

**Thorndike Cell Tower Ordinance**  
(Enacted 3/19/16)

**1. Purpose**

The purpose of this ordinance is to establish a municipal review procedure and siting standards for Personal Wireless Telecommunications Facilities, typically characterized as “cell towers”. The standards herein are designed and intended to balance the interests of the residents of Thorndike, wireless communications providers and wireless communication customers in the siting of wireless communications facilities within the town. These standards are also intended to:

- a. Establish clear guidelines, standards and time frames for the town to regulate wireless communications facilities;
- b. Permit the Town to fairly and responsibly protect public health, safety and welfare;
- c. Encourage the carriers of PWSF to co-locate, thus minimizing adverse visual impacts on the community;
- d. Minimize any potential adverse effect of PWSF on property values;
- e. Provide for the removal of towers and associated structures that are no longer being used for wireless communications purposes; and
- f. Support the goals and policies of the Comprehensive Plan, including orderly development, efficient use of infrastructure, and protection of natural and scenic resources.

**2. Authority**

This ordinance is enacted pursuant to the enabling provisions of Article VIII, Part 2, §1 of the Maine Constitution, the provisions of Title 30-A MRSA, §3001 (*Home Rule*), and the provisions of Title 30-A §4311 et seq. (*Comprehensive Planning and Land Use Regulation, or “Growth Management” Act*). This ordinance is founded upon and pursuant to the *Town of Thorndike Comprehensive Plan*, adopted on December 6, 1991. It is designed to comply with the Telecommunications Act of 1996 and rules of the Federal Communications Commission.

**3. Applicability**

No personal wireless communications facility shall be located within the Town of Thorndike without a Wireless Communications Facility Permit issued by the Planning Board. Applicants seeking approval for siting of new personal wireless service facilities shall first evaluate the suitability of existing structures or approved sites. Only after finding that there are no suitable existing structures or approved sites for co-location, shall a provider propose a new ground mounted facility. Personal wireless service facilities that may be suitable for co-location include but are not limited to buildings, water towers, flag poles, telecommunication facilities, utility poles or existing personal wireless service facilities and related facilities.

The following are exempt from the provisions of this Ordinance:

- a. Amateur (Ham) radio stations licensed by the FCC.
- b. Parabolic antennas of 10 feet or less in diameter that are an accessory use of the property.
- c. Maintaining or repair of a personal wireless service facility and existing equipment, provided that there is no change in the height or other dimensions of the facility.
- d. Temporary personal wireless service facility in operation for a maximum period of 30 (thirty) days.
- e. Residential antennas that are an accessory to a residential dwelling unit, such as a television or radio antenna.

**4. Definitions**

As used in this Ordinance, unless the context otherwise indicates, the terms referenced below have the following meanings:

**“Accessory Structure”** is a structure which is incidental and subordinate to the principal use or structure.

**“Accessory Use”** is a use which is incidental and subordinate to the principal use. Accessory uses, when aggregated, shall not subordinate the principal use of the lot.

**“Alternative Tower Structure”** is defined as clock towers, church steeple, light poles, water towers and similar alternative-design mounting structures that camouflage or conceal the presence of towers.

**“Antenna”** is the surface from which electromagnetic frequency signals are sent or received by the personal wireless service facility.

**“Camouflaged”** means personal wireless service facilities are disguised, hidden, part of an existing or proposed structure or placed within an existing or proposed structure.

**“Co-location”** means the use of a single mount on the ground by more than one carrier and/or several mounts on an existing building or structure by more than one carrier.

**“Equipment Shelter”** is an enclosed structure, shed or box at or near the base of the mount within which are housed equipment for personal wireless service facilities, such as batteries and electrical equipment. Equipment shelters sometimes are referred to as base receiver stations.

**“FAA”** means the Federal Aviation Administration, or its lawful successor.

**“Fall Zone”** means the area on the ground from the base of a structure mounted Personal Wireless Communications Facility that forms a circle with a diameter equal to the height of the facility (inclusive of any antennae or other protuberances) plus any additional area that might be impacted in each direction the facility might fall (e.g. accounting for the impact of mounting braces in the fall trajectory).

**“FCC”** means the Federal Communications Commission, or its lawful successor.

**“Guyed Tower”** is a tower that is tied to the ground or other surface by diagonal cables for lateral support.

**“Height”** means, when referring to a tower or other structure, the distance measured from ground level to the highest point on the tower or other structure, even if said highest point is an antenna.

**“Lattice Tower”** means a type of mount that is self-supporting with multiple legs and cross-bracing of structural steel.

**“Licensed Carrier”** is a company authorized by the FCC to construct and operate a commercial mobile radio services system.

**“Mast”** is a pole that resembles a street light standard or telephone pole.

**“Monopole”** is a type of mount, normally thicker than a mast that is self supporting with a single shaft of concrete, steel or wood, which is designed for the placement of antennas or arrays along the shaft.

**“Mount”** is the structure or surface upon which antennas are mounted. Antennas may be mounted on the roof of a building (roof-mounted), on the side of a building (side-mounted), mounted on the ground (ground-mounted), or mounted on a structure other than a building (structure-mounted).

**“Parabolic Antenna”** means an antenna which is bowl-shaped, designed for the reception and/or transmission of electromagnetic radiation signals in a specific directional pattern.

**“Personal Wireless Service Facility”** or **“Wireless Service Facility”** or **“Facility”** or **“Cell Tower”** means any structure, antenna, tower or other device which provides personal wireless services.

**“Personal Wireless Services”** includes any personal wireless service defined in the Federal Telecommunications Act of 1996, which includes FCC licensed commercial wireless telecommunications services, including cellular, personal communications services (PCS), specialized mobile radio (SMR), enhanced specialized mobile radio (ESMR), paging and unlicensed wireless services, and common carrier wireless exchange access services.

**“Propagation Studies”** are computer generated estimates prepared by a professional radio frequency engineer of the signal emanating, and prediction of coverage, from antennas or repeaters sited on a specific personal wireless service facility or structure.

**“Site”** means the lot, tract or parcel upon which the personal wireless service facility is located.

**“Structure”** means anything built for the support, shelter or enclosure of persons, animals, goods or property of any kind, together with anything constructed or erected with a fixed location on or in the ground, exclusive of fences.

**“Tower”** means any structure, whether free standing or in association with a building or other permanent structure, primarily for the purposes of supporting one or more antennas, including self-supporting lattice towers, guy towers, or monopole towers.

## **5. Administration and Enforcement**

This Ordinance will be administered through the provisions of the Thorndike Site Plan Review Ordinance, specifically Articles V (Administration), VI (Application Procedure), VII (Standards for Approval) and VIII (Enforcement), which are hereby incorporated by reference. Specific application requirements and standards of review pertinent to Personal Wireless Communications Facilities within this Ordinance shall be added to the Application Requirements and Standards of Approval within the Site Plan Review Ordinance. In case of a conflict, the stricter provision shall apply.

## **6. Specific Application Requirements**

In addition to the requirements listed in Section 6.4 D) of the Site Plan Review Ordinance, an application for a personal wireless service facility permit must also include the following, at the cost of the applicant:

- a. A site plan prepared and reviewed by a professional engineer registered to practice in Maine indicating the location, type, and height of the proposed facility and any accessory structure, loading/antenna capacity, on-site and abutting off-site land uses, means of access, and setbacks from property lines. The site plan must include certification by a professional engineer registered in Maine that the design and construction of the proposed facility meets accepted industry standards and satisfies all federal, state, and local building code requirements. The Board may also require an independent review of the site plan by a professional engineer or independent consultant at the applicant’s expense.
- b. A United States Geological Survey 7.5 minute topographical map showing the current location of all structures and personal wireless service facilities above 100 feet in height from ground level, except antennas located on roof tops, within a 5 mile radius of the proposed facility.
- c. Documentation of the applicant's search for appropriate sites for the location of a personal wireless communications facility and the rationale for selecting the site under consideration.
- d. Verification of contact with all other owners of facilities for commercial mobile radio or wireless transmission operating within a 5 mile radius, inquiring as to the feasibility of co-locating the proposed personal wireless service facility on a pre-existing tower or structure.
- e. Proof of the need for a new structure and that co-location on an existing structure is not available. In addition, the applicant shall present proof that there is a contracted first tenant. Propagation studies for the proposed location as well as for any existing or approved personal wireless service facility within a 5-mile radius of the proposed site.
- f. Photo simulations of the proposed facility taken from perspectives determined by the Planning Board. Each photo should be labeled with line of sight, elevation, and the date taken. Photos must demonstrate the color of the proposed facility and method of screening.
- g. Elevation drawings of the proposed facility, showing height above ground level.

- h. A landscaping plan indicating the proposed placement of the facility on the site; location of existing structures, trees, and other significant site features; the type and location of plants proposed to screen the facility; the method of fencing, the access road design and the color of the structure.
- i. A decommissioning and removal plan, outlining the circumstances triggering plan implementation, clear assignment of responsible parties (to be transferred to any future owners), a specific methodology including site reclamation and estimate of costs in future dollars prepared by a Professional Engineer, and means of guaranteeing the finances to carry it out. The Town of Thorndike shall be given access to the means of guarantee and permission to carry out the plan should the owner default on its responsibilities.
- j. A balloon test, illustrating the proposed height and location of a personal wireless service facility, may be required at applicant expense. The Planning Board will ensure that adequate public notice is provided for such a test and determine what photos will be taken.

## **7. Standards for Approval**

### **Location/Co-location**

- a. The applicant shall have the burden of proving that there are no co-location opportunities that are suitable to locate its personal wireless service facility.
- b. The applicant and owner shall allow other future wireless service carriers, using functionally equivalent personal wireless technology, to co-locate antennas, equipment and facilities on the personal wireless service facility they are proposing, unless satisfactory evidence is presented and the Planning Board concurs that technical constraints prohibit co-location.
- c. The applicant and owner shall prepare a standing lease agreement to be made available to public agencies upon request for the placement and servicing of emergency communications equipment at any time during the life of the facility. Such lease agreement shall provide for tower space, power, ground level equipment housing and access rights at no more than marginal cost to the owner. Provisions will clarify responsibilities and liabilities of both parties at terms found acceptable to the Planning Board as advised by officials including but not limited to the Waldo County Emergency Management Director. Excessive or otherwise unreasonable requirements shall be grounds for denying the permit application. If the owner proposes changes to the lease agreement during the life of the facility, the amended agreement must be approved by the Planning Board prior to its execution.

### **Structural/Dimensional/Setback Requirements**

- d. The site plan design and construction, following any revisions required by the Planning Board based upon findings of an independent consultant or other evidence gathered during the review period, meets accepted industry standards and satisfies all federal and state building requirements.
- e. The height of the proposed personal wireless service facility shall be the minimum to meet the need demonstrated by the applicant.
- f. All personal wireless service facilities, guys and accessory facilities shall be setback from any residences or property lines by a minimum of the fall zone plus 25 feet. This standard may be waived if a suitable fall easement is secured on neighboring property or if deemed unnecessary and inappropriate by the Planning Board based on the evidence presented.

### **Aesthetic Standards**

- g. At the site, the design of the facility and accessory structures shall use materials, colors, textures, screening and landscaping that will blend the personal wireless service facility to the natural setting as much as possible. The required security fence shall also use materials that blend in to the natural setting as much as possible. The Planning Board will determine if the style of fencing and/or landscape buffer is compatible with the surrounding area.
- h. When a personal wireless service 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.

### **Lighting/Signage/Safety/Security**

- i. Personal wireless service facilities shall not be artificially lit, except as required by the Federal Aviation Administration or Federal Communications Commission. Strobe or intermittent lighting shall be avoided unless specifically required. Manually operated emergency lights for use when operating personnel are on site are allowed.
- j. No advertising signs or signage is permitted on personal wireless service facilities, except for signs that are needed to identify the property and the owner and to warn of potential hazards. A clearly visible sign with emergency contact information should be provided on site.
- k. No hazardous waste shall be discharged on the site of any personal wireless service facility. If any hazardous materials are to be used on site, there shall be provisions for full containment of such materials and the owner or operator of the personal wireless services facility shall comply with all local, state and federal laws, codes, rules regulations, orders and ordinances in the handling and disposal of such materials. An enclosed containment area shall be provided with a sealed floor, designed to contain at least one hundred and ten (110) percent of the volume of the hazardous materials stored or used on site. In the event of leakage, the owner is responsible for all costs related to cleanup of the site and affected surrounding areas.
- l. A security fence or wall of not less than eight (8) feet in height from the finished grade shall be provided around the tower. Access to the tower shall be through a locked gate.

### **Access Requirements**

- m. Access to the personal wireless service facility shall be limited to a single road or driveway, which must be designed to harmonize with the topographic and natural features of the site by minimizing filling, grading, excavation, or similar activities which result in unstable soil conditions and soil erosion. The accessway must follow the natural contour of the land and should not involve excessive grading or tree removal. Curvilinear design shall be used to prevent direct line of site from the town road access point to the tower site. Existing vegetation should be maintained to the extent practical. All practical steps must be taken to prevent a visible scar up or across a ridgeline. The entrance must satisfy the requirements of the Thorndike Land Use Ordinance. However, emergency vehicle access is not a priority concern for facility protection compared with erosion and visual scarring of the landscape.

### **Maintenance and Monitoring**

- n. The owner and/or operator of the personal wireless service facility shall maintain the structure in good condition. Such maintenance shall include, but is not limited to: painting, structural integrity of the mount and security barrier, any buffer areas, fencing and landscaping.
- o. On an annual basis, the personal wireless service facility owner shall provide the Town with evidence of compliance with federally mandated safety levels for radio frequency electromagnetic fields and radio frequency radiation exposure levels, to include copies of any reports filed with the FCC. If there is any

foreseeable change in operations, a description of such change or anticipated initiation of the decommissioning plan shall be included with this report or as soon as practicable.

- p. The personal wireless service facility owner shall arrange for a licensed structural engineer to conduct regular inspections of the personal wireless service facility's structural integrity and safety at least every five years. A report of the inspection results shall be submitted to the Town Clerk, who will document receipt and forward to the Code Enforcement Officer. The CEO will review the report and share its findings with the Planning Board. If any deficiencies are cited, the CEO will follow up with the owner to confirm that they are promptly addressed.

#### **Decommissioning and Removal Provisions**

- q. The Decommissioning and Removal Plan must satisfy the Planning Board that the facility shall be safely removed and the site restored after its useful life is completed and at no time will present an abandoned eyesore or potential hazard to abutting property owners or the public at large. Unless the Plan is approved with alternate arrangements, the following provisions shall apply.
- r. There shall be a rebuttable presumption that a personal wireless service facility that is not operated for a continuous period of twelve (12) months shall be considered abandoned. The Town shall notify the owner of an abandoned facility in writing, certified mail, return receipt requested, ordering the removal of the facility within 180 days of receipt of the written notice. The owner of the facility shall have thirty (30) days from the receipt of the notice to demonstrate to the Town that the facility has not been abandoned.
- s. If the owner fails to show that the facility is not abandoned, the owner shall have one hundred fifty (150) days to remove the facility. If the facility is not removed within that time period, the Town shall remove the facility at the owner's expense and the Town may draw upon the financial guarantee to defray the costs of removal of the facility. Removal shall include, but not be limited to, antennas, mounts, equipment shelters and security barriers. The owner of the facility shall pay all site reclamation costs deemed necessary and reasonable to return the site to its pre-construction condition, including the removal of roads, and reestablishment of any vegetation.

#### **8. Miscellaneous Provisions**

- a. This ordinance shall become effective upon passage.
- b. This ordinance may be amended at any properly noticed and legally called Town Meeting. The Town Clerk is authorized to renumber sections as needed following any amendment.
- c. Should any portion of this ordinance be declared invalid by a Court of Law, the remainder of the ordinance remains legally in effect.