telephone number shall be posted adjacent to the entry gate. In addition, "No Trespassing" or other warning signs and the federal telecommunication facility registration plate, where applicable, may be posted on the fence or as required to meet federal requirements. No commercial signs or lettering shall be placed on the tower or facility. This provision supercedes Article VI of the zoning ordinance.

4.4.11 Noise: The Planning Board may impose conditions to minimize the effect of noise from the operation of machinery or equipment upon nearby properties.

4.4.12 Collocation:

The applicant must demonstrate to the satisfaction of the Planning Board that any Class 1 telecommunication facility cannot be accommodated on an existing or approved facility or structure for one of the following reasons:

- A. **Structural or Spatial Capacity:** The proposed antennas and equipment would exceed the structural or spatial capacity of the existing or approved facility, as documented by a structural engineer licensed to practice in the State of New Hampshire. Additionally, the existing or approved Class 1 telecommunication facility cannot be reinforced, modified, or replaced to accommodate planned or equivalent equipment, at a reasonable cost, to provide coverage and capacity comparable to that of the proposed facility.
- B. **Radio Frequency Interference:** The proposed antennas and equipment, alone or together with existing facilities, equipment, and/or antennas, would create radio frequency interference (RFI) in violation of federal standards or requirements as documented by a qualified radio frequency engineer.
- C. **Radio Frequency Radiation:** The proposed antennas and equipment, alone or together with existing facilities, equipment, and/or antennas, would create radio frequency radiation (RFR) in violation of federal standards or requirements without unreasonable modification or mitigation measures.
- D. **Aesthetics:** Aesthetic reasons make it unreasonable to locate the planned equipment upon an existing or approved facility.
- E. **Coverage:** There are no existing or approved telecommunication facilities in the area in which coverage is sought.
- F. **Other:** Other specific unforeseen reasons make it unreasonable or not feasible to locate the planned equipment upon an existing or approved telecommunication facility.

4.4.13 Access Roads: If available, existing entrances and driveways shall be utilized, unless the applicant can demonstrate that a new entrance and driveway will result in less visual and

environmental impact. To the extent practicable, new access roads shall minimize disturbances to the natural contour of the land and be located within existing forest or forest fringe areas and not in open fields. Erosion control for the design, construction, and maintenance of access roads shall follow the standards section 4.15 of the Subdivision Regulations. The Planning Board may require underground utilities as a part of its Site Plan review.

4.4.14 Utilities: Utility or service lines for Class 1 telecommunication facilities shall be designed and located so as to minimize or prevent disruption to the scenic character of the area.

4.4.15 Determination of Minimal Visual Impact: Upon review of the applicant's visual analysis, supporting materials, testimony from the parties, and inspections from the designated vantage points, the Planning Board shall evaluate the visual impact of the proposed facility in order to determine if the design minimizes its visual presence in the landscape. The Planning Board may require changes to the design in order to further minimize the visual impact of Class 1 and Class 2 telecommunication facilities. The Planning Board shall consider, among other things, the following in making their determination:

- A. The amount of time and time of year during which the proposed facility will be viewed by the traveling public on a public highway, public trail, or public water body;
- B. The frequency of the view of the proposed facility by the traveling public;
- C. The degree to which the view of the proposed facility is screened by existing and/or proposed vegetation, the topography of the land, and existing structures;
- D. Background features in the line of sight to the proposed facility that obscure the facility or make it more conspicuous from all angles of view;
- E. The distance of the wireless communication telecommunication facility from key vantage points and the proportion of which the facility will be visible above the skyline or treeline;
- F. The number of members of the traveling public or residents of Lyme and neighboring towns who will be affected by the alteration of the scenic character of the area;
- G. The sensitivity or unique value of the particular view affected by the proposed facility; and
- H. Significant disruption of a view that provides context to an historic or scenic resource, including the Appalachian Trail.

4.4.16 Non- Conforming Telecommunication Facility: Any changes to a non-complying conforming telecommunication facility must be in conformity with these regulations unless a variance from these regulations is obtained from the Zoning Board of Adjustment.

SECTION V - APPLICATION AND PERMITTING

Applications for Class 1 and Class 2 Telecommunications facilities in the Town of Lyme require a Conditional Use Approval and Site Plan review by the Planning Board, and may require a Special Exception or Variance from the Zoning Board of Adjustment prior to issuance of a zoning permit by the Zoning Administrator. All applications shall contain all the information required by Section 9.22 of the Zoning Ordinance, Article IV of the Regulations for Site Plan Review, and all of the information needed to demonstrate compliance with all of the standards for telecommunications facilities as specified in Section A:IV.

The Zoning Administrator and Zoning Board of Adjustment shall follow the procedures of Articles IX and X of the Zoning ordinance in processing and approving or denying an application.

The Planning Board shall follow the procedures of Article VI of the Regulations for Site Plan Review in processing and approving or denying an application.

In addition, telecommunications facilities located in or which may affect historical resources either directly and/or indirectly shall be reviewed by the New Hampshire Division of Historical Resources.

SECTION VI – MONITORING AND MAINTENANCE

- 6.1 Maintenance: The owner of the Class 1, 2, or 3 telecommunications facility shall maintain the telecommunications facility in good condition. Such maintenance shall include but shall not be limited to: painting, structural integrity of the mount and security barrier, and maintenance of the buffer areas and landscaping.
- 6.2 Monitoring: As part of the issuance of the site plan approval for a Class 1 telecommunications facility, the property owner shall agree that the Town of Lyme may enter the subject property to obtain RFR measurements and noise measurements at the expense of the carrier. The town shall provide reasonable written notice to carrier and landowner and provide them the opportunity to accompany the Town representatives when the measurements are conducted.
- 6.3 Security for Removal: Recognizing the hazardous situation presented by abandoned and unmonitored Class 1 and Class 2 telecommunication facilities, the Planning Board shall set the form and amount of security that represents the cost for removal and disposal of abandoned facilities in the event that a facility is abandoned and the facility owner is unwilling or unable to remove the facility in accordance with section 8.2. The Planning Board shall accept a performance bond, irrevocable letter of credit or other type or types of security to ensure that final removal and reclamation to the site is actually completed. The amount shall be determined by the Board, and the security is to be released by the Town only after a final restoration inspection by the Planning Board or its designee. The property owner is obligated to remove the facility even if the security does not cover the entire cost of removal and restoration.

SECTION VII – ABANDONMENT OR DISCONTINUATION OF USE

- 7.1 Notification: At such time that a carrier or owner plans to abandon or discontinue operation of a Class 1 or Class 2 telecommunications facility, such carrier or owner will notify the Town by Certified U.S. Mail of the proposed date of abandonment or discontinuation of operations. Such notice shall be given not less than thirty (30) days prior to abandonment or discontinuation of operations.
- 7.2 Removal: Upon abandonment or discontinuation of use, the owner of the facility shall physically remove the telecommunications facility within ninety (90) days from the date of abandonment or discontinuation of use. “Physically remove” shall include, but not be limited to:
- A. Removal of antennas, mount, equipment shelters, and security barriers from the subject property.
 - B. Proper disposal of waste materials from the site in accordance with local and state solid waste disposal regulations.
 - C. Restoring the location to its natural condition.
- 7.3 Failure to Remove: If the owner of the facility does not remove the facility, then the Board of Selectmen shall, after holding a public hearing with notice to the owner and abutters, issue a declaration of abandonment. The owner of the facility shall then dismantle and remove the facility within ninety (90) days of receipt of the declaration of abandonment by the Board of Selectmen. If the abandoned facility is not removed within ninety (90) days, the Board of Selectmen may execute the security to pay for this action.

SECTION VIII - ADMINISTRATION AND ENFORCEMENT

Administration and enforcement shall be in accordance with Article IX of the Zoning ordinance and Article XVI of the Regulations for Site Plan Review as appropriate.

SECTION IX – SEVERABILITY

The invalidity of any provision of this ordinance shall not affect the validity of any other provision of this ordinance or any other Town ordinance, by-law, or regulation.

SECTION X – APPEALS

Appeals shall be made in accordance with the requirements of NH RSA Chapters 676 and 677.

Adopted: March 11, 2003

Amended: March 13, 2007