City of Northfield, Minnesota	Policy Number: 3.01
PUBLIC WORKS (ENGINEERING DIVISION)	Adopted:
SMALL WIRELESS FACILITY DESIGN & REVIEW	Revised:
GUIDELINE POLICY	

3.01 SMALL WIRELESS FACILITY DESIGN AND REVIEW GUIDELINE POLICY

A. PURPOSE AND COMPLIANCE

In implementing Article IV of Chapter 70 of Northfield City Code, the City Council of the City of Northfield (the "City") finds that in order to protect the public health, safety and welfare of its citizens and to reasonably manage and protect the public rights-of-way (the "ROW") and its uses in the City, it is in the best interest of the City and its residents and businesses to establish Small Wireless Facility Design and Review Guidelines (the "Guidelines") to provide the aesthetic requirements and other specifications and reasonable conditions that small wireless facilities installed within the public ROW must meet prior to installation and following installation within the City. Although small wireless facilities installed outside of the ROW are not bound by these Guidelines, they may be used to inform their installations.

The objective of these Guidelines is to strike a balance between preserving and protecting the character of the City through careful design, siting, and camouflaging techniques to blend these facilities into their surrounding environment and provide other reasonable conditions upon such placement and use of the ROW, while enhancing the ability of small wireless facilities carriers to deploy small wireless facilities in the City effectively and efficiently so that residents, businesses, and visitors benefit from ubiquitous and robust wireless service availability.

These Guidelines apply to requests to locate small wireless facilities in the ROW and ongoing use of the ROW for such purposes. These Guidelines are established pursuant to Chapter 70 of Northfield City Code and applicable law. These Guidelines are administered through the permitting process contained therein as conducted by the City Department of Public Works/Engineering.

Placement or modification of a small wireless facilities and/or wireless support structures shall comply with these Guidelines at the time the permit for installation or modification is approved and as amended from time to time. Wireless service providers and permittees are required to comply with Chapter 70 of Northfield City Code.

B. AESTHETIC REQUIREMENTS

PHOTO SIMULATIONS

 For all applications to locate small wireless facilities in the ROW, photo simulations from at least three reasonable line-of-site locations near the proposed project site. The photo simulations must be taken from the viewpoints of the greatest pedestrian or vehicular traffic. Angle of photo simulation separation must be at least 90 degrees or greater and provide a full profile depiction. Photo simulations must be included in the application packet.

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SMALL WIRELESS FACILITY ANTENNAS

- 1. Each small wireless facility antenna ("antenna") shall be located entirely within a shroud or canister type enclosure.
- 2. The diameter of the antenna or antenna enclosure should not exceed the diameter of the top of the wireless support structure pole, and to the maximum extent practical, should appear as a seamless vertical extension of the pole. In no case shall the maximum diameter of the shroud be wider than one and one half times the diameter of the top of the pole. Where maximum shroud diameter exceeds diameter of the top of the pole, the shroud shall be tapered to meet the top of the pole. The enclosure shall not exceed six cubic feet in volume.
- 3. Mounting Location
 - a. All antenna shall be mounted to the top of the wireless support structure pole, aligned with the centerline of the wireless support structure.
- 4. Tree "topping" or the improper pruning of trees is prohibited. Any proposed pruning or removal of trees, shrubs or other landscaping already existing in the ROW must be noted in the application and must be approved by the City.

CABLES AND WIRES

All cables, wires and connectors related to the small wireless facility must be fully concealed
on the wireless support structure and shall match the color of the wireless support
structure. There shall be no external cables and wires related to the small wireless facility
hanging off or otherwise exposed on the wireless support structure.

COLORS

 All colors shall match the background of any wireless support structure that the facilities are located upon. In the case of existing wood poles, finishes of conduit shall be zinc, aluminum or stainless steel, or colored to match those metal finishes and equipment cabinets shall be the color of brushed aluminum. Ground mounted equipment cabinets shall be the color of brushed aluminum.

EQUIPMENT ENCLOSURES/CONCEALMENT

Equipment enclosures, including electric meters, shall be as small as possible. Ground-mounted equipment shall incorporate concealment elements into the proposed design matching color and materials of the wireless support structure unless other materials or colors are approved by the City. Concealment may include, but shall not be limited to, landscaping, strategic placement in less obtrusive locations and placement within existing or replacement street furniture.

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- 2. Radio equipment shall be fully enclosed within an equipment cabinet or concealed within the antenna shroud enclosure matching color and materials of the wireless support structure unless other materials or colors are approved by the City.
- 3. Landscape screening should be provided and maintained around exterior equipment enclosures unless otherwise approved by the City. The planting quantity and size should be such that 100% screening is achieved within two years of installation.

SIGNAGE/LOGOS/LIGHTS/DECALS/COOLING FANS

- 1. Signage: The small wireless facility operator/permittee shall post its name, location identifying information, and emergency telephone number in an area on the cabinet of the small cell facility that is visible to the public. Signage required under this section shall not exceed 4 inches x 6 inches, unless otherwise required by law (e.g. RF ground notification signs) or the City. If no cabinet exists, the signage shall be placed at the base of the pole.
- 2. Lights: New small wireless facilities and wireless support structures shall not be illuminated, except in accord with state or federal regulations, or unless illumination is integral to the camouflaging strategy such as design intended to look like a street light pole.
- 3. Logos/Decals: The small wireless facility operator/permittee shall remove or paint over unnecessary equipment manufacturer decals. The color shall match or shall be as approved by the City. Small wireless facilities and wireless support structures shall not include advertisements and may only display information required by a federal, state or local agency. The small wireless facility operator/permittee shall utilize the smallest and lowest visibility radio-frequency (RF) warning sticker required by government or electric utility regulations. Placement of the RF sticker shall be as close to the antenna as possible.
- 4. Cooling Fans: In residential areas, the small wireless facility operator/permittee shall use a passive cooling system. In the event that a fan is needed, the small wireless facility operator/permittee shall use a cooling fan with a low noise profile.

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EXAMPLE ACCEPTABLE VS UNACCEPTABLE SMALL CELL INSTALLATION ON LIGHT POLES

Unacceptable



Acceptable



C. LOCATION REQUIREMENTS

MOST PREFERABLE LOCATIONS

The following are the most preferred areas for new small wireless facilities in the order of preference (1 being most preferable):

- 1. Industrial Districts if not adjacent to a park, residential district or historic district.
- 2. Highway Rights of Way areas if not adjacent to a park, residential district or historic district.
- 3. Retail and Commercial Districts if not adjacent to a park, residential district or historic district.

COLLOCATION PREFERENCE

It is the City's strong preference that whenever an applicant proposes to place a new small

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wireless facility that the applicant collocate the same on existing wireless support structures.

LEAST PREFERABLE LOCATIONS

The following are the least preferred areas for new small wireless facilities in the order of preference (3 being least preferable).

- 1. Residential Districts
- 2. Parks
- 3. Historic Districts

CONSIDERATION OF ALTERNATE LOCATIONS

The City reserves the right to propose an alternate location for a small wireless facility and/or wireless support structure to the one proposed in the application within one hundred feet of the proposed location or within a distance that is equivalent to the width of the ROW in or on which the small wireless facility and/or wireless support structure is proposed, whichever is greater, which the operator shall use if it has the right to use the alternate location on reasonable terms and conditions and the alternate location does not impose technical limits or additional costs.

GUIDELINES ON PLACEMENT

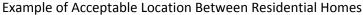
The City desires to promote cleanly organized and streamlined facilities using the smallest and least intrusive means available to provide wireless services to the community. Generally, a small wireless facility and/or wireless support structure shall match and be consistent with the materials and finish of the wireless support structure, adjacent City poles, and of the surrounding area adjacent to their location. In the absence of adjacent City poles, the wireless support structure shall match the materials and finish of the adjacent utility poles.

All proposed small wireless facilities located within residential districts and historic districts shall apply for a special land use permit (see Appendix A for map). In addition, small wireless facilities are strongly discouraged from locating within the historic downtown district and more specifically Division Street, Bridge Square, and Water Street (See appendix B for map).

The following additional guidelines on placement shall apply:

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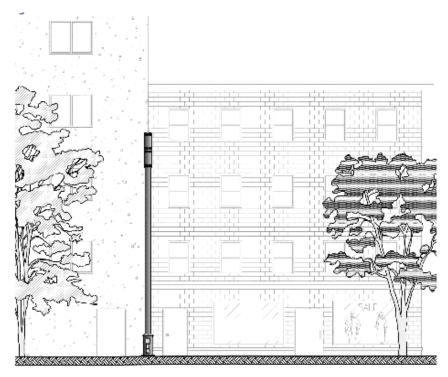
- 1. Small wireless facilities and wireless support structures shall be located no closer than 250 feet away, radially, from another small wireless facility and wireless support structure.
- 2. A combination wireless support structure and streetlight pole should only be located where an existing pole (usually Xcel Energy) can be removed and replaced, or at a new location where it has been identified that a streetlight is necessary.
- 3. In a manner that does not impede, obstruct, or hinder usual public pedestrian or vehicular travel or public safety on a ROW.
- 4. In a manner that does not obstruct the legal use of a ROW by a utility provider
- 5. In a manner that does not violate or conflict with the City's ROW Code, Chapter 70 or these Guidelines.
- 6. In a manner that does not violate the federal Americans with Disabilities Act.
- 7. In a manner that does not negatively impact the structural integrity of the associated wireless support structure.
- 8. In alignment with existing trees, utility poles, and streetlights.
- 9. Equal distance between trees when possible, with a minimum of 15 feet separation such that no proposed disturbance shall occur within the critical root zone of any tree.
- 10. With appropriate clearance from existing utilities.
- 11. So as not to be located along the frontage of a Historic building, deemed historic on a federal, state, or local level.
- 12. Not within sight triangles at street intersections.





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Example of Acceptable Location Between Commercial Buildings



4. LIMITATIONS

While the City fully intends to have small cell facilities meet these guidelines established in this policy, there may be times when not every specific guideline may be met. In these cases, City Staff will use these guidelines in approval of small cell wireless permit applications.

5. EFFECTIVE DATE OF POLICY

This Policy will be effective as of November 20,, 2018. Modifications of the Policy will be effective on the date said modifications are approved by the City Council.