



**POLE
ATTACHMENT
AND WIRELESS
INSTALLATION
STANDARDS**

VERSION 2.0

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Bryan Texas Utilities Pole Attachment and Wireless Installation Standards

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I. STATEMENT OF PURPOSE

Given the increasing and varied demands of pole use by a potentially large number of disparate communications providers in the Bryan/College Station area, Bryan Texas Utilities (BTU) has established these Pole Attachment and Wireless Installation Standards (Standards) to govern access to and use of BTU Eligible Poles. Applicable to all communications providers for attachment of Communications Facilities and Network Nodes, these Standards provide for a non-discriminatory, uniform, consistent, and streamlined approach for the access and use of Eligible Poles in a manner that will facilitate the delivery of the variety of communication services offered today, as well as to assist with speed-to-market processes for future technologies in a manner that is consistent with the safe and reliable operation of BTU Facilities. These Standards will work to ensure that BTU and all communication providers attaching to BTU Eligible Poles comply with all applicable laws, standards, regulations, and ordinances.

In adopting these Standards, BTU has attempted to incorporate new and evolving best practices and recommendations that have been developed and endorsed at the national level, such as the Federal Communications Commission's (FCC) recommendations in its National Broadband Plan¹ related to the ability of Attaching Entities to perform Make-Ready Electrical Construction by utility-approved and qualified contractors, as well as at a local level in some municipalities within the State of Texas. Consistent with the FCC's rules, the Standards also mirror and incorporate national safety standards and federal requirements, such as those developed by the Occupational Safety and Health Administration (OSHA) that are aimed at ensuring the safety of workers and maintaining a safe work environment.² These Standards not only implement state and federal requirements, but also reflect BTU's unique operational experiences and requirements to institute policies, practices, and standards that are more stringent or different than national standards, but in all cases are intended to operate in a competitively neutral manner.

While BTU has looked to FCC pole attachment access rules for guidance, BTU is not bound by such regulations. State law requires BTU to provide Certificated Providers with non-discriminatory access to its Utility Poles for the purpose of installing wire Attachments. In addition, BTU must establish annual pole attachment rates at a level not to exceed the rate that would result from the application of the FCC's telecommunications pole attachment formula. Finally, Chapter 284, Local Government Code, requires that BTU offer "Network Providers" access to its Utility Poles on agreed terms and conditions, including per-foot-of-use or requirement rates. BTU will, therefore, grant non-discriminatory access to its Non-Decorative Streetlight Poles and Utility Poles for Network Nodes pursuant to its obligations under Chapter 284, while also taking into account the burdens that Network Nodes place on BTU Facilities.

Consistent with these legal requirements and the voluntary commitments of BTU under these Standards, wire Attachments may be installed on BTU's Utility Poles, but not on

¹ *Connecting America: the National Broadband Plan*, Recommendation 6.2 on page 111 (adopted Mar. 15, 2010), available at <http://transition.fcc.gov/national-broadband-plan/national-broadband-plan.pdf>.

² <https://www.osha.gov/as/opa/worker/employer-responsibility.html>

Streetlight Poles or Transmission Poles. Conversely, Network Nodes will have access to Non-Decorative Streetlight Poles and specific Utility Poles, subject to certain restrictions and Make-Ready Electrical Construction requirements. Consistent with the rate design for wire Attachments, which is based on a per-foot rental rate, Network Nodes will be assessed annual rent based on the number of feet of Eligible Pole to which the facilities are attached or require.

These Standards seek to balance the competing needs and interests of multiple and varied communications providers seeking to access and utilize BTU's distribution and Streetlight Pole infrastructure, while at the same time recognizing that the core purpose and function of this infrastructure is for BTU's safe and reliable distribution and delivery of electric and street-lighting services to its customers. The use of any of BTU's Poles or other facilities must, therefore, at all times ensure the continued operational integrity, safety, and reliability of BTU's Facilities, electric services, personnel, and the general public.

These Standards are organized into six parts:

- Section I** Statement of Purpose
- Section II** General Administrative Provisions
- Section III** General Technical Provisions
- Section IV** Specifications Applicable to Wire Attachments
- Section V** Specifications Applicable to Network Nodes
- Section VI** Appendices

Upon their effective date, these Pole Attachment Standards shall be enforceable by BTU at all times upon any entity attaching facilities to a BTU-owned Eligible Pole regardless of the status of a Pole Attachment Agreement, Application or Permit.

BTU reserves the right to amend these Standards at any time and manner in response to technical and market conditions and, as necessary, to comply with changes in applicable engineering and/or safety standards or changes in local, state, or federal law. Any such changes will be applied in a non-discriminatory manner with respect to similarly situated entities and facilities.

To the extent that issues arise that have not been contemplated by these Standards, BTU will work with the Attaching Entities and Network Providers in an attempt to find a solution that effectively addresses the issue consistently with these Standards.

These Standards supersede all prior BTU pole attachment rules and regulations. Amendments to these Standards will become effective following a notice period as provided in this document and the return of a letter accepting the amendments, as provided in BTU's *Standard Pole Attachment and Wireless Installation License Agreement*.

II. GENERAL ADMINISTRATIVE PROVISIONS

A. Definitions

For the purposes of these Standards, the following terms, phrases, words, and their derivations shall have the meaning given herein. When not inconsistent with the context, words used in the present tense include the future tense, words in the plural number include the singular number, and words in the singular number include the plural number. The words “shall” and “will” are mandatory and “may” is permissive. Words not defined shall be given their common and ordinary meaning.

1. **Affiliate** means, when used in relation to a Licensee, another entity that owns or controls, is owned or controlled by, or is under common ownership or control with the Licensee.
2. **Agreement** means the Pole Attachment Agreement.
3. **Antenna** means communications equipment that transmits or receives electromagnetic radio frequency signals used in the provision of Wireless Services. Antennas are inventoried Network Node components.
4. **Antenna Area** means the area on an Eligible Pole where the Antenna(s) are installed and are components of a Network Node.
5. **Applicable Codes** means:
 - a) Uniform building, fire, electrical, plumbing, or mechanical codes adopted by a recognized national code organization, including without limitation the NEC and the NESC; and
 - b) Local amendments to those codes to the extent not inconsistent with state or federal law.
6. **Applicable Engineering Standards** means all applicable engineering and/or safety standards governing the installation, maintenance and operation of facilities and the performance of all work and includes BTU’s clearance standards, the NESC, NEC, the Texas Health & Safety Code, Chapter 752 (Vernon 1992) and any amendments, the regulations of the Occupational Safety and Health Act, applicable regulations of the FCC, the Environmental Protection Agency (EPA), lawful requirements of public authorities, and/or other requirements of BTU that are non-discriminatory to each Licensee as compared to all other similarly-situated Attaching Entities or Network Providers and the types of facilities they employ.
7. **Application** means a complete Application for a Permit submitted by a Licensee to BTU for the purpose of requesting consent to install a new Attachment, Overlapping, or Network Node onto or supported by one or more BTU Eligible Poles. For new Attachments and/or Overlaps, the maximum number of Utility Poles to be considered on a single Application is three-hundred (300) Utility Poles. For Network Nodes onto a BTU Eligible Pole, a single Application may include up to a maximum of five (5) Network Node locations, together with the applicable Eligible Poles, provided that the Network Nodes are of similar design at each of the locations within the identified boundaries of a Wireless Project Area and consist of Pre-Certified Equipment.

8. **Application Fee** means the non-refundable fee or fees described in Appendix H of these Standards, compensating BTU for the administrative and other work required to process and review an Application.
9. **Application Form** means the form(s), referenced in Appendix B, a Licensee is required to submit to BTU, along with all applicable documents, as part of a complete Application in order to request a Permit. Such forms include the *Application for Pole Attachment Permit* and the *Application for Wireless Installation Permit*.
10. **Attaching Entity** means any eligible public or private entity that places an Attachment on a Utility Pole in accordance with BTU's applicable requirements, including the execution of a *Standard Pole Attachment and Wireless Installation Agreement* and these Standards, to provide Communications Services, including backhaul services via Transport Facilities.
11. **Attachment** means (a) each aerial cable together with its associated messenger cable, guy wire, anchors, and associated hardware, and each amplifier, repeater, receiver, appliance or other device or piece of equipment, whether comprised of steel, aluminum, copper, coaxial, optical fiber, or other media or material utilized to provide Communications Services; or (b) any Communications Facility affixed to a BTU Utility Pole utilizing one foot or less of Communication Space. An Attachment occurs whether Attaching Entity's or Network Provider's Communications Facilities are connected to the Utility Pole itself or are supported by an Attachment Arm, bracket, support stand, or other support devices; provided, however, Overlashing an existing permitted Attachment and Service Drops shall not count as separate Attachments. This definition shall not apply to communications wires or facilities installed by the City or BTU.
12. **Attachment Arm** means a BTU-approved metal or fiberglass bracket used to support attaching wires away from the face of the Utility Pole in order to meet required specifications and standards.
13. **Attachment Rate** means the annual rate for one foot of Utility Pole space as determined by BTU consistent with Section 54.204(c), Texas Utilities Code. Risers are not included in the per pole foot count for annual billing.
14. **Authorization for Make-Ready Electrical Construction** means the form, referenced in Appendix B, that requests the Licensee's authorization for BTU to undertake Make-Ready Electrical Construction.
15. **Backhaul** means the wireless communication and network infrastructure responsible for transporting communication data from end users or nodes to the central network or infrastructure and vice versa. It is the intermediate wireless communication infrastructure that connects smaller networks with the backbone or the primary network.
16. **Backhaul Network Interface Device** means the network interface enclosure that marks the location where a Communications Facility interconnects with a pole-mounted Network Node for the purpose of

providing telecommunications transport service between the Network Node and the host network.

17. **Bryan Texas Utilities** or **BTU** shall mean the City of Bryan, Texas-owned electric service provider.
18. **BTU Facilities** means all personal property and real property owned or controlled by BTU, including Eligible Poles.
19. **Cable Services** means the provision of one-way transmission to subscribers of video programming, or other programming service, and subscriber interaction, if any, which is required for the selection or use of such video programming or other programming service by a cable system. Cable Services shall not include Information Services or Video Services, as defined in Section 66.002, Texas Utilities Code.
20. **Capacity** means the ability of an existing Eligible Pole to accommodate an additional Attachment, Overlash, and/or Network Node based on Applicable Engineering Standards, including space, design, and loading considerations.
21. **Certificated Provider** means a competitive service provider of Communications Services, Cable Services, or Video Services that has received a Certificate of Convenience and Necessity, a Certificate of Operating Authority, a Service Provider Certificate of Operating Authority, or a State Issued Certificate of Franchising Authority from the Public Utility Commission of Texas.
22. **City** means the City of Bryan, Texas, a home rule municipal corporation which owns and operates a municipal electric utility known as “Bryan Texas Utilities”.
23. **Chapter 284** refers to Chapter 284 of the Texas Local Government Code.
24. **Collection Notice Letter** means a letter of notification produced by BTU or the City of Bryan itemizing charges owed to BTU as a result of damages to BTU Facilities caused by a Licensee, or its respective contractors, subcontractors, or agents, or by a third-party causing damage to the Licensee’s Attachments, Communication Facilities, and/or Network Nodes, or BTU Facilities. This letter constitutes BTU’s tender for recovery of all costs associated with repairs to the damaged facilities.
25. **Communications Facility** means a wire or cable facility including, but not limited to, a Messenger, Transport Facility, fiber optic, copper, or coaxial cable or wire utilized by a Licensee to provide Communications Services, and all associated equipment, material, appurtenance, or apparatus of any sort necessary or desirable for use in the provision of a Licensee’s Communications Services. A Communication Facility shall not include an Antenna or wireless Remote Radio Head.
26. **Communications Services** means the provision of service, including but not limited to Telecommunications Services, Cable Services, Video Services, or Information Services over wire or cable facilities utilizing

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Attachments to Utility Poles or Network Nodes, including without limitation Wireless Services.

27. **Communications Space** means the portion of a Utility Pole’s usable space designated for the installation of Communications Facilities, the top of which is forty (40) inches below BTU’s Neutral or lowest electrical supply conductor.
28. **Communication Worker Safety Zone** means that space on a Utility Pole measured from the location of the Neutral to a location forty (40) inches below the Neutral as described in the NESC.
29. **Completion of Attaching Entity Construction** means the form, referenced in Appendix B, a Licensee shall issue to BTU providing written notice of completion of either: (a) Make-Ready Communication Construction; (b) Make-Ready Wireless Installation Construction; or (c) Make-Ready Electrical Construction, as appropriate.
30. **Complex Transfer** means the transfer or relocation of: (a) an Attachment or Overlash onto a BTU Utility Pole that will require cutting and splicing of a Communication Facility resulting in a network and/or customer outage affecting the Licensee that owns the Communication Facility subject to transfer or relocation, (b) the transfer or relocation of such an Attached or Overlash Communication Facility located over and across a state or federal highway; or (c) a Critical Communication Facility.
31. **Contractual Authorities** means the terms and conditions provided in the Agreement and these Standards, which are incorporated herein by reference as if fully set forth, as they may be amended from time to time.
32. **Critical Communications Facility** means a Communications Facility that must provide “always on” connectivity for public safety communications or public health operations whose failure would pose a potential imminent threat to public health or safety.
33. **Days** means business days, unless specifically designated as calendar days.
34. **Decorative Streetlight 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 City Code or BTU rules or regulations.
35. **Demarcation Point** means the Backhaul Network Interface Device between the Network Node and the provider of telecommunications transport service.
36. **Deployment Plan** means a document prepared by a Licensee that shall include: (a) footprint of the network buildout illustrated in a map depicting the municipal jurisdiction, or parts thereof, within the BTU service area expected to be covered by the project; (b) overall network deployment schedule and phasing; (c) map of backbone fiber rings routes, if any; (d) description of overall physical plant architecture and design; (e) description

of typical Service Drop installations; (f) estimated number of Eligible Poles expected to be attached to including a reasonable “ramp-up” and “ramp-down” plan; (g) project and corporate organizational chart for the Licensee; and (h) signature page attesting to the veracity of the Deployment Plan executed by an authorized officer of the Licensee.

37. **Design District** means an area 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.
38. **Distributed Antenna System or DAS Systems** means an outdoor system of Antenna nodes and associated Wireless Equipment Cabinets interconnected by one or more fiber or coaxial cable Communication Facilities and supported by communications equipment and components housed within a hut structure located on private or public property away from BTU Facilities.
39. **Electrical Space or Supply Space** means the upper portion of a Utility Pole reserved for the installation of electric distribution facilities to support existing and planned electric distribution equipment as described in the NESC.
40. **Eligible Pole** means a Utility Pole or a Non-Decorative Streetlight Pole.
41. **Emergency** means the existence of a situation which, in the reasonable discretion of BTU or a Licensee, if not remedied, will result in an immediate threat to public safety, a hazardous condition, damage to property, or a service outage.
42. **Engineer** means any licensed professional engineer or engineering firm approved by BTU to complete engineering work on BTU Facilities.
43. **Federal Communications Commission or FCC** means the independent federal agency established to regulate, in the public interest, communications by radio and wire.
44. **Graffiti** means any inscriptions, word, figure, painting or other defacement that is written, marked, etched, scratched, sprayed, drawn, painted or engraved on or otherwise affixed to any Licensee’s Communications Facilities, Network Nodes, or any part thereof whether or not authorized by the Licensee.
45. **Historic District** means an area that is zoned or otherwise designated as a historic district under municipal, state, or federal law.
46. **Information Services** means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing and cable modem service, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.
47. **Intermodulation Test** means a report containing a mathematical model identifying potential interference based on computational harmonic mixing

of proposed and existing transmit and receive frequencies in the immediate vicinity.

48. **Inventory** means a complete count of all Poles, Attachments, and Network Nodes, including Unauthorized Attachments and Unauthorized Network Nodes, on Poles BTU owns or to which BTU attaches within the BTU service territory.
49. **Joint Meeting Transfer** means the coordinated transfer of a pole-mounted Network Node by its owner to take place at the same time an Attaching Entity schedules the installation of a new Attachment, Overlash, or Mid-span Installation onto or supported by the same Eligible Pole that hosts the Network Node, which requires adjustments of existing Attachments or Utility Pole replacement as part of the One-Touch Transfer Process.
50. **Law** means common law or a federal, state, or local law, statute, code, rule, regulation, order, or ordinance.
51. **Licensee** means a Requestor with an executed Agreement to be an authorized Attaching Entity, Network Provider, or both, and its authorized successors and assignees.
52. **Macro Tower** means a guyed or self-supported pole or monopole greater than the height parameters prescribed by Section 284.103, Local Government Code, or other applicable law that supports or is capable of supporting Antennas.
53. **Make-Ready Charges** means all administrative, engineering design, construction, inspection, and management charges associated with Make-Ready Work.
54. **Make-Ready Communication Construction** means: (a) that portion of Make-Ready Work associated with construction work requiring access to Communication Facilities within the Communication Space of an Utility Pole, including, but not limited to moving, transferring, relocating, or modifying an existing Attachment, Overlash, Mid-span Installation; (b) replacing a Utility Pole; and (c) all other construction activities necessary to accommodate the installation of a new Attachment, Overlash, or Mid-span Installation. Make-Ready Communications Construction shall include, where applicable, the nexus between aerial and underground communication construction.
55. **Make-Ready Electrical Construction** means: (a) that portion of Make-Ready Work associated with construction work requiring access to BTU Facilities within the Electrical or Supply Space of a Utility Pole, including, but not limited to moving, transferring, relocating, or modifying BTU electric distribution facilities; (b) replacing a Utility Pole; and (c) all other construction activities necessary to accommodate the installation of a new Attachment, Overlash, or Network Node. Make-Ready Electrical Construction shall include, where applicable, the nexus between aerial and underground electrical construction.
56. **Make-Ready Engineering** means: (a) that portion of Make-Ready Work associated with preparing, submitting, reviewing, or approving engineering

associated with Licensee's installation and includes, but is not limited to, the following:

- the Pre-Construction Survey;
- the engineering design document(s) for Make-Ready Electrical Construction;
- Make-Ready Communications Construction; and
- Make-Ready Network Node Construction.

(b) submitting such documents to BTU for review, potential modification, and approval.

Make-Ready Engineering shall include, where required, the engineering design specifications related to the nexus between aerial and underground Communications Facilities as part of Make-Ready Communications Construction of a Network Node, and of electrical distribution facilities as part of Make-Ready Electrical Construction. Make Ready Engineering designs prepared and submitted by Licensees must be sealed by a professional engineer.

57. **Make-Ready Network Node Construction** means: (a) that portion of the Make- Ready Work associated with construction work requiring access to a Utility Pole below the Communications Space or access to a Non-Decorative Streetlight Pole at any location that does not interfere with the streetlight components including, but not limited to the movement, transfer relocation, or modification of an existing Attachment or Overlash when an Eligible Pole replacement is necessary or otherwise in order to accommodate the Network Node components; and (b) all other construction activities necessary to accommodate the Network Node on an Eligible Pole. Make-Ready Network Node Construction shall include, where applicable, the nexus between aerial and underground communications construction.
58. **Make-Ready Work** means all work required to accommodate a Licensee's Attachment, Overlash, or Network Node onto an Eligible Pole as appropriate in compliance with the Applicable Engineering Standards. Make-Ready Work may include, but is not limited to, Make-Ready Engineering, Make-Ready Electrical Construction, Make-Ready Communications Construction, Make-Ready Network Node Construction; along with BTU's review of the engineering design documents, Pole Loading Analysis documents, engineering work, construction work, permitting work, tree trimming (other than tree trimming performed for normal maintenance purposes), Eligible Pole replacement, and the Post-Construction Inspection.
59. **Messenger** means any cable owned by a Licensee extending between Utility Poles that is used as support for a Communications Facility or upon which a Mid-span Installation is clamped.
60. **Micro Network Node** means a Network Node not larger in dimension than 24 inches long, 15 inches wide and 12 inches high and that has an exterior antenna, if any, not longer than 11 inches.

61. **Mid-span Installation** means a Micro Network Node or other Communications Services equipment attached to a Messenger cable suspended between two Utility Poles and attached in the Communication Space that was manufactured for this type of installation and designed to connect by means of an Overlash Communications Facility for the purpose of providing Wireless Service or other Communications Services.
62. **Municipal Park** means an area that is zoned, dedicated and used, otherwise designated by municipal code or acquired as a public park or for the purpose of recreational activity.
63. **National Electrical Code (NEC)** means the current edition published by the National Fire Protection Association (NFPA).
64. **National Electric Safety Code (NESC)** means the current edition published by the Institute of Electrical and Electronic Engineers (IEEE) as may be amended or supplemented from time-to-time.
65. **National Joint Utilities Notification System (NJUNS)** means the national not-for-profit organization that helps support effective communication between utilities, Attaching Entities, and Network Providers.
66. **Network Node**, also known as **Wireless Installation** for purposes of these Standards, means equipment at a fixed location that enables the provision of wireless communications between user equipment and a communications network. The term:
- a) includes:
 - (i) equipment associated with wireless communications;
 - (ii) a radio transceiver, an Antenna, a battery-only backup power supply, and comparable equipment, regardless of technological configuration; and
 - (iii) coaxial or fiber-optic cable that is immediately adjacent to and directly associated with a particular collocation.
 - b) but does not include:
 - (i) an electric generator;
 - (ii) a Pole; or
 - (iii) a Macro Tower.
67. **Network Node Fee** means the total annual rental payment assessed by BTU to each Licensee that owns Network Nodes installed on Eligible Poles determined by multiplying [Attachment Rate] x [total number of pole-feet occupied by a Network Provider's Network Nodes].
68. **Network Node Space** means the space on a BTU Eligible Pole within which BTU has authorized the installation of a Network Node.
69. **Network Node Transfer** means the transfer/relocation of a Network Node to a different Eligible Pole.

70. **Network Operations Center** or **NOC** means a centralized location from which a Licensee administrators remotely, supervises, monitors, and maintains the day-to-day operations of a network. The scope of responsibilities of a NOC may be national or regional in nature.
71. **Network Provider** means:
- a) a Wireless Service Provider; or
 - b) a person or entity that does not provide Wireless Service and that is not an electric utility but builds or installs on behalf of a Wireless Service Provider:
 - (i) Network Nodes; or
 - (ii) Node Support Poles or any other structure that supports or is capable of supporting a Network Node.
72. **Neutral** means the conductor used to carry unbalanced current. In single-phase systems, the conductor used for a return current path.
73. **Node Support Pole** means a Pole installed by a Network Provider for the primary purpose of supporting a Network Node.
74. **Non-Decorative Streetlight Pole** shall mean a BTU-owned Streetlight Pole that is not a Decorative Streetlight Pole.
75. **Notice of Dispute Form** means the form that a Licensee must use to dispute BTU's determination of liability associated with a claim for damages caused to BTU Facilities by Licensee or its contractors, subcontractors, or agents. This form is referenced in Appendix C).
76. **Notice to Proceed** means written notification the Licensee may proceed with: (a) Make-Ready Communication Construction; (b) Make-Ready Network Node Construction; or (c) Make-Ready Electrical Construction, as appropriate. (See Appendix B)
77. **Notice of Safety Violation** means the form, referenced in Appendix B, BTU shall issue to Licensee providing written notice of BTU's identification of a Safety Violation with one or more of the Licensee's Attachments, Overlashings, or Network Nodes. (See Appendix B)
78. **Notice of Safety Violation Assessment Charge** means the form, referenced in Appendix B, BTU shall issue to Licensee providing written notice of the levying of a Safety Violation Assessment Charge to the Licensee. (See Appendix B)
79. **Notice of Unauthorized Attachment or Unauthorized Network Node** means the form, referenced in Appendix B, BTU shall issue to a Licensee providing written notice of BTU's identification of an Unauthorized Attachment or Unauthorized Network Node owned by the Licensee. (See Appendix B)
80. **One-Touch Transfer** mean the transfer, relocation, or alteration of third-party Communication Facilities or Mid-span Installations whether conducted by a Licensee or BTU subject to the requirements described in Section IV.B.5, and Section V.B.5.

81. **Overlash** means to place an additional wire or cable Communications Facility onto an existing Attachment or Messenger already secured to the Utility Pole in order to accommodate additional wire or cable Communications Facility capacity.
82. **Overlashing** means an additional wire or cable Communications Facility mounted onto an existing fiber optic, coaxial, or Messenger cable already secured to the Utility Pole in order to accommodate additional wire or cable Communications Facility capacity.
83. **Pedestals** or **Vaults** or **Enclosures** means above- or below-ground housings that are used to enclose a cable/wire splice, power supplies, amplifiers, and passive devices and/or provide a service connection point and that shall not be attached to BTU Eligible Poles.
84. **Permit (Permit for Attachment or Network Node)** means the written or electronic authorization from BTU to make or maintain an Attachment, Overlash, or Network Node to a specific BTU Eligible Pole pursuant to the requirements of the Pole Attachment Agreement and these Standards.
85. **Pole** means a Utility Pole, a Streetlight Pole, a third-party Utility Pole, or a Network Provider or third-party-owned Node Support Pole.
86. **Pole Attachment Agreement** means a Standard *Pole Attachment and Wireless Installation License Agreement* executed by both a Licensee and BTU.
87. **Pole Attachment Fee** means the total annual rental payment assessed by BTU to each Licensee determined by multiplying [Attachment Rate] x [total number of Utility Pole feet occupied or required by permitted Attachments for the Licensee].
88. **Pole Attachment Program** means the development, implementation, and operation of the BTU Pole Attachment Standards including but not limited to the execution of applicable Pole Attachment Agreements, review of Applications, completion of appropriate Make-Ready Electrical Construction, inspection of Make-Ready Electrical Construction, issuance of Permits, coordination of network deployments and expansions, resolution of conflicts and disputes, provision of applicable invoices, conducting workshops, accepting stakeholder input, amending the Standards as appropriate, enforcing the Standards, conducting Inventories, and all other general program administration and duties.
89. **Pole Attachment Standards** or **Standards** means these “Pole Attachment and Wireless Installation Standards” with an initial effective date of September 1, 2017, and as amended from time to time.
90. **Pole Attachment Standards Revision Request (PASRR)** means the form, referenced in Appendix B, any stakeholder shall submit to BTU to propose a revision(s) to these Standards. (See Appendix B)

91. **Pole Attachment Standards Revision Request (PASRR) Comment Form** means the form submitted to BTU in which a stakeholder provides comments to a PASRR. (See Appendix B).
92. **Post-Construction Inspection** means the survey inspection to determine and verify that the Make-Ready Electrical Construction, Make-Ready Communications Construction, Make-Ready Network Node Construction, and all other Make-Ready Electrical Construction, including the installation of an Attachment, Overlash, and/or Network Node was made in accordance with Applicable Engineering Standards, the Application, and all other Permit requirements.
93. **Pre-Certified Equipment** means Wireless Equipment for which a Network Provider has submitted manufacturing specifications and information to BTU for review and approval and for which BTU has given its approval or pre-certification.
94. **Pre-Construction Survey** means the field survey and all other work and operations required by Applicable Engineering Standards to determine the Make-Ready Electrical Construction necessary to accommodate an Attaching Entity's Communications Facilities or Network Provider's Communications Facilities or Network Node onto an Eligible Pole. Such work includes, but is not limited to, field inspection and administrative processing. The field survey to be done prior to preparation of Make-Ready Engineering shall be conducted by the Licensee's Engineer or other qualified employee or agent.
95. **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.
96. **Public Rights-of-Way** or **Public Right-of Way** means the areas on, below, or above a public roadway, highway, street, public sidewalk, alley, waterway, or utility easement in which the City of Bryan or other governmental entities within the BTU service area has an interest. The term does not include: (a) private easement; or (b) the airwaves above a public right-of-way with regard to wireless telecommunications.
97. **Receiver** means any electronic device the purpose of which is to collect, amplify, and/or control radio frequencies.
98. **Registration and Annual Reporting Form** means the initial registration form, available from BTU's website and referenced in Appendix A, a Requestor must submit in order to enter into a Pole Attachment Agreement with BTU and which must be updated annually (or as changes warrant) to meet the annual reporting requirements of an Licensee.
99. **Remote Radio Heads (RRH)** means a transceiver with transmitting and receiving capability of radio frequencies. The RRH will be served by optical fiber, direct-current power, and output to a single or multiple Antennas. Remote Radio Heads are an inventoried Network Node component.

100. **Request for Pre-Certification of Wireless System** means the form, referenced in Appendix B, a Network Provider shall submit to BTU to request BTU to review and approve Wireless Equipment for a Network Node in advance of it submitting an Application.
101. **Request for Waiver of Applicable Engineering Standards (Waiver Request)** means the form, referenced in Appendix B, a Licensee shall submit to BTU to request a waiver of one or more Applicable Engineering Standards.
102. **Requestor** means an eligible entity that submits a *Registration and Annual Reporting Form* in order to enter into an Agreement with BTU under which it may submit Applications for Permits to access BTU's Eligible Poles for the purpose of installing Attachments, Overlashings, and/or Network Nodes.
103. **Reserved Capacity** means Capacity or space on an Eligible Pole that BTU has identified and reserved for its own core electric utility service and lighting requirements, including space for any and all associated internal communications functions that are essential to the proper operations of such core electric utility service, pursuant to reasonably projected need.
104. **Revisions** means changes or modifications to the BTU Pole Attachment Standards, which may require changes in the collection of field data necessary to prepare an Application for submission.
105. **Riser** means metallic or plastic encasement materials supported by metal standoff brackets placed vertically on an Eligible Pole to guide and protect communication wires and cables where they transition from overhead to underground or vice-versa.
106. **Safety Briefing** means a document or presentation materials prepared by a Licensee and provided to BTU to educate BTU employees and contractors regarding specific process on how to work safely near and/or around the Licensee's specific Attachment or Network Node technologies and locations.
107. **Safety Violation** means a violation of the Applicable Engineering Standards that: (a) is reasonably expected to endanger life or property; or (b) poses a potential safety risk to any BTU employee, Licensee employee or contractor, or to the general public.
108. **Safety Violation Assessment Charge** means the charge payable by a Licensee for a Safety Violation as described in Appendix H.
109. **Service Disconnect Switch** means the electrical device owned by the Licensee which purpose is to de-energize the entire Wireless Installation, and must meet the requirements provided in the BTU Electric Service Standards and all other applicable code requirements.
110. **Service Drop** means a single wired drop installed to provide Communications Service to an individual customer measured from the customer premises to the closest available Utility Pole without requiring any additional anchors or guys to comply with all Applicable Engineering

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Standards. Unless otherwise stated herein, Service Drops are subject to all terms and conditions of these Standards.

111. **Service Pole** means a City-owned Pole located in the Public Rights-of-Way that supports traffic control functions or signage.
112. **Simple Transfer** means the transfer, relocation, or alteration of any Attachment or Overlash on an existing Utility Pole or onto a new Utility Pole that does not require cutting and splicing of the Communication Facility subject to such transfer, relocation, or alteration.
113. **Slab-Mounted Equipment Cabinet** means a ground-based Wireless Equipment Cabinet mounted on a concrete slab or similar structure.
114. **Standard Pole Attachment and Wireless Installation Agreement** or **Agreement** means an executed agreement between BTU and a Licensee that adopts and incorporates these Standards by reference, and under which the Requestor agrees to abide by the terms and conditions of the Agreement as well as the duties and obligations set out in these Standards as they may be amended from time to time. An Agreement shall include additional legal protections and obligations of the parties not specifically covered in the Standards.
115. **Streetlight Pole** means a pole structure owned by BTU that is not part of the electric distribution system with the primary function of providing streetlight service or all night area light service. A Streetlight Pole may be a Decorative Streetlight Pole or Non-Decorative Streetlight Pole.
116. **Tag** means to place a distinct marker within twelve inches (12”) of an Eligible Pole on the wires and cables, coded by number, color, or other means that will readily identify the owner of the Attachment, Mid-span Installation, or Network Node. (See Appendix K) The Tag shall be consistent with accepted communications industry standards.
117. **Tagging Plan** means a written plan developed by a Licensee at the request of BTU to address and remedy untagged or incorrectly tagged Attachments, Overlashings, or Network Nodes.
118. **Telecommunications Services** means that definition provided at 47 U.S.C. §153(53), including any revisions to that definition.
119. **Transport Facility** means each transmission path physically within the Public Right-of-Way extending with a physical line from a Network Node directly to the relevant Wireless Service Provider’s network, installed for the purpose of providing Backhaul for Network Nodes.
120. **Transmitter** means any electronic device which purpose is to generate, amplify, and/or control, radio frequencies.
121. **Unauthorized Attachment** means any Attachment or Overlash of a Licensee: (a) for which the Licensee failed to obtain a Permit; or (b) which is not in compliance with the requirements of the Permit issued for said Attachment or Overlash. An Attachment installed by an entity that failed to execute an Agreement or installed after the expiration or termination of an Agreement shall also be considered an Unauthorized Attachment.

122. **Unauthorized Attachment Charge** means the charge payable by a Licensee for Unauthorized Attachments described in Appendix H.
123. **Unauthorized Network Node** means any Network Node of a Network Provider (a) for which the Network Provider failed to obtain a Permit; or (b) that is not in compliance with the requirements of the Permit issued for said Network Node. A Network Node installed by an entity that failed to execute an Agreement or by an entity after contract expiration or termination, shall also be considered an Unauthorized Network Node.
124. **Unauthorized Network Node Charge** means the charge payable by an Licensee or other person for Unauthorized Network Node as described in Appendix H.
125. **Utility Pole** means a BTU electric distribution system utility pole carrying primary or secondary voltages with phase-to-phase voltages up to and including 34.5 kilovolts (kV) .
126. **Video Services** means video programming services provided through wireline facilities located at least in part in the Public Right-of-Way without regard to delivery technology, including internet protocol technology.
127. **Wireless Equipment** means any FCC-authorized radio equipment components owned by a Network Provider used for a Network Node, including Antennas, Remote Radio Heads, Transmitters, transceivers, and related equipment on an Eligible Pole-mounted Network Node or Mid-span Installation of a Micro Network Node.
128. **Wireless Equipment Area** means the space comprising of the area where the following components of a pole-mounted Network Node are located: (a) Antenna Area; (b) Wireless Equipment Cabinet; and (c) Backhaul Network Interface Device.
129. **Wireless Equipment Cabinet** means a weather-tight enclosure that houses Network Node equipment and components. Wireless Equipment Cabinets are inventoried Network Node components. Subject to the further provisions of these Standards and Chapter 284, Local Government Code, a Wireless Equipment Cabinet, together with all other equipment associated with a Network Node shall be ground-based and shall not be higher than three feet six inches in height, width, or depth.
130. **Wireless Interference** means the material adverse effect of unwanted energy due to one or a combination of emissions, radiations, or inductions upon reception in a pre-existing radio communication system, manifested by any material performance degradation, misinterpretation, or loss of information which could be extracted in the absence of such unwanted energy.
131. **Wireless Project Area** means a defined urban or suburban geographical area identified by a Licensee for the deployment of one or more Network Nodes utilizing the same technology at each installation in order to provide, or enhance the provision of, Wireless Service or Commercial Mobile Radio Service. A Wireless Project Area shall consist of a small portion of the overall service area covered by the Certificated Provider or Wireless

Service Provider on whose behalf the Network Nodes are deployed, and is not considered part of a Deployment Plan.

132. **Wireless Rate** means the annual rate per one foot of Eligible Pole space used or required for support by a Network Node as determined by BTU consistently with the Attachment Rate.
133. **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.
134. **Wireless Service Provider** means a person that provides Wireless Service to the public.

B. Registration of Entity

1. **Initial Registration Information.** Before executing an Agreement, a Requestor must submit a complete *BTU Registration and Annual Reporting Form* (See Appendix A) and submit the completed form to BTU. The Registration and Annual Reporting Form must indicate:
 - a) Corporate name of the Requestor;
 - b) Corporate contact information;
 - c) Contact information for a primary liaison and an escalation list of company personnel responsible to respond to any operational requests from BTU;
 - d) Whether the entity holds a certificate from the Public Utility Commission of Texas (PUCT), and if so, what kind;
 - e) If the entity has been granted a franchise, license agreement, permit or ordinance by the City of Bryan or a suburban city within the BTU service area;
 - f) If the Requestor is a Network Provider, identify the name and contact information of any Wireless Services Providers under contract with Requestor; and
 - g) To the extent Requestor has existing Attachments, Overlashings, or Network Nodes at the time of initial registration, Requestor shall provide relevant pole identification data for all Eligible Poles Requestor's Communications Facilities occupy or require for support, including BTU pole number and GPS location data for entry into the BTU GIS system, and equipment tagging information.

Where applicable, the Requestor shall provide copies of the PUCT certificate and any franchise or license agreements, permits, or ordinances with the *Registration and Annual Reporting Form* authorizing access to the Public Rights-of-Way within the BTU service area. BTU shall have no obligation to execute an Agreement or approve an Application for a Permit within any part of its service area to any Requestor that has not been granted

the right to use Public Rights-of-Way for the installation of Communications Facilities by means of Attachments or Network Nodes.

2. **Updates to Registration Information.** Pursuant to Section II.F, the *Registration and Annual Reporting Form* must be submitted to BTU at least annually thereafter, and as changes in the Licensee's information warrant. Licensee has an obligation and duty to maintain the accuracy of the information in the *Registration and Annual Reporting Form* at all times. ***BTU is not obligated to contact any person not listed as a contact on the Registration and Annual Reporting Form.***

C. **Execution of Standard Pole Attachment and Wireless Installation License Agreement**

Every registered Requestor must execute an Agreement that incorporates these Standards by reference, and BTU must countersign such Agreement before the Requestor may submit an Application. Except as otherwise set out herein, an Application must be submitted in compliance with these Standards for every new Attachment, Overlash, and/or Network Node that a Licensee seeks for a BTU Eligible Pole. BTU's Pole Attachment Application process is described in detail in Section IV for Attachments and in Section V for Network Nodes.

BTU may approve or deny an Application, in whole or in part, for reasons of safety, reliability, or insufficient Capacity that cannot be resolved in a manner consistent with Applicable Engineering Standards and the conditions, processes, and timelines outlined in these Standards. The uninterrupted processing of a Licensee's Application is contingent on the timely payment of invoices for Make-Ready Work and other fees or charges applicable to Attachments or Network Nodes and compliance with the requirements and specifications of these Standards.

The issuance of a Permit is the only means for securing the privilege to install an Attachment or Network Node on any BTU Eligible Pole..

1. **Agreements Required for Network Nodes.** A Network Node may only be attached to an Eligible Pole pursuant to an Agreement. Any Network Node not covered by an Agreement found mounted onto an Eligible Pole shall be considered an Unauthorized Network Node subject to Unauthorized Network Node Charges and any other sanctions or remedies specified herein or in the Agreement.
2. **Standards Applicable Regardless of Effective Agreement.** Upon their effective date, these Standards shall be applicable to all Attachments, Network Nodes, and related Communication Facilities of a Licensee whether or not the Licensee is a party to a valid and existing Agreement. Any Attachments or Network Nodes in place at the time the corresponding Agreement expires or terminates, as well as any additional Unauthorized Attachments installed subsequent to such expiration or termination but prior to the execution of a successor agreement, will be subject to these Standards. Upon execution of a successor Agreement, these Standards will remain in effect and shall be incorporated into the contractual terms in such successor agreement(s). This Section is not intended to supersede, eliminate, or

substitute any contractual protections or duties included in such successor agreement(s).

D. Application for Permit

When submitting an Application for a Permit, the Licensee must specify whether the Application is for a wireline Attachment or a Network Node. The comingling of wireline Attachments and Network Nodes under one Application is strictly prohibited, except to the extent that a Network Provider seeks to connect one or more Network Nodes to Transport Facilities. In such instances, an Attachment Application and an accompanying Network Node Application may be submitted and considered by BTU together as a single project provided the Licensee identifies the Applications as “associated” on the appropriate Application Forms.

No person or entity is authorized to install an Attachment, Overlapping, Network Node, or Mid-Span Installation onto or supported by an Eligible Pole without first: (a) executing an Agreement; (b) submitting one or more complete Applications; and (c) securing and receiving a *Permit for Attachment or Network Node* contemplated.

E. Termination of Permit

1. **Automatic Termination of Permit.** Any Permit issued pursuant to these Standards shall automatically terminate when the Licensee ceases to have authority to construct and operate its Communications Facilities or Network Nodes on public or private property, including federal property, at the location of the Eligible Pole covered by the Permit.
2. **Surrender of Permit.** A Licensee may at any time surrender any Permit and remove the corresponding Attachment(s) and/or Network Node(s) from the affected Eligible Pole(s); provided, however, that before commencing any such removal, Licensee must, not less than ten (10) days before Licensee intends to remove an Attachment or Network Node, submit an Application to and obtain a Permit from BTU. All such work is subject to the insurance requirements of the Agreement. No refund of any fees or costs paid to BTU will be made upon removal.

If Licensee surrenders such Permit pursuant to the provisions of this Section, but fails to remove its Attachments or Network Nodes from BTU’s Facilities within the time provided in the Permit, BTU shall have the right to remove the Attachments or Network Nodes at the Licensee’s expense.

F. Annual Reporting Requirements

As required by Section II.B.2, Licensees must submit a *Registration and Annual Reporting Form* prior to executing an Agreement and an update on or before October 31 of each year thereafter. Concurrently with submitting the updated Registration and Annual Reporting Form, Licensee shall report the following to BTU:

1. **List of Installations.** Licensee shall provide a list of specific Eligible Poles (by BTU Pole number, if available) on which Licensee has installed, during the previous twelve (12) month reporting period, new Attachments,

Overlashings, or Network Nodes, including Risers and Service Drops, or any other facility for which no Permit was required under these Standards (including Micro Network Nodes).

2. **List of Non-Functional Attachments.** Licensee shall provide a list of all Attachments, Overlashings, Network Nodes, or other equipment that has either become non-functional, surrendered, or for which Licensee is no longer paying the annual Pole Attachment Fee or Network Node Fee during the previous twelve (12) month reporting period. The report shall identify the specific Eligible Pole (by BTU Pole number, if available) on which the nonfunctional Attachment, Overlash, Network Node, or other equipment is located and provide a description of the nonfunctional equipment.
3. **Removed Equipment.** Licensee shall provide a list of all Attachments, Overlashings, Network Nodes, or other equipment removed (and not replaced by substantially similar equipment) from specific Eligible Poles (by BTU Pole number, if available) during the previous twelve (12) month reporting period. The report shall identify the Eligible Pole from which the equipment was removed, a description of the removed equipment, and indicate the approximate date of removal. This requirement does not apply where Licensee surrenders a Permit.
4. **Data Required.** For all new or existing Attachments, Overlashings, or Network Nodes or related Communications Facilities, Licensee shall provide relevant pole identification data for all Eligible Poles Requestor's Attachments, Overlashings, or Network Nodes, or other Communications Facilities occupy or require for support, including BTU pole number and GPS location data for entry into the BTU GIS system, and equipment tagging information.
5. **Emergency Contact.** Licensee shall maintain current at all times the emergency contact information required by the Agreement, along with contact information for their Network Operations Center.
6. **Failure to Report.** Failure of a Licensee to comply with the annual reporting requirements of this Section shall result in BTU suspending all work on Licensee's Applications. Within a reasonable time of BTU receiving the updated Registration and Annual Reporting Form, BTU shall resume processing the Licensee's Applications.
7. **Right to Audit.** BTU reserves the right to perform an audit on any annual reporting required herein to validate the information provided. Failure to provide accurate reporting will subject the Licensee to the sanctions provided for a failure to report.

G. Notices

1. Unless otherwise specified, all notices required to be "in writing" may be sent by: (i) U.S. Postal Service, properly addressed and with adequate postage or (ii) email. All email notices to BTU shall be sent to poleattachments@btutilities.com.

2. **Notice of Revisions to the Pole Attachment Standards.** BTU shall publish any proposed revisions to these Standards on the BTU public website. BTU shall also send electronic notice to the primary contact and email address for each Licensee provided in the Registration and Annual Reporting Form. BTU is under no obligation to contact anyone other than the primary contact provided with regard to notices under this Section. BTU shall enforce and a Licensee shall adhere to the revised Standards for new Applications on their effective date. No revisions to the Applicable Engineering Standards shall be retroactive to existing permitted Attachments, Overlashings, or Network Nodes, unless required by city, county, state, or federal law, or if the Attachment, Overlash, or Network Node is modified after the effective date of the revised Standards. If an Attachment, Overlash, or Network Node is modified, including without limitation moved, upgraded, repaired, replaced, or Overlashed (in the case of an existing Attachment), the Attachment, Overlash, or Network Node shall immediately become subject to the Standards then in effect. BTU will publish any proposed amendment to the Standards not less than forty-five (45) calendar days prior to their effective date.

BTU may conduct an annual workshop at any time for the benefit of all Licensees. In the workshop, BTU and Licensees may discuss overall implementation of the Standards, including proposals for amendments to improve operations, procedures, or administration of BTU's Pole Attachment Program. Proposals for major Revisions to the Standards proposed by BTU may be discussed at a workshop prior to publication for comment, adoption, and acceptance.

3. **Process to Request Revisions to the Standards.** A Licensee may formally request a revision to the Standards by:

- (a) Completing the BTU *Pole Attachment Standards Revision Request* (PASRR) form, which is available for download from BTU's website; and
- (b) Submitting the completed PASRR to BTU.

BTU shall review a properly completed PASRR form received and will publish the PASRR on the Pole Attachment webpage for stakeholder comments for a minimum of thirty (30) days.

Licensees and other interested stakeholders may submit comments, including proposed substitute language, within the thirty (30) day comment period. Comments are to be submitted to BTU using the PASRR Comment form, available on the BTU website.

Within thirty (30) days following the end of the comment period, BTU will publish its rationale and decision to accept, modify, or reject the PASRR either in whole or in part and its proposed effective date, if accepted. BTU reserves the right to extend the time for stakeholder comments or the period to respond to stakeholder comments. In the event of such extension, BTU will notify stakeholders by posting such notice of extension on the Pole Attachment website.

H. Scope of Standards

1. **Grant of Permit.** The issuance of a Permit by BTU authorizing the placement of an Attachment, Overlash, or Network Node on an Eligible Pole, pursuant to the provisions of these Standards, will operate to grant a Licensee a revocable, nonexclusive license to install and maintain the Attachment, Overlash, or Network Node, as applicable, on a specific Eligible Pole or set of Utility Poles in the case of Attachments or a Mid-span Installation. The grant of a Permit entitles a Licensee to the quiet enjoyment of its Attachments, Overlash, or Network Node subject to all requirements of these Standards, including the procedures for the transfer or relocation of such Attachment, Overlash, or Network Node.
2. **Duties and Obligations Under Standards.** These Standards set out the duties and obligations of BTU and a Licensee regarding the processing of an Application, issuance of a Permit, compliance with Applicable Engineering Standards, and administration of an Attachment, Overlashing, or Network Node on an Eligible Pole during the entire lifecycle of the Attachment, Overlashing, or Network Node.
3. **Permit Issuance Conditions.** BTU may issue a Permit to a Licensee when there is sufficient Capacity to accommodate the requested Attachment or Network Node or when pole loading conditions would not prohibit an Overlashing, and the corresponding Application complies with all Applicable Engineering Standards. BTU may deny a Permit on a nondiscriminatory basis where there is insufficient Capacity or for reasons of safety, reliability, or as set forth in the Applicable Engineering Standards. BTU shall provide the specific nondiscriminatory reasons for denial of an Application in writing (via email) with the rejected Application.
4. **No Interest in Property.** No use, however lengthy, of any BTU Facilities, and no payment of any fees or charges required under these Standards or otherwise, shall create or vest in a Licensee any easement or other ownership or property right of any nature in any portion of such BTU Facilities.
5. **Non-Exclusivity.** A Permit granted to a Licensee under these Standards is non-exclusive and shall have no effect or take legal precedence over any Permit, rights, or other privileges granted by BTU to any other entity to use a BTU Eligible Pole or other BTU Facilities.
 - a) No Licensee is entitled to reserve or schedule space on any Eligible Pole, other than pole space for which a Permit has been granted to Licensee.
 - b) An approved Permit is subject at all times to BTU's right to provide core electric utility services, including the provision of all internal communications essential to the proper operations of such core electric utility services, using its Eligible Poles.
 - c) The issuance of a Permit by BTU grants only a license and no possessory interest to a specific Eligible Pole or to any space on such pole.

6. **BTU's Rights Over Poles.** The granting of a Permit does not in any way limit BTU's right to locate, install, operate, maintain, relocate, or remove its Poles in the manner and at the time that will best enable it to fulfill its core electric and customer service requirements. BTU reserves to itself the right to maintain its Poles and other BTU Facilities and to operate its facilities thereon in such manner as shall enable BTU to fulfill its own electric service, lighting, maintenance, and customer service obligations and requirements.
7. **Restoration of BTU Service.** BTU's service restoration requirements shall take precedence over any and all work operations of any Licensee on BTU's Eligible Poles. BTU may relocate, replace, or remove a Licensee's Attachments, Overlashings, or Network Nodes, transfer them to substituted poles or perform any other work in connection with such Attachments, Overlashings, or Network Nodes that BTU deems necessary in order to safely and efficiently restore electrical service. BTU shall not be liable to a Licensee for any actions BTU takes pursuant to this Section. The affected Licensee shall reimburse BTU for the expenses that BTU incurs relating to such work within forty-five (45) days of the date BTU issues an invoice for such work.
8. **Permitted Uses.** All Licensees shall be permitted to use an approved Attachment or Overlash only for the purpose of providing Communications Services. Network Nodes shall only be used for the provision of Wireless Services.
 - a) A Licensee is not permitted to install an Attachment, Overlash, or Network Node on behalf of any other party, sublease an Attachment, Overlash, or Network Node to any other party, or Overlash Communications Facilities or install any Network Node devices belonging to a third-party, regardless of whether the third-party is an Affiliate of a Licensee; provided, however, that certain Wireless Installations that Licensee may deploy, construct, install, repair, or maintain under the Standards may be licensed, leased, owned, or operated by one or more Wireless Service Provider customers of Licensee ("Licensee's Customers") pursuant to license, lease, or sales agreements between Licensee and Licensee's Customers.
 - b) Wireless Installations provided for the benefit of Licensee's Customers shall be treated as Licensee's Wireless Facilities under these Standards, and Licensee shall be responsible for performance of all of Licensee's obligations under these Standards with respect to all Wireless Installations Licensee deploys, constructs, installs, repairs, or maintains on an Eligible Pole.
 - c) Licensee shall provide Licensee's Customer a written notice of the BTU's requirements under these Standards, Licensee's Agreement, and any applicable Permit ("BTU Requirements"). Licensee may satisfy this notice requirement by providing Licensee's Customer with an electronic link to BTU's website where the BTU Requirements may be found.

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- d) If Licensee constructs or intends to construct a Wireless Installation owned, leased, or licensed for use in whole or in part by one or more of Licensee's Customers, including without limitation a Wireless Service Provider (a "Third-Party Facility"), Licensee shall provide notice to BTU of such arrangement at the time it submits an Application. Licensee's notice to BTU of Third-Party Facility shall include: (i) the name, address, email address, and contact telephone number of Licensee's Customer; (ii) the model number of and the technical specifications for the Third-party Facility; and (iii) a description of the nature of the interest Licensee's Customer holds or will hold in the Third-Party Facility (*e.g.*, whether Licensee's Customer will own the Third-Party Facility or will lease or license the Third-Party Facility from Licensee). The information required by this Subsection shall be provided as part of the Application.
- e) Any use of an Attachment, Overlapping, or Network Node other than as specified herein, shall be considered an Unauthorized Attachment or Unauthorized Network Node subjecting the non-compliant Licensee to enforcement action by BTU, including:
 - (i) Suspension of the processing of any further Applications submitted by the Licensee pending resolution of the unauthorized use;
 - (ii) Revocation of previously granted Permits; and
 - (iii) Contractual claims under the Agreement, as appropriate.

9. **Expansion of Capacity.** BTU may expand Pole Capacity, at a Licensee's expense, when necessary to accommodate an additional Attachment or Network Node approved pursuant to the issuance of a Permit, and when consistent with local governmental land use requirements of general applicability and the Applicable Engineering Standards. BTU is under no obligation to install, retain, extend, or maintain any Eligible Pole for the benefit of a Licensee when such pole or system of poles is not needed for BTU's core electric or customer service requirements.

10. **Reserved Capacity.** At the time that BTU receives an Application, BTU, to the extent information is known at that time by BTU, may communicate to the requesting Licensee BTU's obligation to reserve space on an Eligible Pole as Reserved Capacity for its own future use in accordance with a *bona fide* electric system expansion or improvement plan that reasonably and specifically projects a need for that space for the provision of its core electric utility or lighting services, including any and all associated internal communications. Reserved Capacity shall be made available for use by a Licensee consistent with these Standards and this Section until BTU has a need for such Reserved Capacity.

- a) BTU may reclaim the Reserved Capacity if required for BTU's use at such time by giving a Licensee at least ninety (90) days' advance notice. BTU shall give the Licensee the option to remove its Attachment or Network Node from the affected Eligible Pole or to pay for the cost of any Make-Ready Electrical Construction needed

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to expand Capacity so that the Licensee may maintain its Attachment or Network Node on the affected Eligible Pole as provided below.

- b) BTU may require a Licensee to remove its Attachment or Network Node from the affected Eligible Pole if the Licensee does not opt to pay for the cost of Make-Ready Electrical Construction needed to expand Capacity within forty-five (45) days of BTU issuing notice that BTU requires use of the Reserved Capacity. BTU may remove the Attachment or Network Node if the Licensee fails to remove it from the affected Eligible Pole within ninety (90) days of BTU issuing notice that BTU requires use of the Reserved Capacity. BTU shall invoice the affected Licensee for the actual cost that BTU incurs for such removal, and the Licensee shall pay such invoice no later than forty-five (45) days following issuance of invoice.
- c) If BTU reclaims Reserved Capacity for which a Licensee has received a Permit and paid for Make-Ready Electrical Construction but the installation of the Attachment and/or Network Node is not complete, BTU may refund all payments made by the Licensee to BTU for the Application Fee and Make-Ready Electrical Construction on the affected Pole.

11. **Authorization for Use of One-Touch Transfer Process.** All Licensees with Attachments, Overlashings, or Network Nodes on BTU Eligible Poles shall be subject to a Simple Transfer, Network Node Transfer or rearrangement of their Attachments, Overlashings, or Network Nodes pursuant to the One-Touch Transfer Process described in Section IV.B.5 and Section V.B.5; provided that any such transfer or rearrangement is consistent conforms to with these Standards including all Applicable Engineering Standards. A Licensee is entitled to utilize the One-Touch Transfer Process when installing its Attachments, Overlashings, or Network Nodes, provided it follows that the requirements of Section IV.B.5, Section IV.B.6, Section V.B.5, and Section V.B.6 are followed

I. Fees and Charges

1. **General.** All Licensees shall be subject to the BTU Schedule of Pole Attachment Rates, Fees, and Charges as specified in Appendix H, as may be amended, and shall comply with the terms and conditions specified herein.
- a) Wherever BTU is required to perform any work related to the Pole Attachment Program on behalf of a Licensee, BTU, at its sole discretion, may utilize its employees or contractors, or any combination of the two, to perform such work. Invoices submitted directly to a Licensee from a BTU contractor shall be treated as if the invoice was issued from BTU pursuant to these Standards.
 - b) Wherever a Licensee is required to pay for such work done or contracted by BTU, the charge for such work shall include all reasonable material, labor, travel, engineering, administrative, and applicable overhead costs, other than those costs compensated by

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payment of the applicable Application Fee, the annual Pole Attachment Fee, or Network Node Fee.

- c) No rates, fees, and/or charges specified in Appendix H shall be refunded on account of any surrender of a Permit.
- d) All Licensees shall pay BTU or its contractor in accordance with the terms of this Section and Appendix H.
- e) If BTU or its contractor does not receive payment from a Licensee for any amounts owed within forty-five (45) days after it becomes due, the Licensee shall pay in addition to the initial amount, interest to BTU at the rate of one and 50/100 percent (1.50%) simple interest per month, or the highest interest rate allow by law, whichever is less, on the amount due beginning from the first of the month following the forty-five (45) days until the payment is made. Should payment not be received within sixty (60) days following the due date, BTU shall suspend the processing of the Licensee's Applications until payment is paid in full.
- f) Excluding the annual Pole Attachment Fee or the annual Network Node Fee, should a Licensee wish to dispute an invoice from either BTU or its contractors, the Licensee shall within fifteen (15) days of receipt of the invoice provide BTU written notice of its intention to dispute the invoice. This notice shall include:
 - (i) A copy of the invoice being disputed;
 - (ii) A detailed description of the disputed amounts;
 - (iii) All documentation to support the licensee's claim of dispute; and
 - (iv) Any legal or factual basis for the claim of dispute.

Within fifteen (15) days of receipt of the written notice of dispute, BTU will arrange a meeting or teleconference with the Licensee to begin discussions regarding the dispute in accordance with the conflict resolution provisions provided herein.

The invocation of a dispute by a Licensee does not relieve the Licensee from timely payment of the invoice. If BTU and the Licensee reach agreement on an amount less than the invoiced amount under dispute and paid under protest or dispute, BTU, or its contractor, shall either reimburse or provide future credit to the Licensee in accordance with the agreements of the parties.

- g) Nonpayment of a non-disputed amount invoiced by BTU or its contractor and due beyond ninety (90) days shall subject a Licensee to escalating enforcement action, including but not limited to:
 - (i) Suspension of the processing of any further Applications submitted by the non-compliant Licensee pending receipt of payment;
 - (ii) Potential contractual claims; and

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- (iii) Termination of the Agreement, as appropriate.
- h) A Licensee shall make full payment consistent with the time frame required by these Standards and shall designate payment as “PAID UNDER PROTEST.” Failure to contest or otherwise dispute an invoice within sixty (60) days of receipt shall be deemed to be acceptance by the Licensee.
- i) Failure to pay an invoice for the annual Pole Attachment Fee or the annual Network Node Fee in full based on any allegation that BTU has improperly applied or calculated the Attachment Rate or the Wireless Rate shall not constitute a legitimate basis for disputing any invoice (other than arithmetic errors that should be brought to BTU’s immediate attention).

2. Application Fee and Make-Ready Engineering Review.

- a) Each Licensee shall pay to BTU an Application Fee to compensate BTU for the cost of administrative and other work required to manage the Application process not directly reimbursed by a Licensee through other Make-Ready Electrical Construction charges or otherwise covered by the annual Pole Attachment Fee or the Network Node Fee. The appropriate Application Fee, set forth in Appendix H, shall be paid to BTU at the time the Application is submitted. If the Licensee fails to pay the Application Fee upon submission, the Application shall be deemed incomplete. As a result, BTU will not process the Application or any subsequent Application(s) for which no Application Fee has been submitted.
- b) A Licensee shall reimburse BTU or its contractor for its actual costs to complete the installation process, including the Make-Ready Engineering review, described in Section IV and Section V. BTU or its contractor shall invoice each Licensee for the work completed in processing the Licensee’s request for Wireless Service on a monthly basis. If the Licensee fails to pay the Make-Ready Engineering costs within forty-five (45) days following issuance of the invoice, BTU will: (i) suspend processing of the Licensee’s pending Applications and any subsequent Applications; or (ii) revoke the Permits issued under the Applications for which Make-Ready Engineering review charges have not been paid. Upon full payment, BTU will resume processing and restore any Permits which may have been revoked under this section.
- c) In the event an Application is submitted by a Licensee and then is subsequently cancelled, the Licensee shall forfeit the Application Fee submitted with the cancelled Application. The Licensee shall also reimburse BTU or its contractor for the costs incurred up to the date of cancellation. Should BTU cancel the Application pursuant to its rights under these Standards, BTU will reimburse the Application Fee to the Licensee.

3. Advance Payment for Make-Ready Electrical Construction. Where Make-Ready Electrical Construction is required, the Licensee is required to

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make advance payment for the Make-Ready Electrical Construction as set forth herein. All required Make-Ready Electrical Construction must be completed before a Licensee shall install any Attachments, Overlashings, or Network Nodes. BTU shall provide an invoice and request authorization for the Make-Ready Electrical Construction by submitting to the Licensee the completed *Authorization for Make-Ready Electrical Construction* form, referenced in Appendix B. The estimate provided in the *Authorization for Make-Ready Electrical Construction* form shall be valid for fifteen (15) days after issuance. Should the Licensee not indicate its acceptance within the fifteen (15) day time-frame, the Application shall be deemed cancelled. If approved by the Licensee, the Licensee shall pay BTU pursuant to the terms of *Authorization for Make-Ready Electrical Construction* and Section II.I.1. BTU will not schedule or release to construction any Make-Ready Electrical Construction work on behalf of a Licensee until the advance payment is received in full by BTU.

- a) As provided in this Section, BTU will require advance payment of estimated expenses for Make-Ready Electrical Construction. At its discretion, BTU may perform a true-up of costs for work orders closed and the following will apply:
 - (i) To the extent that the actual costs of the work order exceed the advance payments of estimated expenses, the Licensee shall pay BTU for the net difference in costs; or
 - (ii) To the extent that the actual costs of the work order are less than estimated costs, BTU will refund to the Licensee the net difference in costs.

In either event, BTU shall either invoice or refund the appropriate costs to the Licensee within sixty (60) days following the close of each quarter.

- b) For any actual costs incurred by BTU that are not reflected in the work order costs for any reason, an estimated cost will be determined by BTU and added to the actual work order costs to account for these costs during the true up process.

4. Annual Pole Attachment and Network Node Fees. BTU shall assess and Licensee shall pay, in addition to any other fees or charges authorized under the Contractual Authorities, fees and charges for the privilege of installing, maintaining, owning, leasing, licensing, using, or operating Attachments or Network Nodes on Eligible Poles.

- a) BTU shall assess fees for Attachments and Network Nodes on a per-pole-foot-required basis at the highest rate permitted under applicable law (the "Attachment Rate"). BTU will provide Licensee notice of the applicable Attachment Rate for the next calendar year by October 31 of each year.
- b) Licensee's initial payment of the Pole Attachment Fees or Network Node Fees for any Attachment or Network Node, as applicable, shall

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be made on the date Licensee completes installation of the Attachment or Network Node to which a fee or fees are applicable.

- c) After installation of an Attachment or Wireless Installation, for each year Licensee operates under this Agreement:
 - i) Licensee shall, on or before October 31 of each year, provide the BTU with a summary statement showing the locations of and information regarding the installation of each Attachment or Network Node it owns, leases, licenses, uses, or operates as of that date, including the number of pole-feet occupied or required for each Attachment or Network Node (“Summary Statement”); and
 - ii) Licensee shall, on or before December 31 of each year following delivery of the Summary Statement, pay to BTU in advance for the following calendar year: (a) the Attachment Rate multiplied by the number of pole-feet occupied by or required for Licensee’s Attachments for all or any part of the preceding calendar year (the “Pole Attachment Fees”); and (b) the Attachment Rate multiplied by the number of pole-feet occupied by or required for Licensee’s Network Nodes installed or in place on or supported by an Eligible Pole for all or any part of the preceding calendar year (the “Wireless Installation Fees”).

5. **Unauthorized Attachments or Unauthorized Network Nodes.** The installation of Unauthorized Attachments or Unauthorized Network Nodes poses an increased risk to BTU personnel, the public, and legitimate Attachments, Overlashings, and Network Nodes of other Attaching Entities. BTU shall issue a *Notice of Unauthorized Attachment or Unauthorized Network Node*, referenced in Appendix B, promptly upon discovery to the Licensee that owns such Attachments or Network Nodes pursuant to Section III.J. Such notice shall include the specific location of the Unauthorized Attachment or Network Node (including BTU Pole number) and the type of Attachment, Overlashing, or Network Node.

- a) A Licensee may dispute BTU’s determination by providing the Attachment’s or Network Node’s Permit or approved Application from BTU within forty-five (45) days of BTU’s issuance of notice.
- b) BTU will invoice for any Unauthorized Attachment or Unauthorized Network Node identified by the terms and conditions of this Section, Section III.J, and Appendix H. Any Unauthorized Attachment Charges or Unauthorized Network Node Charges shall be paid within thirty (30) calendar days upon issuance of invoice.
- c) If the Licensee or operator fails to pay the Unauthorized Attachment Charges or Unauthorized Network Node Charges within thirty (30) days following issuance of the invoice, BTU shall thereon immediately discontinue the processing of any pending and subsequent Applications until the invoice is paid in full, and may

pursue such other and further enforcement remedies as it may have available.

6. **Other.** BTU may invoice other fees or penalties, described in Appendix H, pursuant to the Agreement and these Standards.

J. Claims

1. Claims for Damages to BTU Facilities

- a) The City of Bryan Risk Management Department shall be responsible for investigating and resolving claims for damages to BTU Facilities caused by a third-party, including a Licensee, or its contractors, subcontractors, and agents.
- b) A Licensee shall be responsible for immediately notifying BTU of any damages to BTU Facilities resulting from the Licensee's construction activities, including the activities of its contractors, subcontractors, or agents.
- c) In the event BTU Facilities are damaged by a Licensee, or its contractors, subcontractors, or agents, the City of Bryan Risk Management Department will tender to the Licensee at fault a third-party claim for damages.
- d) The Licensee is responsible for making BTU whole and for reimbursing all third-party claims associated with damages to BTU Facilities resulting from the installation, operation, maintenance, transfer, relocation, removal, failure, or forceful detachment of an Attachment, Overlash, or Network Node whether caused by the Licensee, its contractors, subcontractors, agents, or by any unaffiliated third-party.

2. Upon Receipt of Claim.

- a) Upon receiving notification of damages to BTU Facilities, whether by the Licensee or from another source, a claims file will be opened and a BTU claims representative will be assigned to the file.
- b) The Licensee will be timely notified of the claim for damages to BTU Facilities and will be advised that an internal investigation has commenced, and will be provided with a preliminary assessment of the damages to BTU Facilities.
- c) An internal investigation will be completed by City of Bryan Risk Management Department to determine liability for all claims for damages to BTU Facilities. Utilizing industry standard claims software to create a record of the claims process, the assigned adjuster will investigate the claim and gather relevant facts and documentation. All of the gathered information will be compiled by the licensed adjuster and analyzed to determine liability and the total amount of damages.
- d) Once a determination of liability is made regarding the claims for damage to BTU Facilities, a claims representative will notify the

Licensee in writing and provide a Collection Notice Letter stating the amount of damages owed to BTU, and the Licensee will have an opportunity to respond.

3. Dispute of Claim.

- a) In the event liability is disputed for a claim of damages to BTU Facilities, the Licensee must submit a Notice of Dispute Form, a copy of which is available from BTU's website, to BTU within five (5) days of receiving BTU's tender explaining the reason for the disputing liability and providing documentary support for the dispute.
- b) A Licensee may conduct its own independent investigation of any claims for damage to BTU Facilities. BTU shall cooperate with the Licensee's claims investigator. BTU shall consider the findings of the Licensee's investigation provided that the Licensee completes the investigation within forty-five (45) days of the Licensee submitting to BTU a Notice of Dispute Form.

BTU may assign the dispute to an internal independent review panel which will provide a *de novo* review of the claim file including, the Notice of Dispute Form, and any supporting documentation submitted by the Licensee. BTU will notify the Licensee of the final determination of liability within forty five (45) days.

4. Payment of Claims.

- a) In the event the final determination is one of liability on the part of the Licensee, BTU will send a Collections Notice Letter. Upon receipt of the Collections Notice Letter, the Licensee must remit payment within twenty (20) days to the following address:

Bryan Texas Utilities
Fiscal Department (Damage Payment)
PO Box 1000
Bryan, Texas 77805

- b) The correspondence accompanying payment must include the BTU claim number associated with the file.

5. Failure to Pay Claims.

- a) Failure to timely pay a non-disputed claim or otherwise follow these claim procedures shall constitute violation of these Standards and may result in the suspension of any existing Applications and rejection of any future Applications submitted by the Licensee until such time as the claim has been satisfied and closed.
- b) If a non-disputed payment is not timely received, BTU will seek reimbursement under the Licensee's performance bond.
- c) BTU reserves the right to refer collection on any unpaid outstanding claims to a collections agency or legal counsel.

K. Compliance with Pole Attachment Standards & BTU Enforcement

1. **Expectation of Compliance.** Pursuant to the Agreement, each Licensee shall fully comply with the terms and conditions set forth in these Standards as a condition of receiving and maintaining a Permit from BTU.
2. **Enforcement of Standards.** Pursuant to the Agreement, BTU reserves all rights available to BTU under these Standards or said agreement to enforce compliance with these Standards in a non-discriminatory manner as to all Licensees. Further, BTU will enforce these Standards in a non-discriminatory manner with respect to any Licensee regardless of the status of the Agreement with BTU.
3. **Safety Violations & Safety Violation Assessment Charge.**

- a) If during an Inspection or otherwise, BTU determines that one or more of a Licensee's Attachments or Network Nodes, or any part thereof, are installed, used, or maintained in such a manner as to create one or more Safety Violations, BTU shall promptly notify the Licensee in accordance with the provisions of Section II.B.2 by issuing a *Notice of Safety Violation*. Licensee shall correct the Safety Violation(s) as soon as possible, but no later than five (5) days from BTU's issuance of such notice.

If following BTU's verification the Safety Violation has not been cured within the five (5) day period:

- (i) BTU may correct said conditions. BTU will attempt to notify the non-compliant Licensee in writing (via email) prior to performing such work whenever practicable. Should BTU determine the Safety Violation poses an Emergency, interferes with the performance of BTU's service obligations, or poses an immediate threat to the physical integrity of BTU Facilities, BTU may perform such work or take such action as it deems necessary without first giving written notice to the Licensee. As soon as practicable thereafter, BTU will advise the Licensee of the work performed or the action taken. The Licensee shall be responsible for all costs incurred by BTU in taking action pursuant to this Section. BTU will facilitate the resolution of responsibility for violations in the event that multiple Licensees are on the same Pole.
 - (ii) Pursuant to Section, BTU will impose a ten percent (10%) surcharge on its costs of conducting any work to correct or remedy a Safety Violation.
- b) Following the correction of the Safety Violation(s), BTU shall issue a Notice of a Safety Violation Assessment Charge, the form of which is in Appendix B, to the Licensee, as provided in Appendix H for each Safety Violation noted.

- c) The Licensee may dispute responsibility for such Safety Violation Assessment Charge within fifteen (15) days of BTU's issuance of notice. BTU and the Licensee shall meet within fifteen (15) days of BTU receiving the notice of dispute to review all relevant facts and work towards an agreement on the question of responsibility of the Safety Violation(s). BTU will provide its determination of responsibility within ten (10) days of the determination meeting. Should BTU in its reasonable judgment determine the Licensee was at fault, the Licensee shall be assigned responsibility for the Safety Violation Assessment Charge. However, should BTU in its reasonable judgment determine the Licensee is not at fault, BTU may in its discretion waive the Safety Violation Assessment Charge and investigate to determine the responsible party. Regardless of BTU's determination as to the Safety Violation Assessment Charge, the Licensee that owns the Attachment or Network Node imposing the Safety Violation is required to remedy the Safety Violation within five (5) days of BTU's issuance of the Notice of Safety Violation form in accordance with Section II.K.3.a.

Should the Licensee fail to dispute the Safety Violation Assessment Charge within fifteen (15) days of BTU issuing the Notice of Safety Violation Assessment Charge as required by this Section, the Licensee shall be required to pay the full amount of any Safety Violation Assessment Charges levied by BTU within forty-five (45) days from receipt of invoice. Failure to make timely payment shall result in the immediate suspension of Applications submitted by the non-compliant Licensee for future Permits until full payment is received by BTU.

4. **Failure to Enforce.** Failure of BTU to take action to enforce compliance with any of the terms and conditions of these Standards shall not constitute a waiver or relinquishment of any term or condition of these Standards, but the same shall be and remain at all times in full force and effect until terminated, in accordance with these Standards or the Agreement.

L. Conflict Resolution

Notwithstanding the provisions of Section III.A.5 and Section III.A.6, conflicts, both informal and formal, identified between BTU and a Licensee arising from or related to technical interpretations or day-to-day administration of these Standards shall comply with this Section.

1. **Informal Conflict Resolution.** Informal conflicts identified between a Licensee and BTU arising from or related to technical interpretations or day-to-day administration of these Standards shall comply with this Section. Notice of an informal conflict shall be submitted via electronic mail to the BTU representatives identified in Section II.L.1.a below. The party initiating the conflict notice shall (1) provide a specific detailed description of the conflict including any previous efforts to remedy the conflict, and (2) call for progressive management involvement in the resolution process. Both BTU and the Licensee shall use their best efforts to arrange personal

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meetings or telephone conferences as needed, at mutually convenient times and places at each of the following successive management levels, each of which will have a period of allotted time as specified below in which to attempt to resolve the conflict:

- a) Successive Management Levels (for BTU).
 - (i) First Level: Electrical Engineering Supervisor – 10 days.
 - (ii) Second Level: Division Manager of Engineering and System Planning – 15 days.
- b) Third Level: Executive Director, Energy Delivery – 30 days. The allotted time for the first-level of resolution process will begin on the next business day following the submission of the electronic mail of the conflict by the submitting party. If a resolution is not achieved at any given management level at the end of their allotted time, then the allotted time for the negotiators at the next management level will begin on the next business day unless the parties agree otherwise to extend the allotted time.
- c) If a resolution is reached, BTU shall draft a letter agreement which outlines the basis of the disagreement, the steps taken to reach settlement, and the settlement provisions. Both BTU and the Licensee shall provide their affirmative support of the agreed resolution.
- d) If a resolution is not achieved at the final management level within their allotted time at the operation level, then either party is directed to follow the Dispute Resolution process as defined in the Agreement for further escalation.

2. **Formal Process.** Where these Standards provide BTU with the authority to determine whether a Licensee or its Attachments or Network Nodes are in violation of any Applicable Engineering Standard or of any provision of these Standards, BTU shall provide the Licensee with written notice (via email) of its investigation into such matters. Such notice shall be provided to the Licensee's representative identified in its *Registration and Annual Reporting Form* as required in Section II.B and shall be no less than thirty (30) days prior to the day BTU intends to make a final determination and shall include all information in BTU's possession or control relevant to its investigation and determination. In cases of Emergency or in other cases in which the notice time periods set forth in this Section are not feasible, BTU shall endeavor to provide the Licensee with as much advance notice of its investigation as possible. The Licensee may provide additional information to BTU relevant to the determination within fifteen (15) days of BTU issuing written notice of its investigation. In the event the Licensee provides information that indicates that BTU incorrectly determined that the Licensee was in violation of any Applicable Engineering Standard or any provision of these Standards, BTU shall promptly restore the Licensee to the position it held prior to the determination.

M. Liability Insurance

A Licensee shall provide the insurance required in the Agreement.

N. Indemnification

Licensee shall indemnify BTU and other indemnitees defined in the Agreement to the extent provided in the Agreement in addition to those indemnification provisions provided in these Standards or in applicable law.

O. Security Instrument

Licensee shall secure and maintain a Security Instrument as described in the Agreement.

III. GENERAL TECHNICAL PROVISIONS

A. General Design & Construction Standards & Specifications

1. **Professional Engineer.** A Licensee shall utilize a licensed Professional Engineer to undertake and complete the engineering design and Pole Loading Analysis (PLA) calculations required in completing an Application for Permit as described in Section IV and Section V. For the purposes of these Standards, an Engineer shall include engineering employees or contractors with a valid state of Texas professional engineering license in good standing. All Engineers considered by the Licensee must be approved by BTU before undertaking any engineering work on behalf of the Licensee. BTU approval shall not be unreasonably withheld, conditioned, or delayed.

The Licensee's Engineer shall adhere to all Applicable Engineering Standards and requirements of BTU. Failure to comply with such standards and requirements may result in BTU revoking its approval of the Engineer. If BTU reasonably determines that non-compliance by the Engineer resulted in substandard work, the Licensee shall be required to remedy all work conducted by the Engineer that does not comply with the Applicable Engineering Standards and any other requirements of BTU at the sole expense of the Licensee.

2. **Contractors.** All work, with the exception of One-Touch Simple Transfers, performed on BTU Facilities on behalf of a Licensee pursuant to a Permit shall be done by its own employees, contractors, or subcontractors approved in writing by BTU, which approval shall not be unreasonably withheld, delayed, or conditioned. One-Touch Simple Transfers shall only be undertaken by contractors certified and approved by BTU for such work pursuant to Sections IV.B.5.d. or V.B.5.b. All employees, contractors, and subcontractors utilized by the Licensee shall be subject to the same standards of conduct and behavior as BTU applies to its own contractors and employees. Failure of any employee, contractor, or subcontractor of the Licensee to adhere to and comply with such BTU standards and requirements may result in BTU rescinding its approval of the employee, contractor, or subcontractor to perform work of any kind on BTU Facilities.

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The Licensee shall bear full responsibility for ensuring its employees, agents, contractors, and subcontractors are in full compliance with the requirements of these Standards. A Licensee may be required to remedy any and all work conducted by either its employees, contractor, or subcontractor that does not comply with the Applicable Engineering Standards and other construction standards and requirements of BTU. BTU reserves the right to halt all work undertaken by the Licensee or its contractors/subcontractors that, in BTU's sole discretion, is deemed unsafe or undertaken contrary to BTU standards and requirements.

3. **Right to Review.** BTU contemplates relying upon the Licensee's Pre-Construction Survey and other engineering/field evaluation reports developed and relied upon in connection with any Application submitted by the Licensee. Nonetheless, BTU reserves the right to perform its own (either by BTU employees or contractors) engineering and field evaluation or verification as appropriate or necessary. The costs for BTU to undertake such additional engineering and field evaluation shall be paid by the Licensee.
4. **Installation/Maintenance of Communications Facilities.** All Licensees shall be responsible for the installation and maintenance of their Communications Facilities and/or Network Nodes in accordance with the requirements and specifications set out in these Standards, including the Appendices. A Licensee shall at all times and at its own expense make and maintain its Attachments, Overlashings, and Network Nodes in a safe and workmanlike manner, and keep them in good repair and condition in accordance with all Applicable Engineering Standards.

Notwithstanding the foregoing, Attachments, Overlashings, and Network Nodes that complied with the Applicable Engineering Standards at the time they were originally installed may be operated in place until such time that such facilities are subject to modification, upgrade, rebuild, repair, transfer, relocation, or other such changes, at which time these facilities will be required to comply with the then current Applicable Engineering Standards.

The Licensee, its employees, and contractors, shall install and utilize adequate protective equipment to ensure the safety of people and facilities. The Licensee shall install, at its own expense, protective devices designed to handle the voltage and current impressed on its Communications Facilities or Network Nodes in the event of a contact or due to close proximity with a supply conductor(s) or other energized equipment. BTU shall not be liable for any actual or consequential damages to the Licensee's Communication Facilities, Network Nodes, or Licensee's customers' facilities resulting from such contact or proximity with BTU's supply conductor(s) or other energized equipment.

Licensee shall not connect an Attachment, Overlashing, or Network Node to a power supply until BTU and any other authority having jurisdiction shall have completed an inspection of an appropriate, Licensee-installed, fused service disconnect or circuit breaker.

BTU shall not be liable for any actual or consequential damages to the Licensee's Communication Facilities, Network Nodes, or the Licensee's

customers' facilities resulting from such contact or proximity with BTU's supply conductor(s) or other energized equipment.

5. **Conflicts within the Standards.** If there exists a difference or conflict in the Applicable Engineering Standards, the following rules will apply:
- a) if one Applicable Engineering Standard is more stringent than the other, the more stringent shall apply;
 - b) if one of the conflicting specifications, regulations, or practices is not more stringent than the other, the specification, regulation, or practice of the National Electrical Safety Code (NESC) will apply; or
 - c) if the conflict cannot be resolved under the first two rules, BTU will determine in good faith which specification, regulation, or practice shall apply, with safety concerns given the highest priority in such determination, subject to the conflict resolution procedures outlined in Section II.L.1.

A Licensee shall not be penalized in any manner for non-compliance with conflicting standards that are resolved pursuant to part (c) of this Section, provided the Licensee identifies the potential conflict to BTU in writing via email, at least thirty (30) days before actual construction of the Attachment, Overlash, or Network Node began.

6. **Request for Waiver.** A Licensee may request a waiver of specific items of the Applicable Engineering Standards by submitting a properly completed *Request for Waiver of Applicable Engineering Standards* form (Waiver Request), a link to which is in Appendix B and available on the BTU Pole Attachment website, either before or at the time of Application submission. The request must specifically identify the Applicable Engineering Standard requested to be waived, justification for requesting the granting of the waiver, and the proposed solution to be permitted under the waiver. BTU shall notify the Licensee in writing (via email) within thirty (30) days of receiving a properly completed Waiver Request form. BTU will not grant any waiver that in the sole opinion of BTU will result in a violation of the NESC, NEC, or other applicable federal, state, or local law, regulation, or ordinance.
7. **Guying.** All guying, including the installation of independent anchors for each Attachment or Network Node requiring guying to accommodate a Licensee's Attachments or Network Nodes shall be provided by and at the expense of the Licensee to the satisfaction of BTU as specified in the Applicable Engineering Standards and in Appendix D.
8. **Tagging.** Each Licensee shall properly install identification Tags on all of its Attachments, Overlashings, or Network Nodes as specified in Appendix K and/or applicable federal, state, local, or industry regulations in effect at the time of installation. Failure of a Licensee to provide proper tagging of its new Attachments, Overlashings, or Network Nodes or failure to undertake in good faith its Tagging Plan shall be considered a violation of the Applicable Engineering Standards.

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Should BTU discover in a reasonable sampling of Attachments, Overlashings, or Network Nodes that a Licensee has Attachments, Overlashings, or Network Nodes that are untagged or incorrectly tagged as to the current ownership of the Attachment, Overlash, or Network Node, excluding Service Drops, exceeding five percent (5%) of its total Attachments or Network Nodes respectively, the Licensee, at BTU's request, shall within fifteen (15) days, provide to BTU a written plan (Tagging Plan) to Tag the Attachments, Overlashings, or Network Nodes. The Tagging Plan shall identify an estimated schedule to complete the tagging of all untagged or incorrectly tagged Attachments, Overlashings, or Network Nodes within a six (6) month period for Attachments or Overlashings and within one (1) month for Network Nodes. The Licensee and BTU shall meet at a mutually agreed upon frequency during the timeframe outlined in the Tagging Plan to determine Licensee's compliance with its Tagging Plan. BTU reserves the right to conduct field audits to assess the Licensee's compliance with its Tagging Plan.

In the event any Attachment, Overlashing, or Network Node is untagged or incorrectly tagged, and BTU must determine the owner's identity in order to address the repair or maintenance of a BTU Facility where BTU cannot undertake such repair or maintenance absent the removal or transfer of such Attachment, Overlashing, or Network Node, BTU will undertake the following protocol:

- (i) BTU will expend up to thirty (30) minutes of reasonable effort to determine the owner of the untagged Attachment, Overlashing, or Network Node at no cost to the Licensee; then
- (ii) Provided the initial thirty (30) minute effort is unsuccessful, BTU shall continue with its search until ownership is determined. BTU shall bill, and the non-compliant Licensee shall pay BTU at the Tracing Line Ownership rate set forth at Appendix H for the time required to determine the Attachment, Overlashing, or Network Node ownership.

9. **Physical Interference with BTU Facilities.** A Licensee shall not allow its Communications Facilities or Network Nodes to impede, impair or interfere with the installation, placement, or operation of any BTU Facilities. A Licensee's Communications Facilities, Network Nodes, or any part thereof of which impede, impair, or interfere with any BTU Facilities shall correct such condition within ten (10) days from receipt of written notice of such impairment from BTU. Failure to timely correct such condition will result in BTU, at its option, taking all necessary steps to correct said condition at Licensee's expense plus ten-percent (10%). BTU will attempt to notify the non-compliant Licensee in writing (via email) prior to performing such work whenever practicable but is not obligated to do so.

If a Licensee continues to allow its Communications Facilities or Network Nodes to impede, impair, or interfere with the operation of any BTU Facilities after the initial correction period, the Licensee shall be subject to enforcement action, including but not limited to:

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- (i) Suspension of the processing of any of the Licensee's Applications, pending resolution of such interference; and
- (ii) Potential contractual claims.

A Licensee shall not be responsible for physical interference with future installations by other Licensees, provided that the Licensee's prior Attachments are duly permitted by BTU and comply with all Applicable Engineering Standards and the requirements of these Standards at the time of the initial installation, unless otherwise required by applicable federal, state, or local laws. Where BTU needs to add to or modify BTU Facilities other than to remedy a non-compliant condition caused by a Licensee, and where that action would require the replacement of an Eligible Pole, BTU and all affected Licensees shall be responsible for their own cost of transferring their Attachments, Overlashing, or Network Nodes within the timeframes outlined in these Standards. BTU will be responsible for the cost of the pole replacement.

No Applications will be approved for a Network Node on BTU Eligible Poles within five hundred feet (500') of any BTU Substation's outer fence.

10. **Performance Interference to Licensee's Customer.** To the extent a Licensee identifies any interference with its or Licensee's Customer's Communications Services that Licensee claims may be related to BTU Facilities, neither Licensee nor Licensee's Customers may identify BTU as the source of such interference to any retail customer absent a test report verifying the source and not less than ten (10) days prior notice to BTU of the report's findings. The Licensee shall cooperate with BTU to investigate the source of any such signal interference and shall at BTU's request conduct a test, at the Licensee's expense, verifying the source of such interference. The test equipment used for verifying the source of interference must be calibrated to the standards provided by the National Institute of Standards and Technology or any similar, mutually agreeable standards organization. In the event such testing provides conclusive evidence that BTU Facilities are the source of such interference, BTU shall reimburse the Licensee for the reasonable expense of the testing and will work with Licensee to find a reasonable mitigation of the interference that does not impose undue burdens on BTU's ability to provide electric service.
11. **Wireless Interference.** All Network Nodes, including Mid-span Installations, shall be operated so as not to cause Wireless Interference to any existing or future BTU Facilities, BTU wireless systems or operations, governmental public safety facilities or operations. Nor shall they cause Wireless Interference to the facilities or operations of any other Licensees or FCC-licensed operator. In the event of Wireless Interference, the Licensee shall shut down the Wireless Equipment causing such interference within one (1) hour of BTU contacting the Licensee's Network Operations Center. If the Licensee fails to timely shut down the Wireless Equipment, BTU reserves the right to disconnect electric service to the Network Node,

including battery or other back-up power. Thereafter, following receipt of written notice of the incident, the Licensee will take all commercially reasonable steps necessary to permanently eliminate such interference, including but not limited to, recalibration or replacement of the equipment and the subsequent powering down of said equipment for intermittent testing pursuant to the requirements of Section III.A. In the event the Wireless Interference cannot be eliminated through equipment recalibration or replacement, the Network Node shall be removed and the equipment may be installed at an alternative location that does not cause Wireless Interference. These activities shall be carried out by the Licensee at its own expense.

In the event of Wireless Interference as described in the previous paragraph, the Licensee shall correct such condition within ten (10) days from receipt of written notice. Failure to timely correct such condition permanently, and the reactivation of the Wireless Equipment to the same effect, will result in BTU, at its option, taking all necessary steps to eliminate the reoccurrence of Wireless Interference at Licensee's expense. BTU will attempt to notify the non-compliant Licensee in writing (via email) prior to performing such steps whenever feasible. If any Licensee continues to allow its Network Nodes to interfere with the operation of any BTU Facilities as described above after the initial correction period, the Licensee shall be subject to enforcement action, including but not limited to:

- (i) Interruption of BTU-supplied power to the identified Network Node;
- (ii) Suspension of the processing Licensee's Applications pending resolution of such interference; or
- (iii) Other remedies under the applicable Agreement.

In situations where BTU determines that a Licensee's impairment or interference condition poses a potential Emergency, BTU may perform such work or take such action(s) as it deems necessary to eliminate the potential Emergency without first giving written notice to the Licensee. As soon as practicable thereafter, BTU will advise the non-conforming Licensee of the work performed or the action(s) taken. The non-conforming Licensee shall be responsible for all costs incurred by BTU plus ten-percent (10%) in taking action pursuant to this Section.

- a) Interference Studies & Testing. In the Application process and at Wireless Interference events, BTU requires the documentation and analysis of testing for potential and possible Wireless Interference. BTU reserves the right to hire consultants and industry experts to perform Wireless Interference testing, investigations, and/or analysis at the sole expense of the Licensee.
 - (i) *Initial Installation* - In the Pre-Certification or Application process for the initial installation of the Network Node, an

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Intermodulation Test report will be provided by the Licensee.

- (ii) *Equipment Upgrades or Replacements* - In the Pre-Certification or Application process for an upgrade, or non-like-for-like replacement of the initial Network Node, an Intermodulation Test report will be provided by the Licensee.
 - (iii) *Interference Studies & Testing Report* - The Intermodulation Test report will have an executive summary stating a “highly likely” or “not likely” for potential intermodulation issues. The Intermodulation Test report shall be prepared by an Engineer trained and certified in radio frequency engineering.
- b) At BTU’s sole discretion, a more in-depth radio frequency (RF) interference study may be required at certain occurrences, to include but not, limited to: i) “highly likely” assessment of intermodulation issues in a summary of any Intermodulation Test report; or ii) a known or unresolved RF interference complaint. The RF interference study will require an onsite visit(s) to gather field measurements and site conditions. The following areas will be addressed: intermodulation products – transmitter and receiver, receiver noise & desensitization, transmitter noise & harmonics, and spurious emissions. Such RF interference study shall be undertaken and approved by an Engineer, trained and certified in radio frequency engineering. Additionally, the RF interference report will have an executive summary with action statement, a method of RF interference remedies (if necessary), and all input parameters indexed.
- c) A Licensee may intermittently, temporarily, or permanently; shut-off power to remedy or troubleshoot Wireless Interference issues. Electrical service shall not be reinstated without BTU’s written approval following a request to reestablish electrical service from the Licensee. BTU reserves the right to determine if all Wireless Interference issues are remedied prior to granting approval to reinstate electrical power.

12. **Enclosures.** Except as to Licensee’s facilities located on Licensee’s private property or easements, no Licensee shall place new pedestals, vaults or other enclosures on or within six (6) feet of any Eligible Pole or other BTU Facilities without BTU’s prior written permission. The Licensee shall specifically identify any request for such proximity to an Eligible Pole or BTU Facilities in its Application. If permission is granted by BTU, all such installations shall be in compliance with the specifications and drawings referenced in Appendix D, Appendix I, or other Applicable Engineering Standards.

13. **Vegetation Management.** Licensees shall be responsible for performing, or causing the performance of, all tree trimming and other vegetation management

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necessary for the safe and reliable installation, use, and maintenance of their Attachments, Overlashings, or Network Nodes and to avoid stress on Eligible Poles caused by contact between tree limbs and the Licensees' Attachments, Overlashings, or Network Node components.

Per NESC, all crossing span and adjoining spans on each side of a line crossing, railroad crossing, limited-access highway crossing, or navigable waterway requiring a crossing permit shall be kept free from overhanging or decayed trees or limbs that shall fall into the line, including both supply and communication cables.

All tree trimming shall be performed in accordance with OSHA regulations or local municipal ordinances, as may be amended from time to time. Licensees shall use qualified tree trimming contractors approved by BTU who shall adhere to industry and local municipal ordinances, standards, and requirements for tree trimming and vegetation management. Failure of a tree trimming contractor to adhere to and comply with such standards and requirements may result in BTU retracting its approval of the tree trimming contractor to perform further work of any kind on or around BTU Facilities. A Licensee may be required to remedy any and all work conducted by its tree trimming contractor that fails to comply with the tree trimming standards and requirements set forth in this document. BTU reserves the right to halt any and all work by any such tree trimming contractor that BTU in its discretion deems to be unsafe or performs work contrary to the standards and requirements set forth in this document and the Applicable Engineering Standards.

14. **Pre-Certification of Wireless System.** BTU requires the initial configuration of a specific technology of a Network Node for each Licensee to be Pre-Certified in order to minimize potential interference with communication equipment essential to BTU's core electric operations and for public safety. Pursuant to Section V.B.2.e, before submitting an *Application for Wireless Installation Permit*, a Licensee must submit a completed *Request for Pre-Certification of Wireless System* form to BTU.

The pre-certification process shall consist of three key activities: (i) testing for Wireless Interference; (ii) representation of the proposed Network Node; and (iii) BTU's review and approval of the *Request for Pre-Certification of Wireless System* form.

- a) **Testing for Wireless Interference.** A Licensee shall identify in writing all FCC licensed frequencies, by FCC licensee, that will be used as part of a Network Node and BTU shall disclose all licensed and unlicensed frequencies utilized in its operations. The Licensee will then conduct and submit the reports required by Appendix D, Section C.1, together with a list of other jurisdictions or locations

where the proposed technology and configuration has been pre-certified or accepted for commercial use.

- b) Representation of Network Node. The Licensee shall provide a mock installation of a proposed Network Node, in compliance with Appendix D, Section C.16. A combination of detailed engineering drawings, pictures of the Network Node installation at other locations may, at BTU's sole discretion, be substituted for a mock installation,

BTU will complete its review and either approve or reject the *Request for Pre-Certification of Wireless System* within a reasonable timeframe after receipt of all requested information and documentation. BTU may extend this time requirement based upon the timely response of the Licensee to any BTU inquiry.

B. Pole Modifications and/or Replacements

- 1. Restrictions on Certain Poles. BTU may deny an Application for Permit for access to an Eligible Pole in flood zones, river crossings or other such locations, or if the proposed new Attachment or Network Node cannot be accommodated without creating a potential to disrupt or impair BTU Facilities or endanger the safety of people or facilities.
- 2. Requests for Taller or Larger Eligible Pole to Replace Existing Pole.
 - a) BTU in its sole discretion may erect a taller or larger Eligible Pole to accommodate a Licensee's Attachment or Network Node if the Licensee requests the taller or larger Eligible Pole and pays the costs of such replacement pole in advance.
 - b) If BTU elects to replace an Eligible Pole as provided in this section, the replacement Eligible Pole, including any permitted pole-top equipment, shall not be larger than a Class 2 pole or exceed the lesser of:
 - (i) Fifty-five feet (55') in total length, including that portion of the pole that is buried below grade; or
 - (ii) Ten (10) feet in height above the tallest existing Eligible Pole within 500 linear feet of the new pole in the same public right-of-way.

C. Particular Pole Installations

- 1. Steel, Concrete and Fiberglass Eligible Poles. BTU will consider requests by a Licensee to access existing distribution steel or concrete Eligible Poles.
 - (a) *Steel Eligible Poles*. Attachments must be firmly secured with no more than two (2) clamps or stainless steel bands per Eligible Pole. The drilling of any additional holes into steel Eligible Poles or associated equipment is **prohibited**. Attachments may use self-tapping set screws for grounding of equipment on steel Eligible Poles. A Licensee may request access to a steel Eligible Pole to install a Network Node provided that the components of the Network Node are secured with clamps, and no Risers are attached to the surface of the pole. All

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Riser cables necessary to connect the components of a Network Node on a steel Eligible Pole must be installed inside the steel pole, provided the structural integrity of the pole is maintained.

- (b) *Concrete and Fiberglass Eligible Poles.* Attachments or Network Nodes must be firmly secured with no more than two (2) clamps or stainless steel bands per Eligible Pole unless pre-drilled holes are available for use. The drilling of any additional holes into existing fiberglass or concrete Eligible Poles or associated equipment is **prohibited** without express written permission from BTU.
- (c) *Utility Poles with Street Lights.* Subject to these Standards, BTU will consider Applications to install Attachments or Network Nodes to overhead Utility Poles with street lights installed on them. Attachments or Network Nodes may only be placed in the Communication Space of such poles.
- (d) *Wood Streetlight Poles.* Licensees may not place any Attachments or Network Nodes on wood streetlight poles. Wood Streetlight poles must be replaced with Fiberglass poles to install Network Nodes at such location.
- (e) *Non-Decorative Streetlight Poles.* Network Nodes may be installed on Non-Decorative, non-wood Streetlight Poles without any BTU distribution primary circuits, provided that the Network Node does not interfere with the maintenance and operation of the Non-Decorative Streetlight Pole. While Non-Decorative Streetlight Poles are ineligible for the installation of Attachments and Overlashings, Non-Decorative Streetlight Poles shall have preferential treatment over Utility Poles as a site for Network Nodes.
 - i. On a case-by-case basis, BTU will consider the approval for installations of Network Nodes on non-wood Non-Decorative Streetlight Poles, provided that the fully-integrated proposed Non-Decorative Streetlight Pole meets all of the following criteria:
 - The pole is specifically manufactured to be a turn-key, dual-purpose structure for a Network Node and a Non-Decorative Streetlight Pole.
 - The pole meets the current and estimated future street-lighting purposes of the current Non-Decorative Streetlight Pole.
 - The pole is substantially similar to or improved in aesthetics, capabilities, and functions (as determined by BTU in its sole discretion) to the existing Non-Decorative Streetlight Pole.
 - (ii) The pole provides for no increase in maintenance requirements or operating costs to BTU, as determined by BTU in its sole discretion.
 - (iii) Non-Decorative Streetlight Poles must be equipped with internal conduit for the training of communication cables, wires, or fiber through the pole's interior.
 - (iv) The drilling of any additional holes into metal or fiberglass Non-Decorative Streetlight Poles or associated equipment is prohibited unless the pole manufacturer and BTU have provided express written approval for additional hole(s). Network Nodes may use self-tapping set screws for

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grounding of equipment on metal Eligible Poles. No grounding is required for equipment installed on fiberglass poles.

Licensee understands BTU provides and maintains streetlights within the City of Bryan and surrounding areas. A Licensee may replace existing Non-Decorative Streetlight Poles with hybrid Wireless Installation Streetlight Poles (WI Streetlights) only if Licensee complies with this Section.

BTU has developed a standard WI Streetlight to support Wireless Equipment that employs a hollow pole containing two tracks – one track for Licensee’s wiring to its equipment and one track for BTU’s wiring to the luminaire. The WI Streetlight must be equipped with the proper streetlight arm as determined by BTU.

As part of a Permit application, Licensee may request to replace an existing Non-Decorative Streetlight Pole with a WI Streetlight. BTU, at its sole discretion, may allow Licensee to replace an existing Non-Decorative Streetlight Pole with a WI Streetlight. Licensee (or an authorized third-party) shall install the WI Streetlight in accordance with BTU’s specifications. Licensee shall bear all costs associated with the replacement. Licensee shall also provide BTU no fewer than two WI Streetlights to keep in stock for emergency replacement purposes.

Licensee shall order, store, deliver and install WI Streetlights and is solely responsible for all costs associated with installing new WI Streetlights and maintaining Network Nodes. BTU will provide and install the LED streetlight head attached to the WI Streetlight arm.

If BTU must replace a WI Streetlight containing Licensee’s equipment for any reason (*e.g.* storm damage, hit by vehicle, etc.), BTU will replace the damaged streetlight with a WI Streetlight from its stock and inform Licensee it has replaced the streetlight within a commercially reasonable time. Licensee is solely responsible to repair/install any equipment not included on the BTU stock WI Streetlight and BTU has no responsibility or obligation to install Antennae, shrouds, fiber or other equipment if it must replace a streetlight for any reason. After clearing a site of wireless facilities after replacing a streetlight, BTU will take Licensee’s previously-installed equipment to its yard/warehouse for Licensee to retrieve at a later time. If Licensee does not retrieve that equipment within ten days from the date on which BTU informed Licensee it was holding the equipment, BTU may dispose of the equipment in any way it deems appropriate with no further liability to Licensee.

- (f) *Transmission Structures.* BTU’s transmission poles, towers, or other structures are outside of the scope of these Standards and the Agreement. **No Attachments or Network Nodes are permitted on BTU transmission poles, towers, or other structures regardless of the presence of distribution underbuild or any other equipment.**

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- (g) *Poles with Distribution Equipment Installed.* Network Nodes are prohibited on any BTU Pole that has electric distribution equipment installed on it including, but not limited to: transformers, capacitors, reclosers, sectionalizers, switches, voltage-regulators, voltage- regulator racks, or primary metering.
- (h) *Foreign Poles.* Many of the poles to which BTU’s electrical lines are attached are not owned by BTU and are outside the scope of these Standards. Therefore, BTU cannot give permission to attach to these poles. The Licensee is solely responsible for obtaining permission from the respective pole owner to install any Attachments or Network Nodes on such non-BTU-owned poles.
- (i) *Mid-Span Micro Network Nodes.* A Micro Network Node shall not be installed mid-span except where both supporting poles are Utility Poles.

D. BTU Not Required to Relocate. Except as provided by the Make-Ready Electrical Construction process outlined in Section IV.B.4, and Section V.B.4, no provision of these Standards requires BTU to relocate, modify, or replace any Eligible Pole or other BTU Facility for the benefit of any Licensee.

E. Replacement, Removal, Relocation, or Abandonment of BTU Facilities.

1. BTU Removal or Relocation of Licensee’s Facilities.

If at any time BTU is mandated or in its sole discretion decides to replace, remove, relocate, abandon, or place underground its facilities, resulting in the need for removal or abandonment of Eligible Poles on which one or more Licensee has installed Attachments, Overlashings, or Network Nodes, BTU shall give the affected Licensee notice in writing of the impending replacement, removal, relocation, abandonment, or undergrounding as soon as practical, but at least one hundred twenty (120) days prior to the date on which BTU intends to replace, remove, relocate, or abandon such Eligible Poles or other BTU Facilities. The Licensee shall relocate at its expense its affected Attachments, Overlashings, or Network Nodes within sixty (60) days after receipt of said notification. Notice may be limited to thirty (30) days if BTU is required to remove or abandon its facilities as the result of the action of a third party, including the City of Bryan and the greater notice period is not practicable.

2. BTU Abandonment of Poles. In the event that BTU determines to abandon an Eligible Pole, BTU, in its sole and non-discriminatory discretion, may grant an interested Licensee the option of purchasing without warranty such Eligible Pole at a price negotiated with BTU. The interested Licensee must notify BTU in writing, via certified mail, return receipt requested, within thirty (30) days of the date of BTU’s notice of abandonment that the Licensee desires to purchase the to-be-abandoned Eligible Pole. Thereafter, within forty-five (45) days, the Licensee must also secure and deliver proof of all necessary governmental approvals and easements allowing the Licensee to independently own and access the pole within the forty-five (45) day period.

- a) If Licensee fails to secure the necessary governmental approvals, or should BTU and the Licensee fail to enter into an agreement prior

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to the end of the forty-five (45) day period, the Licensee shall remove at its expense its affected Attachments, Overlashings, or Network Nodes within forty-five (45) days after receipt of said notification.

- b) BTU may limit Licensee's time for relocation to thirty (30) days if BTU is required to remove or abandon its facilities as the result of the action of a third party, including the City of Bryan and the greater notice period is not practicable.
- c) BTU is under no obligation to sell any Licensee an Eligible Pole or other BTU Facilities that it intends to remove or abandon.

3. **Modification or Replacement of Poles.** If BTU intends to modify or replace an Eligible Pole solely for its own electric business requirements, BTU shall be responsible for the costs related to the pole modification or replacement (including any related costs for tree-cutting or trimming required to clear the new location of BTU's cables or wires). Except in Emergency situations, BTU will give Licensee reasonable notice (of at least ten (10) days) of its intent to modify or replace an Eligible Pole containing Licensee's Attachment or Network Node. BTU will provide such notice by email..

- a) If rearranging or transferring the Attachment constitutes a Simple Transfer, BTU may, at its sole discretion, agree to rearrange or transfer the Attachment and notify Licensee upon completion.
- b) If rearranging or transferring the Attachment is not a Simple Transfer, or involves a Network Node, or if BTU elects not to complete the work, BTU will notify Licensee of the required transfer using the one-touch transfer process described in Section IV.B.5. Licensees must complete rearrangements and/or transfers within 120 days of the date on which BTU provided the transfer notification.
- c) If Licensee chooses to rearrange or transfer its Attachment or Network Node, Licensee must: (a) immediately notify BTU by email of its intent; (b) follow the process described in Section IV.B.5; and (c) complete the work within 120 days of the date on which BTU provided the ten-day notice referenced above.

If Licensee elects to modify or add to its Attachment or Network Node, it shall: (a) submit an application to BTU describing the modification/addition; and (b) bear the incremental Make-Ready costs incurred by BTU to make accessible to the Licensee the space on the modified or replaced pole. If Licensee does not timely complete the rearranging/transfer of its Attachment or Network Node or fails to pay any costs associated therewith, BTU has the right to remove Licensee's equipment at Licensee's expense.

- d) All costs to rearrange or transfer a Licensee's Attachment or Network Node shall be borne by the Licensee regardless of whether the Licensee or BTU performs the rearrangement/transfer.

F. Removal of Licensee's Facilities.

- 1. Abandoned Facilities. A Licensee shall report, through the annual registration process described in Section II.F, and remove at the Licensee's expense, all abandoned, non-functional, and obsolete Attachments, Overlashings, Network Nodes, or other Communications Facilities on BTU Eligible Poles that the Licensee or Licensee's Customer, where permitted pursuant to the Contractual Authorities:
 - a) No longer utilizes for providing Communications Services or Telecommunications Services;
 - b) Has abandoned or plans to abandon during the next reporting period; or
 - c) Has replaced with operating capacity of alternative facilities.

Except as otherwise provided, the Licensee shall remove abandoned facilities coincident with their replacement, and in all cases within thirty (30) days of the Attachments or Network Nodes meeting any of the above conditions, unless the Licensee receives written notice from BTU that removal is necessary to accommodate BTU's use of the affected Eligible Poles, pursuant to a reservation of Capacity, in which case the Licensee shall remove such Attachments or Network Nodes within sixty (60) days of BTU issuing such written notice. Where a Licensee has placed Overlashings, the Overlashings may remain in place until BTU notifies the Licensee that removal is necessary to accommodate BTU's use of the affected poles. The Licensee shall give BTU notice of any such Overlashings as required in Section IV.F.2.

- 2. Removal on Expiration/Termination. If a Licensee's Agreement or any individual Permits expire or are terminated and are not renewed or replaced, the Licensee shall submit a written plan that describes the commitment, schedule, and process for the removal of its Attachments, Overlashings, or Network Nodes from the affected Eligible Poles to BTU for approval. BTU shall review such plan and either approve or request additional details within a reasonable time after receipt of the plan. Following approval of the plan by BTU, the Licensee shall make judicious progress toward fulfilling the removal commitments made by the Licensee in the plan. Such removals will be at the Licensee's sole expense.
- 3. Removal for Failure to Meet Standards. BTU may require the removal or modification of an existing Attachment, Overlapping, or Network Node, at the Licensee's expense, if BTU reasonably determines that such Attachment, Overlapping, or Network Node did not meet any requirement set forth in the Standards at the time of installation or modification, or may create a potential to disrupt or impair BTU Facilities or endanger the general safety of people or facilities. Such removals will be at the Licensee's sole expense.

G. Licensee's Failure to Remove or Relocate.

If following the expiration of the applicable notice period the affected Licensee has not yet removed or relocated its affected Attachments, Overlashings, or Network Nodes from the affected Eligible Poles, BTU may have the Attachments, Overlashings, or Network Nodes of the affected Licensee removed or relocated from the Eligible Poles or other BTU Facilities.

1. BTU shall notify Licensee in writing of its intent to remove or relocate the affected Attachments, Overlashings, or Network Nodes not less than ten (10) days before commencing removal or relocation.
2. After providing notice of its election to remove or relocate the affected Attachments, Overlashings, or Network Nodes, BTU may in its sole discretion use reasonable efforts to remove or relocate the affected Attachments, Overlashings, or Network Nodes at Licensee's sole cost and risk.
3. Licensee shall pay BTU:
 - a) The cost of removal or relocation;
 - b) Twenty percent (20%) of the cost of removal or relocation to compensate BTU for acting as a manager of the relocation or removal; and
 - c) Any liquidated damages that may have accrued to the date the removal or relocation is complete.
4. Licensee shall pay all sums due under this provision within thirty (30) calendar days of BTU's delivery of an invoice for the costs of removal or relocation of the affected Attachments, Overlashings, or Network Nodes, the management fee, and liquidated damages.

H. Overlapping

1. **Application Required.** Section IV.B hereto governs the Application process for new Attachments and Overlashings and Section IV.F for the Application process for Overlapping existing Attachments. Regardless of Overlapping size or methodology, Licensee are required to maintain their Overlashings in compliance with the Applicable Engineering Standards in effect at the time of the Overlapping installation, except where a change is required by applicable law.
2. **Overlapping Third-Party Facilities.** A Licensee is prohibited from Overlapping Communications Facilities of a third-party, including an Affiliate of the Licensee, unless both the Licensee and third-party have registered and executed an Agreement with BTU pursuant to Section II.B and Section II.C respectively. BTU shall not grant a Permit authorizing the Overlap of a third-party's Communications Facilities unless the Licensee that owns the Attachments subject to Overlap has provided BTU its consent in writing to such Overlap.

3. **Annual Pole Attachment Fee.** A Licensee or an Overlashing third-party shall not be required to pay a separate annual Pole Attachment Fee for such Overlashed Communications Facilities, provided: that (a) the annual Pole Attachment Fee is already being billed for the original Attachment that was Overlashed; and (b) the Overlash, including the existing cable, does not exceed three and one-half inches (3.5”) in diameter (i) at its widest point mid-span and (ii) where attached to an Eligible Pole. If these conditions are not met, the Licensee or Overlashing third-party shall pay an annual pole attachment fee.

I. Inspection and Inventory of Licensee’s Facilities

1. **Inspections.** BTU, at its discretion and in addition to any inspections undertaken during Make-Ready Electrical Construction and Post-Construction Inspections, may engage in two other specific types of inspections or Inventory of Attachments or Network Nodes to BTU Eligible Poles. These include: a) routine visual inspections of Attachments or Network Nodes that BTU employees may conduct at any time; and b) a formal Inventory that BTU may conduct no more frequently than once every five (5) years that BTU may undertake with its own personnel or with outside contractors, subject to a formal competitive bidding basis, the cost of which shall be borne by all Licensees on a pro-rata basis. Regardless of inspection or Inventory method:
 - a) A Licensee shall install, maintain, and inspect its Attachments, Overlashings, and Network Nodes to ensure these facilities are in good order and safe to the general public at all times. If any inspection reveals that any Licensee’s Attachments, Overlashings, or Network Nodes are not in compliance with the Applicable Engineering Standards in effect at the time the Application was approved, BTU shall provide written notice and the Licensee shall make any and all corrections to bring the Attachment, Overlashing, or Network Node to compliance with the Applicable Engineering Standards. If the degree of non-compliance warrants in BTU’s reasonable judgment, BTU will assess and the Licensee will be required to pay a Safety Violation Assessment as described in Appendix H.
 - b) If it is found that a Licensee has made an Attachment or Network Node without a Permit, the Licensee shall pay an Unauthorized Attachment Charge or Unauthorized Network Node Charge as specified in Appendix H in addition to applicable Pole Attachment Fees, Application Fees, and Make-Ready Charges, if any.
 - c) Notwithstanding any other provisions contained in these Standards, including this Section, no revisions to the Applicable Engineering Standards shall be retroactive to existing permitted Attachments, Overlashings, or Network Nodes unless required by city, county, state, or federal law.
 - d) All Attachments, Overlashings, or Network Nodes must comply with the Applicable Engineering Standards in effect at the time of

installation or modification of the Attachment, Overlash, or Network Node.

2. **Routine Visual Inspections or Inventory.** Any qualified BTU employee or contractor may conduct a routine inspection or inventory of a Licensee's Attachments, Overlashings, or Network Nodes. In practice, these routine inspections or inventory may be undertaken and completed as part of the daily work assignment of a BTU employee. The cost of this work is included in the determination of the annual Attachment Rate or Wireless Rate, as described in Appendix H. In the course of a routine visual inspection, a BTU employee or contractor may require a Licensee or its contractors installing an Attachment, Overlashing, or Network Node to supply evidence of a valid Permit or permission from BTU to access a BTU Eligible Pole or other BTU Facilities. BTU reserves the right to demand the Licensee or its contractor to immediately suspend work on the Attachment, Overlashing, or Network Node should the Licensee or contractor be unable to furnish the valid Permit or other notice of permission for BTU's inspection. If BTU directs the work be suspended, the Licensee or its contractor shall suspended the work in a safe and orderly manner ensuring the suspension of the work will not cause a danger to BTU employees, contractors, or the general public.

3. **Formal Inventory Performed By BTU or Third-Party Contractor Subject To Competitive Bid.** BTU may contract with a third-party contractor to conduct a formal Inventory of either all or designated Eligible Poles or Decorative Streetlight Poles within the BTU service area. The cost of this formal Inventory shall not be included in the calculation of the Attachment Rate or Wireless Rate, as described in Appendix H. All Licensees shall cooperate and participate in the Inventory. Each Licensee will share the total cost of the Inventory on a pro-rata basis with all other Licensees based on the number of found Attachments and Network Nodes belonging to each Licensee and the space occupied by each. For the limited purpose of determining the pro-rata shared costs, BTU Facilities will count as one (1) Attachment on each Eligible Pole. In undertaking this formal Inventory:
 - a) BTU shall have sole responsibility for the management, review, and approval of the Inventory.
 - b) BTU shall routinely conduct meetings, communicate in writing, via electronic mail, with all Licensees to discuss the progress and on-going results of the Inventory. BTU will seek to find consensus with the Licensees as to the most effective schedule and methodology of these meetings and communications. Each Licensee shall be expected to cooperate fully with BTU or the third-party contractor conducting the Inventory by assigning a single point of contact to attend project meetings and receive the written communications and to answer any questions either BTU or the third-party contractor may have concerning the Licensee's Communication Facilities or Network Nodes. Licensees shall be given access to the Inventory results and other supporting documentation, including maps,

spreadsheets, and other related items. BTU shall post on its webpage information regarding the status of the Inventory.

- c) At the conclusion of the Inventory, BTU shall provide a written report to each Licensee containing a draft of the final Inventory Attachment or Network Node count for the Licensee and other documentation necessary to substantiate the third-party contractor's Inventory findings. Notwithstanding the challenge provisions of Section III.D.3.d below, if the Licensee does not provide a written challenge to the draft Inventory count or results within thirty (30) days of the issuance of BTU's draft Inventory count, the Inventory count will be deemed correct.
- d) If a Licensee wishes to challenge the results of the draft Inventory report, the Licensee shall, within thirty (30) days of BTU issuing the draft Inventory report, discussed in the Section above, provide BTU written notice, via certified mail, return receipt requested, of the Licensee's intent to challenge the results. In this notice, the Licensee shall provide to BTU all relevant documentation to substantiate its challenge for review and consideration by BTU. All costs related to this challenge, including both BTU's and third-party contractor's labor and other expenses required to respond to and resolve the challenge shall be borne by the Licensee challenging the Inventory results. Should multiple Licensees provide notice of their intent to challenge the results, BTU will pro-rate the cost and expenses required to respond to the challenge as described in this Section to the Licensees participating in the challenge. To the extent the Licensee prevails in identifying errors or omissions in the Inventory in excess of ten percent (10%) of total Attachments or Network Nodes attributed to the Licensee, BTU shall be responsible for its own and the third-party contractor costs attributable to the challenge/verification process. BTU will meet with the Licensee(s) requesting the challenge within ten (10) days of receiving the written notice of challenge to discuss the challenge and attempt to reach agreement and settlement on the Licensee's Attachment or Network Node count. BTU will issue its final decision in writing as to the resolution of the challenge within fifteen (15) days following this settlement meeting.
- e) Following resolution of all challenges, pursuant to Section III.D.3.d, BTU shall issue a final Inventory report and shall true-up each Licensee's count to the number of Attachments or Network Nodes identified in the final Inventory report including any Unauthorized Attachments or Unauthorized Network Nodes. Unauthorized Attachments or Unauthorized Network Nodes reported shall incur an Unauthorized Attachment Charge or Unauthorized Network Node Charge, as provided in Appendix H. BTU shall invoice the applicable Licensee for the Unauthorized Attachments or Unauthorized Network Nodes and payment shall be due within thirty calendar (30) days of BTU's issuance of the invoice. Failure

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of the Licensee to pay the outstanding invoice timely and in full will result in the suspension of any current pending Applications and the immediate rejection of any future Applications until such payment is received in full.

4. **No Liability.** The making of any inspections or Inventory under this Section, or the failure to do so, shall not operate to impose upon BTU any liability of any kind whatsoever or relieve a Licensee of any responsibility, obligations, or liability, whether assumed or otherwise existing.
5. **Licensee-Conducted Inventory.** Nothing in these Standards prevents a Licensee from performing its own Inventory of its own Attachments or Network Nodes, which BTU may consider in the determination of that Licensee's total Attachment or Network Node count. Before BTU will consider such inventory, the Licensee shall be required to meet with BTU and describe the methodology and approach used to conduct the inventory. The cost of such inventory shall be the sole risk and responsibility of the Licensee undertaking the inventory.

J. Unauthorized Occupancy or Access

1. **Unauthorized Attachments.** If any Attachments or Network Nodes belonging to a Licensee (a) are found to occupy an Eligible Pole for which BTU had not previously issued a Permit to the Licensee, or (b) are being utilized to provide services that are not Communications Services or Wireless Services, BTU, without prejudice to its other rights or remedies, will send the Licensee a written Notice of the Unauthorized Attachment or Unauthorized Network Node, a copy of which is referenced in Appendix B. Such notice shall include the specific location of the Eligible Pole where the Unauthorized Attachment is found and the nature of the Unauthorized Attachment or Unauthorized Network Node. Within thirty (30) days upon receipt of this *Notice of Unauthorized Attachment or Unauthorized Network Node*, the Licensee must submit for the Unauthorized Attachment or Unauthorized Network Node: (a) an Application for a Permit; (b) the correct Application Fee; and (c) the Unauthorized Attachment Charge or Unauthorized Network Node Charge to BTU. Should the Licensee fail to submit the Application for Permit, correct Application Fee, and the Unauthorized Attachment Charge or Unauthorized Network Node Charge within the thirty (30) days, the Licensee must remove its Unauthorized Attachment or Unauthorized Network Node, but still must pay the Unauthorized Attachment Charge or Unauthorized Network Node Charge within forty-five (45) days. If Licensee fails to remove the Unauthorized Attachments or Unauthorized Network Nodes, BTU may remove them without liability and the Licensee shall promptly reimburse BTU for the expense plus ten percent (10%) of such removal together with payment of the Unauthorized Attachment Charge or Unauthorized Network Node Charge, no later than forty-five (45) days following BTU's issuance of an invoice.
2. **Unauthorized Attachment and Unauthorized Network Node Charge.** Pursuant to Section III.J.1 above, BTU, without prejudice to its other rights

or remedies, may assess an Unauthorized Attachment Charge or Unauthorized Network Node Charge as specified in Appendix H, for each Attachment or Network Node for which:

- a) No Permit has been issued by BTU;
- b) An Attachment or Network Node received a Permit, but for which it was later found that the information provided by the Licensee on the Application was substantially incorrect; or
- c) An Attachment or Network Node has been significantly modified after the issuance of Licensee's initial Permit, but such modification had not been approved by BTU.

The Unauthorized Attachment Charge or Unauthorized Network Node Charge is due and payable irrespective of whether a Permit is subsequently issued to the Licensee for the Unauthorized Attachment or Unauthorized Network Node.

3. **No Ratification of Unauthorized Use.** No act or failure to act by BTU with regard to a Licensee's Unauthorized Attachments or Unauthorized Network Nodes shall be deemed as ratification of the unauthorized (unlicensed) use, and if any Permit is subsequently issued, such Permit shall not operate retroactively or constitute a waiver by BTU of any of its rights or privileges. The non-compliant Licensee shall remain subject to all liabilities, obligations, and responsibilities under the Agreement and these Standards with regard to said unauthorized (unlicensed) use from its inception.

4. **Excessive Unauthorized Attachments.**

- a) If a Licensee is determined by BTU pursuant to an Inventory described in Section III.I or by other means to have Unauthorized Attachments or Unauthorized Network Nodes accounting for the greater of (i) more than two percent (2%) of its total Attachments or Network Nodes; or (ii) thirty (30) or more Unauthorized Attachments or three (3) or more Unauthorized Network Nodes, Licensee shall be in breach of its Agreement. Pursuant to the terms of the Agreement, BTU may terminate such Agreement subject to the notice and cure provisions of the Agreement. Failure to timely cure such breach may result in the removal of the Licensee's Communication Facilities or BTU, in its sole discretion, may exercise such other remedies as the Agreement provides.
- b) For those persons not parties to an Agreement found with Unauthorized Attachments or Unauthorized Network Nodes or who are otherwise not authorized to attach to BTU Eligible Poles or other BTU Facilities, BTU may pursue any remedy available under applicable law and equity to remedy the trespass or other claim.

K. Operational Duties & Responsibilities

1. **Duty to Inspect.** While recognizing its duty to maintain and update its electric distribution system in order to provide safe and reliable electric service, BTU does not warrant that its Eligible Poles are free of defects or non-compliant Attachments or Network Nodes. Licensee acknowledges in

submitting an Application that it has an obligation to inspect BTU's Eligible Poles and the premises surrounding such poles prior to commencing any work utilizing BTU's Eligible Poles or entering the premises surrounding such poles. **LICENSEE SHALL REPORT ANY BTU FACILITIES THAT LICENSEE IDENTIFIES AS UNSAFE TO BTU AT (979) 822-3777 AS SOON AS PRACTICAL AFTER SUCH CONDITIONS ARE IDENTIFIED. LICENSEE MAY NOT UNDERTAKE ANY WORK AT A LOCATION DETERMined TO BE UNSAFE UNTIL BTU HAS REMEDIATED THE CONDITION.**

2. **Knowledge of Work Conditions.** In all situations, it is the continuing responsibility of a Licensee to acquaint itself, its employees, agents, contractors, or subcontractors with these Standards including all Applicable Engineering Standards relating to the work for which a Permit may be sought by the Licensee. Failure to become familiar with these Standards and with the facilities, difficulties, or restrictions attending the execution of such work may result in the denial of a Permit, delay in construction, assessment of penalties, and removal of a non-conforming Attachment, Overlapping, or Network Node, among other remedies that BTU may impose for violations of these Standards.

Further, the Licensee acknowledges such dangers and accepts as its duty and sole responsibility to notify, inform, and keep informed its employees, agents, servants, contractors or subcontractors of the following:

BTU Eligible Poles may be treated with chemical wood preservatives; and it is Licensee's responsibility to ensure that any person having a valid reason to climb a pole in performance of assigned job duties is personally satisfied as to the structural integrity of such poles prior to climbing or doing other work on the pole.

3. **Duty of Competent Supervision and Performance.** All Licensees are on notice that in the performance of work under these Standards, a Licensee and its employees, agents, servants, contractors, or subcontractors **will work near electrically energized lines, transformers, or other BTU Facilities, and energy therein will not be interrupted at any time, except in an Emergency endangering life, personal injury, or property.** All Licensees shall ensure that their employees, agents, servants, contractors, or subcontractors have the necessary qualifications, skill, knowledge, training, and experience to protect themselves, their fellow employees, employees of BTU, and the general public from harm or injury while performing work permitted pursuant to these Standards. In addition, all Licensees shall furnish their employees, agents, servants, contractors or subcontractors competent supervision. Licensees shall further ensure that its employees, agents, servants, contractors, or subcontractors have sufficient and adequate tools, equipment, and training for the required work to be performed in a safe manner.

In the event of an Emergency or otherwise in which it may be necessary for BTU to de-energize any part of BTU Facilities, the Licensee shall ensure that work is suspended until such BTU Facilities have been de-energized

and properly grounded and that no such work is conducted unless and until an authorized BTU employee has communicated that such BTU Facilities have been made safe and are ready for the Licensee to work.

4. **Requests to De-energize.** A Licensee may request that BTU de-energize and render safe any BTU Facility for its benefit and convenience. Such request shall be made in writing and received by BTU at least ten (10) working days in advance of the date the work is planned. The Licensee shall reimburse BTU in full for all costs and expenses incurred, in accordance with Section II.I, to comply with such request. With the exception of actions taken because of an Emergency, before any BTU Facilities are de-energized under this section, BTU shall provide upon request an estimate of all costs and expenses (*to include loss of revenue*) to be incurred in accommodating the Licensee's request.
5. **Interruption of Service.** In the event that a Licensee causes an interruption of service by damaging or interfering with any BTU Facilities, the Licensee at its expense shall immediately do all things reasonable to avoid further injury or damages, direct and incidental, resulting therefrom and shall notify BTU immediately of these activities.
6. **Duty to Inform.** **THE WORK CONTEMPLATED UNDER THESE STANDARDS INVOLVES IMMINENT DANGERS INCLUDING SERIOUS BODILY INJURY OR DEATH FROM ELECTROCUTION.** The Licensee acknowledges such dangers and accepts as its duty and sole responsibility to notify, inform, and keep informed its employees, agents, servants, contractors, or subcontractors of such dangers and shall not be passed or assigned this duty and responsibility to any third-party.
7. **Duty to Protect Data.** A Licensee has an obligation and duty under Section 418.181, Texas Government Code (Confidentiality of Certain Information Relating to Critical Infrastructure), to protect and hold confidential BTU data relating to BTU Facilities and not disclose such data to any third-party without BTU's written consent. BTU will undertake reasonable measures to keep a Licensee's proprietary data confidential and secure.
8. **Duty to Provide a Safety Briefing.** A Licensee who desires to install a Network Node on the BTU system is required to prepare a Safety Briefing suitable for BTU employees and contractors who may be required to work near and/or around such equipment. The content of the Safety Briefing is to be preapproved by BTU before distribution and conveyance to BTU employees and contractors.

IV. SPECIFICATIONS FOR WIRE ATTACHMENTS

A. Pole Attachment Application Process

BTU offers Licensees a non-discriminatory process for access to BTU Eligible Poles for Wire Attachments or Overlashings as listed below. Application Forms and additional information regarding the BTU Pole Attachment Program is available on BTU's website.

B. Standard Process for Wire Attachments or Overlashings

1. **Eligibility.** Default process for any Licensee with a valid Agreement.
2. **Application for Permit Required.** A Licensee shall not install any new Attachment or new Overlashing, except as provided in Section IV.F, on any BTU Utility Pole without first submitting an Application and obtaining a Permit pursuant to the requirement and procedures set forth below and elsewhere in these Standards.
 - a) **Application Form.** All Licensees shall use the *Application for Pole Attachment Permit*, a copy of which is available on BTU's website, which may be amended from time to time, provided that any such amendments are consistent with Applicable Engineering Standards and are applied to all similar types of Attachments on a non-discriminatory basis.
 - (i) A single Application may include up to a maximum of three-hundred (300) Utility Poles for new Attachments.
 - (ii) BTU's acceptance of the submitted design documents required as part of a complete Application Form does not relieve the Licensee of full responsibility for any errors or omissions in the engineering analysis and compliance with all Applicable Engineering Standards.
 - b) **Service Drops.** The submission of an Application is not required to install a Service Drop on a Utility Pole on which the Licensee already has an authorized Attachment, provided that the Licensee provides notice of such Service Drop pursuant to Section II.F.1 and the Service Drop is installed within the previously authorized space. Service Drops on Utility Poles for which the Licensee does not have an authorized Attachment may be authorized by BTU on a monthly basis, provided the Licensee submits a corresponding Application for Permit within thirty (30) days of the Service Drop installation.
 - c) **Pole Ownership.** For the purposes of Application submittal, unless BTU records or Utility Poles indicate otherwise, BTU shall be presumed to be the owner of all Utility Poles subject to Attachment. The Licensee is responsible for field verifying Utility Pole ownership and notifying BTU of any discrepancies between BTU's maps/records and the actual Utility Poles in the field.
 - d) **Compliance with Standards.** Licensee shall comply with the Texas Engineering Act, Section 1001.001, *et seq.*, Texas Occupations

Code, to the extent it is applicable to the work described herein, and with the most current version of the NESC, including any and all revisions, and all other Applicable Engineering Standards. The Licensee shall certify its compliance with the above on each Application it submits to BTU for processing. The certification statement shall be signed by an employee or agent of the Licensee who has the final authority or responsibility to approve the Application. BTU will not process an Application that fails to provide the signed certification statement included therein. The Licensee shall provide documentation, sealed by an Engineer, establishing that the Licensee's applicable Make-Ready Electrical Construction design and Pole Loading Analysis (PLA) documents comply with all requirements specified by the above mentioned standards.

- e) **Pole Loading Analysis (PLA)**. A Licensee, in connection with an Application, must comply with the PLA methodology described herein and in Appendix G. Acceptable software for use of PLA shall be a commercially available product with general industry acceptance. Should the Licensee utilize a commercially available software application that BTU does not possess, the Licensee shall make available to BTU at least one software license for BTU use at the Licensee's expense, subject to BTU's Information Technology requirements. The Licensee will gather the pole and Attachment physical and technical information required to conduct a PLA on Utility Poles that meet the criteria for PLA as described in Appendix G, with assistance as required from BTU.
- f) **Submission of Application**. Completed Applications may be submitted by either U.S. mail or other means mutually agreeable by BTU and the Licensee. To submit an application via electronic mail, send it to poleattachments@btutilities.com. All Applications shall include:
 - (i) A completed Application Form, as referenced in Appendix B;
 - (ii) Detailed design documents of the required Make-Ready Electrical Construction, prepared or reviewed/approved by an Engineer that includes the Licensee's estimated cost of proposed Make-Ready Electrical Construction;
 - (iii) A proposed installation schedule;
 - (iv) Evidence the Licensee has obtained all necessary authority to use or occupy the public rights-of-way or easement in which the relevant BTU structure or structures are installed;
 - (v) PLA worksheets and results;
 - (vi) Relevant pole identification data, including BTU pole number and GPS location data for entry into the ID1 field of the BTU GIS system, and equipment tagging information;

- (iv) If applicable, a Waiver Request form, as described in Section III.A.6; and
- (v) The appropriate Application Fee.

Such Application shall be prepared by, or under the authority of, the Licensee. The detailed design documents” referenced in this Section will be undertaken and completed in design tools to be determined by BTU. All actions pursuant to this Section shall be at the Licensee’s cost and risk.

Licensee shall submit the appropriate Application Fee at the time of Application submission.

3. **BTU Review of Application.** BTU will respond to each completed Application and Make-Ready Engineering design documents submitted by the Licensee within ninety (90) days of receipt. BTU will prioritize multiple applications based on the date/time received and respond to applications in the order in which BTU received them.

Should BTU return an Application for clarification or modification, the time required for the Licensee to address the concerns raised and return the Application shall not count against the ninety (90) day period. For Applications with Overlapping only, BTU will respond pursuant to Section IV.F. Any Application that does not conform to the requirements provided in Section IV.B.2.e and the Applicable Engineering Standards will be deemed incomplete and immediately rejected by BTU. If an Application is rejected as incomplete, the Licensee will be provided with a detailed description of changes, modifications, or revisions to the Application necessary for BTU’s review and approval within thirty (30) days of rejection of the Application.

In the event BTU does not finalize its review of a completed Application within ninety (90), BTU may impose an extension period in which to complete its review for each Application.

- a) **Review.** In making its decision as to whether to approve an Application, BTU will consider the Application’s proposed compliance with engineering and safety requirements, in accordance with Applicable Engineering Standards. In addition, BTU shall consider Capacity constraints, including the future needs of BTU as determined in accordance with the Reserved Capacity provisions set forth in Section II.H.10, flood zone requirements, in-flight BTU projects, and other circumstances known at the time that could directly affect the engineering, safety requirements, and Capacity constraints of the Application submission and review which may impact the Application, including any known third-party requests or Attachment to the same Pole as described in Section IV.B.3.f below.

- b) Make-Ready Electrical Construction. In the event that a Licensee's proposed Application requires BTU to undertake and complete Make-Ready Electrical Construction to accommodate the Licensee's facilities, BTU will review the detailed design documents and the cost estimate for this Make-Ready Electrical Construction work provided by the Licensee. Following BTU's approval of the Make-Ready Electrical Construction design and review of the estimated Make-Ready Electrical Construction costs, BTU may, at its discretion, revise the cost estimate to more accurately reflect the anticipated cost of the work. BTU will then submit this estimate of the cost of Make-Ready Electrical Construction to the Licensee utilizing the *BTU Authorization for Make-Ready Electrical Construction* form for approval from the Licensee to proceed. The Licensee shall make advanced payment of this cost estimate in order for any Make-Ready Electrical Construction to proceed in accordance with the provisions of Section II.I.3. The Licensee shall have fifteen (15) days following the issuance of the *Authorization for Make-Ready Electrical Construction* form to approve the estimate and provide payment. Failure of the Licensee to respond to BTU or return the *Authorization for Make-Ready Electrical Construction* form within the fifteen (15) day period will result in the Application being cancelled by BTU, with all applicable Application Fees being non-refundable.
- c) Changes Required. If BTU describes any changes, modifications, or revisions to the proposed Make-Ready Electrical Construction design documents pursuant to this Section, BTU shall notify the Licensee in writing (via email). Upon receipt of this notice, the Licensee may notify BTU in writing (via email) that it agrees to the changes, modifications, or revisions to the proposed Make-Ready Electrical Construction design required by BTU, in which case the Licensee may resubmit the Application as amended and it shall be deemed granted; alternatively, Licensee may propose changes, modifications, or revisions consistent with Applicable Engineering Standards by resubmitting the Application with such alternative proposals, provided that such resubmission explains the reasons for the alternative proposals and addresses all concerns raised by BTU in response to the initial Application. The alternative proposals shall not be the original Make-Ready Engineering design documents rejected by BTU.

Licensee shall incur an Application Fee, if applicable, upon resubmitting the Application containing the alternative proposals. BTU shall have sixty (60) days of receipt thereof to provide the Licensee with:

- (i) Notification that access is granted based on the alternative proposals; or

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- (ii) A detailed description of any changes, modifications, or revisions to the alternative proposal necessary to comply with safety, reliability, or generally applicable engineering practices or standards.

In the event BTU fails to complete its review within sixty (60) days of the resubmitted Application containing the alternative proposals for Make-Ready Electrical Construction, BTU may impose an extension period in which to complete its review of the resubmitted Application.

- d) Compliance by Licensee. BTU's acceptance of the submitted Make-Ready Electrical Construction design and engineering documents does not relieve the Licensee from compliance with the requirements of the Texas Engineering Act, the National Electrical Safety Code, and all other Applicable Engineering Standards as required by this Standard.
- e) Application Approval.
 - (i) *If Make-Ready Electrical Construction is Required.* After acceptance of all necessary revisions, BTU will issue to the Licensee the *Authorization for Make-Ready Electrical Construction*. The Licensee shall comply with the provisions of Section IV.B.4.
 - (ii) *If Make-Ready Electrical Construction is Not Required.* After acceptance of all necessary revisions to the Application, BTU will issue to the Licensee the *BTU Notice to Proceed*. The Licensee shall comply with the provisions of Section IV.B.4.e.
- f) Treatment of Multiple Requests for Same Utility Pole. BTU shall consider complete Applications received from multiple Licensees to attach to the same Utility Pole on a "first-come, first-served," non-discriminatory basis.
 - (i) If BTU receives an Application from a second prospective Licensee following acceptance of a complete Application, but before completing Make-Ready Electrical Construction or issuing a Notice to Proceed on the first Application, BTU will reject the second Application and any subsequent Applications for the same Utility Pole without consideration of the proposed Attachments from the Application which was first-in-time. BTU will reconsider the rejected Application if it is revised and resubmitted in consideration of the characteristics of the installations contemplated in the first-in-time Application and eliminates any conflict. If the

second Application requests use of the Utility Pole for installation of a Network Node, BTU will evaluate the Network Node Application pursuant to Section V.B.4.f as if the Attachment of the first Licensee has been completed.

- (ii) If the first-in-time Application requires BTU to undertake and complete any Make-Ready Electrical Construction on a Utility Pole, and a subsequent request for an Attachment or Network Node is received before BTU completes the Make-Ready Electrical Construction necessary for the first-in-time Application, BTU will meet with each Licensee and allocate the costs to complete Make-Ready Electrical Construction between the Licensees requesting access to the Utility Pole.
- (iii) If the first-in-time Licensee fails to timely install its Attachment or Network Node in accordance with Section IV.B.4.f or Section V.B.4.f, as applicable, BTU will revoke permission to construct the facility that is the subject of the first-in-time Application. BTU will then process the second-in-time Application. Where Make-Ready Electrical Construction on a Utility Pole for the first-in-time Application has been completed, but the Licensee fails to timely install its Attachment or Network Node, Licensee shall nevertheless remain responsible for payment of the Make-Ready Electrical Construction charges incurred.

4. Make-Ready Electrical Construction. If Make-Ready Electrical Construction is required to accommodate a Licensee's Attachment or Overlapping, BTU or its contractors shall perform such work at Licensee's expense as provided in Section IV.B.3, Section IV.B.5.e, and Appendix B.

- a) Advance Payment. Upon execution of *Authorization for Make-Ready Electrical Construction* by a Licensee, BTU shall schedule the Make-Ready Electrical Construction. Pursuant to Sections II.I.3, BTU shall require payment from Licensee in advance for any Make-Ready Electrical Construction to be performed by BTU or its contractors based upon the estimated cost of such work.
- b) Work Performed by BTU or BTU Contractor. Make-Ready Electrical Construction shall be performed only by BTU or a contractor authorized by BTU to perform such work. BTU will strive to perform the Make-Ready Electrical Construction to accommodate a Licensee's Attachments within sixty (60) days of receipt of the advanced payment estimate for the Make-Ready Electrical Construction. BTU will provide to the Licensee as soon as possible the estimated schedule for completing the Make-Ready Electrical Construction.
- c) Work Schedule. In performing all Make-Ready Electrical Construction to accommodate a Licensee's Attachments, BTU will

include such work in its normal work schedule on a non-discriminatory basis. In the event the Licensee requests that the Make-Ready Electrical Construction be performed on a priority basis or outside of BTU's normal working hours, the Licensee shall pay the appropriate increased costs. **Nothing herein shall be construed to require performance of any Licensee's work on a priority basis, outside of BTU's normal working hours, or before other scheduled work, BTU service restoration, or other Emergency work.**

- d) Notifying Other Licensees. Prior to commencing Make-Ready Electrical Construction, BTU shall provide no less than five (5) days' written notice to the Licensees on the affected Utility Pole of the impending work. Such written notice shall be provided through NJUNS.
- e) Notice to Proceed. Following completion of the Make-Ready Electrical Construction, BTU will issue a *BTU Notice to Proceed* to the Licensee (Applicant) that the Utility Pole is available for Make-Ready Communications Construction and Attachment. When applicable, the Licensee shall proceed to install its Attachments utilizing the One-Touch Transfer Process described in Section IV.B.5 below. Whenever the transfer of an Attachment or Network Node would require cutting or splicing of the Communication Facility or disruption of wireless service, the Complex Transfer Process in Section IV.B.6 below shall apply.
- f) Failure to Attach. A Licensee must exercise the right granted by the BTU Notice to Proceed within sixty (60) days of issuance of the Notice to Proceed. If needed, Licensee may request in writing to BTU an additional thirty (30) day extension of the effective period of the Notice to Proceed. The request for this extension must be received by BTU no later than seven (7) days before the expiration date provided in the Notice to Proceed. In considering this request, BTU will review past construction practices of Licensee and current efforts underway to complete the installation for which the extension was requested. BTU will provide a written response to the request for extension within a reasonable time after receiving the request. BTU, at its discretion, may not consider any requests for extension received within seven (7) days of the expiration of the Notice to Proceed.
 - (i) Failure to complete installing an Attachment within the effective period of the Notice to Proceed, or extended period if granted by BTU, will result in expiration of the Application and the forfeiture of the applicable Application Fees and any payments made for Make-Ready Electrical Construction already completed. Following expiration of an Application, should the Licensee wish to continue to install the Attachment subject to the expired Application, Licensee must submit a new Application covering the same Attachment

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including all appropriate Application Fees and following all relevant timelines as though it was a new application.

- (ii) BTU and Licensee shall determine a mutually-agreeable schedule for the completion of the Make-Ready Electrical Construction should an issue of Force Majeure, as described in the Agreement, be asserted by either party.

5. Make-Ready Communication Construction – One Touch Transfer – Wireline Attachments.

The transfer of third-party Attachments or Network Nodes, whether conducted by a Licensee or BTU, shall hereinafter be referred to as the “One-Touch Transfer Process.” Pursuant to these Standards, the One-Touch Transfer Process allows a Licensee to transfer or rearrange an Attachment of one or more Licensees in the Communications Space of a Utility Pole, or coordinate the Joint Meeting Transfer of a Network Node, as may be necessary, to accommodate the installation of a new Attachment in conformance with the requirements identified in this Section. All One-Touch Transfers conducted by a Licensee or BTU must comply with the following requirements:

- a) Simple Transfers Only. One-Touch Transfers shall be limited to rearrangement or transfer of third-party Attachments on an existing Utility Pole or a Mid-Span Installation suspended by a messenger cable between two Utility Poles. Such Attachment or Mid-Span installation may be rearranged within an existing Utility Pole or transferred onto a replacement Utility Pole (along with any supporting Communication Facility or Overlash) only where it may be accomplished without cutting and splicing or severance of any affected Mid-span Installation from the Communication Facility providing connectivity.
- b) Joint Meeting Transfer. Any Network Node on a Utility Pole hosting Attachments subject to One-Touch Transfer shall be modified within the same Utility Pole or transferred onto a replacement Utility Pole at the same time as the Attachments subject to Simple Transfer through the coordination of a Joint Meeting Transfer of the Network Node.
 - (i) Before a Licensee seeking to avail itself of the One-Touch Transfer process begins to undertake Make-Ready Communication Construction, it shall, not less than thirty (30) days before the date contemplated for the start of Make-Ready Communication Construction, notify in writing each affected existing Licensee owning a Network Node on an affected Utility Pole and arrange for a Joint Meeting Transfer of the Network Node.
 - (ii) Such notice shall identify the specific Utility Pole subject to Simple Transfer where the Network Node is mounted. The written notice shall provide sufficient instructions to coordinate the Joint Meeting Transfer.

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- (iii) Either party may make earlier arrangements with the other for any proposed Joint Meeting Transfer.
- (iv) Licensees have an obligation to cooperate to successfully complete the Joint Meeting Transfer of the Network Node.
 - a. In the event the Licensee utilizing the One-Touch Transfer Process fails to provide the required notice of the Joint Meeting Transfer to the Licensee that owns the Network Node, the former will be responsible for the cost of removing and relocating the Network Node to a replacement Utility Pole.
 - b. In the event the Licensee that owns the Network Node fails to attend the Joint Meeting Transfer or attends the meeting but fails to relocate the Network Node as part of the One-Touch Transfer Process, such Licensee shall be responsible for modifying the Network Node within the same Utility Pole or transferring the Network Node onto a replacement Pole within ten (10) days following the date of the failed Joint Meeting Transfer. Failure to relocate the Network Node within such ten (10) day period shall result in BTU finding the Network Node in non-compliance with these Standards and subject to a penalty as provided in Appendix H.
- c) Removal of the Existing Utility Pole. Licensee utilizing the One-Touch Transfer Process shall be responsible for the cost of removing the existing Utility Pole if a replacement Utility Pole is required to be installed as part of the One-Touch Transfer Process.
- d) Certified Contractors. A Licensee must engage qualified contractors approved in advance by BTU pursuant to a contractor approval program developed by BTU with the input of Licensees.
- e) Applicability to BTU. BTU's communications wires or facilities installed in the Communication Space of a Utility Pole will also be subject to the One-Touch Transfer Process.
- f) One-Touch Transfers Subject to Applicable Engineering Standards. All Make-Ready Communication Construction performed under the One-Touch Transfer Process shall meet Applicable Engineering Standards, including BTU's clearance standards. Applications that include Make-Ready Communications Construction and One-

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Touch Transfers that fail to meet Applicable Engineering Standards will be rejected by BTU.

- g) Cost Responsibility. Where in the sole judgment of BTU a Utility Pole is identified as defective, BTU will be responsible for the cost to replace such defective Utility Pole. In all other instances, the Licensee shall pay all costs of Make-Ready Work associated with One-Touch Transfers as described below:
- (i) Where the Utility Pole includes one or more third-party Attachment(s) that fail to meet Applicable Engineering Standards but otherwise there is sufficient space on the Utility Pole to accommodate the Licensee's Attachment, Make-Ready Work will not include the transfer of the third-party Attachment(s), unless the lowest Attachment on the Utility Pole fails to meet NESC clearance standards or poses a public safety hazard. In that case, Make-Ready Work will include the relocation of the non-compliant Attachment and the Licensee may recover the cost to bring such Attachment into compliance from the owner of the non-compliant Attachment.
 - (ii) Where the Utility Pole includes one or more third-party Attachment(s) that fail to meet Applicable Engineering Standards, and in order to accommodate the Licensee's Attachment on the same Utility Pole the third-party Attachment(s) must be rearranged, the cost of rearranging the third-party Attachment(s) will be included in Make-Ready Work. Provided that if the lowest Attachment on the Utility Pole fails to meet all relevant NESC clearance standards or poses a public safety hazard, the Licensee may attempt to recover the cost to bring such Attachment into compliance from the owner of that Attachment, but no others.
 - (iii) Where the Utility Pole includes one or more third-party Attachment(s) that fail to meet Applicable Engineering Standards, and in order to accommodate the Licensee's Attachment a new Utility Pole must be installed, the cost of the new Utility Pole and the transfer of the third-party Attachment(s) will be included in the Make-Ready Work.
 - (iv) Where the Utility Pole includes one or more third-party Attachment(s) that meet Applicable Engineering Standards, and otherwise there is enough space on the Utility Pole to accommodate the Licensee's Attachment, Make-Ready Work will not include the transfer of the third-party Attachment(s).
 - (v) Where the Utility Pole includes one or more third-party Attachment(s) that comply with Applicable Engineering Standards, and in order to accommodate the Licensee's

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Attachment on the same Utility Pole the third-party Attachment(s) must be rearranged, the cost of rearranging the third-party Attachment(s) will be included in Make-Ready Work.

- (vi) Where the Utility Pole includes one or more third-party Attachment(s) that comply with Applicable Engineering Standards, and in order to accommodate the Licensee's Attachment a new Utility Pole must be installed, the cost of the new Utility Pole and the transfer of the third-party Attachment(s) will be included in Make-Ready Work.
- h) Notice of Transfer. A Licensee shall provide all third-parties having wire Attachments or Overlashings affected by a proposed One-Touch Transfer with advance written notice of such One-Touch Transfer not less than thirty (30) days prior to undertaking such One-Touch Transfer. This notice shall be provided using the NJUNS to a duly designated representative of the affected Licensee, unless another method of notice is prescribed by BTU. Such notice shall identify the specific Utility Pole(s) affected by such One-Touch Transfer. The Licensee that desires to utilize the One-Touch Transfer Process shall bear the responsibility of determining the appropriate representative for each Licensee affected by the Licensee's implementation of the One-Touch Transfer Process.
- i) Critical Communication Facilities. If an affected Licensee, in its reasonable discretion, determines that a proposed One-Touch Simple Transfer poses a risk of disconnection or interruption of service to a Critical Communications Facility, the affected Licensee shall notify the requesting Licensee and BTU in writing within ten (10) days of receiving the notice of transfer described in Section IV.B.5.h. The affected Licensee is obligated to make the requested transfer of their Critical Communication Facilities within fifteen (15) days of providing such notice. Failure to transfer the Critical Communications Facilities in a timely manner will subject the Critical Communications Facility to the One-Touch Transfer Process.
- j) Post-Transfer Notice. Within fifteen (15) days following the completion of a One-Touch Transfer, the Licensee shall send written notice of the completed One-Touch Transfer and as-built reports to each affected Licensee. Within thirty (30) days of receipt of these as-built reports, the Licensee that owns the Communications Facilities that were transferred or relocated may conduct an inspection at the expense of the Licensee that moved the facilities.

If the One-Touch Transfer failed to meet all Applicable Engineering Standards, the owner of the Communications Facilities subject to transfer or relocated will notify the Licensee responsible for the One-Touch Transfer of any deficiency, which will be corrected within fifteen (15) days following receipt of such written notice at the expense of the Licensee responsible for the One-Touch Transfer. The Licensee responsible for the One-Touch Transfer shall pay the actual, reasonable, and documented inspection expenses incurred by the owner of the Communication Facilities subject to transfer or relocated, within forty-five (45) days of receipt of an invoice. Failure of the owner of the moved or relocated Attachment to undertake and complete the inspection within the thirty (30) day period shall be deemed acceptance of the One-Touch Transfer.

- k) Licensee's Attachments Subject to One-Touch Transfer by Other Entities. A Licensee's Communications Facilities shall be subject to the One-Touch Transfer Process conducted by another Licensee or BTU pursuant to the same terms and conditions prescribed in this Section and in Appendix H.

6. Make-Ready Communication–Construction - Complex Transfers.

- a) Responsibility for Complex Transfers. The accomplishment of a Complex Transfer is considered part of Make-Ready Communication Construction and shall be performed by the Licensee that owns the Attachment subject to transfer. It is the responsibility of the Licensee requesting the Complex Transfer to negotiate a private process with the owning Licensee for the Complex Transfer. The cost of the Complex Transfer shall be borne by the requesting Licensee. Network Nodes will not be subject to the Complex Transfer process as any modification or transfer of such facilities shall be subject to the Joint Meeting Transfer process described in Section IV.B.5.b.
- b) Complex Transfers Escalation Process. In the event a Licensee refuses to reach agreement on a process for the expedient transfer of an Attachment subject to a Complex Transfer, the requesting Licensee may rely on the following escalation procedures. At any time during these escalation procedures, the requesting Licensee and the owner of the Attachment subject to the Complex Transfer may reach agreement on a voluntary transfer process. In such event, the requesting Licensee shall notify BTU in writing of this agreement.
- (i) Level 1: Initial Request for Complex Transfer (Days 0 to 30)
- Initial Notice Letter. The requesting Licensee shall provide written notice to owner of the Attachment subject to Complex Transfer requesting the transfer of such Attachment using NJUNS with a copy to BTU. The Licensee that owns such Attachment shall perform the transfer within thirty (30) days of receipt of notice from the requesting Licensee.

- (ii) Level 2: Initial Escalation Process (Days 31 to 60)
 - a. Escalation Notification. If the owner fails to transfer the Attachment subject to Complex Transfer within the initial thirty (30) days, the requesting Licensee shall send a certified letter notifying the non-compliant Licensee that failure to transfer the Attachment within a subsequent thirty (30) days (escalation period) of receipt of notice will result in the Attachment in question being designated by BTU as non-compliant with the Complex Transfer Process and subject to penalty, as described in Appendix H, on the basis of interference with the requesting Licensee's permitted Attachment rights. The requesting Licensee shall send BTU a copy of the escalation letter and all other correspondence between the parties related to this matter.
 - b. Duty to Negotiate. The requesting Licensee is required to continue negotiations with the non-compliant Licensee during the thirty (30) day escalation period. Absent extraordinary circumstances, the non-compliant Licensee's failure to transfer the Attachment subject to Complex Transfer by the end of the thirty (30) day escalation period shall be considered a lack of cooperation on the part of the non-compliant Licensee. Conversely, absent extraordinary circumstances, a refusal by the requesting Licensee to agree to an alternative process for the transfer of the Attachment in question within a reasonable date certain shall be considered a lack of cooperation on the part of the requesting Licensee.
 - c. Notice of Success Complex Transfer. If the non-compliant Licensee transfers the Attachment subject to Complex Transfer within the thirty (30) day escalation period, or the requesting Licensee transfers the Attachment by mutual agreement of the parties, no further escalation will be necessary.
- (iii) Level 3: BTU Finding of Non-Compliant Attachments (Days 61 to 90)
 - a. Request for Finding of Non-compliant Attachments. If the requesting Licensee and the non-compliant Licensee cannot reach agreement and the Licensee

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with an existing Attachment subject to Complex Transfer fails to transfer it within the thirty (30) day escalation period, the requesting Licensee shall notify BTU in writing within five (5) days thereafter, provide a short summary of efforts to negotiate the rearrangement or transfer of the Attachment in question, and request BTU to make a finding of Non-Compliant Attachment on the basis of interference with the requesting Licensee's permitted Attachment rights.

b. Notification of Non-Compliant Attachments. Within fifteen (15) days of receiving the request for a finding of non-compliant Attachments, BTU will evaluate the request and, if it finds the request credible, BTU will:

(1) Notify the non-compliant Licensee by certified mail that BTU has determined the Attachment subject to Complex Transfer is declared as "Non-Compliant Attachment."

(2) Accrual of Penalties. From and after the date an Attachment is determined to be a Non-Compliant Attachment: (a) the non-conforming Licensee will accrue penalties as provided in Appendix H of these Standards until the Non-Compliant Attachment is transferred; and (b) BTU will suspend the processing of the non-compliant Licensee's Applications.

Thereafter, the non-compliant Licensee will have fifteen (15) days in which to transfer the non-compliant Attachment and notify BTU in writing in order to reinstate the processing of Applications. If the non-compliant Licensee fails to transfer the non-compliant Attachment within fifteen (15) days, the non-compliant Attachment will be subject to further penalties and transfer as provided in Section III.E and Appendix H. BTU will reinstate the processing of the non-compliant Licensee's Applications within a reasonable time after receiving receipt of written notification of the transfer of the non-compliant Attachment and the payment of all assessed penalties.

c. Duty to Negotiate. The requesting Licensee is required to continue negotiations with the non-compliant Licensee that owns the non-compliant Attachment during the fifteen (15) day period.

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- d. Notice of Transfer. If the non-compliant Licensee transfers non-compliant Attachment within the fifteen (15) day period, or the requesting Licensee transfers the non-compliant Attachment by mutual agreement of the parties, the moving party shall notify BTU in writing, and BTU will reinstate processing of the other Licensee's Applications within a reasonable time after receiving payment of all outstanding penalties.
 - e. Stop Processing Pole Attachment Permit Applications. If BTU does not receive written notification of the transfer of the non-compliant Attachment by the end of the fifteen (15) day period, BTU will stop processing the non-compliant Licensee's Applications pending further written notice of a successful transfer and the payment of all outstanding penalties.
- (iv) Level 4: Transfer or Removal of Unauthorized Attachments (Days 91 and Beyond)
- a. Notification of Failed Transfer. If the parties fail to negotiate the successful transfer of the Non-Compliant Attachment, the requesting Licensee shall promptly notify BTU in writing (via certified mail, return receipt requested) of the failed attempt and explain the reasons for the unsuccessful transfer.
 - b. Notification of Transfer of Non-Compliant Attachments. Following receipt of the notification of failed transfer, BTU shall promptly proceed to transfer the non-compliant Attachment at the respective owner's expense. Following the transfer of the Non-Compliant Attachment, BTU will provide written notification of the transfer to the non-compliant Licensee. BTU shall reinstate processing of the non-compliant Licensee's Applications within a reasonable time after receiving payment for the transfer cost and all outstanding penalties.
 - c. Notice of Transfer. In the event the non-compliant Licensee transfers the Non-Compliant Attachment, or the requesting Licensee transfers the Non-Compliant Attachment by mutual agreement of the parties, prior to BTU's transfer efforts, the moving party shall notify BTU in writing. The non-compliant Licensee shall be assessed a one-time penalty as provided in Appendix H of these Standards. Thereafter, BTU will reinstate the processing of the non-compliant Licensee's Applications within a reasonable time after receiving payment of all outstanding penalties.

7. Notice of Attachment Completion and Acceptance.

The Licensee shall notify BTU in writing by submitting the *Completion of Licensee Construction* form, including as-built drawings, within ten (10) days following the acceptance by all Licensees the facilities of which were rearranged or transferred pursuant to Section IV.B.5 (Simple Transfers) or Section IV.B.6 (Complex Transfers) that all Make-Ready Communication Construction has been completed and accepted, and that the new Attachments or Overlashings and all Make-Ready Work are ready for BTU to undertake Post-Construction Inspection.

8. Post-Construction Inspection.

- a) Construction Subject to Inspection. BTU shall complete a Post-Construction Inspection of applicable Make-Ready Construction at the Licensee's expense within sixty (60) days of receiving the Licensee's notification set forth in Section IV.B.7. BTU will conduct the Post-Construction Inspections to evaluate compliance with the requested Permit, Applicable Engineering Standards, or other design and installation requirements. Completion of a Post-Construction Inspection by BTU shall not in any way relieve any Licensee or a Licensee's insurers of any responsibility, duty, obligation, or liability under these Standards, any contractual agreement, or otherwise; nor does BTU's ability to make Post-Construction Inspections relieve a Licensee from its obligations to exercise due care in the installation of its Attachments or Overlashings. The Post-Construction Inspection provision set forth in this Section does not affect any other inspection requirements elsewhere in these Standards. This Section also applies to supplemental Post-Construction Inspections where the Licensee reports "final corrections" of previously identified non-compliant work or locations as described below.
- b) Compliance. In the event a Post-Construction Inspection conducted pursuant to Section IV.B.8. reveals that corrections or other actions are required of a Licensee, including without limitation those required for reasons of safety or structural integrity, the Licensee shall make such required corrections or take the requested actions within ten (10) days after the date BTU sends written notice. Licensee must notify BTU in writing when corrections are completed to allow for a follow-up Post-Construction Inspection. If the Licensee does not complete the required corrections within ten (10) days of receiving the notice from BTU, the Attachment will be considered an Unauthorized Attachment. If BTU determines in its reasonable judgment and discretion that the needed corrections rise to the level of an Emergency, BTU may perform the necessary corrective work without providing notice, at the Licensee's sole risk and cost, plus ten-percent (10%). As soon as

practicable thereafter, BTU will advise the Licensee of the work performed or the action taken.

- ð Issuance of Permit. Upon satisfactory completion of the Post-Construction Inspection, BTU shall notify the Licensee in writing that BTU has approved the Attachments identified in the Application by submitting to the Licensee a Permit for the affected facilities.

d

- C. Reserved for Future Use**
- D. Reserved for Future Use**
- E. Reserved for Future Use**

F. Standard Process for Overlashing Existing Attachments

1. **Eligibility.** Default process for any Licensee with a valid Agreement that is engaged in Overlashing existing Attachments.
2. **Application for Permit Required.** All provisions of Section IV.B.2 shall be applicable to Applications considered under the Standard Process for Overlashing Existing Attachments, except as provided below:
 - a) A Licensee may Overlash its own Attachments where the facilities comprising the Overlashing and Attachment do not exceed a combined total of three and one-half inches (3.5”) in diameter, such Overlashing fully complies with the Applicable Engineering Standards, and no Make-Ready Electrical Construction is required. In such cases, the Licensee shall provide BTU with fifteen (15) days’ prior written notice of the Overlashing and its compliance with the requirements set forth in this Section.
 - b) For Overlashing and Attachments that will exceed a combined total of three and one-half inches (3.5”) in diameter, BTU requires thirty (30) days’ notice before installation and its compliance with the requirements set forth in this Section.
 - c) A Licensee shall be permitted to Overlash its own Attachments without prior written notice or submitting an Application to BTU in the event such Overlashing is necessary to restore service temporarily to the Licensee’s customers and is in compliance with the Applicable Engineering Standards. In such cases, the Licensee shall provide BTU with written notice of the Overlashing within five (5) days of its completion.
 - d) Such notice as required in Section IV.F.2.a, Section IV.F.2.b, and Section IV.F.2.c above will be provided using the BTU *Standard Pole Attachment Application*, available on BTU’s website and shall include:
 - (i) The Utility Poles and Attachments subject to Overlashing, including relevant pole identification data, including BTU pole number and GPS location data for entry into the BTU GIS system, and equipment tagging information;
 - (ii) The total diameter and estimated weight of the existing Communications Facilities subject to Overlash;
 - (iii) The diameter and estimated weight of the added Communications Facilities;
 - (iv) The owner of the Communication Facilities;
 - (v) The total estimated diameter and weight of the Communications Facilities after the Overlash;
 - (vi) Applicable PLA documents, if any;
 - (vii) Applicable Make-Ready Electrical Construction engineering design documents, if any; and

(viii) The applicable Application Fee.

3. **BTU Review of Application.** All provisions of Section IV.B.3 shall be applicable to Applications considered under the Standard Process for Overlapping Existing Attachments, except as provided below:
 - a) Where no Make-Ready Electrical Construction is required, BTU shall review and provide written Notices to Proceed in accordance with the provisions of Section IV.F.2.a and Section IV.F.2.b above.
 - b) Where Make-Ready Electrical Construction is required, the provisions of Section IV.B.4 shall apply.
4. **Make-Ready Electrical Construction.** If required, all provisions of Section IV.B.4 shall apply to Make-Ready Electrical Construction for Applications considered under the Standard Process for Overlapping Existing Attachments.
5. **Make-Ready Communication Construction – One Touch Transfers.** If required, all provisions of Section IV.B.5 shall apply to Make-Ready Communications Construction for Applications considered under the Standard Process for Overlapping Existing Attachments regarding One-Touch Transfers.
6. **Make-Ready Communication Construction - Complex Transfers.** If required, all provisions of Section IV.B.6 shall apply to Make-Ready Communications Construction for Applications considered under the Standard Process for Overlapping Existing Attachments regarding Complex Transfers.
7. **Notice of Attachment Completion and Acceptance.** All provisions of Section IV.B.7 shall apply to Notice of Attachment Completion and Acceptance for Applications considered under the Standard Process for Overlapping Existing Attachments.
8. **Post Construction Inspection.** All provisions of Section IV.B.8 shall apply to Post Construction Inspection for Applications considered under the Standard Process for Overlapping Existing Attachments.

V. SPECIFICATIONS FOR WIRELESS INSTALLATIONS

A. Network Node Application Process

BTU offers Licensees access to Eligible Poles, subject to certain restrictions and Make-Ready Construction requirements, for the purpose of attaching Network Nodes pursuant to the Application processes. The technical specifications for Network Nodes are found in Appendix D, Appendix G, and Appendix I. Additional information, including the Application Forms for a Network Node installation, may be downloaded from BTU's website.

B. Standard Process for Network Nodes

1. **Eligibility.** Any Licensee with a valid Agreement that is a Network Provider.
2. **Site Selection.** A Licensee or Licensee representative wishing to apply for a Permit may elect to participate in a formal site selection review process to verify the feasibility of the proposed site/location prior to submitting an Application. Licensee shall pay the cost of the site selection review up front before the start of the site selection review process. Prior to submitting a formal application, Licensee shall:
 - a) submit a completed *Wireless Pole Attachment Site Selection Form* (available on the BTU web site); and
 - b) coordinate with BTU to perform a site walk, receive a power route sketch, and receive assessment of the feasibility of the proposed installation and attaching to the requested Pole within the desired time frame. Site walks may include Licensee coordinating with other City departments.
3. **Application for Permit Required.** A Licensee shall not install any new Network Node on any BTU Eligible Pole without first submitting an Application and obtaining a Permit pursuant to the requirements and procedures set forth in these Standards.
 - a) **Application Form.** All Licensees shall use the *Application for Wireless Installation Permit*, a copy of which is available on BTU's website, which may be amended from time to time, provided that any such amendments are consistent with Applicable Engineering Standards and are applied to similar types of Network Nodes and similarly situated Licensees on a non-discriminatory basis.
 - (i) A single Application may include up to a maximum of five (5) Network Node locations, together with the applicable Eligible Poles, provided that the Network Nodes are of similar design and consist of Pre-Certified Equipment.
 - (ii) BTU's acceptance of the submitted design documents required as part of a complete Application Form submittal does not relieve the Licensee of full responsibility for any

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errors or omissions in the engineering analysis and compliance with all Applicable Engineering Standards.

- b) Pole Ownership. For the purposes of Application submittal, unless BTU records or Eligible Poles indicate otherwise, BTU shall be presumed to be the owner all Eligible Poles subject to a Network Node installation. The Licensee is responsible for field verifying Eligible Pole ownership and notifying BTU of any discrepancies between BTU's maps/records and the actual Eligible Poles in the field.
- c) Compliance with Standards. Licensee shall comply with:
 - (i) the Texas Engineering Act, Section 1001.001, et seq., Texas Occupations Code, to the extent it is applicable to the work described herein, and with the most current version of the NESC,
 - (ii) Appendices D, F, G and I, including all revisions, and
 - (iii) all other Applicable Engineering Standards.

The Licensee shall certify its compliance with the above-referenced requirements on each Application it submits to BTU for processing. The certification statement shall be signed by an employee or agent of the Licensee who has the final authority or responsibility to approve the Application. BTU will not process an Application that fails to provide the signed certification statement included therein. The Licensee shall provide documentation, sealed by an Engineer, establishing that the Licensee's applicable Make- Ready Electrical Construction design and Pole Loading Analysis (PLA) documents comply with all requirements specified by the above mentioned standards.

- d) Pole Loading Analysis (PLA). A Licensee, in connection with an Application, must comply with the PLA methodology described herein and in Appendix G. Acceptable software for use of PLA shall be a commercially available product with general industry acceptance. Should the Licensee utilize a commercially available software application that BTU does not possess, the Licensee shall make available to BTU at least one software license for BTU use at the Licensee's expense, subject to BTU's Information Technology requirements. The Licensee will gather the pole and Attachment physical and technical information required to conduct a PLA on Eligible Poles that meet the criteria for PLA as described in Appendix G, with assistance as required from BTU.
- e) Submission of Application. Completed Applications may be submitted by either U.S. mail or other means mutually agreeable by BTU and the Licensee. Applications submitted via electronic mail shall be sent to poleattachments@btutilities.com. The Application shall include:

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- (i) A complete Application with all applicable supporting documents, tests, reports, applications, permit numbers, and license numbers;
- (ii) A copy of an approved *Request for Pre-Certification of Wireless System* form for the type of Network Node proposed;
- (iii) A copy of the Safety Briefing for the type of Network Node proposed;
- (iv) Engineering design documents created using the ANSI/SCTE Graphic Symbols Drawing Standards, prepared or reviewed by an Engineer, and including a detailed description of the Network Node in compliance with all Applicable Engineering Standards, all detailed design documents for any required Make-Ready Work, and the Licensee's estimated cost of any proposed Make-Ready Electrical Construction;
- (v) The proposed Deployment Plan for the proposed Wireless Project Area, including a description of how the Network Node will be served with electricity and backhaul broadband telecommunications transport service;
- (vi) Report certifying compliance with FCC OET Bulletin 65 signage requirements and the location of such signage on the Eligible Pole, if applicable;
- (vii) PLA worksheets and results, as required by Appendix G;
- (viii) Relevant pole identification data, including BTU pole number and GPS location data for entry into the ID1 field of the BTU GIS system, and equipment tagging information;
- (ix) A proposed installation schedule;
- (x) Evidence that Licensee has obtained all necessary authority to use or occupy the public rights-of-way or easement in which the relevant BTU structure or structures are installed;
- (xi) If applicable, a Waiver Request form, as described in Section III.A.6; and
- (xii) The appropriate Application Fee.

Such Application shall be prepared by, or under the authority of, the Licensee. The detailed design documents referenced in this Section will be undertaken and completed in design tools to be determined by BTU. All actions pursuant to this Section shall be at the Licensee's cost and risk.

Licensee shall submit the appropriate Application Fee at the time of Application submission.

4. **BTU Review of Application.** Any Application not conforming to the requirements provided in Section V.B.2.d and the Applicable Engineering

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Standards will be deemed incomplete and rejected by BTU. If BTU rejects an Application as incomplete, BTU will provide the Licensee with a detailed description of changes, modifications, or revisions to the Application necessary for BTU to accept the Application within thirty (30) days of rejection. BTU will approve or deny an Application for a Network Node not later than sixty (60) days after the date BTU receives the complete application and Make-Ready Engineering design documents.

If BTU denies a complete Application, it will document the basis for the denial, including the specific applicable code provisions or other rule, regulation, or other law on which it based the denial. BTU will send the documentation by electronic mail to the applicant on or before the date it denies the Application.

Not later than the 30th day after the date BTU denies the Application, the applicant may cure the deficiencies and resubmit the application without paying an additional application fee, other than a fee for actual costs incurred by BTU. If the applicant does not resubmit the application within that thirty (30) day period, BTU will consider the Application withdrawn.

BTU will approve or deny the revised completed application after a denial not later than ninety (90) days after the date it receives the completed revised application. BTU will limit its review of the revised Application to the deficiencies cited in the denial documentation.

An Application for a Mid-span Installation requiring a supporting Overlash installation provided by the Licensee will be considered by BTU pursuant to Section IV.F and this Section. An Application for a DAS System supporting new Attachments for fiber backhaul transport facilities will be considered by BTU pursuant to Section IV.B and this Section.

- a) Review. In making its decision as to whether to issue a Permit, BTU will consider engineering and safety requirements, in accordance with Applicable Engineering Standards. In addition, BTU shall consider Capacity constraints, including the future needs of BTU as determined in accordance with the Reserved Capacity provisions set forth in Section II.H.10, flood zone requirements, in-flight BTU projects, and other circumstances known at the time that could directly affect the engineering, safety requirements, and Capacity constraints associated with desired pole. Specifically, BTU will not consider a Network Node to be installed on an Eligible Pole that is subject to a pending Network Node Application or that is already hosting a Network Node. Other Capacity constraints may impact approval of a Network Node Application as described in Section V.B.3.f below.
- b) Make-Ready Electrical Construction. In the event a Licensee's proposed Application requires BTU to undertake and complete Make-Ready Electrical Construction to accommodate the Licensee's Network Node, BTU will review the detailed design documents and the cost estimate for this Make-Ready Electrical Construction work provided by the Licensee. Following BTU's

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approval of the Make-Ready Electrical Construction design and review of the estimated Make-Ready Electrical Construction costs, BTU may, at its discretion, revise the cost estimate to more accurately reflect the anticipated cost of the work. BTU will then submit this estimate of the cost of Make-Ready Electrical Construction to the Licensee utilizing the *Authorization for Make-Ready Electrical Construction* form for approval from the Licensee to proceed. The Licensee shall make advance payment of this cost estimate in order for any Make-Ready Electrical Construction to proceed in accordance with the provisions of Section II.I.3. Licensee shall have fifteen (15) days following the issuance of the *Authorization for Make-Ready Electrical Construction* form to approve the estimate and provide payment. Failure of the Licensee to respond to BTU or return the *Authorization for Make-Ready Electrical Construction* form and payment within the fifteen (15) day period will result in the Application being cancelled by BTU, with all applicable Application Fees being non-refundable.

- c) Changes Required. If BTU requires any changes, modifications, or revisions to the proposed Make-Ready Electrical Construction design documents pursuant to this Section, BTU shall notify the Licensee in writing (via email). Upon receipt of such notice, the Licensee may notify BTU in writing that it agrees to the changes, modifications, or revisions to the proposed Make-Ready Electrical Construction required by BTU, in which case the Licensee may resubmit the Application as amended and it shall be deemed granted; alternatively, Licensee may propose changes, modifications, or revisions consistent with Applicable Engineering Standards by resubmitting the Application with such alternative proposals, provided that such resubmission explains the reasons for the alternative proposals and addresses all concerns raised by BTU in response to the initial Application. The alternative proposals shall not be the original Make-Ready Engineering design documents rejected by BTU.

The Licensee shall incur an Application Fee upon resubmitting the Application containing the alternative proposals. BTU shall have sixty (60) days of receipt thereof to provide the Licensee with:

- (i) Notification that access is granted based on the alternative proposals; or
- (ii) A detailed description of any changes, modifications, or revisions to the alternative proposal necessary to comply with safety, reliability, or generally applicable engineering practices or standards.

In the event BTU fails to complete its review within sixty (60) days of the resubmitted Application containing the alternative proposals for Make-Ready Electrical Construction, BTU may impose an extension period in which to complete its review of the resubmitted

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Application. A Network Node shall never be installed without the affirmative written consent of BTU and the issuance of a Permit.

- d) Compliance by Licensee. BTU’s acceptance of the submitted Make-Ready Electrical Construction design and engineering documents does not relieve the Licensee from compliance with the requirements of the Texas Engineering Act, the National Electrical Safety Code, and all other Applicable Engineering Standards as required by this Standard.
- e) Application Approval.
 - (i) *If Make-Ready Electrical Construction is Required.* After acceptance of all necessary revisions, BTU will issue to the Licensee the *Authorization for Make-Ready Electrical Construction*. The Licensee shall comply with the provisions of Section V.B.4.
 - (ii) *If Make-Ready Electrical Construction is Not Required.* After acceptance of all necessary revisions to the Application, BTU will issue to the Licensee the BTU Notice to Proceed. The Licensee shall comply with the provisions of Section V.B.4.e.
- f) Treatment of Multiple Requests for Eligible Poles in the Same General Area. BTU will not authorize more than one Network Node per Eligible Pole. Eligible Pole assignments for Network Node Applications shall be considered on a “first-come, first-served,” non-discriminatory basis. Should a Licensee fail to install a Network Node within the allotted time frame, the requested pole will be released and made available to another Licensee upon request as further described in Section V.B.3.g.i below. Multiple requests to install Network Nodes in the same general area will be treated as described Section V.B.3.g.ii below. The treatment of Mid-span Installations and DAS System Antenna node installations in potential conflict with other Network Nodes is described in Section V.B.3.g.iii and Section V.B.3.g.iv.
 - (i) If BTU issues a Permit and the Licensee fails to install the Network Node in compliance with Section V.B.4.f, BTU will release the requested Eligible Pole for use by another Licensee.
 - (ii) In situations where BTU receives multiple Network Node Applications for Eligible Poles within the same general area from different Licensees, BTU will limit a Licensee to only one Network Node for every six (6) contiguous Eligible Poles. Under no circumstances will a Licensee be allowed to reserve an Eligible Pole for future use.
 - (iii) BTU will not allow more than one (1) Mid-span Installation between any two (2) contiguous Utility Poles. Mid-span Installations shall not be installed on any Attachments

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suspended from Non-Decorative Streetlight Poles. Subject to interference testing, a pole-mounted Network Node may be installed on an Eligible Pole that hosts an Attachment that supports a Mid-Span Installation.

- (iv) An Antenna node for a DAS System shall not be attached on an Eligible Pole that already hosts a pole-mounted Network Node, or vice-versa. Subject to interference testing, a Mid-span Installation may adjacent to an Attachment that is installed on a Utility Pole that hosts a DAS System Antenna node.

5. **Make-Ready Electrical Construction.** If Make-Ready Electrical Construction is required to accommodate a Network Node, BTU or its contractors shall perform such work at Licensee's expense as provided in Section V.B.3, Section V.B.5.e, and Appendix B.

- a) Advance Payment. Upon execution of *Authorization for Make-Ready Electrical Construction* by a Licensee, BTU shall schedule the Make-Ready Electrical Construction. Pursuant to Section II.I.3, BTU shall require payment from Licensee in advance for any Make-Ready Electrical Construction to be performed by BTU or its contractors based upon the estimated cost of such work.
- b) Work Performed by BTU or BTU Contractor. Make-Ready Electrical Construction shall be performed only by BTU or a contractor authorized by BTU to perform such work. BTU will strive to perform the Make-Ready Electrical Construction to accommodate a Licensee's Network Node within sixty (60) days of receipt of the advance payment for the Make-Ready Electrical Construction. BTU shall provide to the Licensee as soon as practicable the estimated schedule for completing the Make-Ready Electrical Construction.
- c) Work Schedule. In performing all Make-Ready Electrical Construction to accommodate a Licensee's Network Nodes, BTU will include such work in its normal work schedule on a non-discriminatory basis. In the event the Licensee requests that the Make-Ready Electrical Construction be performed on a priority basis or outside of BTU's normal working hours, the Licensee shall pay the increased costs. **Nothing herein shall be construed to require performance of any Licensee's work on a priority basis, outside of BTU's normal working hours, or before other scheduled work, BTU service restoration, or other Emergency work.**
- d) Notifying Other Licensees. Prior to commencing Make-Ready Electrical Construction, BTU shall provide no less than five (5) days' written notice to the Licensees on the affected Eligible Poles of the impending work. Such written notice shall be provided through NJUNS.

- e) Notice to Proceed. Following completion of the Make-Ready Electrical Construction, BTU will issue a *BTU Notice to Proceed* to the Licensee (Applicant) that the Eligible Pole is available for Make-Ready Network Node Construction. When applicable, the Licensee shall proceed to install its Network Nodes utilizing the One-Touch Transfer Process described in Section V.B.5 below. Whenever the transfer of an Attachment would require the cutting or splicing of the Communication Facility, the Complex Transfer Process in Section V.B.6 below shall apply.
- f) Failure to Attach. A Licensee must exercise the right granted by the BTU Notice to Proceed within sixty (60) days of issuance of the Notice to Proceed. If needed, the Licensee may request in writing to BTU an additional thirty (30) day extension of the effective period of the Notice to Proceed. The request for this extension must be received by BTU no later than seven (7) days before the expiration date provided in the Notice to Proceed. In considering this request, BTU will review past construction practices of the Licensee and current efforts underway to complete the installation for which the extension was requested. BTU will provide a written response to the request for extension within a reasonable time after receiving the request. BTU, at its discretion, may not consider any requests for extension received within seven (7) days of the expiration of the Notice to Proceed.
 - (i) Failure to complete installing a Network Node within the effective period of the Notice to Proceed, or extended period if granted by BTU, will result in expiration of the Application and the forfeiture of the applicable Application Fees and any payments made for Make-Ready Electrical Construction already completed. Following expiration of an Application, should the Licensee wish to continue to install the Network Node subject to the expired Application, the Licensee must submit a new Application covering the same Network Node including all appropriate Application Fees and following all relevant timelines as though it was a new application.
 - (ii) BTU and the Licensee shall determine a mutually-agreeable schedule for the completion of the Make-Ready Electrical Construction should an event of Force Majeure, as described in the Agreement, be asserted by either party.

6. **Make-Ready Network Node Construction – One Touch Transfer**. The transfer of third-party Attachments or Network Nodes, whether conducted by a Licensee or BTU, shall hereinafter be referred to as the “One-Touch Transfer Process.” Pursuant to these Standards, the One-Touch Transfer Process allows a Licensee permitted to install a Network Node to transfer or rearrange the Attachments of one or more Licensees in the Communications Space of a Utility Pole, as may be necessary, to accommodate the new Network Node contingent upon compliance with

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requirements identified in this Section. All One-Touch Transfers conducted by a Licensee or BTU must comply with the following requirements:

- a) Simple Transfers Only. One-Touch Transfers shall be limited to the rearrangement or transfer of a third-party Attachment on an existing Pole and Mid-Span Installation suspended by a messenger cable between two Utility Poles. Such Attachment or Mid-Span Installation may be rearranged within an existing Utility Pole or transferred onto a replacement Utility Pole, provided the affected Attachment or Mid-span Installation (along with any supporting Communication Facility or Overlashing) is not subject to cutting and splicing and any affected Mid-span Installation is not severed from the Communication Facility providing connectivity.
- b) Certified Contractors. A Licensee must engage qualified contractors approved in advance by BTU pursuant to a contractor approval program developed by BTU with the input of Licensees.
- c) Applicability to BTU. BTU's communications wires or facilities installed in the Communication Space of a Utility Pole will also be subject to the One-Touch Transfer Process.
- d) One-Touch Transfers Subject to Applicable Engineering Standards. All Make-Ready Network Node Construction performed under the One-Touch Transfer Process shall meet all Applicable Engineering Standards, including BTU's clearance standards. As part of the Make-Ready Network Node Construction, a Licensee may modify one or more Attachments on a Utility Pole and any Mid-span Installation suspended from a messenger cable between two Utility Poles, by relocating said Attachments/Messengers within an existing Utility Pole or transferring the Attachments/Messengers onto a replacement Utility Pole, as necessary to accommodate the Network Node. Applications that include Make-Ready Network Node Construction and One-Touch Transfers that fail to meet Applicable Engineering Standards will be rejected by BTU.
- e) Cost Responsibility. Where in the sole judgment of BTU a Utility Pole is identified as defective, BTU will be responsible for the cost to replace such defective Utility Pole. In all other instances, the Licensee (Applicant) shall pay all costs of Make-Ready Work associated with One-Touch Transfers as described below:
 - (i) Where the Utility Pole includes one or more third-party Attachment(s) that fail to meet Applicable Engineering Standards but otherwise there is sufficient space on the Utility Pole to accommodate the Licensee's Network Node, Make-Ready Work will not include the transfer of the third-party Attachment(s), unless the lowest Attachment on the Utility Pole fails to meet NESC clearance standards or poses a public safety hazard. In that case, the Licensee shall notify BTU, who will notify the owner of the non-compliant

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Attachment that the Attachment is non-compliant with the Applicable Engineering Standards or presents a Safety Violation in accordance with the provisions of Section II.K.3.

- (ii) The Licensee requesting the Network Node will not be allowed to undertake the installation of the Network Node until the non-compliant Attachment is remedied.
 - (iii) Where the Utility Pole includes one or more third-party Attachment(s) that fail to meet Applicable Engineering Standards and, in order to accommodate the Licensee's Network Node on the same Utility Pole, the third-party Attachment(s) must be rearranged, the cost of rearranging the third-party Attachment(s) will be included in Make-Ready Work; provided, however, if the lowest Attachment on the Utility Pole fails to meet all relevant NESC clearance standards or poses a public safety hazard, the Licensee may recover the cost to bring such Attachment into compliance from the owner of that Attachment, but no others.
 - (iv) Where the Utility Pole includes one or more third-Party Attachment(s) that fail to meet Applicable Engineering Standards and, to accommodate the Licensee's Network Node a new Utility Pole must be installed, the cost of the new Utility Pole and the transfer of the third-party Attachment(s) will be included in the Make-Ready Work.
 - (v) Where the Utility Pole includes one or more third-party Attachment(s) that meet Applicable Engineering Standards, and otherwise there is enough space on the Utility Pole to accommodate the Licensee's Network Node, Make-Ready Work will not include the transfer of the third-party Attachment(s).
 - (vi) Where the Utility Pole includes one or more third-party Attachment(s) that comply with Applicable Engineering Standards, and to accommodate the Licensee's Network Node on the same Utility Pole the third-party Attachment(s) must be rearranged, the cost of rearranging the third-party Attachment(s) will be included in Make-Ready Work.
 - (vii) Where the Utility Pole includes one or more third-party Attachment(s) that comply with Applicable Engineering Standards, and to accommodate the Licensee's Network Node a new Utility Pole must be installed, the cost of the new Utility Pole and the transfer of the third-party Attachment(s) will be included in Make-Ready Work.
- f) Notice of Transfer. A Licensee shall provide all third-parties affected by a proposed One-Touch Transfer with advance written notice of such One-Touch Transfer not less than thirty (30) days prior to undertaking such One-Touch Transfer. This notice shall be provided using the NJUNS to a duly designated representative of the affected Licensee, unless another method of notice is prescribed by

BTU. Such notice shall identify the specific Utility Pole(s) subject to the Network Node and affected by such One-Touch Transfer. The Licensee that desires to utilize the One-Touch Transfer Process shall bear the responsibility of determining the appropriate representative for each Licensee affected by the Licensee's implementation of the One-Touch Transfer Process.

- g) Critical Communication Facilities. If an affected Licensee, in its reasonable discretion, determines that a proposed One-Touch Simple Transfer poses a risk of disconnection or interruption of service to a Critical Communications Facility, the affected Licensee shall notify the requesting Licensee and BTU in writing within ten (10) days of receiving the notice of transfer described in Section V.B.5.f. The affected Licensee is obligated to make the requested transfer of its Critical Communication Facilities within fifteen (15) days of providing such notice. Failure to transfer the Critical Communications Facilities in a timely manner will subject the Critical Communications Facilities to the One-Touch Transfer Process.
- h) Post-Transfer Notice. Within fifteen (15) days following the completion of a One-Touch Transfer, the Licensee shall send written notice of the completed One-Touch Transfer and as-built reports to each affected Licensee. Within thirty (30) days of receipt of these as-built reports, the Licensee that owns the Communications Facilities that were transferred or relocated may conduct an inspection at the expense of the Licensee who moved the facilities. If the One-Touch Transfer failed to meet all Applicable Engineering Standards, the owner of the Communications Facilities subject to transfer or relocated will notify the Licensee responsible for the One-Touch Transfer of any deficiency, which will be corrected within fifteen (15) days following receipt of such written notice at the expense of the Licensee responsible for the One-Touch Transfer. The Licensee responsible for the One-Touch Transfer shall pay the actual, reasonable, and documented inspection expenses incurred by the owner of the Communication Facilities subject to transfer or relocated, within forty-five (45) days of receipt of an invoice. Failure of the owner of the moved or relocated Attachment to undertake and complete the inspection with the thirty (30) day period shall be deemed acceptance of the One-Touch Transfer.
- i) Licensee's Attachments Subject to One-Touch Transfer by Other Entities. A Licensee's Communications Facilities shall be subject to the One-Touch Transfer Process conducted by another Licensee or BTU pursuant to the same terms and conditions prescribed in this Section and in Appendix H.

7. Make-Ready Network Node Construction - Complex Transfers.

- a) Responsibility for Complex Transfers. Accomplishing a Complex Transfer is considered part of Make-Ready Communication Construction and shall be performed by the Licensee that owns the

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Attachment subject to transfer. It is the responsibility of the Licensee requesting the Complex Transfer to negotiate a private process with the owning Licensee for the Complex Transfer. The cost of the Complex Transfer shall be borne by the requesting Licensee.

b) Complex Transfers Escalation Process. In the event a Licensee fails to reach agreement on a process for the expedient transfer of an Attachment subject to a Complex Transfer, the requesting Licensee may rely on the following escalation procedures. At any time during these escalation procedures, the requesting Licensee and the owner of the Attachment/Network Node subject to the Complex Transfer may reach agreement on a voluntary transfer process. In such event, the requesting Licensee shall notify BTU in writing of this agreement.

(i) Level 1: Initial Request for Complex Transfer (Days 0 to 30)

Initial Notice Letter. The requesting Licensee shall provide written notice to owner of the Attachment subject to Complex Transfer requesting the transfer of such Attachment using NJUNS with a copy to BTU. The Licensee that owns such Attachments shall perform the transfer within thirty (30) days of receipt of notice from the requesting Licensee.

(ii) Level 2: Initial Escalation Process (Days 31 to 60)

a. Escalation Notification. If the owner fails to transfer the Attachment subject to Complex Transfer within the initial thirty (30) days, the requesting Licensee shall send a certified letter notifying the non-compliant Licensee that failure to transfer the Attachment within a subsequent thirty (30) days (escalation period) of receipt of notice will result in the Attachment in question being designated by BTU as non-compliant with the Complex Transfer Process and subject to penalty, as described in Appendix H, on the basis of interference with the requesting Licensee's permitted Attachment rights. The requesting Licensee shall send BTU a copy of the escalation letter and all other correspondence between the parties related to this matter.

b. Duty to Negotiate. The requesting Licensee is required to continue negotiations with the non-compliant Licensee during the thirty (30) day escalation period. Absent extraordinary circumstances, the non-compliant Licensee's failure to transfer the Attachment subject to Complex Transfer by the end of the thirty (30) day escalation period shall be considered a lack of cooperation on the part of the non-compliant Licensee. Conversely, absent extraordinary

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circumstances, a refusal by the requesting Licensee to agree to a reasonable alternative process for the transfer of the Attachment in question within a reasonable date certain shall be considered a lack of cooperation on the part of the requesting Licensee.

- c. Notice of Success Complex Transfer. If the non-compliant Licensee transfers the Attachment subject to Complex Transfer within the thirty (30) day escalation period, or the requesting Licensee transfers the Attachment by mutual agreement of the parties, no further escalation will be necessary.
- (iii) Level 3: BTU Finding of Non-Compliant Attachments (Days 61 to 90)
- a. Request for Finding of Non-compliant Attachments or Network Nodes. If the requesting Licensee and the non-compliant Licensee cannot reach agreement and the other Licensee fails to transfer the Attachment subject to Complex Transfer within the thirty (30) day escalation period, the requesting Licensee, within five (5) days thereafter, shall notify BTU in writing, provide a short summary of efforts to negotiate the rearrangement or transfer of the Attachment in question, and request BTU to make a finding of Non-complaint Attachment on the basis of interference with the requesting Licensee’s permitted rights.
 - b. Notification of Non-Compliant Attachments. Within ten (15) days of receiving the request for a finding of non-compliant Attachment, BTU will evaluate the request and if it finds the request credible, BTU will:
 - (1) Notify the non-compliant Licensee by certified mail that BTU has determined the Attachment subject to Complex Transfer is declared as either a “Non-compliant Attachment” or “Non-compliant Network Node,” as appropriate;
 - (2) Accrual of Penalties. The non-compliant Licensee will begin accruing penalties as provided in Appendix H of these Standards until the Non-compliant Attachment or Non-compliant Network Node is transferred; and BTU will suspend the processing of the non-compliant Licensee’s Applications.

Thereafter, the non-compliant Licensee will have fifteen (15) days in which to transfer the non-compliant Attachment and notify BTU in writing that

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the relocation has been completed in order to reinstate the processing of Applications. If the non-compliant Licensee fails to transfer the non-compliant Attachment within fifteen (15) days, the non-compliant Attachment will be subject to further penalties and transfer as provided in Section III.E and Appendix H. BTU will reinstate the processing of the non-compliant Licensee's Applications within a reasonable time after receiving receipt of written notification of the transfer of the non-compliant Attachment and the payment of all assessed penalties.

- c. *Duty to Negotiate.* The requesting Licensee is required to continue negotiations with the non-compliant Licensee that owns the non-compliant Attachment/Network Node during the fifteen (15) day period.
 - d. *Notice of Transfer.* If the non-compliant Licensee transfers a non-compliant Attachment within the fifteen (15) day period or the requesting Licensee transfers the non-compliant Attachment/ by mutual agreement of the parties, the moving party shall notify BTU in writing, BTU shall reinstate processing of the other Licensee's Applications within a reasonable time after receiving payment of all outstanding penalties.
 - e. *Stop Processing Applications.* If BTU does not receive written notification of the transfer of the non-compliant Attachment/ by the end of the fifteen (15) day period, BTU shall stop processing the non-compliant Licensee's Applications pending further written notice of a successful transfer and the payment of all outstanding penalties.
- (iv) Level 4: Transfer or Removal of Unauthorized Attachments (Days 91 and Beyond)
- a. *Notification of Failed Transfer.* If the parties fail to negotiate the successful transfer of the non-compliant Attachment/, the requesting Licensee shall promptly notify BTU in writing of the failed attempt and explain the reasons for the unsuccessful transfer.
 - b. *Notification of Transfer of Non-compliant Attachment.* Following receipt of the notification of failed transfer, BTU shall promptly proceed to transfer the non-compliant Attachment at the respective owner's expense. Following the transfer of the non-compliant Attachment, BTU will provide

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written notification of the transfer to the non-compliant Licensee within a reasonable timeframe. BTU shall reinstate processing of the non-compliant Licensee's Applications within a reasonable time after receiving payment for the transfer cost and all outstanding penalties.

- c. Notice of Transfer. In the event the non-compliant Licensee transfers the non-compliant Attachment or the requesting Licensee transfers the non-compliant Attachment by mutual agreement of the parties, prior to BTU's transfer efforts, the moving party shall notify BTU in writing. The non-compliant Licensee shall be assessed a one-time penalty as provided in Appendix H of these Standards. Thereafter, BTU shall reinstate the processing of the non-compliant Licensee's Applications within a reasonable time after receiving payment of all outstanding penalties.

8. Notice of Attachment or Network Node Completion and Acceptance.

The Licensee shall notify BTU in writing by submitting the *Completion of Licensee Construction* form, including as-built drawings, within ten (10) days following the acceptance by all Licensees the facilities of which were rearranged or transferred pursuant to Section V.B.5 (Simple Transfer) or Section V.B.6 (Complex Transfers) that all Make-Ready Network Node Construction has been completed and accepted, and that the new Network Node and all Make-Ready Electrical Construction are ready for BTU to undertake Post-Construction Inspection.

9. Post-Construction Inspection.

- a) Construction Subject to Inspection. BTU shall complete a Post-Construction Inspection of applicable Make-Ready Construction at the Licensee's expense within sixty (60) days of receiving the Licensee's notification of completion set forth in Section V.B.7. BTU will conduct the Post-Construction Inspections to evaluate compliance with the requested Permit, Applicable Engineering Standards, or other design and installation requirements. Completion of a Post-Construction Inspection by BTU shall not in any way relieve any Licensee or a Licensee's insurers of any responsibility, duty, obligation, or liability under these Standards, any contractual agreement, or otherwise; nor does BTU's ability to make Post-Construction Inspections relieve a Licensee from its obligations to exercise due care in the installation of its Network Nodes. The Post-Construction Inspection provision set forth in this Section does not affect any other inspection requirements elsewhere in these Standards. This Section also applies to supplemental Post-Construction Inspections where the Licensee reports "final corrections" of previously identified non-compliant work or locations as described below.

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- b) Compliance. In the event a Post-Construction Inspection conducted pursuant to Section V.B.8.a reveals that corrections or other actions are required of a Licensee, including without limitation those required for reasons of safety or structural integrity, the Licensee shall make such required corrections or take the requested actions within ten (10) days after the date BTU sends written notice. Licensee must notify BTU in writing upon completing corrections to allow a follow-up Post-Construction Inspection. If the required corrections are not completed within ten (10) days of receiving the notice from BTU, the Network Node will be considered an Unauthorized Network Node. If BTU determines in its reasonable judgment and discretion that the needed corrections rise to the level of an Emergency, BTU may perform the necessary corrective work without providing notice, at the Licensee's sole risk and cost, plus ten-percent (10%). As soon as practicable thereafter, BTU will advise the Licensee of the work performed or the action taken.
- c) Issuance of Permit. Upon satisfactory completion of the Post-Construction Inspection, BTU shall notify the Licensee in writing that BTU has approved the Network Node(s) identified in the Application by submitting to the Licensee a Permit for said Network Node(s).

VI. APPENDICES

Appendix A: Registration and Annual Reporting Form

This most current version of this form is available for download from BTU's webpage.

A1: A1 Registration and Annual Reporting Form

Appendix B: Pole Attachment and Wireless Installation Program Forms

These most current version of these forms is available for download from BTU's webpage.

- B1: Application for Pole Attachment Permit*
 - B2: Application for Wireless Installation Permit*
 - B3: Request for Pre-Certification of Wireless System*
 - B4: Request for Waiver of Applicable Engineering Standards*
 - B5: Authorization for Make-Ready Electrical Construction*
 - B6: Obsolete*
 - B7: Completion of Licensee Construction*
 - B8: Notice to Proceed*
 - B9: Permit for Attachment or Network Node*
 - B10: Notice of Unauthorized Attachment or Unauthorized Network Node*
 - B11: Pole Attachment Standards Revision Request (PASRR)*
 - B12: Pole Attachment Standards Revision Request (PASRR) Comment Form*
 - B13: Notice of Safety Violation*
 - B14: Notice of Safety Violation Assessment Charge*
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Appendix C: Notice of Dispute Form

This most current version of this form is available for download from BTU's webpage.

C1: Appendix C - BTU Notice of Dispute Form

Appendix D: Specifications for Attachments and Network Nodes

The following engineering and construction specifications practices will be followed by the Licensee when installing Attachments or Network Nodes to BTU Eligible Poles or other BTU Facilities. The items listed below are not an exhaustive list and are intended to supplement, not replace the National Electrical Safety Code (NESC) or other Applicable Engineering Standards required by the Agreement, BTU Pole Attachment Standards, or other applicable BTU standards and specifications.

A. General

The following items are applicable to Attachments and Network Nodes.

1. **Attachment and Cable Clearances:** Licensee's Attachments on BTU Utility Poles and Network Nodes on or supported by BTU Eligible Poles, including metal attachment clamps and bolts, metal cross-arm supports, bolts and other equipment, must be attached so as to maintain the minimum separations specified in the National Electrical Safety Code (NESC) and in the BTU drawings and standards provided in Appendices D, F, G and I. BTU requires Licensee's compliance with revisions of the NESC upon adoption by NESC of those revisions. Compliance with NESC Sections pertaining to overhead communication lines **will be stringently enforced** by BTU.
2. **Vertical Runs on Utility Poles:** All vertical runs on Utility Poles shall be placed on the quarter faces of the Utility Pole and shall be covered by a riser guard with a two-inch (2") clearance in any direction from cable, bolts clamps, metal supports and other equipment.
3. **Cable Bonding:** A Licensee's messenger cable shall be bonded to the BTU Utility Pole ground wire at each BTU Utility Pole that has a ground wire.
4. **Down Guys and Anchors:**
 - a) Down guys shall not be bonded to ground or Neutral wires of the BTU Utility Pole and shall not provide a current path to ground from the Utility Pole ground or power system Neutral.
 - b) All Licensees shall provide their own anchors. **Under no circumstances** shall the Licensee attach its guy to a BTU anchor. Licensee shall use best efforts to maintain a minimum of four (4) feet clearance in any direction of its anchors from the BTU anchor.
 - c) No Attachments or Network Nodes may be installed on a Utility Pole until all required guys and anchors are installed. No Attachment or Network Node may be modified, added to, or relocated in such a way as will materially increase the stress or loading on a Utility Pole until all required guys and anchors are installed.
 - d) Anchors and guys must be installed on each Utility Pole where an angle or dead-end occurs. Licensee shall make guy attachments to Utility Poles at the height of its Attachment or Network Node.
5. **Climbing Space:** All Attachments and Network Nodes must be placed to allow and maintain at all times a clear and proper climbing space on the face of the BTU

Utility Pole. Attachments shall be placed on the same side of the Utility Pole as existing Attachments. In general, all other facilities and vertical runs should be placed on Utility Pole quarter faces.

6. **Riser Installations:** All Riser installations, including those providing 120/240-volt power for Licensee's equipment enclosure shall be placed on the quarter faces of a Utility Pole and limited such that one side (180 degrees) of the pole is kept clear for climbing space and future replacement of the pole and must be installed in BTU approved conduit with a weatherhead attached to the Utility Pole with metal stand-off brackets. Communication cable Risers should be located on the same side of the pole as their overhead Communication Services cables are attached. Ground wires may be attached directly to the Utility Pole. There shall be a forty (40") inch separation from the top of an electric Riser to the highest Communication Services Attachment. BTU may approve the use of u-guards for communications cables associated with wire Attachments.
7. **Identification:** All Licensees' Attachments, Communications Facilities, and Network Nodes, including all cable, shall be identified with Tags as required by these Standards and described in Appendix K.
8. **Communication Worker Safety Zone:** The Communication Worker Safety Zone between Attachments, Communication Facilities, and Network Nodes and supply facilities on the same Utility Pole extends horizontally out to the boundaries of the climbing space and working space as described in the NESC. The Communication Worker Safety Zone is measured vertically from the level of the closest surface of the Attachment, Communication Facility, or Network Node to the level of the closest surface of the electrical supply facility. The required clearance of the Communication Worker Safety Zone is measured vertically between the levels of the equipment involved. Stand-off bracket installation will not be allowed to meet the forty-inch (40") clearance requirement. No mounting brackets are permitted in the Communication Worker Safety Zone.
9. **Electric Meter:** Licensee shall not install an electric meter or Service Disconnect Switch on any BTU Pole.
10. **Metered Connections:** All Communications Services will be metered connections subject to BTU's Electric Service terms and conditions, as they may be amended.
11. **Relocating Attachments or Network Nodes:** When moving an Attachment or Network Node from one location to another, Licensee shall immediately treat all affected holes left in the Utility Pole with industry-standard wood preservative and plug all holes left by such Attachments or Network Nodes.
12. **Bolts:** No bolt used by Licensee to attach its Attachments, Communication Facilities, or Network Nodes shall extend or project more than one inch (1") beyond its nut.
13. **Workmanship:** Licensee shall install and maintain any and all of its Attachments, Communication Facilities, and Network Nodes in a neat and workmanlike manner

consistent with the maintenance of the overall appearance of the Utility Pole as determined by BTU in its sole discretion.

14. **Sag and Mid-Span Clearances:** Licensee will leave proper sag in its lines and cables and shall observe the established sag of power line conductors and other cables so that minimum clearances are (a) achieved at Utility Poles located on both ends of the span; and (b) retained throughout the span. At mid-span, a minimum of four inches (4") of separation must be maintained between Licensee's lines and cables and any other communication cables. At the Utility Pole support, a twelve inch (12") spacing must be maintained between Licensee's connection and any other Attaching Entities' Attachments or Network Provider's Network Node as noted in Appendix F.

B. Wire Attachments

1. **Service Clearances:** A four-inch (4") separation shall be maintained between BTU's service cable and any other Licensee's facilities located on a customer's private property in accordance with the National Electric Code (NEC).
2. **Service Drop Clearance:** The parallel minimum separation between a Licensee's Service Drops and existing Communications Service Drops shall be six inches (6"), and the crossover separation between the drops shall be twelve inches (12").
3. **Communications Services Cables:** All Communications Services cables not owned by BTU shall be attached within the Communication Space that is located no less than forty inches (40") below the BTU Neutral.
4. **Platforms:** Communication Facilities/Attachments in a pole line must dip underground one Utility Pole before and one Utility Pole after on all BTU Platforms for voltage- regulator banks.
5. **Attachment Arm:** Communications Services Attachments shall be installed without the use of Attachment Arms, extension arms, stand-off brackets or similar hardware, unless otherwise approved in advance and in writing by BTU for each Utility Pole. The proposed use of Attachment Arms, extension arms, stand-off brackets or similar hardware by a Licensee shall be clearly identified on the Application for Permit.
6. **Overhead Streetlight Clearances:** Communication cables proposing to attach below the Overhead Streetlight fixture, shall be installed 12" minimum below the bottom mast arm or drip loop of the Overhead Streetlight supply conductor whichever is lowest. The Overhead Streetlight supply conductor shall be covered with a non-metallic conduit.

C. Network Nodes:

1. **FCC OET Bulletin 65 (Maximum Permissible Exposure)**: Licensee shall comply with all provisions and guidelines of the FCC OET Bulletin 65, as may be amended from time to time. As part of the Pre-Certified Equipment process, and prior to BTU granting any Permit to attach, Licensee shall submit a report certifying FCC OET 65 compliance for each applied or licensed Network Node location. The report can be in the format of the Licensee's regulatory department standards. The following elements, at a minimum, must be contained within the report:
 - a) A statement of compliance (or non-compliance),
 - b) Date of the report,
 - c) Date of statement of compliance,
 - d) BTU pole number proposed for the Network Node,
 - e) Licensee's site or identification number for the Network Node,
 - f) GPS coordinates of the proposed pole for the Network Node,
 - g) Calculation of RF power at the transmitter or Remote Radio Heads,
 - h) Calculation of RF power at the Antennas,
 - i) Location of the applicable signage with above ground level height listed.
 - j) Wireless Equipment Specifications – Data Sheets for all Wireless Equipment that make up the Wireless Installation setup. The data sheets shall include, at a minimum, voltage requirements, ERP, EHF, licensed and unlicensed frequencies, duty cycle, and FCC license reference copy. This information shall be organized based on the four components of the Wireless Installation:
 - (i) Antennas, including brackets, cables, conduit, and enclosures;
 - (ii) Wireless Equipment Electronics, including Remote Radio Heads, transmitters, transceivers, receivers, related electronic components, communications cables, power supply wires, conduit, and enclosures;
 - (iii) Backhaul Equipment, identify whether backhaul will be provided by wireless antenna (including all applicable components) or by landline (fiber/other), including the type of communications facility providing backhaul, name of communications provider, conduit, and type of network interface device or other component marking the Demarcation Point with the communications provider; and
 - (iv) Power Supply, including the type of Service Disconnect Switch used to shut off power and mark the point of delivery for electricity.

- k) Wireless Interference Analysis Report – The Wireless Provider must provide contact information for Wireless Interference analysis follow up and for coordination when operational circumstances require a power down of Wireless Equipment. Provide the following contact information:
- Contact Name
 - Contact Phone Number
 - Contact Email
 - Contact Company Name
 - Contact Company Address
- l) Interference Analysis – Report should include any calculated interference that could be produced via interaction with BTU Licensed frequencies.
- (i) C to I based study should be performed if carrier frequencies are adjacent or co-channel to BTU frequencies.
 - (ii) Study should list results in dB and can be done on service area basis.
- m) Intermodulation Analysis – The Intermodulation Analysis Report (the “Report”) must include a clearly written interference analysis of the Wireless Provider’s licensed frequencies against the target frequencies provided by BTU.
- (i) The Report shall assume minimum range of collocation to maximum range of source to be two thousand (2,000’) feet.
 - (ii) If planned Wireless Equipment is to be within one mile of another FCC licensed transmitter, the Report shall include those additional frequencies.
 - (iii) The Report should also include any known interference that could be produced via interaction with other FCC Licensees in the referenced application band of frequencies.
 - 1. For the purpose of this item, assumed minimum range of collocation to maximum range of source to be two-thousand feet (2000’).
 - 2. Resulting report should show non-interference against the target BTU frequencies to the seventh order.

BTU reserves the right not to accept reports that BTU in its reasonable discretion deem incomplete, contradictory, or erroneous. All statements of compliance must be signed by an authorized and responsible employee of the Licensee or the FCC licensee that owns the licensed frequencies subject to compliance, if the Licensee is not the same party (the “Licensed Party”). The Licensee or Licensed Party is required to resubmit annual reports and statement of compliance for each permitted Network Node location. The annual report will be due on the anniversary date for annual reports set by BTU in Section II.F.

- 2 **RF Signage Requirements.** Approved signage compliant with FCC OET Bulletin 65 shall be posted at each Eligible Pole or at multiple locations on the pole as

required by FCC OET 65. The RF signage shall comply with the appropriate and predetermined exposure level applicable to: “General Public,” “Occupational Worker,” and “Specialized Worker” as shown in the figure below.



All signage shall be 8” x 12” and made of weather, corrosion, and ultra-violet (UV) resistant materials.

3. Antenna. All Antennas shall be located in a defined Antenna Area as provided in the illustrations in Appendix I. The Antenna Area is not exclusive for the Licensee’s sole use, but shall allow for other permitted Licensees and expressly BTU’s use and operation of the pole. Antennas shall be flush-mounted.

- a) Type, Size and Quantity – Antennas can be of a panel or omnidirectional type. Panel Antennas may not exceed twelve inches (12”) in height (vertical length), twelve inches (12”) in width, or eight inches (8”) in depth. Omni directional antennas cannot exceed twelve inches (12”) in height (vertical length), twelve inches (12”) in width (depth and width are the same measurement of an omnidirectional antenna). There can only be one (1) antenna cylinder enclosure for wireless backhaul antenna per Antenna Area. Additional consideration for Antenna height is specified in Appendix I.
- b) Licensed Frequency - Antennas shall only transmit or receive frequencies that are licensed by the FCC to the Licensee or its Wireless Service Provider customer or unlicensed frequencies. No third-party agreements are accepted for non-licensed Licensees to transmit or receive frequencies of another FCC-licensed entity. Frequency bands listed by the FCC to be unlicensed, and available for open use, may be transmitted or received, as long as they do not cause interference with another Licensee, FCC-license entity, or BTU.
- c) Attachment Position and Defined Space - Antenna clearances in any direction from supply and other communications lines shall be in compliance with this Section and Appendix I. Under no circumstance shall an Antenna clearance be less than specified by the NESC.
- d) RF/Power Shut-Off – BTU maintains the right to open the Service Disconnect Switch in order to deenergize the Antennae prior to performing any work on a BTU Utility Pole. Licensee shall install any backup power in a manner that ensures that it will not emit RF when the Service Disconnect Switch is operated to an open/off position.
- e) Backup Power – Licensee shall install any battery backup power in a manner that ensures that the associated Network Node and Antenna will not

emit RF when the Service Disconnect Switch is operated to an open/off position. Backup AC power devices are prohibited.

- 4 **Riser Cable.** Riser cables are used to connect Antennas and Antenna accessory equipment, backhaul services, and power lines to Wireless Equipment components. All Riser Cables shall be in conduit with top side weatherheads. Power cables transporting AC power shall be in separate conduit from DC power or telecommunications cable. All conduit shall be schedule 40 rigid metallic conduit. All metallic conduit shall be bonded to ground at the Antenna Area ground point and at the Wireless Equipment Area ground point.
- a) Type, Size and Quantity - Cables can be coaxial, fiber optic, solid or stranded metallic conductor. Hybrid cables, cable with two or more cable types enclosed in one sheath, are permitted. No exposed Riser cables, Riser cables not in conduit, shall exceed the nominal size of 5/8 inch for coaxial or fiber optic, or 2 AWG for solid or stranded metallic conductor.
 - b) Attachment Position and Defined Space - Riser cables with conduit must be affixed to the pole with two (2) hole pipe straps (minimum of 3 required to support the service raceway).
 - c) Cable Slack - No exposed Riser cable slack to be stored externally. All slack to be stored in junction boxes or Wireless Equipment Cabinets within the Wireless Equipment Area.
- 5 **Radio Equipment.** Radio equipment may be located in RRHs, housed in the Wireless Equipment Cabinet, or within an Antenna enclosure. The most common application of radio equipment is in the RRH. Radio equipment can transmit, receive, or transceive.
- a) Type, Size and Quantity - Radio equipment is not limited to size or quantity.
 - b) Attachment Position and Defined Space - Radio equipment is housed in other inventoried Network Node components. An RRH may be installed within the Wireless Equipment Area to include internal mounting within the Wireless Equipment Cabinet.
- 6 **Slab-Mounted Equipment Cabinet.** A Slab-Mounted Equipment Cabinet must be at least five feet (5') from any BTU pole structure, anchor, guy, conduit, or Riser as shown in Appendix I, and not exceed the dimension requirements in Chapter 284 of the Texas Local Government Code. Upon submittal of an Application including a Slab-Mounted Equipment Cabinet, BTU will review the proposed cabinet and its location for compliance with these Standards and to determine how to provide electric service to the cabinet. BTU shall approve the cabinet design and location prior to installation. Irrespective of statutory requirements, BTU encourages Wireless Providers to reduce the footprint of the Slab-Mounted Equipment Cabinet. BTU does not grant permission for Wireless Equipment to be located on third-party property. It is the responsibility of the Wireless Provider to secure legal authority to use such private property. Slab-Mounted Equipment Cabinet installations must include provisions for BTU Meter and the Service Disconnect Switch. All such installations must comply with BTU's electric service standards and are subject to review and approval. For Slab-Mounted

Equipment Cabinet installation, the Antenna will be installed on a BTU pole structure in the communication space.

7. **Prohibited Poles** – Network Node equipment may *not* be installed on:
- a) Junction poles (a Utility Pole where the BTU primary electric distribution line runs in three or more directions);
 - b) Utility Poles that are 50 feet or greater in length;
 - c) Transmission poles;
 - d) Wood Streetlight Poles;
 - e) Eligible Poles with a Network Node equipment already installed;
 - f) Eligible Poles with cabinets containing controls such as fire alarm, police signal, or traffic signals;
 - g) Eligible Poles with existing equipment mounted to them such as primary metering, capacitor controls, regulator controls, recloser controls, air-switch operating handles, distribution automation equipment, or an existing electrical service entrance;
 - h) Poles used for guying purposes only and with no electric distribution equipment or wires;
 - i) Poles that are not readily accessible to mechanized equipment (i.e., a bucket truck); and
 - j) Poles with existing underground electric or communication riser conduits.
8. **Markings.** Licensee shall install signs or decals made of weather, corrosion, and UV resistant materials easily visible from the ground level. At a minimum, each sign or decal shall indicate the Antenna’s owner/operator’s name, emergency 24-hour contact number, and unique identifier for that Antenna site.
9. **Wireless Equipment Installations.** Installation of Wireless Equipment Cabinets and Wireless Equipment Area for DAS Systems may be located outside the Public Right-of-Way; provided, however, that BTU does not have authority to grant permission for Network Nodes to be located on third-party property. It is the responsibility of the Licensee to secure legal authority to use such private property and to provide evidence of such authority at the time an Application is submitted.
10. **Conduit Requirements.** Conduits described in this Section refer to below ground conduits and transitions to Riser cable conduits or Wireless Equipment Cabinets.
- a) **Type, Size and Quantity** - Below ground, all horizontal runs shall be schedule 40 PVC or SRD-11 HDPE. Transitions to above ground shall be in schedule 40 RGS conduit with galvanized finish. All coupling points shall be threaded mechanical or solvent-welded and watertight. Conduits may not exceed a diameter of four inches (4”). No more than two (2)

conduits shall be permitted to affix to Wireless Equipment Cabinets or Riser cable conduit.

- b) Conduit for Electric Service - Licensee shall be responsible for furnishing and installing any primary and secondary conduit necessary for BTU to provide electric service to the Wireless Equipment Cabinet. The specification for the conduit and its manner of installation shall be approved by BTU prior to installation and shall follow specifications found in BTU's *Service Entrance Requirements Manual*.
- c) Conduit Location - Licensee shall install all conduit leading to BTU's Eligible Pole including the elbow and first joint up the pole. Conduits shall remain twelve inches (12") from all other Wireless Equipment below ground facilities. All conduits shall be locatable and the responsibility of the Licensee to locate per Texas law and the regulations of the Damage Prevention Councils of Texas.

11. Backhaul Service. Backhaul service refers to Communications Services provided by means of Transport Facilities and not between localized components of the Network Node or Network Nodes installed on one or more Eligible Poles. Backhaul service may either be wireline or wireless.

- a) Wireline - Wireline backhaul service typically uses fiber optic Transport Facilities, as copper circuits do not provide the necessary bandwidth for data throughput. Copper telephone circuits and coaxial cables may be used for wireline backhaul if bandwidth speeds allow. All provision of Section IV and Section V of the Standards apply to the installation of wireline backhaul services.
 - (i) *Self-Provisioned* - The Licensee may provide its own backhaul service through installation of Transport Facility Attachments to Utility Poles. The self-provisioned wire Attachment may be existing or proposed. BTU will use reasonable efforts to review both the wire Attachment Application and the Network Node Application concurrently, but each Application is treated separately for contractual purposes. Applications and all associated documents must have a common reference name for any concurrent Applications review to be considered as part of a common project.
 - (ii) *Third-Party Provided* - A Licensee may contract backhaul service from another Licensee. The third-party provided wire Attachment may be existing or proposed. If proposed, the third-party Licensee must have an executed Agreement and shall submit the Attachment Applications at the same time as the Network Node Application is submitted. BTU will use reasonable efforts to review both the third-party wire Attachment Application and the Network Node Application concurrently, but each Application is treated separately for contractual purposes. Applications and all associated documents must have a common reference name for any concurrent Application review to be considered.

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- (iii) *Type of Backhaul Facility* - Typically, the backhaul facility originates as a wire Attachment on the same Utility Pole as the Network Node. Underground backhaul facilities are permitted when transitioning from any of the following: another BTU Utility Pole line, a transportation crossing, or to a Licensee-installed pole. Applications with predominantly underground backhaul services will not be approved.
 - (iv) *Point of Demarcation* – The Backhaul Network Interface Device is to be clearly stated on the submitted Network Node engineering drawings, as required with the Pre-Certified Equipment form and the Application, with the provider of backhaul services clearly identified.
- b) Wireless - The Network Node has the option to use wireless backhaul services. Any Antenna for wireless backhaul services is counted towards one (1) of the two (2) total Antennas allowed on a Utility Pole. Wireless backhaul service Antennas shall comply with all the specifications listed in Appendix D, Section C.3.
- (i) *Type, Size and Quantity* - All specifications in Appendix D, Section C shall apply. In addition, wireless backhaul Antennas shall have the specific azimuth (accurate to the degree) and the length of the link path (accurate to the tenth of a mile) listed on the submitted drawings required by the Application.
 - (ii) *Attachment Position and Defined Space* - All specifications in Appendix D, Section B.3 shall apply.
 - (iii) *Self-Provisioned* - Self-Provisioned wireless backhaul services may be approved by BTU, consistent with the applicable provisions of the Agreement and these Standards.
 - (iv) *Third-Party Provided* - Third-party wireless backhaul services are prohibited by BTU.
 - (v) *Point of Demarcation* - Wireless backhaul services equipment shall be installed pursuant to the technical requirements of Appendix I.
 - (vi) *Noise above Ambient* - A Network Node may not create a sound level that exceeds the ambient noise level by more than 3dB during the night time and by more than 5dB during the day time.

12 **Bonding.** It is the policy and practice of BTU to bond to ground on all Poles installed on the BTU distribution system. Licensees are required to install their own specific ground electrode and ground bond for any Network Nodes. All of the following defined Wireless Equipment components, or pole appurtenance listed, must be bonded:

- (a) Antenna(s),
- (b) Antenna bracket(s) or standoff(s),
- (c) Riser conduit(s),
- (d) RRH(s), and

(e) **Wireless Equipment Cabinets.**

Licensee shall install one central point of bonding at the Antenna Area and a second central point of bonding at the Wireless Equipment Area. Central points of bonding shall be a ground bar measuring no greater than four inches (4”) high, twelve inches (12”) wide, and exactly one-fourth inch (¼”) thick. Any two ground bars on a pole must be connected via #2 AWG solid wire (aluminum, copper, copper-clad aluminum, copper-clad steel) exothermically welded. All connections from wireless components with factory-installed ground posts will be bonded with solid or stranded wire mechanically (or hydraulically) crimped with lugs – the wire shall be aluminum, copper-clad aluminum, copper, copper-clad steel and between #2 AWG to #6 AWG in size. Lugs on the ground bar side will have two lug holes and two mechanical fasteners. A fastener bolt nominal thread size (or factory grounding post) for bonding shall be no smaller than one-sixteenth inch (1/16”) diameter than the lug hole or ground bar hole. The closest ground bar to grade on any pole will be bonded via #2 AWG solid wire exothermically welded to ground rod. Ground rods shall be steel or copper-cad steel, 5/8-3/4 inches in diameter, and driven at least eight feet (8’) below grade in undisturbed soil. All mechanical connections shall be “tool-tight” with no play or slack if manipulated by hand. All metal material bonded must be non- reactive to inhibit corrosion.

- a) Existing Ground Present - An Application for any Network Node shall note if a BTU ground is present or not at the specific pole location proposed for the Network Node. When an existing BTU ground or Licensee’s ground is present, the Network Node shall be bonded to existing ground rod(s) at a minimum of twelve inches (12”) below grade. The ground wire size will be #2 AWG and exothermically bonded on each ground rod. All Network Node ground rods shall be at a minimum twelve inches (12”) from other ground rods and/or anchors.
- b) Sharing of BTU Grounding Facilities - Network Nodes shall not bond to existing BTU Facilities for grounding unless specifically approved in writing by BTU. Approvals must be granted in advance and shall be made on a case-by-case basis.
- c) No Ground Present – An Application for any Network Node shall note if a BTU ground is present or not at the specific pole location proposed for the Network Node. If no ground is present, adding a BTU ground may be an applicable task for any BTU approved Make-Ready Construction.

13. Electric Service.

- a) Equipment Subject to Electric Service – All equipment requiring electrical service shall follow all applicable codes and regulations including obtaining applicable local building or electrical permits.
- b) Compliance with BTU’s Electric Service Standards – The Licensee shall follow all requirements provided in the applicable BTU Electric Service Standards, as amended from time to time, for its Network Node.
 - (i) *Application for Electric Service* – The Licensee must make an application for electrical service from BTU as required by BTU’s Application for Commercial Electric Service, as may be amended

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from time to time. The electric service application is not part of the *Application for Wireless Installation Permit* but must be completed prior to BTU providing electric service to the location.

- (ii) *Metered connections* – All services will be metered connections subject to the terms and conditions of BTU’s electric service rates, as may be amended.
- (iii) *Electric Metering* – All electric services for Network Nodes will be metered. BTU’s responsibility for the delivery of electricity to a Network Node ends at the “point of delivery” as that term is defined in BTU Electric Service Standards. The “point of delivery” for Network Nodes shall be as follows:
 - a) *Slab-Mounted Equipment Cabinet* – For Network Nodes deployed using the Slab-Mounted Equipment Cabinet design, the “point of delivery” shall be at the line side of the meter socket located in the cabinet as provided in BTU’s electric service standards.
 - b) *Wireless Equipment Cabinet* – For Network Nodes deployed using the pole-mounted Wireless Equipment Cabinet design, the “point of delivery” shall be at the junction (service entrance) as provided in BTU’s electric service standards.
- c) Technical Drawings of Equipment Subject to Electric Service – Technical drawings identifying all electrical specifications and requirements for the Network Node shall be provided to BTU as part of the Pre-Certified Equipment process outlined in Section III.A.14, and shall accompany every Application for a Wireless Installation.
- d) Backup AC Power – Backup AC power devices will not be allowed.

14. Mid-span Installations. All Mid-span Installations shall be no closer than fifteen inches (15”) or no further than seventy-two inches (72”) from any BTU Utility Pole as referenced in Appendix I.

15. Down Guys and Anchors:

- a) Down guys shall not be bonded to ground or Neutral wires of the BTU Utility Pole and shall not provide a current path to ground from the Utility Pole ground or power system Neutral.
- b) All Licensees shall provide their own anchors. *Under no circumstances* shall the Licensee attach its guy to a BTU anchor. Licensee shall use best efforts to maintain a minimum of four (4) feet clearance in any direction of its anchors from the BTU anchor.
- c) No Attachments may be installed on a Utility Pole until all required guys and anchors are installed. No Attachment may be modified, added to, or relocated in such a way as will materially increase the stress or loading on a Utility Pole until all required guys and anchors are installed.

- d) Anchors and guys must be installed on each Utility Pole where an angle or dead-end occurs. Licensee shall make guy attachments to Utility Poles at the height of its cable Attachment.

16. Mock-Up Installations. Prior to any submission of an Application for a Wireless Installation, a Licensee shall coordinate the mock-up installation of the proposed Wireless Installation at BTU's training yard or any other location designated by BTU. The Licensee shall schedule the mock-up demonstration with BTU. The mock-up installation shall be a realistic representation of how the Wireless Installation will be installed. The following activities will be accomplished by a successful mock-up installation:

- a) Compliance with Applicable Engineering Standards – The mock-up installation shall be constructed and inspected for compliance with all Applicable Engineering Standards and Appendix I.
- b) Safety Training – The mock-up installation will be used for “on site” and/or “in class” safety training of BTU employees regarding the specifications of the Wireless Installation and any radio frequency occupational training related to working in close proximity to the Antenna devices. This content shall be incorporated into the Safety Briefing required in this Standard.
- c) Meter Installation – The mock-up display may include the installation of a Slab-Mounted Equipment Cabinet installation that include a Meter and Service Disconnect Switch connected to the Wireless Installation in compliance with BTU's Electric Service Standards.
- d) Pole Use Measurement – Once BTU certifies that the mock-up installation is fully compliant with all the requirements of Appendix D, Section C, BTU will measure and document the number of feet that the Wireless Installation covers on the Pole. This measurement will be used for the purpose of determining the annual Wireless Installation Fee for all Wireless Installations of the same configuration.
- e) Approval of Pre-Certification of Wireless Equipment Form – Upon completion of the pre-certification process, BTU will approve the Pre-Certification of Wireless Equipment Form which will authorize the Licensee to begin submitting Applications for the same pre-certified Wireless Installation configuration. Should the Licensee at any time wish to upgrade Wireless Equipment that will substantially change the pre-certified Wireless Installation configuration or deploy new Wireless Equipment technology under a different Wireless Installation configuration, the Licensee shall coordinate a new mock-up installation to pre-certify the alternative Wireless Installation configuration. BTU will not accept Applications for an alternative Wireless Installation configuration that has not been pre-certified.

Appendix E: Reserved for Future Use

Appendix F: Attachment Requirements

These most current version of these requirements are available for download from BTU's webpage.

- F1: Supply and Communication Clearances at the Pole*
- F2: Licensee Bonding to Pole Ground*
- F3: Down Guys and Anchors*
- F4: Climbing Space thru Communication Service Drops*
- F5: Communication Attachment & Service Drop*
- F6: Location of Vertical Runs*

Appendix G: Pole Loading Requirements

It is the determination of BTU that pole attachments can have a significant wind loading and stress effect on a pole and can cause overloading. Therefore, nothing should be attached to a pole that is not engineered to be there in advance.

1. **Engineering and Planning Qualifications:** Any Pole Loading Analysis (PLA) submitted as part of the Application package shall be signed and sealed by a licensed Professional Engineer approved by BTU.
2. **PLA Submittal requirements:** Licensee shall submit PDF copies of the full PLA report for each pole identified as requiring a PLA study pursuant to this Appendix G. Acceptable software for use of PLA will be a commercially available product with general industry acceptance. Should the Licensee utilize a software application that BTU does not possess, Licensee shall make available to BTU at least one software license for BTU use at Licensee's expense, subject to BTU's Information Technology requirements. Licensee's submittal shall include an affirmation from a Professional Engineer that the stress level determined in the PLA indicates the existing pole can accommodate all existing equipment plus Licensee's proposed equipment, as designed. If a pole requires modification to meet PLA requirements, Licensee shall provide to BTU a detailed description of the required changes for each pole included in an Application.
3. **Pole Loading Parameters:** PLA is to be performed in accordance with the requirements of **Medium Loading Zone** as described the current version of the National Electric Safety Code (NESC Rule 250, Figure 250-1, C2-2017) for the Bryan area. BTU PLA Grade Requirements shall be as follows:
 - *Single Circuit and Streetlight Poles:* NESC Grade B.
 - *Double Circuit:* NESC Grade B.
 - *Network Nodes:* NESC Grade B is required for any Eligible Pole utilized for a pole-mounted Network Node.
4. **Required conditions for PLA:** BTU will require a PLA for the following conditions:
 - Utility Poles with angles of greater than 10° (guyed & un-guyed) - single & double circuit
 - Utility Poles with primary spans greater than 200 feet
 - All un-guyed Non-Decorative Streetlight Poles with "break away" bases
 - All BTU dead-end Utility Poles
 - All Utility Poles supporting equipment such air-break switches, transformers, regulators, reclosers, and capacitor banks
 - All Utility Poles on which 3-phase electric distribution is installed
 - All Utility Poles with five (5) or more Attachments, other than primary, secondary and Neutral attachments

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- All Eligible Poles for which a Network Node is proposed and all Utility Poles intended to support a Mid-span Installation
 - For Mid-span Installations, both end-point Utility Poles shall have a PLA completed
 - Any critical Eligible Pole identified by BTU that is not specified in categories above.
5. **Reserved Capacity for Proposed Pole Change Outs:** BTU shall require Reserved Capacity for any new or replaced Utility Pole as follows:
- *Single Circuit:* ten percent (10%)
 - *Double Circuit:* twenty percent (20%)
6. **Pole Loading Analysis Time Limitations:** PLA analysis shall be valid for a time period of no longer than six (6) months from the time of Application submission. After this six month period, a new PLA analysis will be required.

Appendix H: Schedule of Pole Attachment and Network Node Rates, Fees, and Charges

Although BTU is exempt from the definition of the term “utility” that applies to the regulations of the Federal Communications Commission (FCC) relating to pole attachments made by providers of communications services; BTU uses the current FCC formula applicable to providers of telecommunications services. BTU reserves the right to adjust this Schedule of *Pole Attachment and Network Node Rates, Fees, and Charges* in accordance with any changes in the FCC formula delineated below, and with updated BTU cost information.

1. Site Selection Fee

- a) Licensee shall submit a payment to BTU for a site selection fee per the fee schedule for the feasibility review described in Section V.B above.

2. Application Fee

- a) Wire Attachments. For wire Attachments, the Application Fee is \$45.00 per BTU Utility Pole identified in the Application. This fee covers all costs incurred by BTU in processing the application. Any additional processing costs incurred by BTU will be recovered from the Applicant.
- b) Network Nodes. For Network Nodes, the Application Fee shall be \$500.00 per application for up to five Network Nodes

3. Make-Ready Fees

- a) The costs incurred by BTU associated with establishing service to the Applicant’s facilities will be recovered from the Applicant. These costs include Make-Ready Charges.

4. Annual Fees

- a) Wire Attachments. The Pole Attachment Fee is the annual rental payment assessed by BTU to each Licensee with Attachments. The annual Pole Attachment Fee is determined by BTU for each Licensee by multiplying [**Attachment Rate**] by the [**total number of pole-feet required by Attachments for the Licensee**].
- b) Overlashing. Overlashing an existing Permitted Attachment is not a separate Attachment and will not be subject to a separate Pole Attachment Fee, unless the Overlash requires that Licensee occupy more than one foot of Utility Pole space to meet clearance requirements.
- c) Network Nodes. The Network Node Fee is the annual rental payment assessed by BTU to each Licensee with Network Nodes. The annual Network Node Fee is determined by BTU for each Licensee by multiplying [**Attachment Rate**] by the [**total number of pole-feet used or required to support each Network Node**].
- d) Mid-span Installations. Mid-span Installations shall be assessed the Pole Attachment Fee for the amount of space required on both Utility Poles supporting the Mid-span Installation to comply with the vertical clearance requirements of the Applicable Engineering Standards.

- e) Attachment Rate Formula. The applicable Attachment Rate formula, the annual Attachment Rate, and the financial and operational inputs utilized by BTU in the calculation of the Attachment Rate formula are available on the BTU webpage.

5. Unauthorized Attachment Charge

A Licensee or other Attaching Entity shall pay BTU, in addition to the annual Pole Attachment Fees that would have been payable for such Attachments if they had been authorized, an Unauthorized Attachment Charge as provided below:

- a) For entities without a valid Agreement, the Unauthorized Attachment Charge shall be determined to be \$500.00 per Attachment per year for each Unauthorized Attachment. Unless an Attaching Entity without a valid Agreement proves to BTU's reasonable satisfaction otherwise, BTU will presume that the Unauthorized Attachment has been in place for 10 years.
- b) For a Licensee with a valid Agreement, the Unauthorized Attachment Charge shall be determined to be five (5) times the annual Attachment Rate in effect at the time the Unauthorized Attachment is discovered per Utility Pole per year if the Licensee does not have a Permit and the violation is self-reported or discovered through a joint inspection. An additional sanction of \$100.00 per Utility Pole per year shall apply if BTU discovers the violation during any inspection or during Inventory or a third-party reports the violation.
- c) If BTU cannot independently determine the date on which the Unauthorized Attachment was made, or the Attaching Entity cannot prove to BTU's reasonable satisfaction that the Unauthorized Attachment was installed more recently, the Unauthorized Attachment will be presumed to have been installed by the Licensee or other Attaching Entity on the next day following the last completed Inventory or ten (10) years, whichever is less.

6. Unauthorized Network Node Charge

A Licensee or other Network Provider shall pay BTU, in addition to the annual Network Node Fees that would have been payable for such Network Nodes if they had been authorized, an Unauthorized Network Node Charge as provided below:

- a) For Network Providers without a valid Agreement, the Unauthorized Network Node Charge shall be determined to be \$500 per month for each Unauthorized Network Node.
- b) For Licensees with a valid Agreement, the Unauthorized Network Node Charge shall be determined to be \$100 per month per Network Node where BTU has not issued a duly authorized *Permit for Attachment or Network Node* to the Licensee.
- c) If the date on which the Unauthorized Network Node was made cannot be determined, the Unauthorized Network Node will be assumed to have been installed by the Licensee or Network Provider on the next day following the last completed Inventory or ten (10) years, whichever is less.
- d) **Liquidated Damages.** In addition to any other rights or remedies available at law or equity or as otherwise provided in the Contractual Authorities, BTU shall have the power to impose the following sum as liquidated damages in the event the Licensee violates any provision of the Contractual Authorities. The Licensee is

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required to pay BTU the monetary liquidated damages within thirty (30) days from the date of written notification for payment thereof in accordance with the schedule set forth below. In the event that Licensee fails to pay such liquidated damages as demanded, such liquidated damages may be recoverable from the Licensee's Security Instrument at the option of BTU.

- e) Failure to complete construction within one (1) year of the approval by BTU of the Application to the Licensee, unless a longer period of time has been granted by BTU - One Hundred Dollars (\$100) per day.
- f) Failure to properly restore the Public Right-of-Way to their original condition following completion of the placement or maintenance of Communications Facilities, Network Nodes, or any part thereof in the Public Right-of-Way - One Hundred Dollars (\$100) per day.
- g) Failure to adhere to the permitting, inspection and installation standards and requirements in accordance with the Contractual Authorities - One Hundred Dollars (\$100) per day.
- h) Failure to properly maintain its Communication Facilities, Network Nodes, or any part thereof - One Hundred Dollars (\$100) per day.
- i) Failure to remove or relocate, either temporarily or permanently, Communications Facilities, Network Nodes, or any part thereof as required pursuant to the Contractual Authorities - Five Hundred Dollars (\$500) per day.
- j) Failure, in an Emergency, to repair, relocate, shut off or eliminate harmful conditions caused by the Licensee's Communications Facilities, Network Nodes, or any part thereof in accordance with the Contractual Authorities - Five Hundred Dollars (\$500) per day.
- k) Failure to pay for, keep or maintain on file the required insurance or bonds as required pursuant to the Contractual Authorities or to provide evidence thereof to BTU - Five Hundred Dollars (\$500) per day.
- l) Failure to remove or remedy Graffiti or other foreign item within thirty (30) days from receipt of notice by BTU that Graffiti or other foreign item exists on the Licensee's Communications Facilities, Network Nodes, or any part thereof - Fifty Dollars (\$50) per day.
- m) Failure to supply *Completion of Licensee Construction* in accordance with the Contractual Authorities in connection with placement of Communications Facilities, Network Nodes, or any part thereof - One Hundred Dollars (\$100) per day beginning at the date when the Application was approved.

7. Other

- a) Non-Compliance with Complex Transfer Process. Pursuant to Section IV.B.6 of the BTU Pole Attachment Standards, BTU shall levy a penalty of \$350 per non-compliant Attachment to the Licensee failing to make the Complex Transfer in the required timeframe.
- b) Non-Compliance with Joint Meeting Transfer. Pursuant to Section IV.B.5 of the BTU Pole Attachment Standards, BTU shall levy a penalty of \$350 per day to the non-compliant Licensee that fails to attend or fails to complete the transfer or modification of a Network Node within the required Joint Meeting Transfer ten

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- c) (10) day timeframe. The penalty shall become automatically effective beginning on the eleventh (11th) day following the Joint Meeting Transfer conference.
- d) Safety Violation Assessment Charge. The Safety Violation Assessment Charge is
- e) \$500 per Safety Violation identified for each day after notice is given to Licensee.
- f) Tracing Line Ownership Fee. In the event any Attachment or Network Node is untagged and BTU must determine the owner's identity to address the repair or maintenance of a BTU Eligible Pole, equipment, or facility that BTU cannot undertake absent removal or transfer of said Attachment or Network Node, BTU shall bill the owner of the Attachment or Network Node for time reasonably undertaken by BTU to determine the identity of the owner of the Attachment or Network Node. The Licensee that owns the untagged Attachment or Network Node shall pay BTU the Tracing Line Ownership Fee of \$150 for the first hour plus \$100 per hour thereafter. Partial hours shall be rounded up to the next whole hour. BTU shall bill the Licensee within thirty (30) days of determining the Licensee's identity.

Appendix I: Network Node Diagrams

The most current version of these requirements are available for download from BTU's webpage.

- I1: Wireless Installation – Comm Space 4G/5G Side Mount Antenna and Slab Mounted Equipment Cabinet (Primary pole)*
- I2: Wireless Installation – Mid-span Wireless Equipment and Slab Mounted Equipment Cabinet*
- I3: Wireless Installation – Comm Space 4G/5G Side Mount Antenna and Slab Mounted Equipment Cabinet (Secondary pole)*
- I4: Wireless Installation – Poletop 4G/5G Side Antenna on Secondary pole and Slab Mounted Equipment Cabinet*
- I5: Wireless Installation – Poletop 4G Antenna on Streetlight Pole and Slab Mounted Equipment Cabinet*
- I6: Wireless Installation – Poletop 4G/5G Antenna on Streetlight Pole and Slab Mounted Equipment Cabinet*
- I7: Reserved for Future Use*
- I8: Reserved for Future Use*
- I9: Reserved for Future Use*
- I10: Reserved for Future Use*
- I11: Reserved for Future Use*
- I12: Reserved for Future Use*
- I13: Wireless Installation – 4G/5G Node Support Pole and Slab Mounted Equipment Cabinet*
- I14: Wireless Installation – 4G/5G Node Support Pole and Pole Mounted Equipment Cabinet*

Appendix J: Reserved for Future Use

Appendix K: Pole Attachment List & Detail

K1: Pole Attachment Tag List

The following table defines tag numbers for Licensee. **NOTE:** Some Licensees or Attaching Entities may not be approved at the time of publication.

Tag Number	Company Name of Licensee	Tag Number	Company Name of Licensee
1	BTU	26	
2	City of Bryan	27	
3	City of College Station	28	
4	Suddenlink Communications	29	
5	Managed Network Solutions	30	
6	BVCNET	31	
7	College Station ISD	32	
8	BVCOG	33	
9	Bryan ISD	34	
10	Frontier	35	
11	Brazos County	36	
12	Texas A&M University	37	
13	ExteNet	38	
14	New Cingular Wireless PCS	39	
15	Mobilitie	40	
16	AT&T	41	
17	Consolidated Communications	42	
18	CEO Technologies	43	
19	Wirestar Network	44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

K2: Pole Attachment Tag Detail

For the purposes of Tagging an Attachment, Overlash or Network Node (including a Mid-span Installation), BTU requires the use of a Tag placed within twelve inches (12") of a Pole on the wires and cables, coded by number, color, or other means that will readily identify the owner of the Attachment at a Pole from ground level. The Tag shall be as specified below.

