

TOWN OF SOUTHBOROUGH

Grant of Location Design and Aesthetic Criteria

In order to promote safe, well-organized, and aesthetically acceptable Utility Installations and Small Wireless Facilities using the least intrusive means available to provide utility and wireless services, all Utility Installations and Small Wireless Facilities subject to the Town of Southborough Grant of Location Policy, including poles, support structures and installations shall, to the greatest extent possible, comply with the following Design and Aesthetic Criteria:

A. General Requirements: An Applicant shall construct and maintain Utility Installations, Small Wireless Facilities and wireless support structures in a manner that does not: (1) obstruct, impede or hinder the usual use of, travel or public safety on a right-of-way; (2) obstruct the legal use of a right-of-way by other utility providers; (3) violate or conflict with any section of the Town's Charter, Bylaws or Rules and Regulations; or (4) violate the Americans with Disabilities Act ("ADA").

B. Collocation: The Town encourages collocations between Utility Installations and Small Wireless Facilities whenever feasible. Applications for new pole installations for Small Wireless Facilities will only be approved upon a showing that the new pole is necessary to avoid materially inhibiting the provisions of wireless services.

C. Concealment: All antenna(s) and equipment, other than the electric meter and disconnect switch, must be concealed within housing that also conceals the cable connections, antenna mount and other hardware. Antennas and equipment shrouds or cabinets must be painted, wrapped or otherwise treated to match the primary pole to which it is attached. New poles shall match the color and finish of existing decorative lighting or other poles in the area, (or black where no nearby poles exist).

D. Utility Lines: Whenever feasible, new service lines must be undergrounded to avoid additional overhead lines. For metal poles, undergrounded cables and wires must transition directly into the pole base without any external protruding junction box, unless it is contained within an approved ground mounted equipment cabinet. In areas where underground wiring exists (electric, cable, telephone, or other) but is not in conduits, the applicant shall use its best efforts to coordinate with all other underground utilities to provide conduits for each utility. Conduits for all utilities shall be installed at the time the applicant's new service lines are undergrounded.

E. Lights: Unless otherwise required for compliance with any applicable law, rule or regulations, the Utility Installation or Small Wireless Facility shall not include any permanently installed lights. Any lights associated with the electronic equipment shall be appropriately shielded from public view. This subsection is not meant to prohibit installations on streetlights or the installation of luminaires or additional street lighting on new poles when required by the Town.

F. Dimensional Requirements:

- (i) Existing support structures: Utility Installations and Small Wireless Facilities attached to poles or other structures shall be installed at least 10 feet above the ground. Antennas 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 10 percent.
- (ii) New support structures: In areas where there are no wireless support structures or utility poles taller than 34 feet in height above ground level, the maximum allowable height for Small Wireless Facilities shall be 34 feet in residential zones and 37 feet in all other zones. In areas where there are existing utility or other Town-owned poles, the wireless support structure may not exceed such poles by greater than 4 feet or 10 % of the height of the existing structure on which it is mounted, whichever is less.
- (iii) Ground-Mounted Equipment: The dimensions of ground-mounted cabinet must not exceed 28 cubic feet. Any square or rectangular cabinets must be chamfered along all exposed sides and top edges. Ground mounted cabinets must be installed flush to the ground and painted or finished to match any decorative lighting or other poles in the area. Ground mounted equipment on sidewalks must not interfere with the flow of pedestrian traffic and must conform to the ADA in regards to appropriate sidewalk spacing.
- (iv) Pole diameter: Utility Installations and Small Wireless Facilities requiring new pole installations shall not exceed the diameter of the existing poles located along the same side of the street within a distance of 200 feet. In no event shall a new pole exceed a diameter of 10 inches.
- (v) Protrusion: No protrusions from the outer circumference of a Utility Installation or Small Wireless Facility or support structure shall be more than one times the width of the support structure. The wireless support structure and equipment that are projecting, or any equipment or appurtenance mounted on the ground, shall comply with ADA and shall not obstruct an existing or planned sidewalk or walkway.

G. Location of Wireless Equipment:

- (i) Location of Ground Mounted Equipment: Ground equipment should be placed to minimize any obstruction, impediment, or hindrance to the usual travel or public safety on a right-of-way, maximize the line of sight required to add to safe travel of vehicular and pedestrian traffic and maximize that line of sight at street corners and intersections and

minimize hazards at those locations. An application that negatively impacts vehicular and/or pedestrian safety may be denied. To the extent feasible, ground equipment shall be installed at or near property lines to avoid placement directly in front of residential dwellings.

The equipment shroud or cabinet must contain all the equipment associated with the Small Wireless Facility, other than the antenna. All cables and conduits associated with the equipment must be concealed from view, routed directly through the metal pole (with the exception of wood power poles) and undergrounded between the pole and the ground-mounted cabinet.

- (ii) **Location of Pole Mounted Equipment:** When pole-mounted equipment is either permitted or required, all equipment other than the antenna(s), electric meter and disconnect switch must be concealed within an equipment cabinet. All pole-mounted equipment must be installed as flush to the pole as possible. The bottom of a pole mounted equipment cabinet, must be installed no lower than 10 feet above ground level on the pedestrian side of the pole or 12 feet above the street level on the vehicular side of the pole.

It is preferred that equipment shrouds be mounted flush to the pole, subject to the pole owner's approval. Standoff mounts are permitted. Cabinets shall not project more than one times the pole width from the outside surface of the pole when surface mounted or 1.5 times the pole width when standoff brackets are required. Such cabinets shall not exceed 6 cubic feet in total volume. All pole mounted equipment shall be located as close together as technically possible and if possible, on the same side of the pole.

- (iii) **Electric Meter:** The Town strongly encourages Small Wireless facility operators to use flat-rate electric service when it would eliminate the need for a meter. When a meter is necessary, site wireless services providers shall use the smallest and least intrusive electric meter available. Whenever permitted by the electric service provider, the electric meter base should be painted to match the pole.
- (iv) **Spools and Coils:** To reduce clutter and deter vandalism, excess fiber optic or coaxial cables for Utility Installations and Small Wireless Facilities shall not be spooled, coiled or otherwise stored on the pole except within the approved enclosure such as a cage or cabinet.
- (v) **Above-Ground Conduit:** On poles, all above-ground wires, cables and connections shall be encased in the smallest section or smallest diameter / channel, conduit, u-guard, or shroud feasible. Such conduit shall be

finished in zinc, aluminum or stainless steel, and painted or finished to match the color of the utility pole.

H. New Pole and Support Structures:

- (i) **Spacing:** The Town strongly discourages the installation of new poles or support structures for Small Wireless Facilities, unless it can be demonstrated that existing poles and support structures in the area are inadequate or insufficient for the stated need and that the provision of wireless telecommunications will be materially inhibited without the addition of a new support structure.

Wireless support structures shall be spaced apart from utility poles or wireless support structures supporting Small Wireless Facilities with the as currently exists in the immediate proximity.

To the extent feasible, new poles and support structures shall be installed at or near property lines to avoid placement directly in front of residential dwellings.

- (ii) **Alignment with Other Poles:** The centerline of any pole or support structure must be aligned, as much as possible, with the centerlines of existing poles on the same street segment.
- (iii) **New Wood Poles:** In all locations, the Town reserves the right to require a metal pole rather than a wood pole based on the building and/or natural environmental character of the proposed site location.

All new wood poles must be direct buried to a depth based on structural requirements. The design shall be stamped, sealed and signed by a professional engineer licensed and registered by the Commonwealth of Massachusetts, and subject to the Town's review and approval.

- (iv) **New Metal Poles:** All new metal poles must be supported with a reinforced concrete pier. The design including the pier, footings and anchor bolts shall be stamped, sealed and signed by a professional engineer licensed and registered by the Commonwealth of Massachusetts, and subject to the Town's review and approval. All anchor bolts must be concealed from public view with an appropriate pole boot or cover subject to the Town's approval.

All metal poles must be constructed from hot-dip galvanized steel or other corrosion-resistant materials approved by the Town and finished in accordance with these guidelines to avoid rust stains on adjacent sidewalks, buildings or other improvement

Metal pole finish must match nearby poles. The applicant may select a paint or powder coat system in compliance with applicable standards.

(v) **Lighting, Planters, Flags, Banners:** The Town may require the applicant to install functional streetlights and/or brackets to hold hanging flower planters, flags and/or banners when technically feasible and the Town determines that such additions will enhance the overall appearance and usefulness of the proposed Utility Installation or Small Wireless Facility. The Town may install hanging flower planters, flags and/or banners utilizing the brackets.

I. **Utility and Traffic Poles or Structures:**

(i) **Required Load Analysis:** Installations on all utility poles or other Town-owned structures shall have an industry standard pole load analysis completed, sealed and signed by a Professional Engineer licensed and registered by the Commonwealth of Massachusetts and submitted to the Town with each permit application indicating that the utility pole or other structure to which the small wireless facility will be attached will safely support the load.

(ii) **Installations on Traffic Signals:** Installations on all utility poles that supports a traffic signal or related structures will not be permitted. For non-Town owned traffic poles or structures, the wireless facility must not interfere with the integrity of the traffic signalization and related equipment in any way that may compromise the safety of the public.

(iii) **Installations on Street Light Poles:** Installations on utility pole with street lights owned by the Town will rarely be permitted. Where it is considered, the wireless equipment must not interfere with the integrity of the street lighting equipment in any way that may compromise the safety of the public. The installation must not interfere with other existing uses on the pole such as, street lights, smart nodes, photocells, hanging flower planters, flags, and/or banners. Installation of small wireless facilities on any street light pole shall (a) be encased in a separate (internal to the pole) conduit than the street light electronics; (b) have a separate electric power connection than the street light; and (c) have a separate access point than the street light pole.

J. Historic Districts and Scenic Ways. Installation of Utility Installations and Small Wireless Facilities within a designated Historic District pursuant to G.L. c.40C or along a roadway designated by the Town as a Scenic Way pursuant to G.L. c.40, §15C shall comply with the following requirements in addition to the foregoing:

- (i) Concealment techniques shall be designed to be consistent and harmonious with the nature and character of the Historic District or Scenic Way, including color, shape and size of proposed equipment;
- (ii) New utility poles or wireless support structures shall be designed to match the size, girth, and design of any existing utility poles or other vertical structures located in the Historic District right-of-way or Scenic Way, i.e. decorative light poles;
- (iii) This subsection shall not be construed to limit the Town's enforcement of historic preservation in conformance with the requirements adopted pursuant to M.G.L. c. 9, §§ 26-27C, c. 40C, or the National Historic Preservation Act of 1966, 54 U.S.C. § 300101 et seq., and the Bylaws and regulations adopted to implement those laws.

K. Noise Mitigation: The applicant is required to incorporate ambient noise suppression measures and/or required to place the equipment in locations less likely to impact adjacent residences or businesses to ensure compliance with all applicable noise regulations.

L. Public Safety Communication Interference: For colocations on poles or structures containing existing public safety equipment, the applicant shall prepare and include in its application a study by a firm qualified in undertaking such studies, confirming that the proposed Utility Installations and Small Wireless Facilities will not adversely create interference with the Town's public safety radio system, traffic light signal system, or other communications components.