

These Standards and General Guidelines were adopted by the Town Board on \_\_\_\_\_, 2019, pursuant to Chapter 129 Section 2.3(d) of the Town of Manlius Code, relating to the placement of small cell wireless facilities in the Town of Manlius. All words and

## A General Design Guidelines

- (1) All Communications Facilities shall comply with the United States Department of Transportation Manual on Uniform Traffic Control Devices (MUTCD), the National Electric Code (NEC), all Town of Manlius Codes, and any other applicable local, state, and federal rules and regulations.
- (2) Utility Underground Required. All service lines to the proposed Communication Facility shall be underground if all other utilities in the immediate area are also underground.
- (3) Power and Fiber Optic Supply.
  - (a) Independent Power Source Required. Communication Facilities subject to a ROW Agreement may not use the same power source providing power for the existing facilities original to the purposes of the support structure, unless specifically authorized by the owner of the support structure and approved by the Town Engineer. Independent power source must be contained within a separate conduit on the existing support structure.
  - (b) Applicant shall coordinate, establish, maintain and pay for all power and communication connections with private utilities.
- (4) Wiring, Cables and Conduit Requirements.
  - (a) All wiring and cables must be housed within the steel or other metal support structure pole and extended vertically within a flexible conduit. In non-steel or solid support structures, all wiring and cables must be appropriately protected in their entirety and covered with a material that matches the non-steel or solid support structures so as not to be visible from public view.
  - (b) Above ground wires, cables, connections and conduits are prohibited, except as specified in this Deign Guideline Manual based on the wireless support structure.
  - (c) Spools and/or coils of excess fiber optic or coaxial cables or any other wires shall not be stored on the pole except completely within the approved enclosures or cabinets.

- (5) Lighting. Lighting associated with Communication Facilities is prohibited. Any internal lights associated with electronic equipment must be shielded from public view.
- (6) Signage. Signage is prohibited on all small cell facilities and wireless support structures, including stickers, logos, and other non-essential graphics and information unless required by the FCC.
- (7) Work Permits. All operators must require the appropriate work permit by the Town for any activity described in Chapter \_\_\_\_ of the Code and for any activity for which consent is authorized under the same.

## B. Existing Wireless Support Structures

- (1) Collocation encouraged. The collocation of Communication Facilities on existing Poles, Towers and Support Structures is strongly encouraged as a means to minimize the extent of intrusion of redundant support structures within the Town ROW or on private property.
- (2) Structural Integrity of Existing Support Structures.
  - (a) The Town shall not authorize any attachments to Town owned infrastructure, Pole, Tower or Support Structure that negatively impacts the structural integrity of said infrastructure, Pole, Tower or Support Structure.
  - (b) The Town may condition approval of the Collocation on replacement or modification of the Communication Facility at the Provider's cost if the Town determines that replacement or modification is necessary for compliance with the construction and/or safety standards of the Town. A replacement or modification of the Communication Facility shall conform to the applicable design guideline(s) and the Town's applicable specifications for the type of structure being replaced. The Town may retain ownership of a replacement wireless support structure.
- (3) Maximum Permitted Height. For an existing Communication Facility, the Antenna and any associated shroud or concealment material are permitted to be collocated at the top of the existing wireless support structure and shall not increase the height of the existing wireless support structure by more than five (5) feet or a total of thirty-five (35) feet.
- (4) Right to reserve space on Pole, Tower or Support Structure. The Town may reserve space for future public safety or transportation uses in the right-of-way or on a Pole, Tower or Support Structure owned by the Town in a documented and approved plan in place at the time an Application is filed.
  - (a) A reservation of space shall not preclude placement of a Pole or Collocation of a Communication Facility.

(b) If replacement of the Town's Pole or Support Structure is necessary to accommodate the Collocation of the Communication Facility and the future use, the Provider shall pay for the replacement of the Pole or Support Structure, and the replaced Pole or Support Structure must accommodate the future use.

## New Wireless Pole, Tower or Support Structures

### (1) Location

#### (a) Required Setbacks.

(1) The centerline of new Pole, Tower or Support Structures shall be installed in alignment with existing street trees and other poles along the same right-of-way when possible.

(2) In no case shall a new Pole, Tower or Support Structure be located less than what is required in the ROW Agreement from any of the roadway/face of curb, sidewalk, or shared use path as measured to the nearest part of the support structure.

(3) New Poles, Towers or Support Structures shall be located a minimum of six feet from any permanent object, structure or existing lawful encroachment into the right of way, or as determined in the ROW Agreement.

(b) Required Spacing. Collocation is strongly encouraged. If not feasible, a minimum of 300 linear feet between Poles, Towers, Support Structures or Communication Facilities is required. To the extent feasible, any new or replace Pole, Tower or Support Structure constructed in the ROW shall be at the property line between two houses and not in direct line of site from the front of a house.

### (2) Maximum Permitted Height

(a) For a new wireless support structure in a Commercial A or B or Industrial Zone, the overall height of the wireless Pole, Tower and Support Structure and any collocated antennas shall not be more than forty feet (40') in height above established grade measured at the base of the wireless support structure.

(b) The Town shall limit the maximum permissible height of wireless Pole, Tower or Support Structure in residential zones to not more than thirty-five feet (35') in height above established grade measured at the base of the structure.

### (3) Design Requirements

(a) Shape and Dimensions. All new Poles, Towers or Support Structures shall be constructed of solid hot-dipped galvanized steel, be round in shape with the pole shaft tapered in diameter from the base to the top with a maximum of twelve

(12) inches at the base.

(b) Transformer Base. All new Poles, Towers or Support Structures shall include a one-piece cast aluminum alloy transformer base in a breakaway design, consistent with engineering standards subject to the Engineer for the Town's review and approval.

(c) Foundation/Footer.

(1) All new Poles, Towers or Support Structures must be supported with a reinforced concrete foundation and footer designed, stamped, sealed and signed by a professional engineer licensed and registered in the State of New York, and subject to the Engineer for the Town's review and approval.

(2) Anchor bolts must be constructed from steel (high strength) per ATSM A36, threaded (J-Type/L-Type), hot dip galvanized steel per ODOT CM Item No. 711.02, and in a strength and diameter, stamped, sealed and signed by a professional engineer licensed and registered in the State of New York, and subject to the Engineer for the Town's review and approval.

(3) All anchor bolts must be concealed from public view with an appropriate Pole boot or cover, powder coated to match the Pole, Tower or Support Structure.

(d) Color. New Poles, Towers or Support Structures, including the breakaway transformer base, shall have a powder coated finish in the dark earth tone colors such as dark green, dark brown, gray, or black consistent with the color of other Poles, Towers or Support Structures in the immediate vicinity.

(4) Multiple requests for wireless support structures in violation of spacing requirements. If multiple requests are received by the Town to install two or more Poles, Towers or Support Structures that would violate applicable spacing requirements outlined herein, or to collocate two or more Communication Facilities on the same wireless Pole, Tower or Support Structure the Town may resolve conflicting requests through whatever reasonable and nondiscriminatory manner it deems appropriate.

(5) Town directed alternate location for Poles, Towers or Support Structures. The Town may propose an alternate location to any proposed location of a new Pole, Tower or Support Structure, subject to the following:

(a) That the alternate location is within one hundred feet (100') of the proposed location or within a distance that is equivalent to the width of the right-of-way in or on which the new is proposed, whichever is greater; and

(b) The operator shall use the alternate location if it has the right to do so on reasonable terms and conditions and the alternate location does not impose technical limits or significant additional costs.

(6) Waiver to Town directed alternate Pole, Tower or Support Structure location or undergrounding requirements.

(a) Provider may seek a waiver from the Planning Board of the undergrounding or alternative location requirements for the placement of a new Pole, Tower or Support Structure to support Communication Facilities if the Provider is unable to achieve its service objective using a Communication Facility under the following circumstances:

1. From a location in the right-of-way where the prohibition does not apply;

2. In a utility easement the Provider has the right to access; or

3. In or on other suitable locations or structures made available by the Town at reasonable rates, fees, and terms. (b) The Town shall process waivers in a reasonable and nondiscriminatory manner that does not have the effect of prohibiting the provision of wireless service.

(D) Antenna.

(1) Location. All antenna to be installed on new or existing wireless Poles, Tower or Support Structures shall be mounted to the top of the Pole, Tower or Support Structure and aligned with the centerline of the Pole, Tower or Support Structure, unless otherwise agreed to by the Town based on the specific context and characteristics of the Communication Facility.

(2) Size. Each Antenna shall be located entirely within an enclosure of not more than six cubic feet in volume or, in the case of an Antenna that has exposed elements, the Antenna and all of its exposed elements could fit within an enclosure of not more than twelve cubic feet in volume.

(3) Design.

(a) Shape. Antennas shall be cylindrical in shape, or completely housed within a cylindrical enclosure, radome or shroud.

(b) Color. Exposed Antennas and Antenna enclosures shall match the color specifications of the Pole, Tower or Support Structure.

(E) Small Wireless Facilities Installed on Wireless Support Structures

(1) Size. Exclusive of the Antenna, all wireless equipment associated with the Communication Facility shall not cumulatively exceed twenty-eight cubic feet in volume. The calculation of equipment volume shall not include electric meters, concealment elements, telecommunications demarcation boxes, grounding equipment, power transfer switches, cut-off switches, and vertical cable runs for the connection of power and other services.

(2) Equipment Enclosures Required. All Communication Facilities mounted to wireless Poles, Towers or Support Structures or located on the ground shall be fully contained within enclosures or cabinets.

(3) Required Clear Height. All Communication Facilities mounted to a wireless Pole, Tower or Support Structure shall provide a minimum of 10 feet of clear space on the pole as measured from established grade to the lowest point of any facility/equipment cabinets or concealment apparatus mounted to the Pole, Tower or Support Structure.

(4) Maximum Horizontal Offset from Support Structure. Communication Facility's equipment cabinets or enclosures shall not extend more than 10 inches beyond the Pole, Tower or Support Structure of centerline in all directions.

(5) Design.

(a) Cabinet or Enclosure Shape.

(1) Communication Facility equipment cabinets or enclosures shall be rectangular in shape, with the vertical dimensions being greater than the horizontal.

(2) Generally, the cabinet or enclosure shall be no wider than the maximum diameter of the support structure.

(b) Installation Method.

(1) All Pole mounted equipment cabinets or enclosures must be installed as flush to the Pole as possible.

(2) Any installation brackets connecting the cabinets or enclosure to the Pole shall not extend more than 2 inches from the Pole, and shall include metal flaps (or wings) to fully conceal the gap between the cabinet and Pole.

(c) Cabinet or Enclosure Material. (To be discussed)

(d) Color. Cabinets or enclosures shall match the color specification of the Pole, Tower and/or Support Structure.

(F) Ground Mounted Small Cell Facilities

(1) Location.

(a) Required Setbacks.

(1) In no case shall ground mounted small cell facilities be located no less than required in the ROW Agreement from the road-way/face of curb, sidewalk, or shared use path as measured to the nearest part of the cabinet or enclosure.

(2) Ground mounted Communication Facilities and associated required screening or shrouding shall be located a minimum of six feet from any permanent object or existing lawful encroachment into the right-of-way.

(2) Size. All Communication Facility equipment associated with the Facility shall not cumulatively exceed twenty-eight (28) cubic feet in volume. The calculation of equipment volume shall not include electric meters, concealment elements, telecommunications demarcation boxes, grounding equipment, power transfer switches, cut-off switches, and vertical cable runs for the connection of power and other services.

(3) Maximum Permitted Height. The maximum height for ground mounted Communication Facilities shall not exceed 2.5 feet as measured from established grade at the base of the facility.

(4) Equipment Enclosures Required. All ground mounted Communication Facilities shall be fully contained within enclosures or cabinets.

(5) Design Requirements.

(a) Screening required. Evergreen plant material shall be used for screening and shall be planted and maintained to ensure that the equipment will be screened to its full height two years of planting without obstructing the view of motor traffic or pedestrians.

(b) Concrete Pad or Slab. In accordance with state and local standards approved by the Director of Planning and Development or Code Enforcement Director.

(c) Breakaway Design. All objects placed within the ROW shall feature breakaway design.

(d) Color. Ground mounted Communication Facility cabinets and enclosures shall be dark green or black powder coated finish.

(G) Construction and Safety Requirements.

(A) Approval of the collocation or replacement or modification of the Pole, Tower or Support Structure is conditioned upon the operators assumption of costs of the Town determines that replacement or modification is necessary for compliance with its written construction or safety standards.

(B) Prevention of failures and accidents. Any person who owns a Communication Facility sited in the right-of-way shall at all times employ ordinary and reasonable care and install and maintain in use nothing less than the best available technology for preventing failures and accidents which are likely to cause damage, injury, or nuisance to the public.

(C) Compliance with fire safety and FCC regulations. Communication Facilities, wires, cables, fixtures, and other equipment shall be installed and maintained in substantial compliance with the requirements of the National Electric Code, all FCC, state, and local regulations, and in such manner that will not interfere with the use of other property.

(D) Surety bond or equivalent financial tool for cost of removal. All owners must procure and provide to the Town a renewable bond, or must provide proof of an equivalent financial mechanism, to ensure compliance with all provisions of this section. The renewable bond or equivalent financial method must specifically cover the cost of removal of unused or abandoned small cell facilities or damage to Town property caused by an operator or its agent of each Communication Facility which the owner installs in the right-of-way in case the Town has to remove or pay for removal of the wireless facility. Two acceptable alternatives to a bond include a funds set-aside and a letter of credit.

(H) Indemnify and Hold Town Harmless.

Any Provider who owns or operates Communication Facility or Pole, Tower or Support Structure in the public way shall indemnify, protect, defend, and hold the Town and its elected



officials, officers, employees, agents, and volunteers harmless against any and all claims, lawsuits, judgments, costs, liens, losses, expenses, fees to include reasonable attorney fees and costs of defense, proceedings, actions, demands, causes of action, liability and suits of any kind and nature, including personal or bodily injury or death, property damage or other harm for which recovery of damages is sought, to the extent that it is caused by the negligence of the operator who owns or operates small cell facilities and wireless service in the public way, any agent, officer, director, representative, employee, affiliate, or subcontractor of the operator, or their respective officers, agents, employees, directors, or representatives while installing, repairing, or maintaining facilities in a public way. Said Provider shall also hold the Town and/or its agent(s) harmless in the event any action by the Town and/or its agent(s) negligently or recklessly disrupts, destroys, and incapacitates small cell facility or wireless support structure in the public way created under these Design Guidelines and Standards.

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