

**EXHIBIT**  
**“A”**

# City of Round Rock

## DESIGN MANUAL

for the Installation of Network Nodes and Node Support Poles

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## SECTION 1. PURPOSE AND APPLICABILITY.

The City of Round Rock (“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.

*Purpose:* Loc. Gov. Code, Chapter 284 allows certain wireless Network Providers to install in the public rights-of-way their wireless facilities, described and defined in Tex. Loc. Gov. Code, Chapter 284, Sec. 284.002 as “Micro Network Nodes”, “Network Nodes”, and “Node Support Poles”.

As expressly allowed by Tex. Loc. Gov. Code, Chapter 284, Section 284.108, and pursuant to its police power authority reserved in Sec. 284.301, the City enacts this Design Manual in order to meet its fiduciary duty to the citizens of the City, and to give assistance and guidance to wireless telecommunications providers to assist such companies in the timely, efficient, safe and aesthetically pleasing installation of technologically competitive equipment.

*Applicability:* This Design Manual is for siting and criteria for the installation Wireless Facilities, including Micro Network Nodes, Network Nodes, Node Support Poles and related ground equipment being installed pursuant to Loc. Gov. Code, Chapter 284

This Design Manual shall apply to any sitings, installations, collocations of Network nodes, Node support poles, Micro network nodes, Distributed Antenna Systems, microwave communications or other Wireless Facilities, by whatever nomenclature they are known, in, on, over or under the public rights-of-way, whether they are installed pursuant to Chapter 284, or installed pursuant to an agreement as agreed to and consented to by the City in its discretion, or installed as may otherwise be allowed by state law.

A Network Provider shall comply with the City’s Public Rights-of-Way Management Ordinance except where in conflict with this Design Manual or Chapter 284, Subchapter C.

## SECTION 2. DEFINITIONS.

The definitions as used in Tex. 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 refers to 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 Round Rock, Texas or its lawful successor. As used throughout, the term city also includes the designated agent of the city.

*City Manager* shall mean City Manager or designee.

*Chapter 284* means Tex. Loc. Gov. Code, Chapter 284.

*Collocate* and *collocation* 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. 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, by way of example, the use of façades, blending with surrounding area design, painting to match the supporting area, or disguising 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 or directional signage or temporary holiday or special event attachments, have been placed or are permitted to be placed according to nondiscriminatory municipal codes.

*Design District* means an area that is zoned, or otherwise designated by municipal code, and for which the city maintains and enforces unique design and aesthetic standards on a uniform and nondiscriminatory basis. For the purposes of this Design Manual, Design Districts include the designated areas in Section 3(D) below.

*Development Code* refers to the most recently dated version of the City of Round Rock Development Code approved by the Round Rock City Council.

*Disaster emergency* or *disaster* means an imminent, impending, or actual natural or human-made 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.

*Ground Equipment* means a Wireless Facility that is located on the surface of the Public Right-of-Way in an approved permit that is immediately adjacent to the Pole on which the Network Node is located.

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

*Historic Design Guidelines* refers to the Design Guidelines for Historic Commercial and Residential Districts and Properties in Round Rock, Texas, approved by the Round Rock City Council.

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

*Historic Landmark* refers to a historic site or structure recognized by the state or federal government (i.e. the site or structure is listed in the National Register of Historic Places, as a Texas State Antiquities Landmark or Recorded Texas Historical Landmark) or a zoned area designated as H-Overlay as specified by the City of Round Rock. These are not limited to sites or structures in the City.

*Historic Preservation Officer* refers to the City of Round Rock Historic Preservation Officer or their designee.

*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.

*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 an area that is zoned or otherwise designated by municipal code or dedicated as a public park for the purpose of recreational activity.

*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:

1. equipment associated with wireless communications;
2. a radio transceiver, an antenna, a battery-only backup power supply, and comparable equipment, regardless of technological configuration; and
3. coaxial or fiber-optic cable that is immediately adjacent to and directly associated with a particular collocation; and
4. a "Small Cell"

B. does not include:

1. an electric generator;
2. a pole; or
3. a macro tower.

*Network Provider or 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:

1. network nodes; or
2. 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 written authorization for the use of the public right-of-way or collocation on a service pole required from a municipality before a network provider may perform an action or initiate, continue, or complete a project over which the municipality has police power authority.

*Pole* means a Service Pole, Municipally 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.

*Service Pole* means a pole, other than a Municipally Owned Utility Pole, owned or operated by a municipality 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 a municipality and supporting only network nodes.

*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 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 means 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 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.

*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 3. PROHIBITED AND PREFERRED LOCATIONS OF  
MICRO NETWORK NODES, NETWORK NODES, NODE SUPPORT POLES  
AND RELATED GROUND EQUIPMENT.**

**A. Prohibited or Restricted Areas for Certain Wireless Facilities, except with Separate City Agreement or Subject to Concealment Conditions.**

1. ***Municipal Parks and Residential Areas.*** In accordance with Chapter 284, Sec. 284.104 (a), a Network Provider may not install a Node Support Pole in a public right-of-way without the City's discretionary, nondiscriminatory, and written consent if the public right-of-way is in a Municipal Park or is adjacent to a street or thoroughfare that is:

- a. not more than 50 feet wide; and
- b. adjacent to single-family residential lots or other multifamily residences or undeveloped land that is designated for residential use by zoning or deed restrictions.

1.1. In accordance with Chapter 284, Sec. 284.104 (b), a Network Provider installing a Network Node or Node Support Pole in a public right-of-way described above shall comply with private deed restrictions and other private restrictions in the area that apply to those facilities.

1.2. Each permit application shall disclose if it is within a Municipal Park and Residential Areas as described above.

2. ***Historic District and Design Districts.*** In accordance with Chapter 284, Sec. 284.105, a Network Provider must obtain advance written approval from the City before collocating Network Nodes or installing Node Support Poles in a Design District or in an area of the City zoned or otherwise designated as a Design District or Historic District.

2.1. Installation of Network Nodes or Node Support Poles in Design Districts or Historical Districts shall be reviewed for compliance with this Design Manual, the City's Code of Ordinances, Development Code, Historic Design Guidelines, Overlay District Guidelines, and City, State, and federal historic preservation laws by the Historic Preservation Officer.

2.2. As a condition for approval of Network Nodes, Network Support Poles, or related equipment in a Design District or in a Historic District, the City shall require reasonable design, Camouflage or Concealment measures for the Network Nodes or Network Support Poles. Any request for installations shall include Camouflage or Concealment measures aimed to mitigate the impact or improve the aesthetics of the installation.

2.3. Applications for installation of Network Nodes, Network Support Poles, or related equipment in a Design District or in a Historic District shall include accurate scaled

drawings of all proposed new equipment for installation, showing the proposed location relative to existing equipment and adjacent structures within three hundred (300) feet of the proposed installation.

2.4. Any Network Nodes or related equipment mounted on a Decorative Pole or Network Support Pole within a Design District or in a Historic District must match the color of the District's Decorative Poles.

2.5. Each permit application shall disclose if it is within a Design District or a Historic District.

2.6. The Historic Preservation Officer shall have discretion to require additional materials from a Network Provider for the purpose of ensuring compliance with standards set forth in this manual, the City's Code of Ordinances, Development Code, Historic Design Guidelines, Overlay District Guidelines, and City, State, and federal historic preservation laws.

3. ***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).

3.1. Camouflage or Concealment measures for Network Nodes, Network Support Poles, and related equipment shall be required by the City for applications for installation in a public right-of-way within three hundred (300) feet of a designated Historic Landmark. Camouflage or Concealment measures shall be reviewed and approved by the Historic Preservation Officer.

3.2. The installation of new Network Support Pole in front of the front façade or front lot line of a structure or site designated as a Historic Landmark is prohibited.

3.3. For proposed installations of Network Nodes or Network Support Poles within three hundred (300) feet of a Historic Landmark, the Historic Preservation Officer shall have discretion to require additional materials from a Network Provider for the purpose of ensuring compliance with standards set forth in this manual, the City's Code of Ordinances, Development Code, Historic Design Guidelines, Overlay District Guidelines, and City, State, and federal historic preservation laws.

4. ***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.

4.1. 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.

4.2. Each permit application shall disclose if it is within an area that has undergrounding requirements.

**B. Least preferable locations.**

1. ***Residential Areas and Municipal Parks.*** A Network Provider is discouraged from installing a Network Node on an existing pole in a public right-of-way in or adjacent to a street or thoroughfare that is adjacent to a Municipal Park or residential lots or undeveloped land that is designated for residential use by zoning or deed restrictions.
2. ***Historic Districts and Design Districts.*** A Network Provider is discouraged from installing a Network Node or a Node Support Pole in the public right-of-way in any area designated by the City as a Design Districts or Historic Districts.

**C. Most preferable locations**

1. ***Industrial areas*** if not adjacent to a Municipal Park, Residential area, Historic District or Design District.
2. ***Highway Rights-of-Way*** areas if not adjacent to a Municipal Park, Residential area, Historic District or Design District.
3. ***Retail and Commercial areas*** if not adjacent to a Municipal Park, Residential area, Historic District or Design District.

**D. Designated Areas.** The City Council may designate an area as a Historic District or Design District under Chapter 284.105 at any time. Currently designated Design Districts include the following:

1. A public improvement district pursuant to Chapter 372 of the Texas Local Government Code, as amended;
2. reinvestment zone pursuant to Chapter 311 of the Texas Tax Code, as amended;
3. planned development zoning district with Decorative Poles;
4. zoning districts MU-1 (Mixed-use Historic Commercial Core), MU-2 (Mixed-use Downtown Medium Density), MU-L (Mixed-use Limited), H (Historic) Overlay, and CT (Chisholm Trail) Overlay, as specified by City of Round Rock Planning and Development Services;
5. Property within 300 feet of any property zoned H (Historic) Overlay;

6. conservation district; and
7. any other area the City Council has designated a Design District.

**E. Exceptions.** The City by its discretionary consent and agreement may grant exception to the above prohibited locations and sizes, but only in a non-exclusive, and non-discriminatory manner, as allowed or required by Chapter 284, Sec. 284.109 and Sec. 284.110.

**F. Order of Preference regarding Network Node attachment to existing facilities and New Node Support Poles.**

1. *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.
2. *Existing Utility Poles* (electric poles or telephones poles), shall be the preferred support facility for Network Nodes and related ground equipment.
3. *Municipal Service Poles:*
  - a. *Non-decorative street lights* with a height of more than 20 feet.
  - b. *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).
  - c. *Street signage* shall be a low priority use for attachment of a Network Node.
  - d. *Other municipal Service Pole* use is discouraged.
4. *New Node Support Poles* shall be the least preferred type of allowed facility for attachment of Network Nodes.
5. *Ground Equipment.* Ground equipment should be minimal and the least intrusive.

## SECTION 4. GUIDELINES ON PLACEMENT.

### A. Generally.

In accordance with Chapter 284, a Network 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 municipality's publicly disclosed public right-of-way management ordinances or this Design Manual.
5. violate the federal Americans with Disabilities Act of 1990 (42 U.S.C. Section 12101 et seq.).
6. cause any harmful radio interference to FCC-authorized mobile telecommunications operations of the city.
7. Violate the National Electrical Safety Code provisions prohibiting placement within ten feet of energized conductors or existing utility service poles.

### B. General Requirements and Information:

1. **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.
2. **State and Federal Rights-of-way permit.** If the project lies within a Highway Right-of-Way, the applicant must provide evidence of a permit from the State or Federal Government.
3. **Confirmation of non-interference with City Safety Communication Networks.**
  - a. The Network Provider needs to provide analysis that the proposed network node shall not cause any interference with City public safety radio system, traffic signal light system, or other city safety or utility communications components in accordance with Chapter 284, Sec. 284.304.
  - b. 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.

4. ***Improperly Located Network Node facilities, Node Support Poles and related ground equipment:***

- a. Improperly Located Network Node facilities, Node Support Poles and related ground equipment shall not impede pedestrian or vehicular traffic in the Right-of-Way. If any Network Node facilities, Node Support Poles or ground equipment is installed in a location that is not in accordance with the plans approved by the d and impedes pedestrian or vehicular traffic or does not comply or otherwise renders the Right-of-Way non-compliant with applicable Laws, including the American Disabilities Act, then Network Provider shall promptly remove the Network Node facilities, Node Support Poles or ground equipment.
- b. Notice to Remove unauthorized facilities and relocate and penalty: After 30 days' notice to remove of Network Node facilities, Node Support Poles or ground equipment that is located in the incorrect permitted location, if not relocated the Network Provider shall be subject to a penalty of \$50 per day penalty until the Network Node facilities, Node Support Poles or ground equipment is relocated to the correct area within the permitted Location, regardless of whether or not the Network Provider's contractor, subcontractor, or vendor installed the Network Node facilities, Node Support Poles or ground equipment in strict conformity with the City Rights-of-way management ord., and other applicable ordinances concerning improperly located facilities in the rights-of-way.

**C. Underground Requirement Areas.**

1. In accordance with Chapter 284.107, a Network Provider shall, in relation to installation for which the City approved a permit application, 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.
2. If a location is designated by the City to transits to be an Underground Requirement Area, then a Network 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 90 days after the designation, with removal of said the Micro Network Node, Network Node, Node Support Pole, and related ground equipment at such location within 90 days of such designation, or as otherwise reasonably allowed by the City for the transition of other overhead facilities.

**D. Network Node facilities placement.**

1. ***Right-of-Way:*** Network Node facilities, Node Support Poles and related ground equipment shall be placed, as much as possible, within two feet of the outer edge of the Right-of-Way line to minimize any obstruction, impediment, or hindrance to the usual travel or public safety on a public right-of-way.

2. ***Height above ground.*** Network Node attachments to a pole shall be installed at least eight (8) feet above the ground in accordance with Chapter 284, Sec. 284.108, 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 sixteen (16) feet above the ground.
3. ***Protrusions.*** In accordance with Chapter 284, Sec. 284.003(a)(1)(C), Sec. 284.003(a)(2)(C) and Sec. 284.003(a)(3)(B), no protrusion from the outer circumference of the existing structure or pole shall be more than two (2) feet.
4. ***Limit on number of Network Nodes per Site.*** There shall be no more than one Network Node on any one Pole.

#### **E. New Node Support Poles.**

1. ***New Node Support Poles Spacing.*** New node support poles shall be spaced apart from existing utility poles or Node Support poles at the same as the spacing between utility poles in the immediate proximity, but no less than at a minimum 300 feet from a utility pole or another Node Support Pole to minimize the hazard of poles adjacent to road ways and to minimize effect on property values and aesthetics on the area.
2. ***Height of Node Support Poles or modified Utility Pole.*** In accordance with Chapter 284, Sec. 284.103, a Node support pole or modified Utility Pole may not exceed the lesser of:
  - a. 10 feet in height above the tallest existing utility pole located within 500 linear feet of the new pole in the same public right-of-way; or
  - b. 55 feet above ground level.

#### **F. Ground Equipment.**

1. ***Ground Equipment near street corners and intersections:*** Ground equipment should be minimal and the least intrusive. In accordance with Chapter 284.102 (1), to minimize any obstruction, impediment, or hindrance to the usual travel or public safety on a public right-of-way the maximum line of sight required to add to safe travel of vehicular and pedestrian traffic and in order to maximize that line of sight at street corners and intersections and to minimize hazards at those locations, ground equipment may not be installed within 250 feet of a street corner or a street intersection.
2. ***Ground Equipment near Municipal Parks.*** For the safety of Municipal park patrons, particularly small children, and to allow full line of sights near Municipal park property, the Network Provider shall not install Ground Equipment in a Right-of-Way that is within a Park or within 250 feet of the boundary line of a Park, unless approved by the City Manager in writing.

3. **Minimize Ground equipment density:** In accordance with Chapter 284, Sec. 284.102 (1) to enhance the safety requirements of line of sight of pedestrians, particularly small children, the City's designee may deny a request for a proposed Location if the Network Provider installs Network Node ground equipment where existing ground equipment within 300 feet already occupies a footprint of 25 sq. ft. or more.
4. **Water, Sewer and Storm Drainage Lines:** Special precautions must be taken where underground fiber optic cable is installed in public street right-of-ways commonly used for utility corridors.
  - a. Underground utilities and service connections must be identified prior to excavation. "Dig Alert," "One Call," or similar underground utility contractor must be contacted to identify the locations of subsurface utilities.
  - b. If temporary disruption of service is required, the installation contractor must notify the City, the service provider, and customers at least 24 hours in advance. No service on such lines may be disrupted until prior approval from the City and the service provider.
  - c. At locations where the fiber optic cable will cross other subsurface utilities or structures, the cable must be installed to provide a minimum of 12 inches of vertical clearance between it and the other subsurface utilities or structures, while still maintaining the other applicable minimum depth requirement. To maintain the minimum depth requirement, the cable must be installed under the existing utility. If the minimum 12-inch clearance cannot be obtained between the proposed cable facility and the existing utility, the fiber optic cable must be encased in steel pipe of avoid future damage.
  - d. Existing Water Lines: No communication lines shall be placed on top of a water line but may be placed to the side of a water line at least 4 feet from the center line of the water line. When crossing a water line, a 12- inch vertical or horizontal clearance must be maintained. Poles must be at least 3 feet from a water line.
  - e. Existing Sewer Lines: No communication lines shall be placed on top of a sewer line but may be placed to the side of a sewer line at least 4 feet from the center line of the sewer line. When crossing a sewer line, a 12- inch vertical or horizontal clearance must be maintained. Poles must be at least 3 feet from a sewer line.
  - f. Existing Storm Drainage Lines: No communication lines shall be placed on top of a storm drainage line but may be placed to the side of a storm drainage line at least 4 feet from the center line of the storm drainage line. When crossing a storm drainage line, a 12-inch vertical or horizontal clearance must be maintained. Poles must be at least 3 feet from a storm drainage line.
5. Blocking streets, roads, alleys or lanes: Texas Department of Transportation (TxDOT) standards must be followed for work zone areas that will block streets, roads, alleys or lanes. A traffic plan must be submitted to the City prior to construction.

## G. Municipal Service Poles.

1. ***In accordance with Agreement:*** Installations on all Service Poles shall be in accordance with an agreement as allowed by Chapter 284, Sec. 284.056 and Sec. 284.101 (a) (3), and (b).
2. ***Required industry standard pole load analysis:*** Installations on all Service Poles shall have an industry standard pole load analysis completed by the Network Provider and submitted to the municipality with each permit application indicating that the Service Pole to which the Network Node is to be attached will safely support the load, in accordance with Chapter 284.108.
3. ***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 sixteen (16) feet above the ground.
4. ***Installations on Traffic Signals:*** Installations on all Traffic signal structures must not interfere with the integrity of the facility in any way that may compromise the safety of the public and must be in accordance with an agreement as allowed by Chapter 284, Sec. 285.056 and Sec. 284.101 (a) (3), and (b). Installation of Network Node facilities on any traffic signal structures shall:
  - a. Be encased in a separate conduit than the traffic light electronics;
  - b. Have a separate electric power connection than the traffic signal structure; and
  - c. Have a separate access point than the traffic signal structure; and
  - d. Shall not alter, puncture, or drill into any City structure.
5. ***Installations on Street signage:*** Installations on all street signage structures must not interfere with the integrity of the facility in any way that may compromise the safety of the public. Installation of Network Node facilities on any street signage structures that has electronics shall:
  - a. Be encased in a separate conduit than any City signage electronics;
  - b. Have a separate electric power connection than the signage structure; and
  - c. Have a separate access point than the signage structure; and
  - d. Shall not alter, puncture, or drill into any City structure.
6. ***Reservation of Rights:***
  - a. The City reserves the right to install, and permit others to install, utility facilities in the Rights-of-Way. In permitting such work to be done by others, the City shall not be liable to the Network 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, traffic control devices, clear paths regarding the line-of-sight for the commuting public, and protection of public safety.

- c. The City reserves the right to locate, operate, maintain, and remove any City Pole or structure located within the Right-of-Way in the manner that best enables the City's operation.

7. ***Restoration of City facilities and private property:*** The Network Provider shall be responsible for repairing any damage to any street, street right-of-way, ditch or any structure to its original condition immediately upon completing the installation. Any change to the slope of the land must be remedied, and there must be replacement of top soil and grass to its original condition.

## **SECTION 5. GENERAL AESTHETIC REQUIREMENTS**

### **A. Concealment.**

1. Concealment of Network Nodes and Node support poles shall be required by the City in Design Districts and in Historic Districts pursuant to Chapter 284.105.
2. It is also the City's preference that all new node support poles be camouflaged, except those located in an area zoned or predominantly industrial area. Companies shall submit their proposal for camouflage with the permit application.
3. The Network Node facilities shall be concealed or enclosed as much as reasonably possible in an equipment box, cabinet, or other unit 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 the City's rights-of-way management ordinance, and other applicable ordinances, except to the extent not consistent with Chapter 284.

### **B. New Node Support Pole Spacing.**

New node support poles shall be at a minimum 300 feet from a utility pole or another Node Support Pole to minimize the hazard of poles adjacent to road ways and to minimize effect on property values and aesthetics on the area.

### **C. Minimize Ground Equipment Concentration.**

In order to minimize negative visual impact to the surrounding area, and in accordance with Chapter 284, Sec. 284.102 (1) to enhance the safety requirements of line of sight of pedestrians, particularly small children, the City's designee may deny a request for a proposed Location if the Network Provider installs Network Node ground equipment where existing ground equipment within 300 feet already occupies a footprint of 25 sq. ft. or more to minimize effect on property values and aesthetics on the area.

**D. Allowed Colors.**

Colors in Historic Districts and Design Districts must be in strict accordance with the City's rights-of-way management ordinance, other applicable ordinances, and other design regulations related the Historic or Design District, except to the extent not consistent with Chapter 284.

**SECTION 6. ELECTRICAL SUPPLY**

- A. Network Provider shall be responsible for obtaining any required electrical power service to the Micro Network Node, Network Node facilities, Node Support Poles and ground equipment. The City shall not be liable to the Network Provider for any stoppages or shortages of electrical power furnished to the Micro Network Node, Network Node facilities, Node Support Poles or ground equipment, including without limitation, stoppages or shortages caused by any act, omission, or requirement of the public utility serving the structure or the act or omission of any other tenant or Network Provider of the structure, or for any other cause beyond the control of the City.
- B. Network Provider shall not allow or install generators or back-up generators in the Right-of-Way in accordance with Chapter 284, Sec. 284.002 (12) (B) (1).

**SECTION 7. INSURANCE, INDEMNITY, BONDING AND SECURITY DEPOSITS.**

A. 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.

B. 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 8. REQUIREMENTS IN REGARD TO REMOVAL, REPLACEMENT, MAINTENANCE AND REPAIR**

**A. Removal or Relocation by Network Provider.**

Removal and relocation by the Network provider of its Micro Network Node, Network Node facilities, Node Support Pole or related ground equipment at its own discretion, 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.

**B. Removal or Relocation Required for City Project.**

Removal and Relocation of Network Provider's Micro Network Node, Network Node, Node Support Pole or related ground equipment, or portion thereof required for a City project 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, Sec. 284.107, except as provided in existing state and federal law.

**C. Removal Required by City for Safety and Imminent Danger Reasons.**

1. 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 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. 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 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.

**D. Coordination of Traffic Signal Maintenance Activities and Emergency Response.**

Provider will provide City a key to each meter box at the time of inspection and have the ability to temporarily cut-off electricity to its 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 Network Nodes, Provider shall have the sole responsibility to repair or replace its Network Nodes and shall coordinate its own emergency efforts with the City.

**SECTION 9. PERMITTING**

**A. Attachment to Existing Poles.**

Prior to installation or modification of a Network Node or Node Support Pole, Provider shall complete and submit to the City a Right-of-Way Permit application, along with standard required documents and the following items:

1. Permit Fee
2. Aerial map and street view image showing the location of the existing pole to which the Network Node is proposed to be attached.

3. Plans and drawings prepared by a professional engineer licensed in the State of Texas that has evaluated the existing pole or infrastructure for structural stability to carry proposed Network Nodes and can bear the wind load without pole modification or whether the installation will require pole re-enforcement. If pole re-enforcement is necessary, Provider shall provide engineering design and specification drawings for the proposed alteration to the existing pole. Any pole re-enforcement or replacement shall be at Provider's sole cost. All reinforcement or replacement poles shall match the character of the pre-existing pole in order to blend into the surrounding environment and be visually unobtrusive. City reserves the right to deny a certain type of pole due to its differences.
4. Scaled dimensioned drawings, in plan and profile view, supplemented with pictures and drawing, of the proposed attachments of the Network Node to the existing poles or structures as well as any other proposed equipment associated with the proposal, indicating the spacing from existing curb, driveways, sidewalk, and other existing light poles and any other poles or appurtenances. This shall include a before-and-after image of the pole and all proposed attachments and associated standalone equipment.
5. Scaled dimensioned construction plans indicating the current Right-of-Way line and showing the proposed underground conduit and equipment, and its spacing from existing utilities. The drawings shall also show a sectional profile of the Right-of-Way and identify all existing utilities and existing utility conflicts.
6. The applicant shall provide analysis that the proposed Network Node shall not cause any interference with City public safety radio system, Traffic Signal light system, utility systems, or other communications components. It shall be the responsibility of the Provider to evaluate, prior to making the application for the permit, the compatibility between the existing City infrastructure and the Provider's proposed infrastructure. 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.
7. A traffic control plan, a stormwater pollution prevention plan ("SWPPP"), and trench safety plan may also be required based on the proposed scope of work.
8. The City issued Right-of-Way permit authorizes use of its Right-of-Way. Providers/applicants are responsible for obtaining permission on non-city-owned infrastructure. If the project lies within the State Right-of-Way, the applicant must provide evidence of a permit from the State.
9. Notification to adjacent residential developments/neighborhoods within 300 feet is required on all node attachments on City infrastructure and shall state that the proposed work is not paid for or endorsed by the City. Such notice shall be submitted to the City's Engineering Department for approval prior to issuance.

## **B. Installation of New Poles.**

Prior to installation or modification of a Node Support Pole, Provider shall complete and submit to the City a Commercial Building Permit application for the new pole, as well as a Right-of-Way Permit application. Along with standard required documents, the following items will also be required for the ROW Permit application:

1. Permit Fee.
2. Map showing intended location of the Node Support Pole. Aerial Map showing the location of the proposed new pole, and a street view image.
3. The applicant will need to provide analysis showing that the proposed new Node Support Pole is spaced at least three thousand (3,000) feet from another existing pole that is capable of supporting Network Nodes along the proposed location, unless otherwise approved by the City in writing.
4. TX PE sealed scaled dimensioned drawings and pictures of the proposed Node Support Pole as well as any other proposed equipment associated with the proposal, indicating the spacing from existing curb, driveways, sidewalk, light poles, and any other poles or appurtenances. This shall include a before-and-after street view image. The after-image needs to include the proposed pole and all proposed attachments and associated standalone equipment.
5. TX PE sealed scaled dimensioned construction plans, in plan and profile view, indicating the current Right-of-Way line and showing the proposed underground conduit and equipment, its spacing from existing lines. The drawings shall also show a sectional profile of the Right-of-Way and identify all existing utilities and existing utility conflicts.
6. A traffic control plan, SWPPP, and trench safety plan may also be required based on the proposed scope of work.
7. Analysis that the proposed Network Node shall not cause any interference with City public safety radio system, Traffic Signal light system, utility communication system, or other communications components. It shall be the responsibility of Provider to evaluate, prior to making application for permit, the compatibility between the existing City infrastructure and Provider's proposed infrastructure. 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.
8. If the project lies within the State Right-of-Way, the applicant must provide evidence of a permit from the State.
9. Notification to adjacent residential development/neighborhoods within 300 feet is requirement on all node attachments owned by provider and shall state that the

proposed work is not paid for or endorsed by the City. Such notice shall be submitted to the City's Engineering Department for approval prior to issuance.

### **C. Electrical Permit**

1. Provider shall be responsible for obtaining any required electrical power service to the Network Nodes and Node Support Poles or structures. Provider's electrical supply shall be separately metered from the City.
2. As provided by law, Provider shall provide City with the electrical permit and provide Texas Professional Engineer-sealed engineered drawings for conduit size, circuit size, calculations for Amp, distances running, etc.

## **SECTION 10. INSTALLATION AND INSPECTIONS**

### **A. Installation.**

Network Provider shall, at its own cost and expense, install the Micro Network Node, Network Node facilities, Node Support Poles and related ground equipment in a good and workmanlike manner 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

### **B. Inspections.**

The City Manager, or designee, may perform visual inspections of any Micro Network Node, Network Node, Node Support Pole or related ground equipment located in the Right-of-Way shall be allowed 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 11. REQUIREMENTS UPON ABANDONMENT OF OBSOLETE MICRO NETWORK NODE, NETWORK NODE, NODE SUPPORT POLE AND RELATED GROUND EQUIPMENT.**

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.

## **SECTION 12. GENERAL PROVISIONS.**

- A. As Built Maps and Records.** Network Provider's as built maps and records 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.
- B. Courtesy and Proper Performance.** Courtesy and Proper Performance of Network provider's personnel, and contractors 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.

- C. Drug Policy.** Drug policy of Network provider's personnel, and contractors in the rights-of-way 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.
- D. Allocation of Funds for Removal and Storage.** The City has appropriated \$0 to pay for the cost of any removal or storage of Micro Network Node, Network Node, Node Support Pole and related ground equipment, as authorized under this Article, and no other funds are allocated.
- E. Ownership.** Ownership of Network Node and related equipment 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.
- F. Tree Maintenance.** Tree maintenance 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.
- G. Signage.** Signage 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.
- H. Graffiti Abatement.** Graffiti abatement shall be in strict accordance with the City's rights-of-way management ordinance, and other applicable policies or ordinances, except to the extent not consistent with Chapter 284.
- I. 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 removal or relocation activities (or any other of Network Provider's activities hereunder) 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.
- J. Network Provider's Responsibility.** 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 13-19 RESERVED

## SECTION 20. 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.