**Design Manual:** Installation of Network Nodes and Node Support Poles Pursuant to Chapter 284 of the Texas Local Government Code



# CITY OF ROCKWALL, TEXAS

# TABLE OF CONTENTS

Section 1: Section 2: Section 3:	Purpose and Applicability Definitions Prohibited and Preferred Locations of Micro Network Node, Network Node, Node Support Pole and Related Ground Equipment
Section 4:	Guidelines on Placement
Section 5:	General Aesthetic Requirements
Section 6:	Electrical Supply
Section 7:	Insurance, Indemnity, Bonding and Security
	Deposits
Section 8:	Requirements in Regard to Removal, Replacement, Replacement, Maintenance and Repair
Section 9.	Installation and Inspections
Section 10:	Requirements Upon Abandonment of Obsolete Micro Network Node, Network Node, Node Support Pole and Related Ground Equipment
Section 11:	General Provisions
Section 12:	Special Exceptions
Section 13:	Design Manual Updates

# SECTION 1: PURPOSE AND APPLICABILITY

The City of Rockwall, Texas (*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

Chapter 284 of the *Texas Local Government Code* allows certain wireless *Network Providers* to install in the public rights-of-way their wireless facilities, described and defined in *Section 284.002* of *Chapter 284* of the Texas Local Government Code as *Micro Network Nodes, Network Nodes,* and *Node Support Poles*.

As expressly allowed by *Section 284.008* of *Chapter 284* of the Texas Local Government Code, and pursuant to its police power authority reserved in Sec. 284.301<sup>1</sup>, the City enacts these Design Guidelines 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.

#### <u>APPLICABILITY</u>

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 Texas Local Government Code, Chapter 284

This Design Manual shall apply to any siting, installations, collocations in, on, over or under the public rights-of-way of network nodes, node support poles, micro network nodes, distributed antenna systems, microwave communications or other wireless facilities, by whatever nomenclature, 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.

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

# SECTION 2: DEFINITIONS

The definitions as used in *Section 284.002* of *Chapter 284* of the Texas Local Government Code shall be used in this *Design Manual*, unless otherwise noted in this *Section 2*, below.<sup>2</sup>

Abandon. 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, hand-holes, 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. Communications equipment that transmits or receives electromagnetic radio frequency signals used in the provision of wireless services. Applicable Codes. In this case, the following are the applicable codes: (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. The City of Rockwall, Texas or its lawful successor. City Council. The municipal governing body of the City of Rockwall, Texas.

SECTION 284.301: LOCAL POLICE POWER BASED REGULATIONS.

<sup>(</sup>a) Subject to this chapter and applicable federal and state law, a municipality may continue to exercise zoning, land use, planning, and permitting authority in the municipality's boundaries, including with respect to utility poles.

<sup>(</sup>b) A municipality may exercise that authority to impose police-power-based regulations for the management of the public right-of-way that apply to all persons subject to the municipality.

<sup>(</sup>c) A municipality may impose police-power-based regulations in the management of the activities of network providers in the public right-of-way only to the extent that the regulations are reasonably necessary to protect the health, safety, and welfare of the public.

<sup>:</sup> The definitions defined in Sec. 284.002 of Chapter 284 of the Texas Local Government Code shall be used in this Design Manual.

City Manager.	The City Manager or	his/her designee.

*Chapter 284. Chapter 284* of the Texas Local Government Code.

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

- *Concealment. 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 Section 284.105 of Chapter 284 in Historic or Overlay 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 hidden beneath a façade, blended with surrounding area design, painted to match the supporting area, or disguised with artificial tree branches.
- Decorative Pole. 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.
- *Disaster Emergency. Disaster Emergency, Disaster,* or E*mergency* 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.

Distributed Antenna System (DAS) shall be included as a type of Network Node.

*Easement. Easement* 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 (FCC).

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. Right-of-Way adjacent to a state or federal highway.
- *Historic District.* An area that is zoned or otherwise designated as a historic district under municipal, state, or federal law (i.e. Old Town Rockwall Historic District and Planned Development District 50 [PD-50]).
- *Law.* A common law or a federal, state, or local law, statute, code, rule, regulation, order, or ordinance.
- *Local.* Within the geographical boundaries of the City.
- Location. The City approved and lawfully permitted location for the Network Node.
- *Macro Tower.* 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. The Mayor for the City of Rockwall, Texas, or designee.
- *Micro Network Node.* 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.* An area that is zoned or otherwise designated by municipal code as a public park for the purpose of recreational activity.

Municipally Owned Utility Pole.A utility pole owned or operated by a municipally owned utility, as defined by Section 11.003,<br/>Utilities Code, and located in a public right-of-way.

*MUTCD.* Manual of Uniform Traffic Control Devices.

*Network Node.* Equipment at a fixed location that enables wireless communications between user equipment and a communications network. The term:

	<ul> <li>(A) includes:         <ul> <li>(i) Equipment associated with wireless communications; and</li> <li>(ii) A radio transceiver, an antenna, a battery-only backup power supply, and comparable equipment, regardless of technological configuration; and</li> <li>(iii) Coaxial or fiber-optic cable that is immediately adjacent to and directly associated with a particular collocation; and</li> </ul> </li> </ul>		
	<ul> <li>(B) does not include:</li> <li>(i) An electric generator;</li> <li>(ii) A pole; or</li> <li>(iii) A macro tower</li> </ul>		
Network Provider.	Means:		
	<ul> <li>(A) a wireless service provider; or</li> <li>(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: <ul> <li>(i) Network nodes; or</li> <li>(ii) Node support poles or any other structure that supports or is capable of supporting a network node.</li> </ul> </li> </ul>		
Node Support Pole.	A pole installed by a network provider for the primary purpose of supporting a network node.		
Overlay District.	A pole installed by a network provide for the primary purpose of supporting a network houe. 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 non-discriminatory basis.		
Permit.	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.	A service pole, municipally owned utility pole, node support pole, or utility pole.		
Private Easement.	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.	The area on, below, or above a public roadway, highway, street, public sidewalk, alley, waterway, or utility easement in which the municipality has an interest. The term does not include:		
	<ul><li>(A) A private easement; or</li><li>(B) The airwaves above a public right-of-way with regard to wireless telecommunications.</li></ul>		
Public Right-of-Way M	<i>An ordinance that complies with Subsection C of Chapter 284 (i.e. Chapter 42, Telecommunications, of the Municipal Code of Ordinances</i> ).		
Service Pole.	A pole, other than a municipally owned utility pole, owned or operated by a municipality and located in a public right-of-way, including:		
	<ul> <li>(A) A pole that supports traffic control functions;</li> <li>(B) A structure for signage;</li> <li>(C) A pole that supports lighting, other than a decorative pole; and</li> <li>(D) A pole or similar structure owned or operated by a municipality and supporting only network nodes.</li> </ul>		
Small Cell.	Shall be included as a type of Network Node.		
Street.	Street or public way or public right-of-way or public rights-of-way or rights-of-way or right-of way means the surface of, and the space above and below a public street, road, highway, freeway, land, path, public way or place, alley, court, boulevard, parkway, drive, or other easement now or hereafter held by or under the control of the city, to which the city holds the property rights in regard to the use for utilities, excluding easements not intended for public works or public utility facilities but shall not include property of city which is not a dedicated public right-of way, street, highway, or alley. Neither the		

		r the provisions hereof shall be construed to grant any right or privilege to utilize or occupy the expressed agreement of the city or by authority expressly granted by state law.	
SWPPP.	Storm Water Pollution Prevention Plan.		
TAS.	Texas Accessibility Standards.		
Traffic Signal.	Any device, whether manually, electrically, or mechanically operated by which traffic is alternately directed to stop and to proceed.		
Transport Facility.	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 Requiren	nent Area.	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.	A person or organization whi of-way, depending on the cor	ich conducts a business over facilities occupying the whole or a part of a public street or right- ntext.	
Utility Pole.	A pole that provides:		
		a voltage rating of not more than 34.5 kilovolts; or unications provider, as defined by Chapter 284, Section 51.002, Utilities Code.	
Wireless Service.	Any service, using licensed or unlicensed wireless spectrum, including the use of Wi-Fi, whether at a fixed location o mobile, provided to the public using a network node.		
Wireless Service Provider.		A person that provides wireless service to the public.	
<i>Wireless Facilities Micro Network Nodes, Network</i> Code.		ork Nodes, and Node Support Poles as defined in Chapter 284 of the Texas Local Government	

## SECTION 3: PROHIBITED AND PREFERRED LOCATIONS OF MICRO NETWORK NODE, NETWORK NODE, NODE SUPPORT POLE 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 of paved street surface, being the area measured as the shortest distance between the inside of the curb to the inside of the opposite curb, or the area measured as the shortest distance between the two parallel edges of the paved roadway for vehicular travel where there is no curb; 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 Sec. 284.104 (b) of Chapter 284 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 Overlay Districts*. In accordance with Sec. 284.105 of Chapter 284 a *Network Provider* must obtain advance written approval from the City before collocating Network Nodes or installing Node Support Poles in an Overlay District with Decorative Poles or in an area of the City zoned or otherwise designated as an Overlay District or Historic District.
    - 2.1. As a condition for approval of *Network Nodes* or *Node Support Poles* in Overlay Districts with Decorative Poles or in a Historic District, the City shall require reasonable design or *Concealment* measures for the *Network Nodes* or *Node Support Poles*. Therefore, any request for installations in an Overlay District with *Decorative Poles* or in a Historic District, must be accompanied with proposed *Concealment* measures in the permit applications.

- 2.2. The City request that a *Network Provider* explore the feasibility of using Camouflage measures to improve the aesthetics of the *Network Nodes, Node Support Poles,* or related ground equipment, or any portion of the nodes, poles, or equipment, to minimize the impact to the aesthetics in Overlay Districts or in an Historic District.
- 2.3. A *Network Provider* shall comply with and observe all applicable City, State, and federal historic preservation laws and requirements.
- 2.4. Each permit application shall disclose if it is within an Overlay District with Decorative Poles or in an area of the City zoned or otherwise designated as an Overlay District or Historic District.
- 3. *Historic or Local 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 or Local 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.
- 4. *Compliance with Undergrounding Requirements.* In accordance with Sec. 284.107 of Chapter 284 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 Parks. A *Network Provider* is discouraged from installing a *Network Node* on an existing pole in a public right-ofway without written consent from the City Council if the public right-of-way is located in or adjacent to a street or thoroughfare that is adjacent to a municipal park or single-family residential lots or other multifamily residences or undeveloped land that is designated for residential use by zoning or deed restrictions.

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

2. Historic Districts and Overlay 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 an Overlay Districts or in an area of the City zoned or otherwise designated as a Historic District unless such a *Network Node* or a new *Node Support Pole* is camouflaged.

## C. Most preferable locations

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

#### D. Designated Areas.

- 1. The City Council may designate an area as a Historic District or an Overlay District under Chapter 284.105 at any time.
- 2. 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.

## E. Exceptions

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

#### 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 Sec. 285.056 and Sec. 284.101 (a) (3), and (b) of Chapter 284.
- 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 284.102, 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 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.).

#### 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 Sec. 284.002 of Chapter 284 size of a *Micro Network Node*, Sec. 284.003, Size of *Network Nodes*, and Sec. 284.103, maximum pole height, with each application and with each request for a permit for each location.<sup>3</sup>
- 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.
  - 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 communications components in accordance with Sec. 284.304 of Chapter 284.

(2)

SECTION 284.003. LIMITATION ON SIZE OF NETWORK NODES.

- (a) Except as provided by Section 284.109, a network node to which this chapter applies must conform to the following conditions:
  - (1) each antenna that does not have exposed elements and is attached to an existing structure or pole:
    - (A) must be located inside an enclosure of not more than six cubic-feet in volume;
    - (B) may not exceed a height of three-feet above the existing structure or pole; and
    - (C) may not protrude from the outer circumference of the existing structure or pole by more than two-feet;
    - if an antenna has exposed elements and is attached to an existing structure or pole, the antenna and all of the antenna's exposed elements:
    - (A) must fit within an imaginary enclosure of not more than six cubic-feet;
    - (B) may not exceed a height of three-feet above the existing structure or pole; and
    - (C) may not protrude from the outer circumference of the existing structure or pole by more than two-feet;
  - (3) the cumulative size of other wireless equipment associated with the network node attached to an existing structure or pole may not:
     (A) be more than 28 cubic-feet in volume; or
    - (b) protrude from the outer circumference of the existing structure or a node support pole by more than two-feet;
  - (4) ground-based enclosed in the basis of the basis of a hade support point of the basis of the basis of a hade support point of the basis of the
  - pole-mounted enclosures may not be taller than five-feet.
- (b) The following types of associated ancillary equipment are not included in the calculation of equipment volume under Subsection (a):
  - (1) electric meters;
  - (2) concealment elements;
  - (3) telecommunications demarcation boxes;
  - (4) grounding equipment;
  - (5) power transfer switches
  - (6) cut-off switches; and
  - (7) vertical cable runs for the connection of power and other services.
- (c) Equipment attached to node support poles may not protrude from the outer edge of the node support pole by more than two-feet.

<sup>&</sup>lt;sup>3</sup>: SECTION 284.002. DEFINITIONS.

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.

<sup>(</sup>d) Equipment attached to a utility pole must be installed in accordance with the National Electrical Safety Code, subject to applicable codes, and the utility pole owner's construction standards.

- 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 City Administrator 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 \$500.00 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 ordnances 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, 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.
- 3. Before commencing underground installation, 811 Dig Tess must be called so that the area can be flagged for underground utilities.

# 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 (2) 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 Sec. 284.108 of Chapter 284, 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 16-feet above the ground.
- 3. *Protrusions*. In accordance with Sec. 284.003 (a) (1) (C), Sec. 284.003 (a) (2) (C) and Sec. 284.003 (a) (3) (B) of Chapter 284 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 Sec. 284.103 of Chapter 284, a Node support pole or modified Utility Pole may not exceed the lesser of:
  - a. Ten (10) feet in height above the tallest existing utility pole located within 500 linear-feet of the new pole in the same public right-ofway; 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 Sec. 284.102 (1) of Chapter 284, to enhance the safety requirements of line of sight of pedestrians, particularly small children, the City Manager, or 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 SF or more.
- 4. 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 Sec. 285.056 and Sec. 284.101 (a) (3), and (b) of Chapter 284.
- 2. *Required industry standard pole load analysis*: Installations on all Service Poles shall have an industry standard pole load analysis completed 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.
- Height of attachments: All attachments on all Service Poles shall be at least eight (8) feet above grade, in accordance with Sec. 285.108

   (a) (1) (2) of Chapter 284, 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 16-feet above the ground.
- 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 Sec. 285.056 and Sec. 284.101 (a) (3), and (b) of Chapter 284. 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.
  - c. Have a separate access point than the traffic signal 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 electrics shall:
  - a. Be encased in a separate conduit than any City signage electronics.
  - b. Have a separate electric power connection than the signage structure.
  - c. Have a separate access point than the signage structure.
- 6. *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 Overlay Districts with Decorative Poles 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. 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.
  - 4. The *Network Node* facilities shall be concealed or enclosed as much as 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, 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 impacts to the surrounding area, and in accordance with Sec. 284.102 (1) of Chapter 284 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 SF or more to minimize effect on property values and aesthetics on the area.

# D. Allowed Colors.

- 1. Colors in Historic Districts and Overlay Districts must 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. Colors in Historic Districts and Overlay Districts must be approved by the City Manager from a palette of approved colors. Unless otherwise provided, all colors shall be earth tones or shall match the background of any structure the facilities are located upon and all efforts shall be made for the colors to be inconspicuous. Colors in areas other than in Historic Districts and Overlay Districts shall conform to colors of other installations of telecommunication providers in the immediately adjacent areas.

# SECTION 6: ELECTRICAL SUPPLY

- A. Provider Responsible for Electricity. 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. *Generators Prohibited.* Network 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).

# 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 Sec. 284.302 of Chapter 284 as provided for in Sec. 283.057 (a) and (b) of Chapter 283 of the Texas Local Government Code.

# SECTION 8: REQUIREMENTS IN REGARD TO REMOVAL, REPLACEMENT, REPLACEMENT, MAINTENANCE AND REPAIR

## A. REMOVAL OR RELOCATION BY NETWORK PROVIDER.

- 1. 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 Chapter 42, *Telecommunications*, of Rockwall's Municipal Code of Ordinances, and other applicable ordinances, except to the extent not consistent with Chapter 284
- 2. If the *Network Provider* removes or relocates a *Micro Network Node, Network Node* facilities, *Node Support Pole* or related ground equipment at its own discretion, it shall notify the City Manager in writing not less than ten (10) business days prior to removal or relocation. *Network Provider* shall obtain all permits required for relocation or removal of its *Micro Network Node, Network Node* facilities, *Node Support Poles* and related ground equipment prior to relocation or removal.
- 3. The City shall not issue any refunds for any amounts paid by *Network Provider* for *Micro Network Node*, *Network Node* facilities, *Node Support Poles* or related ground equipment that have been removed.

## B. REMOVAL OR RELOCATION REQUIRED FOR CITY PROJECT.

- 1. 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.
- 2. In accordance with Sec. 284.107 of Chapter 284 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 City managing the public right-of-way
- 3. *Network Provider* understands and acknowledges that the City may require *Network Provider* to remove or relocate its *Micro Network Node, Network Node, Node, Support Pole* and related ground equipment, or any portion thereof from the *Right-of-Way* for City construction projects as allowed by state and federal law, including the common-law.
- 4. Network Provider shall, at the City Manager's direction, remove or relocate the same at *Network Provider's* sole cost and expense, except as otherwise provided in existing state and federal law, whenever the City Manager reasonably determines that the relocation or removal is needed for any of the following purposes: Required for the construction, completion, repair, widening, relocation, or maintenance of, or use in connection with, any City construction or maintenance project of a street ort public rights-of-way to enhance the traveling public's use for travel and transportation.

- 5. If *Network Provider* fails to remove or relocate the *Micro Network Node, Network Node, Node Support Pole* or related ground equipment, or portion thereof as requested by the City Manager within 90 days of *Network Provider 's* receipt of the request, then the City shall be entitled to remove the *Micro Network Node, Network Node, Node Support Pole* or related ground equipment, or portion thereof at Network Provider's sole cost and expense, without further notice to *Network Provider*.
- 6. *Network Provider* shall, within 30 days following issuance of invoice for the same, reimburse the City for its reasonable expenses incurred in the removal (*including, without limitation, overhead and storage expenses*) of the *Micro Network Node, Network Node, Node Support Pole* or related ground equipment, or portion thereof.

# 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, 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, Node Support Pole and related ground equipment, or use of any location under applicable law in strict accordance with Chapter 42, Telecommunications, of Rockwall's Municipal Code of Ordinances, 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 Chapter 42, *Telecommunications*, of Rockwall's Municipal Code of Ordinances, and other applicable ordinances, except to the extent not consistent with Chapter 284.
- 3. The 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 (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, Network Node, Node Support Pole and related ground equipment at the Network Provider's sole cost and expense.
- 4. 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.
- 5. *Network Provider* shall reimburse the 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.

## SECTION 9. INSTALLATION AND INSPECTIONS

## A. INSTALLATION.

- 1. 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 Chapter 42, *Telecommunications*, of Rockwall's Municipal Code of Ordinances, and other applicable codes/ordinances, except to the extent not consistent with Chapter 284
- 2. 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 and in accordance with the requirements promulgated by the City Manager, as such may be amended from time to time. *Network Provider's* work shall be subject to the regulation, control and direction of the City Manager. All work done in connection with the installation, operation, maintenance, repair, modification, and/or replacement of the *Micro Network Node, Network Node* facilities, *Node Support Poles* and related ground equipment shall be in compliance with all applicable laws, ordinances, codes, rules and regulations of the City, applicable county, the state, and the United States (*Laws*).

## B. INSPECTIONS.

- 1. 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
- 2. 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* as the City Manager deems appropriate without notice. If the inspection requires physical contact with the *Micro Network Node, Network Node, Node Support Poles* or related ground equipment, the City Manager shall provide

written notice to the *Network Provider* within five business days of the planned inspection. *Network Provider* may have a representative present during such inspection.

# SECTION 10: REQUIREMENTS UPON ABANDONMENT OF OBSOLETE MICRO NETWORK NODE, NETWORK NODE, NODE SUPPORT POLE AND RELATED GROUND EQUIPMENT

- A. 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.
- B. Network Provider shall remove Micro Network Node, Network Node, Node Support Pole and related ground equipment when such facilities are abandoned regardless of whether or not it receives notice from the City. Unless the City sends notice that removal must be completed immediately to ensure public health, safety, and welfare, the removal must be completed within the earlier of 90 days of the Micro Network Node, Node, Network Node, Node, Support Pole and related ground equipment being abandoned or within 90 days of receipt of written notice from the City. When Network Provider removes, or abandons permanent structures in the Right-of-Way, the Network Provider shall notify the City Manager in writing of such removal or abandonment and shall file with the City Manager the location and description of each Micro Network Node, Network Node, Node Support Pole and related ground equipment removed or abandoned. The City Manager may require the Network Provider to complete additional remedial measures necessary for public safety and the integrity of the Right-of-Way.

## SECTION 11: GENERAL PROVISIONS

- 1. 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.
  - 1.1 A Network Provider shall maintain accurate maps and other appropriate records of its *Network Node* facilities, *Node Support Poles* and related ground equipment as they are actually constructed in the *Rights-of-Way*, including, upon request, the use of Auto CAD/GIS digital format. Network Provider will provide additional maps to the City upon request.
- 2. 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.
  - 2.1 A Network Provider shall make citizen satisfaction a priority in using the Right-of-Way. Network Provider shall train its employees to be customer service-oriented and to positively and politely interact with citizens when dealing with issues pertaining to its Micro Network Node, Network Node, Node Support Pole and related ground equipment in the Right-of-Way. Network Provider's employees shall be clean, courteous, efficient, and neat in appearance and committed to offering the highest quality of interaction with the public. If, in the opinion of the City Manager or designee, Network Provider is not interacting in a positive and polite manner with citizens, he or she shall request Network Provider to take all remedial steps to conform to these standards.
- 4. ALLOCATION OF FUNDS FOR REMOVAL AND STORAGE. The City Council has currently appropriated no funds 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 the law.
- 5. **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 codes and ordinances, except to the extent not consistent with Chapter 284.
  - 5.1 No part of a *Micro Network Node, Network Node, Node Support Pole* and related ground equipment erected or placed on the *Right-of-Way* by *Network Provider* will become, or be considered by the City as being affixed to or a part of, the *Right-of-Way*. All portions of the *Micro Network Node, Network Node, Node Support Pole* and related ground equipment constructed, modified, erected, or placed by *Network Provider* on the *Right-of-Way* will be and remain the property of *Network Provider* and may be removed by *Network Provider* at any time, provided the *Network Provider* shall notify the City Manager prior to any work in the *Right-of-Way*.
- 6. 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.
  - 6.1 A Network Provider, its contractors, and agents shall obtain written permission from the City Manager before trimming trees hanging over its *Micro Network Node, Network Node,* or *Node Support Pole,* to prevent branches of such trees from contacting attached *Micro Network Node, Network Node,* or *Node Support Pole.* When directed by the City Manager, Network Provider shall trim under the supervision and direction of the City Manager. The City shall not be liable for any damages, injuries, or claims arising from Network Provider's actions under this section.
- 7. 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.

- 7.1 Network Provider shall post its name, location identifying information, and emergency telephone number in an area on the cabinet of the *Network Node* facility that is visible to the public. Signage required under this section shall not exceed four (4) inches by six (6) inches, unless otherwise required by law or the City Manager.
- 7.2 Except as required by law or by the *Utility Pole* owner, a *Network Provider* shall not post any other signage or advertising on the *Micro Network Node, Network Node, Node Support Pole, Service Pole* or *Utility Pole*.

## 8. Restoration.

- 8.1 A *Network Provider* shall restore and repair of the public 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.
- 8.2 A *Network Provider* shall repair 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*) within ten (10) calendar days following the date of such removal or relocation, at Network Provider's sole cost and expense, including restoration of the Right-of-Way and such property to substantially the same condition as it was immediately before the date Network Provider was granted a Permit for the applicable Location or did the work at such Location (*even if Network Provider did not first obtain a Permit*), including restoration or replacement of any damaged trees, shrubs or other vegetation. Such repair, restoration and replacement shall be subject to the sole, reasonable approval of the City Manager.
- 9. Network provider's responsibility.
  - 9.1 A Network Provider shall be responsible and liable for the acts and omissions of the 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.
  - 9.2 A Network Provider shall be responsible and liable for the acts and omissions of the 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, Transport Facility and related ground equipment, as if such acts or omissions were Network Provider's acts or omissions.

## SECTION 12: SPECIAL EXCEPTIONS

Should the *Network Provider* desire to deviate from any of the design standards set forth in this Design Manual, the *Network Provider* may request a special exception from the City Council. The process and criteria for a special exception request shall follow the process established by Section 8.5, *Criteria for Granting Special Exceptions*, of Article II, *Authority and Administrative Procedures*, of the Unified Development Code.

## SECTION 13: DESIGN MANUAL UPDATES

Placement or modification of *Micro Network Node, Network Node, Node Support Pole, Transport Facility*, 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.