



Design Manual

for the

Installation of Network Nodes and Node Support Poles

pursuant to Tex. Loc. Gov. Code, Chapter 284.

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SECTION I. PURPOSE AND APPLICABILITY.

1.3 Purpose

The City of Allen (“City”) recognizes that the State of Texas has delegated to the City the fiduciary duty, as a trustee, to manage the public right-of-way for the health, safety, and welfare of the public to Texas municipalities.

The standards and procedures provided in this Wireless Facilities Design Manual are adopted to protect the health, safety, and welfare of the public by minimizing and reducing impacts to public safety within the City’s public right-of-way and to minimize and reduce impacts to the City, its residents, and visitors and to give assistance and guidance to wireless telecommunications providers to assist providers in the timely, efficient, safe, and aesthetically pleasing installation of technologically competitive equipment.

Due, in part, to the increasing number of facilities in the City’s Public right-of-way, the City has adopted Chapter 13, Article III (Management of Public Rights-of-Way) of the Code of Ordinances, which is applicable to all public service providers, including wireless service providers or network providers (collectively, “Providers”) as defined by Chapter 284 of the Texas Local Government Code.

In addition, the City has adopted this Wireless Facilities Design Manual to provide technical criteria and details necessary for Providers seeking to install and construct network nodes and node support poles in the City’s public right-of-way.

1.4 Applicability

Providers shall adhere to the requirements found in Chapter 13, Article III (Management of Public Rights-of-Way) of the Code of Ordinances and this Wireless Facilities Design Manual for the installation, operation, maintenance, repair, modification, and replacement of wireless facilities within the City’s public right-of-way.

This Wireless Facilities Design Manual is for siting and criteria for the installation of wireless facilities, including micro network nodes, network nodes, node support poles, and related ground equipment, being installed pursuant to Chapter 284 of the Texas Local Government Code. This Wireless Facilities Design Manual shall apply to any sitings, installations, colocations in, on, over or under the public rights-of-way of such wireless facilities, whether they are installed pursuant to Chapter 284, or installed pursuant to an agreement with the City in its discretion, or installed as may otherwise be allowed by state law.

To the extent that the provisions of Chapter 284 of the Texas Local Government Code; Chapter 13, Article III (Management of Public Rights-of-Way) of the Code of Ordinances; or other applicable laws, ordinances, codes, rules and regulations of the City are in conflict with provisions of this Wireless Facilities Design Manual or each other, the provisions of Chapter

284 of the Texas Local Government Code; this Wireless Facilities Design Manual; Chapter 13, Article III (Management of Public Rights-of-Way) of the Code of Ordinances; or other applicable laws, ordinances, codes, rules and regulations of the City shall prevail and control with regard to a Provider in that order.

SECTION II. DEFINITIONS.

The definitions as used in Tx. Loc. Gov. Code, Chapter 284, Sec. 284.002 shall be used in this Design Manual, unless otherwise noted in this Section 2, below.

Abandon and its derivatives means the facilities installed in the right-of-way (including by way of example but not limited to: poles, wires, conduit, manholes, handholes, cuts, network nodes and node support poles, or portion thereof) that have been left by Provider in an unused or non-functioning condition for more than 120 consecutive calendar days unless, after notice to Provider, Provider has established to the reasonable satisfaction of the City that the applicable facilities, or portion thereof, is still in active use.

Antenna means communications equipment that transmits or receives electromagnetic radio frequency signals used in the provision of wireless services.

Applicable codes means:

- (A) uniform building, fire, electrical, plumbing, or mechanical codes adopted by a recognized national code organization; and
- (B) local amendments to those codes to the extent not inconsistent with Chapter 284.

City means the City of Allen, Texas or its lawful successor, and its officers and employees.

City Manager shall mean City Manager or designee.

Chapter 284 means Tex. Loc. Gov. Code, Chapter 284, as it exists or may be amended.

Colocate and **Colocation** mean the installation, mounting, maintenance, modification, operation, or replacement of network nodes in a public right-of-way on or adjacent to a pole.

Concealment or **Camouflaged** means any Wireless Facility or Pole that is covered, blended, painted, disguised, camouflaged or otherwise concealed such that the Wireless Facility blends into the surrounding environment and is visually unobtrusive as allowed as a condition for City advance approval under Chapter 284, Sec. 284.105 in Historic or Design Districts. A Concealed or Camouflaged Wireless Facility or Pole also includes any Wireless Facility or Pole conforming to the surrounding area in which the Wireless Facility or Pole is located and may include, but is not limited to any wireless facility or pole hidden beneath a façade, blended with surrounding area design, painted to match the supporting area, or disguised with artificial tree branches.

Decorative pole means a streetlight pole specially designed and placed for aesthetic purposes and on which no appurtenances or attachments, other than specially designed informational, regulatory, or directional signage or temporary holiday or special event attachments, have been placed or are permitted to be placed according to nondiscriminatory City laws, ordinances, codes, rules, or regulations.

Design District means an area that is zoned, or otherwise designated by City ordinance, and for which the City maintains and enforces unique design and aesthetic standards on a uniform and nondiscriminatory basis.

Disaster emergency or **disaster** or **emergency** means an imminent, impending, or actual natural or humanly induced situation wherein the health, safety, or welfare of the residents of the city is threatened, and includes, but is not limited to any declaration of emergency by city state or federal governmental authorities.

Distributed Antenna System or DAS shall be included as a type of "Network Node."

Easement means and shall include any public easement or other compatible use created by dedication, or by other means, to the city for public utility purposes or any other purpose whatsoever. "Easement" shall include a private easement used for the provision of utilities.

Federal Communications Commission or FCC means the Federal Administrative Agency, or lawful successor, authorized to oversee cable television and other multi-channel regulation on a national level.

Highway right-of-way means right-of-way adjacent to a state or federal highway.

Historic district means an area that is zoned or otherwise designated as a historic district under City, state, or federal law.

Law means common law or a federal, state, or local law, statute, code, rule, regulation, order, or ordinance.

Local means within the geographical boundaries of the City.

Location means the City approved and lawfully permitted location for the Network Node or other wireless facilities.

Macro tower means a guyed or self-supported pole or monopole greater than the height parameters prescribed by Chapter 284, Section 284.103 and that supports or is capable of supporting antennas.

Mayor means the Mayor for the City.

Micro network node means a network node that is not larger in dimension than 24 inches in length, 15 inches in width, and 12 inches in height, and that has an exterior antenna, if any, not longer than 11 inches.

Municipal park means the various properties under the direction, control, or supervision of the Director of the City's Park and Recreation Department pursuant to authority granted by the City Council and the City Charter or City ordinances or resolutions.

Municipally owned utility pole means a utility pole owned or operated by a municipally owned utility, as defined by Section 11.003, Utilities Code, and located in a public right-of-way.

MUTCD means Manual of Uniform Traffic Control Devices.

Network node means equipment at a fixed location that enables wireless communications between user equipment and a communications network. The term:

- (A) includes:
 - (i) equipment associated with wireless communications;
 - (ii) a radio transceiver, an antenna, a battery-only backup power supply, and comparable equipment, regardless of technological configuration; and
 - (iii) coaxial or fiber-optic cable that is immediately adjacent to and directly associated with a particular colocation; and
- (B) does not include:
 - (i) an electric generator;
 - (ii) a pole; or
 - (iii) a macro tower.

Network provider means:

- (A) a wireless service provider; or
- (B) a person that does not provide wireless services and that is not an electric utility but builds or installs on behalf of a wireless service provider:
 - (i) network nodes; or
 - (ii) node support poles or any other structure that supports or is capable of supporting a network node.

Node support pole means a pole installed by a network provider for the primary purpose of supporting a network node.

Permit means a document issued by the City authorizing installation, removal, modification, and other work for Provider's wireless facilities in accordance with the approved plans and specifications.

Pole means a service pole, City owned utility pole, node support pole, or utility pole.

Private easement means an easement or other real property right that is only for the benefit of the grantor and grantee and their successors and assigns.

Provider has the same meaning as “Network Provider.”

Public right-of-way means the area on, below, or above a public roadway, highway, street, public sidewalk, alley, waterway, or utility easement in which the City has an interest. The term does not include:

- (A) a private easement; or
- (B) the airwaves above a public right-of-way regarding wireless telecommunications.

Public right-of-way management ordinance means an ordinance that complies with Chapter 284, Subchapter C.

Service pole means a pole, other than a City owned utility pole, owned or operated by the City and located in a public right-of-way, including:

- (A) a pole that supports traffic control functions;
- (B) a structure for signage;
- (C) a pole that supports lighting, other than a decorative pole; and
- (D) a pole or similar structure owned or operated by the City and supporting only network nodes.

Small cell shall be included as a type of “Network Node.”

Stealth has the same meaning as “concealment.”

Substitution pole shall mean a pole that is installed that will replace an existing municipal or utility pole that serve the original intended purpose and support the new network node. A Provider may elect to remove an existing pole, replace it with a similar pole (with some modification) that serves as a new network node in addition to serving the original purpose.

Street means only the paved portion of the right-of-way used for vehicular travel, being the area between the inside of the curb to the inside of the opposite curb, or the area between the two parallel edges of the paved roadway for vehicular travel where there is no curb. A “Street” is generally part of, but smaller in width than the width of the entire right-of-way, while a right-of-way may include sidewalks and utility easements, a “Street” does not. A “street” does not include the curb or the sidewalk, if either are present at the time of a permit application or if added later.

SWPPP shall mean Storm Water Pollution Prevention Plan.

TAS means Texas Accessibility Standards.

Traffic Signal means any device, whether manually, electrically, or mechanically operated by which traffic is alternately directed to stop, to slow down or alter current speed, and to proceed.

Transport facility means each transmission path physically within a public right-of-way, extending with a physical line from a network node directly to the network, for the purpose of providing backhaul for network nodes.

Underground Requirement Area shall mean an area where poles, overhead wires, and associated overhead or above ground structures have been removed and buried or have been approved for burial underground pursuant to City ordinances, zoning regulations, state law, private deed restrictions, and other public or private restrictions, that prohibit installing aboveground structures in a public right-of-way.

User means a person or organization which conducts a business over facilities occupying the whole or a part of a public street or right-of-way, depending on the context.

Utility pole means a pole that provides:

- (A) electric distribution with a voltage rating of not more than 34.5 kilovolts; or
- (B) services of a telecommunications provider, as defined by Chapter 284, Section 51.002, Utilities Code.

Wireless service means any service, using licensed or unlicensed wireless spectrum, including the use of Wi-Fi, whether at a fixed location or mobile, provided to the public using a network node.

Wireless service provider means a person that provides wireless service to the public.

Wireless facilities mean “Micro Network Nodes,” “Network Nodes,” and “Node Support Poles” as defined in Texas Local Government Code Chapter 284.

SECTION III. PERMITTING.

3.1 General Requirements and Information

A Provider shall not install, modify, or relocate a network node or install, modify, or relocate a node support pole within the public right-of-way without first obtaining a Right-of-Way Permit from the City. Prior to installation, modification, or relocation of a network node or installation, modification, or relocation of a node support pole, Provider shall complete and submit to the City a Commercial Building (Electrical) Permit application and a Right-of-Way Permit application in the form provided by the City, along with standard required documents and the following items:

- A. **Payment.** Permit application fee and all other fees required under Chapter 284, including but not limited to annual fees set forth in Section 284.053(a) of Chapter 284, as such fees may be adjusted from time to time pursuant to Section 284.054 of Chapter 284, and fees set forth in Section 284.055 and Section 284.056 of Chapter 284, as applicable;
- B. **Map.** An aerial map showing the location of the existing pole or structure to which the network node is proposed to be attached, and a street view image of the same;
- C. **GIS Data.** Geographic Information System (GIS) data for the location of each proposed wireless facility or node support pole in the format acceptable to the City;
- D. **Size Limits.** Network Providers shall provide detailed drawings, with calculations to show strict conformity to the size limitations as set forth in Chapter 284, in accordance with, but not limited to Chapter 284, Sec. 284.002, size of a Micro Network Node, Sec. 284.003, Size of Network Nodes, and Sec. 284.103, Max. pole height, with each application and with each request for a permit for each location.
- E. **Non-interference with City Safety Communication Networks.** Documentation identifying the frequency on which the proposed network node will operate and a certification that the proposed network node shall not cause any interference with the City's traffic signal light system, public safety radio system, private police cell system, or other City communications components in accordance with Chapter 284, Sec. 284.304;

It shall be the responsibility of the Network Provider to evaluate, prior to making application for permit, the compatibility between the existing City infrastructure and Provider's proposed Network Node. A Network Node shall not be installed in a location that causes any interference. Network Nodes shall not be allowed on City's public safety radio infrastructure.

- F. **Emergency Contacts.** The names and telephone numbers of at least two persons serving as emergency contacts for the Provider who can be reached by telephone 24 hours a day, seven days a week, in the event of an emergency;
- G. **Electrical Drawings.** Sealed engineering drawings for the electrical service providing power to the proposed network node, which must include the conduit size, circuit size,

calculations for amp, and distances running. Provider shall use 120 voltage when connecting to any City service pole or decorative pole and shall provide a disconnect switch and key to meter enclosure upon inspection. The City is entitled to disconnect power to the network node or other wireless facilities in emergency situations;

- H. **Engineering Drawings.** Scaled dimensional construction and engineering drawings indicating the current public right-of-way line and showing any proposed underground conduit and equipment and its spacing from the City's existing utility facilities. Such drawings shall also show a sectional profile of the public right-of-way and identify all existing utilities and existing utility conflicts;
- I. **State and Federal Rights-of-way permit.** If the project lies within right-of-way adjacent to a state or federal highway, the Provider must provide evidence of a permit from the state or federal government; and
- J. **Daily Work Information.** If the work proposed in the Right-of-Way Permit application involves more than five hundred (500) feet of continuous trenching or boring or the installation of more than three (3) new node support poles or more than three (3) electrical meter pedestals or ground boxes, then the Provider shall submit daily work location information, before work can begin;
- K. **Other.** All other information required to be submitted by a right of user in connection with a Right of Way Permit application under Chapter 13, Article III (Management of Public Rights-of-Way) of the Code of Ordinances or other applicable laws, ordinances, codes, rules and regulations of the City.
- L. **Traffic Control/Storm Water Pollution Prevention/Trench Safety.** Where required by the City, based on the proposed scope of work, Provider shall submit a traffic control plan, storm water pollution prevention plan, and/or trench safety plan;

3.2 Attachments to Existing Poles or Structures

In addition to the items in the General Requirements and Information Section 3.1, Provider will submit the following items prior to installation, modification, or relocation of a network node on an existing pole or structure or modification or relocation of an existing node support pole:

- A. Construction and engineering drawings prepared by a professional engineer licensed in the State of Texas, and for wireless facilities proposed to be attached to a service pole, a decorative pole or other City-owned or -controlled structure, a certification from the engineer that the existing pole or structure and its foundations have sufficient structural stability to support the proposed network node and can bear the wind load without pole modification, or in the event the installation will require pole re-enforcement, that such re-enforced pole will have sufficient structural stability to support the proposed network node and can bear the wind load without further pole modification. Such construction and engineering drawings must also address the design of the connection of any item to the pole. If pole re-enforcement is necessary, Provider shall provide construction and

engineering drawings for the proposed alteration to the existing pole. Any re-enforcement or replacement of a pole shall match the color of the existing pole. Any pole re-enforcement or replacement shall be at Provider's sole cost;

- B. A certificate that the network node complies with applicable regulations of the Federal Communications Commission;
- C. Certification that the proposed network node will be placed into active commercial service by or for a Provider not later than the sixtieth (60th) day after the date the construction and final testing of the network node is completed;
- D. Scaled dimensional drawings or pictures of the proposed attachments of the network node to the existing poles or structures as well as any other proposed wireless facility, indicating the spacing from existing curbs, driveways, sidewalks, and other existing poles. This shall include a before-and-after image of the pole and all proposed attachments thereto and associated standalone equipment;

3.3 Substitution of Existing Municipal Poles

A Provider shall not replace an existing Municipal Service Pole without first obtaining a Right-of-Way permit from the City. Each permit application shall disclose if it is a proposed Substitution Pole.

A Provider may elect to remove an existing Municipal Service Pole, replace it with a similar pole (with some modification) that serves primarily as a Node Support Pole in addition to the original purpose. Once construction of a Substitution Pole is complete, it shall become a Node Support Pole and shall be the responsibility of the Provider to maintain.

Maintenance – Street Lights. If the Substitution Pole also serves as a street light, City agrees to perform routine maintenance, at Providers expense, of the street light, including maintenance and all repair and/or replacement of switches, bulbs, ballasts, and starters in accordance with City's standard practices and procedures for maintaining City's standard street lights. Nothing herein shall obligate City to undertake pole replacement, pole repair, decorative modifications, painting, or other repairs deemed aesthetic in nature. Pole replacement, pole repair, and aesthetic improvements shall be at the sole cost and expense of Provider.

3.4 Installation of Network Nodes on New Poles

In addition to the items in the General Requirements and Information Section 3.1, Provider will submit the following items prior to installation or modification of a new node support pole or a network node on a new node support pole:

- A. Scaled dimensional drawings or pictures of the proposed node support pole and any other proposed wireless facilities to be installed in connection with the proposal, indicating the spacing from existing curbs, driveways, sidewalks, and other existing poles. This shall include a before-and-after street view image of the pole and all proposed attachments and associated standalone equipment;

3.5 Installation of Transport Facilities

A Provider shall not install or modify a new transport facility within the public right-of-way without first obtaining a Right-of-Way Permit from the City. Before beginning excavation in any public right-of-way, Provider shall be responsible for complying with all Laws relating to verifying the location of existing utility lines and facilities and avoiding encroachment thereon, including the requirements of Chapter 13, Article III (Management of Public Rights-of-Way) of the Code of Ordinances.

SECTION IV. ELECTRICAL SUPPLY.

Provider shall be responsible for obtaining any required electrical power service to the Provider's wireless facilities. Provider's electrical supply shall be separately metered from the City. The City shall not be liable to the Provider for any stoppages or shortages of electrical power furnished to the wireless facilities, including without limitation, stoppages or shortages caused by any act, omission, or requirement of the public utility serving the wireless facility structure or the act or omission of any other tenant or Provider of the wireless facility structure, or for any other cause beyond the control of the City.

SECTION V. NETWORK NODE AND NODE SUPPORT POLE REQUIREMENTS.

Provider shall, at its own cost and expense, install all wireless facilities in a good and workmanlike manner and in accordance with the requirements promulgated by this Wireless Facilities Design Manual, Chapter 13, Article III (Management of Public Rights-of-Way) of the Code of Ordinances, Chapter 284 of the Texas Local Government Code, and all other applicable laws, ordinances, codes, rules and regulations of the City, the state, and the United States (collectively, "Laws"), as such may be amended from time to time. Provider's work shall be subject to the regulation of the City. All work done in connection with the installation, operation, maintenance, repair, modification, and/or replacement of wireless facilities shall be in compliance with all applicable Laws. The following requirements apply to the installation, operation, maintenance, repair, modification, and/or replacement of wireless facilities:

- A. **Concealment.** Wireless facilities shall be concealed or enclosed as much as possible in an equipment box, cabinet or other enclosure that may include ventilation openings. External cables and wires hanging off a pole shall be sheathed or enclosed in a conduit, so that wires are protected and not visible or visually minimized to the extent possible in strict accordance with Chapter 13, Article III (Management of Public Rights-of-Way) of the Code of Ordinances and other applicable ordinances, except to the extent not consistent with Chapter 284;
- B. **Visibility Triangles.** No wireless facility shall be located or placed in a manner that encroaches on existing or proposed City site visibility triangles;

- C. **Meters.** Electrical meters shall not be mounted on a service pole, decorative pole or other City-owned or -controlled structure. Standalone electrical meters shall be located on or within a pad-mounted pedestal enclosure that is powder coated dark bronze. Provider shall provide a key (#2195) to each meter upon inspection by City. All electrical meters serving network nodes must display the Provider's name and contact information;
- D. **Power Disconnect.** All power to a network node located on or attached to a service pole, decorative pole or other City-owned or -controlled structure must be able to be disconnected to provide a safe working environment;
- E. **City Conduit.** Use of City conduits for a Provider's wireless facilities is prohibited;
- F. **Height of Attachments.** All attachments on all Service Poles shall be at least 8 feet above grade, in accordance with Chapter 284, Sec. 285.108 (a) (1) - (2) and if a Network Node attachment is projecting toward the street, for the safety and protection of the public and vehicular traffic, the attachment shall be installed no less than seventeen (17) feet above the ground.
- G. **Protrusion.** In accordance with Section 284.003(a)(1)(C), Section 284.003 (a)(2)(C) and Section 284.003(a)(3)(B) of Chapter 284, no protrusion from the outer circumference of the existing structure or pole to which a network node is attached shall be more than two (2) feet;
- H. **Color.** The color of network nodes shall match the color of the poles or structures to which they are attached such that the network nodes blend with the color of the poles or structures and new node support poles shall match the finish and coating of other poles in the vicinity (i.e. galvanized or powder-coated dark bronze);
- I. **Locates.** Before beginning excavation in any public right-of-way, Provider shall be responsible for complying with all Laws relating to verifying the location of existing utility lines and facilities and avoiding encroachment thereon, including the requirements of Chapter 13, Article III (Management of Public Rights-of-Way) of the Code of Ordinances;
- J. **Meeting.** A pre-construction meeting is required before any work is commenced that involves installing a network node on a City pole or structure;
- K. **Wooden Poles.** Wooden node support poles are prohibited in the public right-of-way. All new node support poles located within the public right-of-way must be installed on breakaway supports that meet the requirements contained in the American Association of State Highway and Transportation Officials' (AASHTO) Manual and must be in a material and color matching standard City poles unless otherwise approved by the City in writing; and
- L. **New Node Support Pole Spacing.** Unless otherwise approved by City in writing, new node support poles shall be spaced apart from existing utility poles or node support poles at the same distance as the spacing between utility or City poles in the immediate vicinity, but no less than at a minimum three hundred (300) feet from a colocated utility pole or

another node support pole to minimize the hazard of poles adjacent to roadways and to minimize effect on property values and aesthetics on the area.

- M. **Identifying Labels.** All colocated utility or city poles or any new node support pole shall have the contact information of the Provider conspicuously displayed (i.e. visible from an observer standing on the ground) on the pole in a permanent fashion in accordance with Section 15.4, for the purpose of contacting by the City or other interested parties to affect adjustment, repair, or in event of emergency. Such contact information must be kept current. Out-dated or incorrect information will result in the network node equipment being considered abandoned and action in accordance with Section 13.2(c) will ensue. Contact information shall include provider name, a phone number, and physical address.

SECTION VI. INSPECTIONS.

The City may perform visual inspections of any wireless facilities located in the public right-of-way as the City deems appropriate without notice. If the inspection requires physical contact with any wireless facilities, the City shall provide written notice to the Provider within five (5) business days of the planned inspection. Provider may have a representative present during such inspection.

In the event of an emergency situation, the City may, but is not required to, notify Provider of an inspection. The City may take all actions necessary to remediate the emergency situation and the City shall notify Provider as soon as practicable after remediation is complete.

SECTION VII. DESIGNATED AREAS.

1. The City Council may designate an area as a Historic District or a Design District under Chapter 284.105 at any time.
2. Currently designated *Historic Districts* are:
 - (a) Historic District Number 1 is the area referred to as the Central Business District. Its boundaries are defined in the Comprehensive Plan, adopted by the Allen City Council.
3. The failure to designate an area in this Chapter shall not mean that such an area is not within a defined district, if so designated by the City Council. Future areas may be designated as one of these Districts at any time. Such a designation does not require a zoning case.
4. While not required under Chapter 284 to designate Underground Compliance Areas to prohibit above ground Wireless facilities, the City may also, from time to time, also designate Underground Compliance Areas.

SECTION VIII. PLACEMENT OF NETWORK NODES AND NODE SUPPORT POLES.

- 8.1 Generally.** In accordance with Chapter 284.102, a Provider shall construct and maintain Network Nodes and Node Support Poles in a manner that does not:

- 1) obstruct, impede, or hinder the usual travel or public safety on a public right-of-way;
- 2) obstruct the legal use of a public right-of-way by other utility providers;
- 3) violate nondiscriminatory applicable codes;
- 4) violate or conflict with the City's publicly disclosed public right-of-way management ordinance or this Design Manual;
- 5) violate the federal Americans with Disabilities Act of 1990 (42 U.S.C. Section 12101 et seq.).

8.2 *Locations.* Location of a wireless facility must receive written consent from the City prior to installation. If a provider fails to remove any unauthorized wireless facility or any wireless facility that is located in an improper location within the earlier of thirty (30) days after receiving written notice or the date required by the City the Provider shall be subject to a penalty of \$500.00 per day until the wireless facility is removed or relocated to the correct area within the permitted location, regardless of whether the Provider's contractor, subcontractor, or vendor installed the wireless facility in strict conformity with Chapter 13, Article III (Management of Public Rights-of-Way) of the Code of Ordinances or other applicable Laws concerning improperly located facilities in the public right-of-way.

Without the prior written consent of the City, a provider shall neither allow the installation of nor install wireless facilities in or on any:

1. Municipal Park
2. City Property that is not public right-of-way
3. Decorative Poles
4. Historic Districts
5. Design Districts
6. Residential Areas where right-of-way that is adjacent to a street that is not more than fifty (50) feet wide or adjacent to single-family residential lots or other multifamily residences or undeveloped land that is designated for residential use by zoning, as designated on the future land use plan of the Comprehensive Plan, or deed restrictions.

Each permit application shall disclose if it is within areas listed above.

8.3 *Historic District and Design District Conditions.* As a condition for approval of wireless facilities in design districts or historic districts, the City shall require reasonable design or concealment measures for the wireless facilities. Therefore, any request for installation in a design district or historic district must be accompanied with proposed concealment measures in the permit application. The City requests that a Provider explore the feasibility of using camouflage measures to improve the aesthetics of the wireless facilities, or any portion thereof, to minimize the impact to the aesthetics in design districts or historic districts. Provider shall comply with and observe all applicable Laws relating to historic preservation.

- 8.4 *Historic Landmarks.*** A Network Provider is discouraged from installing a Network Node or Node Support Pole within 300 feet of a historic site or structure or Historic Landmark recognized by the City, state or federal government (see, for example, and not limited to §442.001(3) of the Texas Government Code, and 16 U.S.C. §470), as of the date of the submission of the permit. It is recommended that each permit application disclose if it is with 300 feet of such a structure.
- 8.5 *Public right-of-way.*** To minimize any obstruction, impediment, or hindrance to the usual travel or public safety on a public right-of-way, node support poles and ground equipment shall be placed within three (3) feet of the outer edge of the public right-of-way line or as close as possible thereto, unless approved otherwise by permit. Wireless facilities shall not obstruct, impede, or hinder pedestrian or vehicular traffic in the public right-of-way or obstruct or interfere with the legal use of a public right-of-way by other utility providers. Provider shall promptly remove wireless facilities that are installed in a location that is not in accordance with the plans approved by the City, that obstructs, impedes, or hinders pedestrian or vehicular traffic, that obstructs or interferes with the legal use of a public right-of-way by other utility providers, that does not comply with applicable Laws, or that otherwise renders the public right-of-way non-compliant with applicable Laws, including but not limited to the American Disabilities Act.
- 8.6 *Existing telephone or electrical lines between existing utility poles.*** Micro network nodes shall only be lashed on existing telephone or electrical lines between existing utility poles (electric poles or telephones poles), with notice to the pole owner as required by the Federal Pole Attachment Act, and not placed on utility poles, node support poles or service poles.
- 8.7 *Limit on number of network nodes per location.*** There shall be no more than one network node on any one pole.
- 8.8 *Compliance with Undergrounding Requirements.*** In accordance with Chapter 284, Sec. 284.107, a Network Provider shall comply with nondiscriminatory undergrounding requirements, including municipal ordinances, zoning regulations, state law, private deed restrictions, and other public or private restrictions, that prohibit installing aboveground structures in a public right-of-way without first obtaining zoning or land use approval.
1. Areas may be designated from time to time by the City as Underground Requirement Areas in accordance with filed plats, and or conversions of overhead to underground areas, as may be allowed by law.
 2. Each permit application shall disclose if it is within an area that has undergrounding requirements.
 3. If a location is designated by the City to transition to be an Underground Requirement Area, then a Provider's permit for the location of the micro network node, network node, node support pole, and related ground equipment at such location will be revoked ninety (90) days after the designation, with removal of said micro network node, network node, node support pole, and related ground equipment at such location within ninety (90) days of such designation, or as otherwise allowed by the City for the transition of other overhead facilities.

SECTION IX. ORDER OF LOCATION PREFERENCE.

9.1 Order of Location Preference

1. Existing Utility Poles (electric poles or telephones poles), shall be the preferred support facility for Network Nodes and related ground equipment.
2. Existing non-decorative street lights with a height of more than 25 feet.
3. Substitution Poles
4. New network node support poles.
5. Traffic signal structures when such installation will not interfere with the integrity of the facility and will not interfere with the safety of public and in accordance with an agreement as allowed by Chapter 284, Sec. 285.056 and Sec. 284.101 (a) (3), and (b).
6. Street signage shall be the least preferred type of allowed facility for attachment of Network Nodes.

A Provider must demonstrate why, to the satisfaction of the City, a higher preference option is not feasible for the proposed network node installation, when making application for installation of a lower-priority installation. Such information shall be included within the permit application to be considered complete and adequate for review.

SECTION X. GROUND EQUIPMENT.

10.1 *Ground Equipment near street corners and intersections.* Ground equipment shall be minimal and the least intrusive. Ground equipment may not be installed within two hundred fifty (250) feet of a street corner or a street intersection to minimize any obstruction, impediment, or hindrance to the usual travel or public safety on a public right-of-way; to provide the maximum line of sight required to facilitate the safe travel of vehicular and pedestrian traffic; to maximize that line of sight at street corners and intersections; and to minimize hazards at those locations.

10.2 *Ground Equipment near municipal parks.* For the safety of municipal park patrons, particularly small children, and to allow full line of sight near municipal park property, a Provider shall not install ground equipment in a public right-of-way that is within a municipal park or within two hundred fifty (250) feet of the boundary line of a municipal park, unless approved by the Director of the City's Parks and Recreation Department in writing.

10.3 *Ground equipment density.* To enhance the safety requirements of line of sight of pedestrians, particularly small children, the City may deny a request for a proposed location if the Provider seeks to install ground equipment where existing ground equipment within three hundred (300) feet already occupies a footprint of twenty-five (25) square feet or more.

SECTION XI. MUNICIPAL SERVICE POLES.

11.1 Conformance. Installation of wireless facilities on a service pole shall be in strict conformance with the agreement applicable to each such installation pursuant to Section 285.056 and Section 284.101(a)(3) and (b) of Chapter 284.

11.2 Installations on Traffic Signals or Lighting Structures

- A. Installations of wireless facilities on a traffic signal structure or lighting structure must not interfere with the integrity of the structure in any way that may compromise the safety of the public and must be in strict conformance with an agreement applicable to each such installation pursuant to Section 285.056 and Section 284.101(a)(3) and (b) of Chapter 284. Installation of wireless facilities on any traffic signal structure shall:
1. Utilize conductor or wiring encased in a separate conduit than the traffic signal or lighting electronics;
 2. Have a separate electric power connection than the traffic signal or lighting structure;
 3. Have a separate access point than the traffic signal or lighting structure; and
 4. Shall not puncture, penetrate, or cut the Municipal Pole in any way.
- B. Provider shall provide the City a key to each electrical meter providing power to a wireless facility at the time of inspection and shall have the ability to temporarily cut-off electricity to its wireless facilities for the safety of maintenance personnel. In the event of failure of components of the traffic signal system for whatever reason, including damage resulting from vehicular collisions, weather-related events, or malicious attacks, City will respond to restore traffic signal operations as a matter of public safety. Should the events that result in damage or failure of the traffic signal system also affect Provider's wireless facilities, Provider shall have the sole responsibility to repair or replace its wireless facilities and shall coordinate its own emergency efforts with the City.

11.3 Installations on Street Signage or other Traffic Control Structures

Installations of wireless facilities on a street signage or traffic control structure must not interfere with the integrity of the structure in any way that may compromise the safety of the public and must be in strict conformance with an agreement applicable to each such installation pursuant to Section 285.056 and Section 284.101(a)(3) and (b) of Chapter 284. Installation of wireless facilities on any street signage or traffic control structure that has electrical power shall:

- A. Utilize electric conductor or wiring encased in a separate conduit than any City signage or traffic control electronics;
- B. Have a separate electric power connection than the signage or traffic control structure;
- C. Have a separate access point than the signage or traffic control structure; and
- D. Shall not puncture, penetrate, or cut the Municipal Pole in any way.

11.4 Reservation of Rights

- A. The City reserves the right to install, and permit others to install, utility facilities in the public right-of-way. In permitting such work to be done by others, the City shall not be liable to Provider for any damage caused by those persons or entities.
- B. The City reserves the right to locate, operate, maintain, and remove City traffic signal poles in the manner that best enables the operation of its traffic signal system and protects public safety.
- C. The City reserves the right to locate, operate, maintain, and remove any City pole or structure located within the public right-of-way in the manner that best enables the City's operations and protects public safety.

SECTION XII. INTERFERENCE WITH OPERATIONS.

12.1 No Liability

- A. The City shall not be liable to a Provider for any damage caused by other Providers with wireless facilities sharing the same pole or for failure of Provider's wireless facilities for whatever reason, including damage resulting from vehicular collisions, weather-related events, or malicious attacks.
- B. The City shall not be liable to a Provider by reason of inconvenience, annoyance, or injury to the Provider's wireless facilities or activities conducted by Provider related thereto, arising from the necessity of repairing any portion of the public right-of-way, or from the making of any necessary alterations or improvements in, or to, any portion of the public right-of-way or in, or to, City's fixtures, appurtenances, or equipment. The City will use reasonable efforts not to cause material interference to Provider's operation of its wireless facilities.

12.2 Signal Interference with City's Communications Infrastructure Prohibited

- A. **No interference.** In the event that Provider's wireless facilities interfere with the City's traffic signal system, public safety radio system, private police cell system, or other City communications infrastructure operating on spectrum where the City is legally authorized to operate, Provider shall promptly cease operation of the wireless facility causing such interference upon receiving notice from the City and refrain from operating such wireless facility in the future. Provider shall respond to the City's notice to address the source of the interference as soon as practicable, but in no event later than twenty-four (24) hours of receiving notice. Documentation shall be submitted with the Provider's permit application that identifies the frequency on which the wireless facility will operate, which must not interfere with the City's traffic signal system, public safety radio system, private police cell system, or other City communications infrastructure. Wireless facilities shall not be located or colocated on the City's public safety radio infrastructure.

- B. **Protocol for responding to event of interference.** For each event of prohibited interference, Provider shall provide the City an interference remediation report that includes the following items:
1. Remediation Plan. Provider shall devise a proposed remediation plan to stop the event of inference;
 2. Time Frame for Execution. Provider shall provide the expected time frame for execution of the remediation plan; and
 3. Additional Information. Provider shall include any additional information relevant to the execution of the remediation plan.

In the event that interference with City facilities, services, or operations cannot be eliminated, Provider shall shut down the interfering wireless facility and remove or relocate the wireless facility that is the source of the interference as soon as possible to a suitable alternative location approved by City.

- C. **Testing.** Following installation or modification of a network node, the City may require Provider to test the network node's radio frequency and other functions to confirm it does not interfere with the City's facilities, services, or operations.

SECTION XIII. ABANDONMENT, RELOCATION, AND REMOVAL.

13.1 Abandonment of Wireless Facilities

Abandoned or obsolete Micro Network Node, Network Node, Node Support Pole and related ground equipment shall be removed in strict accordance with the City's rights-of-way management ordinance, and other applicable ordinances, except to the extent not consistent with Chapter 284.

When Provider removes or abandons permanent structures in the public right-of-way, the Provider shall notify the City in writing of such removal or abandonment and shall file with the City the location and description of each wireless facility removed or abandoned. The City may require the Provider to complete additional remedial measures necessary for public safety and to protect the integrity of the public right-of-way.

13.2 Relocation and Removal at Provider's Expense

In accordance with Chapter 284, Sec. 284.107, except as provided in existing state and federal law, a Network Provider shall relocate or adjust Micro Network Node, Network Node, Node Support Pole and related ground equipment in a public right-of-way in a timely manner and without cost to the municipality managing the public right-of-way.

- A. Provider shall remove and relocate a wireless facility at its own expense to an alternative location not later than ninety (90) days after receiving written notice that removal, relocation, and/or alteration of the wireless facility is necessary due to:

1. Construction, completion, repair, widening, relocation, or maintenance of, or use in connection with, any City construction, city-sanctioned improvement by others, or maintenance project or other public improvement project;
 2. Maintenance, upgrade, expansion, replacement, removal or relocation of the City's pole or structure upon which Provider's network nodes are attached;
 3. The wireless facility, or portion thereof, is adversely affecting proper operation of traffic signals, streetlights, or other City property;
 4. Closure of a street or sale of City property;
 5. Projects and programs undertaken to protect or preserve the public health, safety or welfare;
 6. Activities undertaken to eliminate a public nuisance;
 7. Provider's failure to obtain all applicable licenses, permits, and certifications required by Law for its wireless facility; or
 8. Duty otherwise arising from applicable Law.
- B. Provider's duty to remove and relocate its wireless facility at its expense is not contingent on the availability of an alternative location acceptable for relocation. City may make reasonable efforts to provide an alternative location within the public right-of-way for relocation, but regardless of the availability of an alternative site acceptable to Provider, Provider shall comply with the notice to remove its wireless facility as instructed.
- C. The City may remove the wireless facility if Provider does not remove the wireless facility within ninety (90) days of Provider's receipt of request. In such event, Provider shall reimburse City for the City's actual cost of removal of Provider's wireless facility within thirty (30) days of receiving an invoice from the City.

13.3 Removal by City for Safety and Imminent Danger Reasons

- A. Network Provider shall, at its sole cost and expense, promptly disconnect, remove, or relocate the applicable Micro Network Node, Network Node, Node Support Pole and related ground equipment within the time frame and in the manner required by the City Manager if the City Manager reasonably determines that the disconnection, removal, or relocation of any part of a Micro Network Node, Network Node, Node Support Pole and related ground equipment (a) is necessary to protect the public health, safety, welfare, or City property, (b) the Micro Network Node, Network Node, Node Support Pole and related ground equipment, or portion thereof, is adversely affecting proper operation of streetlights or City property, or (c) Network Provider fails to obtain all applicable licenses, Permits, and certifications required by Law for its Micro Network Node, Network Node, Node Support Pole and related ground equipment, or use of any Location under applicable law. If the City Manager reasonably determines that there is imminent danger to the public, then the City may immediately disconnect, remove, or relocate the

applicable Micro Network Node, Network Node, Node Support Pole and related ground equipment at the Network Provider's sole cost and expense.

- B. The City Manager shall provide 90 days written notice to the Network Provider before removing a Micro Network Node, Network Node, Node Support Pole and related ground equipment under this Section, unless there is imminent danger to the public health, safety, and welfare.
- C. Network Provider shall reimburse City for the City's actual cost of removal of Micro Network Node, Network Node, Node Support Pole and related ground equipment within 30 days of receiving the invoice from the City.

13.4 Removal or Relocation by Provider

- A. If the Provider removes or relocates a wireless facility at its own discretion, it shall notify the City in writing not less than ten (10) days prior to removal or relocation. Provider shall obtain all permits required for relocation or removal of its wireless facilities prior to relocation or removal.
- B. The City shall not issue any refunds for any amounts paid by Provider for wireless facilities that have been removed.

13.5 Provider Responsible

Network Provider shall be responsible and liable for the acts and omissions of Network Provider's employees, temporary employees, officers, directors, consultants, agents, Affiliates, subsidiaries, sub-Network Provider's and subcontractors in connection with the installations of any Micro Network Node, Network Node, Node Support Pole and related ground equipment, as if such acts or omissions were Network Provider's acts or omissions in strict accordance with the City's rights-of-way management ordinance, and other applicable ordinances, except to the extent not consistent with Chapter 284.

SECTION XIV. INSURANCE.

- 1. Insurance, bonding and security deposits shall be in strict accordance with the City's rights-of-way management ordinance, and other applicable ordinances, except to the extent not consistent with Chapter 284.
- 2. Indemnity shall be in accordance with Chapter 284, Sec. 284.302, as provided for in Chapter 283, Sec. 283.057 (a) and (b) of the Texas Loc. Gov't Code.

SECTION XV. GENERAL PROVISIONS.

15.1 Fiber Connection

Provider shall be responsible for obtaining access and connection to fiber optic lines or other backhaul solutions that may be required for its wireless facilities.

15.2 Generators

Provider shall not allow or install generators or back-up generators in the public right-of-way in accordance with Chapter 284, Sec. 284.002 (12) (B) (1).

15.3 Equipment Dimensions

Provider's node support poles and network nodes shall comply with the dimensions set forth in Chapter 284.

15.4 Signage

- A. Provider shall post its name, location identifying information, and emergency telephone number in an area on the cabinet of the node support poles and network nodes that is visible to the public. Signage required under this section shall not exceed 4" x 6", unless otherwise required by law (e.g. RF ground notification signs) or the City.
- B. Except as required by applicable Laws or by the utility pole owner, Provider shall not post any other signage or advertising on the node support poles and network nodes, or utility pole.

15.5 Repair

Whenever the installation, placement, attachment, repair, modification, removal, operation, use, or relocation of wireless facilities, or any portion thereof, is required and such installation, placement, attachment, repair, modification, removal, operation, use, or relocation causes any property of the City to be damaged or to have been altered in such a manner as to make it unusable, unsafe, or in violation of any Laws, Provider, at its sole cost and expense, shall promptly repair and return such property to its original condition. If Provider does not repair such property or perform such work as described in this section, then the City shall have the option, upon seven (7) days prior written notice to Provider or immediately if there is an imminent danger to the public, to perform or cause to be performed such reasonable and necessary work on behalf of Provider and to charge Provider for the reasonable and actual costs incurred by the City. Provider shall promptly reimburse the City for the costs.

15.6 Inventory

Provider shall maintain a list of its wireless facilities located in the City and provide City an inventory of the location of each such wireless facility within ten (10) days of installation. The inventory of wireless facilities shall include GIS coordinates, date of installation, City pole ID number (if applicable), type of pole used for installation, pole owner, and description/type of installation for each wireless facility.

Upon City's written request, Provider shall provide a cumulative inventory within thirty (30) days of City's request. With respect to wireless facilities that become inactive, the inventory shall include the same information as active installations in addition to the date the wireless

facility was deactivated and the date the wireless facility was removed from the public right-of-way. City may compare the inventory to its records to identify any discrepancies.

In the event Provider's contact information changes and differs from the information provided on a permit application, Provider shall promptly provide updated contact information to the City for emergency purposes and immediately update signage on network node property in accordance with Section 15.4.

15.7 Restoration

Network Provider shall restore and repair of the rights-of-way from any damage to the Right-of-Way, or any facilities located within the Right-of-Way, and the property of any third party resulting from Network Provider's activities in strict accordance with the City's rights-of-way management ordinance, and other applicable ordinances, except to the extent not consistent with Chapter 284.

SECTION XVI. RESERVED.

SECTION XVII. DESIGN MANUAL – UPDATES.

Placement or Modification of Micro Network Node, Network Node, Node Support Pole and related ground equipment shall comply with the City's Design Manual at the time the Permit for installation or Modification is approved and as amended from time to time.