

**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

THE APPLICATION OF )  
NEW CINGULAR WIRELESS PCS, LLC, )  
A DELAWARE LIMITED LIABILITY COMPANY, )  
D/B/A AT&T MOBILITY )  
AND UNITI TOWERS LLC, A DELAWARE )  
LIMITED LIABILITY COMPANY )  
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC ) CASE NO.: 2020-00365  
CONVENIENCE AND NECESSITY TO CONSTRUCT )  
A WIRELESS COMMUNICATIONS FACILITY )  
IN THE COMMONWEALTH OF KENTUCKY )  
IN THE COUNTY OF ROCKCASTLE )

SITE NAME: MCGUIRE RELO / MT. VERNON

\*\*\*\*\*

**APPLICATION FOR  
CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY  
FOR CONSTRUCTION OF A WIRELESS COMMUNICATIONS FACILITY**

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility and Uniti Towers LLC, a Delaware limited liability company ("Applicants"), by counsel, pursuant to (i) KRS §§ 278.020, 278.040, 278.650, 278.665, and other statutory authority, and the rules and regulations applicable thereto, and (ii) the Telecommunications Act of 1996, respectfully submit this Application requesting issuance of a Certificate of Public Convenience and Necessity ("CPCN") from the Kentucky Public Service Commission ("PSC") to construct, maintain, and operate a Wireless Communications Facility ("WCF") to serve the customers of the Applicants with wireless communications services.

In support of this Application, Applicants respectfully provide and state the following

information:

1. The complete names and addresses of the Applicants are: New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility, having an address of Meidinger Tower, 462 S. 4<sup>th</sup> Street, Suite 2400, Louisville, Kentucky 40202 and Uniti Towers LLC, a Delaware limited liability company having an address of 10802 Executive Center Drive, Benton Building, Suite 300, Little Rock, Arkansas 72211.

2. Applicants propose construction of an antenna tower for communications services, which is to be located in an area outside the jurisdiction of a planning commission, and Applicants submit this application to the PSC for a certificate of public convenience and necessity pursuant to KRS §§ 278.020(1), 278.040, 278.650, 278.665, and other statutory authority.

3. AT&T Mobility is a limited liability company organized in the State of Delaware on October 20, 1994. Uniti Towers is a limited liability company organized in the State of Delaware on December 2, 2015.

4. Applicants attest that they are in good standing in the state in which they are organized and further state that they are authorized to transact business in Kentucky.

5. The Certificates of Authority filed with the Kentucky Secretary of State for both Applicants are attached as part of **Exhibit A** pursuant to 807 KAR 5:001: Section 14(3).

6. AT&T Mobility operates on frequencies licensed by the Federal Communications Commission ("FCC") pursuant to applicable FCC requirements. Copies of AT&T Mobility's FCC licenses to provide wireless services are attached to this Application or described as part of **Exhibit A**, and the facility will be constructed and operated in

accordance with applicable FCC regulations.

7. The public convenience and necessity require the construction of the proposed WCF. The construction of the WCF will bring or improve AT&T Mobility's services to an area currently not served or not adequately served by AT&T Mobility by increasing coverage or capacity and thereby enhancing the public's access to innovative and competitive wireless communications services. The WCF will provide a necessary link in AT&T Mobility's communications network that is designed to meet the increasing demands for wireless services in Kentucky's wireless communications service area. The WCF is an integral link in AT&T Mobility's network design that must be in place to provide adequate coverage to the service area.

8. To address the above-described service needs, Applicants propose to construct a WCF at Old U.S. Hwy 25, Mt. Vernon, KY 40456 (37° 21' 11.74" North latitude, 84° 19' 38.27" West longitude), on a parcel of land located entirely within the county referenced in the caption of this application. The property on which the WCF will be located is owned by VADD Company pursuant to a deed recorded at Deed Book 187, Page 303 in the office of the County Clerk. The proposed WCF will consist of a 330-foot tall tower, with an approximately 12-foot tall lightning arrestor attached at the top, for a total height of 342-feet. The WCF will also include concrete foundations and a shelter or cabinets to accommodate the placement of AT&T Mobility's radio electronics equipment and appurtenant equipment. The Applicants' equipment cabinet or shelter will be approved for use in the Commonwealth of Kentucky by the relevant building inspector. The WCF compound will be fenced and all access gate(s) will be secured. A description of the

manner in which the proposed WCF will be constructed is attached as **Exhibit B** and **Exhibit C**.

9. A list of utilities, corporations, or persons with whom the proposed WCF is likely to compete is attached as **Exhibit D**.

10. The site development plan and a vertical profile sketch of the WCF signed and sealed by a professional engineer registered in Kentucky depicting the tower height, as well as a proposed configuration for AT&T Mobility's antennas has also been included as part of **Exhibit B**.

11. Foundation design plans signed and sealed by a professional engineer registered in Kentucky and a description of the standards according to which the tower was designed are included as part of **Exhibit C**.

12. Applicants have considered the likely effects of the installation of the proposed WCF on nearby land uses and values and have concluded that there is no more suitable location reasonably available from which adequate services can be provided, and that there are no reasonably available opportunities to co-locate AT&T Mobility's antennas on an existing structure. When suitable towers or structures exist, AT&T Mobility attempts to co-locate on existing structures such as communications towers or other structures capable of supporting AT&T Mobility's facilities; however, no other suitable or available co-location site was found to be located in the vicinity of the site.

13. A copy of the Determination of No Hazard to Air Navigation issued by the Federal Aviation Administration ("FAA") is attached as **Exhibit E**.

14. A copy of the approval issued by the Kentucky Airport Zoning Commission



("KAZC") for the proposed construction is attached as **Exhibit F**.

15. A geotechnical engineering firm has performed soil boring(s) and subsequent geotechnical engineering studies at the WCF site. A copy of the geotechnical engineering report, signed and sealed by a professional engineer registered in the Commonwealth of Kentucky, is attached as **Exhibit G**. The name and address of the geotechnical engineering firm and the professional engineer registered in the Commonwealth of Kentucky who supervised the examination of this WCF site are included as part of this exhibit.

16. Clear directions to the proposed WCF site from the County seat are attached as **Exhibit H**. The name and telephone number of the preparer of **Exhibit H** are included as part of this exhibit.

17. Uniti Towers LLC, pursuant to a written agreement, has acquired the right to use the WCF site and associated property rights. A copy of the agreements or abbreviated agreements recorded with the County Clerk are attached as **Exhibit I**.

18. Personnel directly responsible for the design and construction of the proposed WCF are well qualified and experienced. The tower and foundation drawings for the proposed tower submitted as part of **Exhibit C** bear the signature and stamp of a professional engineer registered in the Commonwealth of Kentucky. All tower designs meet or exceed the minimum requirements of applicable laws and regulations.

19. The Construction Manager for the proposed facility is Jeremy Culpepper and the identity and qualifications of each person directly responsible for design and construction of the proposed tower are contained in **Exhibits B & C**.

20. As noted on the Survey attached as part of **Exhibit B**, the surveyor has determined that the site is not within any flood hazard area.

21. **Exhibit B** includes a map drawn to an appropriate scale that shows the location of the proposed tower and identifies every owner of real estate within 500 feet of the proposed tower (according to the records maintained by the County Property Valuation Administrator). Every structure and every easement within 500 feet of the proposed tower or within 200 feet of the access road including intersection with the public street system is illustrated in **Exhibit B**.

22. Applicants have notified every person who, according to the records of the County Property Valuation Administrator, owns property which is within 500 feet of the proposed tower or contiguous to the site property, by certified mail, return receipt requested, of the proposed construction. Each notified property owner has been provided with a map of the location of the proposed construction, the PSC docket number for this application, the address of the PSC, and has been informed of his or her right to request intervention. A list of the notified property owners and a copy of the form of the notice sent by certified mail to each landowner are attached as **Exhibit J** and **Exhibit K**, respectively.

23. Applicants have notified the applicable County Judge/Executive by certified mail, return receipt requested, of the proposed construction. This notice included the PSC docket number under which the application will be processed and informed the County Judge/Executive of his/her right to request intervention. A copy of this notice is attached as **Exhibit L**.

24. Notice signs meeting the requirements prescribed by 807 KAR 5:063, Section

1(2) that measure at least 2 feet in height and 4 feet in width and that contain all required language in letters of required height, have been posted, one in a visible location on the proposed site and one on the nearest public road. Such signs shall remain posted for at least two weeks after filing of the Application, and a copy of the posted text is attached as **Exhibit M**. A legal notice advertisement regarding the location of the proposed facility has been published in a newspaper of general circulation in the county in which the WCF is proposed to be located. A copy of the newspaper legal notice advertisement is attached as part of **Exhibit M**.

25. The general area where the proposed facility is to be located is rural and heavily wooded.

26. The process that was used by AT&T Mobility's radio frequency engineers in selecting the site for the proposed WCF was consistent with the general process used for selecting all other existing and proposed WCF facilities within the proposed network design area. AT&T Mobility's radio frequency engineers have conducted studies and tests in order to develop a highly efficient network that is designed to handle voice and data traffic in the service area. The engineers determined an optimum area for the placement of the proposed facility in terms of elevation and location to provide the best quality service to customers in the service area. A radio frequency design search area prepared in reference to these radio frequency studies was considered by the Applicants when searching for sites for its antennas that would provide the coverage deemed necessary by AT&T Mobility. A map of the area in which the tower is proposed to be located which is drawn to scale and clearly depicts the necessary search area within which the site should be located pursuant

to radio frequency requirements is attached as **Exhibit N**.

27. The tower must be located at the proposed location and proposed height to provide necessary service to wireless communications users in the subject area.

28. All Exhibits to this Application are hereby incorporated by reference as if fully set out as part of the Application.

29. All responses and requests associated with this Application may be directed to:

David A. Pike  
Pike Legal Group, PLLC  
1578 Highway 44 East, Suite 6  
P. O. Box 369  
Shepherdsville, KY 40165-0369  
Telephone: (502) 955-4400  
Telefax: (502) 543-4410  
Email: [dpike@pikelegal.com](mailto:dpike@pikelegal.com)

**WHEREFORE**, Applicants respectfully request that the PSC accept the foregoing Application for filing, and having met the requirements of KRS §§ 278.020(1), 278.650, and 278.665 and all applicable rules and regulations of the PSC, grant a Certificate of Public Convenience and Necessity to construct and operate the WCF at the location set forth herein.

Respectfully submitted,



---

David A. Pike  
Pike Legal Group, PLLC  
1578 Highway 44 East, Suite 6  
P. O. Box 369  
Shepherdsville, KY 40165-0369  
Telephone: (502) 955-4400  
Telefax: (502) 543-4410  
Email: [dpike@pikelegal.com](mailto:dpike@pikelegal.com)  
Attorney for Applicants

## **LIST OF EXHIBITS**

- A - Certificate of Authority & FCC License Documentation
- B - Site Development Plan:
  - 500' Vicinity Map
  - Legal Descriptions
  - Flood Plain Certification
  - Site Plan
  - Vertical Tower Profile
- C - Tower and Foundation Design
- D - Competing Utilities, Corporations, or Persons List
- E - FAA
- F - Kentucky Airport Zoning Commission
- G - Geotechnical Report
- H - Directions to WCF Site
- I - Copy of Real Estate Agreement
- J - Notification Listing
- K - Copy of Property Owner Notification
- L - Copy of County Judge/Executive Notice
- M - Copy of Posted Notices and Newspaper Notice Advertisement
- N - Copy of Radio Frequency Design Search Area

**EXHIBIT A  
CERTIFICATE OF AUTHORITY & FCC LICENSE  
DOCUMENTATION**

**Commonwealth of Kentucky**  
**Alison Lundergan Grimes, Secretary of State**

Alison Lundergan Grimes  
Secretary of State  
P. O. Box 718  
Frankfort, KY 40602-0718  
(502) 564-3490  
<http://www.sos.ky.gov>

**Certificate of Authorization**

Authentication number: 216299  
Visit <https://app.sos.ky.gov/ftshow/certvalidate.aspx> to authenticate this certificate.

I, Alison Lundergan Grimes, Secretary of State of the Commonwealth of Kentucky, do hereby certify that according to the records in the Office of the Secretary of State,

**NEW CINGULAR WIRELESS PCS, LLC**

, a limited liability company authorized under the laws of the state of Delaware, is authorized to transact business in the Commonwealth of Kentucky, and received the authority to transact business in Kentucky on October 14, 1999.

I further certify that all fees and penalties owed to the Secretary of State have been paid; that an application for certificate of withdrawal has not been filed; and that the most recent annual report required by KRS 14A.6-010 has been delivered to the Secretary of State.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal at Frankfort, Kentucky, this 28<sup>th</sup> day of May, 2019, in the 227<sup>th</sup> year of the Commonwealth.



*Alison Lundergan Grimes*  
Alison Lundergan Grimes  
Secretary of State  
Commonwealth of Kentucky  
216299/0481848





COMMONWEALTH OF KENTUCKY  
ALISON LUNDERGAN GRIMES, SECRETARY OF STATE

0972004.06 mstratton  
ADD

Alison Lundergan Grimes  
Kentucky Secretary of State  
Received and Filed:  
1/3/2017 3:10 PM  
Fee Receipt: \$90.00

Division of Business Filings Business Filings PO Box 718 Frankfort, KY 40602 (502) 564-3490 www.sos.ky.gov	Certificate of Authority (Foreign Business Entity)	FBE
---	---	-----

Pursuant to the provisions of KRS 14A and KRS 271B, 273, 274, 275, 362 and 385 the undersigned hereby applies for authority to transact business in Kentucky on behalf of the entity named below and, for that purpose, submits the following statements:

1. The entity is a:  profit corporation (KRS 271B);  nonprofit corporation (KRS 273);  professional service corporation (KRS 274);  
 business trust (KRS 386);  limited liability company (KRS 275);  professional limited liability company (KRS 275);  
 limited partnership (KRS 362).

2. The name of the entity is Uniti Towers LLC  
(The name must be identical to the name on record with the Secretary of State.)

3. The name of the entity to be used in Kentucky is (if applicable): \_\_\_\_\_  
(Only provide if "real name" is unavailable for use; otherwise, leave blank.)

4. The state or country under whose law the entity is organized is Delaware

5. The date of organization is 12/2/2015 and the period of duration is \_\_\_\_\_  
(If left blank, the period of duration is considered perpetual.)

6. The mailing address of the entity's principal office is  
10802 Executive Center Drive, Benton Building, Suite 300 Little Rock AR 72211  
Street Address City State Zip Code

7. The street address of the entity's registered office in Kentucky is  
306 West Main Street - Suite 512 Frankfort KY 40601  
Street Address (No P.O. Box Numbers) City State Zip Code

and the name of the registered agent at that office is C T Corporation System

8. The names and business addresses of the entity's representatives (secretary, officers and directors, managers, trustees or general partners):

Daniel L. Heard	10802 Executive Center Drive, Benton Building, Suite 300	Little Rock	AR	72211
Name	Street or P.O. Box	City	State	Zip Code
Kenneth Gunderman	10802 Executive Center Drive, Benton Building, Suite 300	Little Rock	AR	72211
Name	Street or P.O. Box	City	State	Zip Code
Mark A. Wallace	10802 Executive Center Drive, Benton Building, Suite 300	Little Rock	AR	72211
Name	Street or P.O. Box	City	State	Zip Code

9. If a professional service corporation, all the individual shareholders, not less than one half (1/2) of the directors, and all of the officers other than the secretary and treasurer are licensed in one or more states or territories of the United States or District of Columbia to render a professional service described in the statement of purposes of this corporation.

10. I certify that, as of the date of filing this application, the above-named entity validly exists under the laws of the jurisdiction of its formation.

11. If a limited partnership, it elects to be a limited liability limited partnership. Check the box if applicable:

12. If a limited liability company, check box if manager-managed:

13. This application will be effective upon filing, unless a delayed effective date and/or time is provided.  
 The effective date or the delayed effective date cannot be prior to the date the application is filed. The date and/or time is \_\_\_\_\_  
(Delayed effective date and/or time)

[Signature] Keith Harvey, VP - Deputy General Counsel 12/30/2016  
Signature of Authorized Representative Printed Name & Title Date

I, C T Corporation System, consent to serve as the registered agent or behalf of the business entity.  
Type/Print Name of Registered Agent

[Signature] Tristan Emrich Assistant Secretary 12/30/2016  
Signature of Registered Agent Printed Name Title Date

(09/15)

# Delaware

Page 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY "UNITI TOWERS LLC" IS DULY FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL EXISTENCE SO FAR AS THE RECORDS OF THIS OFFICE SHOW, AS OF THE THIRTIETH DAY OF DECEMBER, A. D. 2016.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL TAXES HAVE BEEN PAID TO DATE.



5896640 8300

SR# 20167345793

You may verify this certificate online at [corp.delaware.gov/authver.shtml](http://corp.delaware.gov/authver.shtml)

A handwritten signature in black ink, appearing to read "JWB", is written over a horizontal line. Below the line, the text "Jeffrey W. Bullock, Secretary of State" is printed in a small font.

Authentication: 203613650

Date: 12-30-16

**REFERENCE COPY**

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: LESLIE WILSON  
NEW CINGULAR WIRELESS PCS, LLC  
208 S AKARD ST., RM 1016  
DALLAS, TX 75202

<b>Call Sign</b> KNKN965	<b>File Number</b>
<b>Radio Service</b> CL - Cellular	
<b>Market Numer</b> CMA448	<b>Channel Block</b> B
<b>Sub-Market Designator</b> 0	

FCC Registration Number (FRN): 0003291192

<b>Market Name</b> Kentucky 6 - Madison
--

<b>Grant Date</b> 08-30-2011	<b>Effective Date</b> 08-31-2018	<b>Expiration Date</b> 10-01-2021	<b>Five Yr Build-Out Date</b>	<b>Print Date</b>
---------------------------------	-------------------------------------	--------------------------------------	-------------------------------	-------------------

**Site Information:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
4	37-24-34.0 N	084-19-48.0 W	449.6	110.0	1043626

Address: Burdette Rd (105167)

City: WILDIE County: ROCKCASTLE State: KY Construction Deadline:

**Antenna: 2**

<b>Maximum Transmitting ERP in Watts:</b> 140.820								
Azimuth(from true north)	0	45	90	135	180	225	270	315
<b>Antenna Height AAT (meters)</b>	211.200	144.500	148.400	190.800	163.400	170.700	205.900	192.000
<b>Transmitting ERP (watts)</b>	61.200	28.600	3.100	0.200	0.122	0.200	3.900	32.100

**Antenna: 3**

<b>Maximum Transmitting ERP in Watts:</b> 140.820								
Azimuth(from true north)	0	45	90	135	180	225	270	315
<b>Antenna Height AAT (meters)</b>	211.200	144.500	148.400	190.800	163.400	170.700	205.900	192.000
<b>Transmitting ERP (watts)</b>	0.400	0.500	13.000	99.800	198.200	83.200	6.800	0.900

**Antenna: 4**

<b>Maximum Transmitting ERP in Watts:</b> 140.820								
Azimuth(from true north)	0	45	90	135	180	225	270	315
<b>Antenna Height AAT (meters)</b>	211.200	144.500	148.400	190.800	163.400	170.700	205.900	192.000
<b>Transmitting ERP (watts)</b>	6.800	0.900	0.400	0.500	13.000	99.800	198.200	83.200

**Conditions:**

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN965

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
10	37-21-02.1 N	084-19-46.3 W	450.8	77.4	1242832

Address: 208 DAVIS LANE (86925)

City: Mount Vernon County: ROCKCASTLE State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	193.700	137.500	148.900	151.500	164.200	185.600	160.000	178.000
Transmitting ERP (watts)	122.700	52.400	5.400	0.300	0.245	0.300	8.700	63.000

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	193.700	137.500	148.900	151.500	164.200	185.600	160.000	178.000
Transmitting ERP (watts)	1.600	18.200	93.100	111.900	26.300	2.500	0.300	0.400

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	193.700	137.500	148.900	151.500	164.200	185.600	160.000	178.000
Transmitting ERP (watts)	1.800	0.400	0.400	6.700	55.500	186.500	141.700	15.300

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
14	37-30-14.0 N	084-19-39.5 W	339.2	110.3	1204267

Address: 151 JIM LAMBERT ROAD (67666)

City: MOUNT VERNON County: ROCKCASTLE State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	132.000	123.500	30.000	52.900	101.900	117.900	108.700	136.400
Transmitting ERP (watts)	74.600	66.500	10.300	0.900	0.149	0.200	2.100	19.600

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	132.000	123.500	30.000	52.900	101.900	117.900	108.700	136.400
Transmitting ERP (watts)	0.500	0.500	11.300	108.100	236.600	118.500	7.800	1.100

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	132.000	123.500	30.000	52.900	101.900	117.900	108.700	136.400
Transmitting ERP (watts)	45.200	1.900	0.433	0.433	2.600	47.700	216.900	210.000

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN965

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
18	37-06-28.8 N	083-58-14.2 W	429.8	59.7	1251801

Address: 1250 Lick Fork Road (114153)

City: London County: LAUREL State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	133.300	116.400	135.500	105.700	114.900	136.800	115.700	116.100
Transmitting ERP (watts)	26.000	16.100	1.700	0.200	0.100	0.200	2.000	16.100

Antenna: 2

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	133.300	116.400	135.500	105.700	114.900	136.800	115.700	116.100
Transmitting ERP (watts)	1.800	20.600	105.700	127.100	29.900	2.900	0.300	0.400

Antenna: 3

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	133.300	116.400	135.500	105.700	114.900	136.800	115.700	116.100
Transmitting ERP (watts)	2.100	0.423	0.423	7.600	63.000	211.700	160.900	17.400

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
19	37-06-39.3 N	084-02-46.7 W	463.2	30.5	1229456

Address: 102 STONEHENGE DRIVE (37535)

City: LONDON County: LAUREL State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	144.000	126.500	122.000	126.400	140.600	130.100	134.900	129.600
Transmitting ERP (watts)	70.300	32.900	3.500	0.200	0.140	0.200	4.500	36.900

Antenna: 2

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	144.000	126.500	122.000	126.400	140.600	130.100	134.900	129.600
Transmitting ERP (watts)	4.500	36.900	70.300	32.900	3.500	0.200	0.140	0.200

Antenna: 3

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	144.000	126.500	122.000	126.400	140.600	130.100	134.900	129.600
Transmitting ERP (watts)	0.249	0.300	3.500	32.800	124.700	111.200	17.200	1.500

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN965

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
20	37-06-03.7 N	084-46-43.5 W	340.2	106.4	1247464

Address: 499 Happy Ridge Road (86919)

City: Nancy County: PULASKI State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	113.200	126.700	136.700	137.900	142.000	130.800	101.800	102.000
Transmitting ERP (watts)	16.300	10.100	1.100	0.100	0.100	0.100	1.200	10.100

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	113.200	126.700	136.700	137.900	142.000	130.800	101.800	102.000
Transmitting ERP (watts)	2.800	38.100	190.900	224.300	48.000	2.100	0.500	0.500

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	113.200	126.700	136.700	137.900	142.000	130.800	101.800	102.000
Transmitting ERP (watts)	0.100	0.100	0.100	0.300	1.300	1.700	1.900	0.700

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
21	37-11-18.1 N	084-08-34.4 W	377.0	75.0	1227530

Address: 233 US 25 North (37533)

City: East Bernstadt County: LAUREL State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	109.000	105.900	96.400	83.500	90.300	96.500	101.200	103.800
Transmitting ERP (watts)	116.900	5.400	1.300	0.706	2.000	31.400	227.900	353.200

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	109.000	105.900	96.400	83.500	90.300	96.500	101.200	103.800
Transmitting ERP (watts)	8.800	72.700	203.500	125.800	12.400	1.500	0.407	0.407

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	109.000	105.900	96.400	83.500	90.300	96.500	101.200	103.800
Transmitting ERP (watts)	0.100	0.200	0.400	1.700	2.700	2.800	1.300	0.200

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN965

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
22	37-14-13.8 N	084-13-43.8 W	369.7	97.5	1201300

Address: Route #1, Box 119V (37534)

City: East Bernstadt County: LAUREL State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	110.700	99.200	115.800	90.900	91.900	120.600	111.300	82.000
Transmitting ERP (watts)	64.700	126.200	53.800	5.500	0.300	0.300	0.300	8.900

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	110.700	99.200	115.800	90.900	91.900	120.600	111.300	82.000
Transmitting ERP (watts)	2.000	31.000	224.800	348.300	115.300	5.300	1.200	0.700

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	110.700	99.200	115.800	90.900	91.900	120.600	111.300	82.000
Transmitting ERP (watts)	147.600	9.500	1.600	0.600	0.600	14.000	128.700	295.600

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
23	37-09-08.0 N	084-18-58.5 W	350.8	106.7	1229865

Address: 31 Laddie (37716)

City: Somerset County: PULASKI State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	123.200	125.000	89.000	126.700	144.700	130.600	152.500	128.900
Transmitting ERP (watts)	11.500	89.000	176.600	74.200	6.100	0.800	0.400	0.400

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	123.200	125.000	89.000	126.700	144.700	130.600	152.500	128.900
Transmitting ERP (watts)	0.400	0.400	11.700	89.800	178.200	74.900	6.100	0.800

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	123.200	125.000	89.000	126.700	144.700	130.600	152.500	128.900
Transmitting ERP (watts)	13.600	1.600	0.331	0.331	5.900	49.200	165.500	125.700

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN965

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
24	37-08-25.1 N	084-32-06.1 W	427.9	59.4	1279127

Address: 740 Fire Tower Rd (37718)

City: Somerset County: PULASKI State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	167.000	183.000	156.400	168.700	182.300	193.800	178.100	149.400
Transmitting ERP (watts)	52.800	159.300	116.300	17.200	0.800	0.318	0.318	4.000

Antenna: 2

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	167.000	183.000	156.400	168.700	182.300	193.800	178.100	149.400
Transmitting ERP (watts)	0.300	0.300	2.000	31.300	143.100	142.000	30.400	1.500

Antenna: 3

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	167.000	183.000	156.400	168.700	182.300	193.800	178.100	149.400
Transmitting ERP (watts)	84.900	4.800	0.600	0.700	1.900	34.400	225.900	292.800

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
25	37-01-12.7 N	084-34-43.7 W	398.4	77.7	1234225

Address: 1025 Hill Road (39215)

City: Somerset County: PULASKI State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	172.600	159.800	160.600	194.400	199.300	176.400	199.200	183.200
Transmitting ERP (watts)	219.200	70.600	3.800	0.900	0.438	1.300	17.700	131.500

Antenna: 2

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	172.600	159.800	160.600	194.400	199.300	176.400	199.200	183.200
Transmitting ERP (watts)	0.300	1.700	14.200	43.300	50.200	49.700	10.000	3.300

Antenna: 3

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	172.600	159.800	160.600	194.400	199.300	176.400	199.200	183.200
Transmitting ERP (watts)	3.200	0.200	0.200	0.400	8.600	56.400	93.500	32.500



Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN965

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
26	37-02-20.6 N	084-38-44.1 W	341.4	29.3	

Address: 1399 W. HWY 914 (110483)

City: Somerset County: PULASKI State: KY Construction Deadline:

Antenna: 1

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	39.000	70.700	66.600	85.100	87.700	103.300	69.700	85.600
Transmitting ERP (watts)	193.600	81.300	6.600	0.900	0.400	0.500	12.700	97.600

Antenna: 2

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	39.000	70.700	66.600	85.100	87.700	103.300	69.700	85.600
Transmitting ERP (watts)	2.600	27.000	144.400	181.000	38.100	3.500	0.500	0.600

Antenna: 3

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	39.000	70.700	66.600	85.100	87.700	103.300	69.700	85.600
Transmitting ERP (watts)	1.800	0.400	0.400	6.500	53.800	181.000	137.600	14.900

Control Points:

Control Pt. No. 3

Address: 500 W. Dove Rd.

City: Southlake County: TARRANT State: TX Telephone Number: (800)264-6620

Waivers/Conditions:

NONE

REFERENCE COPY

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



Federal Communications Commission  
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL J. MATHEW  
NEW CINGULAR WIRELESS PCS, LLC  
208 S AKARD ST., RM 1016  
DALLAS, TX 75202

<b>Call Sign</b> KNLF251	<b>File Number</b>
<b>Radio Service</b> CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 06-02-2015	<b>Effective Date</b> 01-16-2020	<b>Expiration Date</b> 06-23-2025	<b>Print Date</b>
<b>Market Number</b> MTA026	<b>Channel Block</b> A	<b>Sub-Market Designator</b> 15	
<b>Market Name</b> Louisville-Lexington-Evansville			
<b>1st Build-out Date</b> 06-23-2000	<b>2nd Build-out Date</b> 06-23-2005	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

Waivers/Conditions:

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/United States), future coordination of any base station transmitters within 72 km (45 miles) of the United States/Canada border shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

This authorization is subject to the condition that the remaining balance of the winning bid amount will be paid in accordance with Part 1 of the Commission's rules, 47 C.F.R. Part 1.

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at <http://wireless.fcc.gov/uls/index.htm?job=home> and select "License Search". Follow the instructions on how to search for license information.

**Licensee Name:** NEW CINGULAR WIRELESS PCS, LLC

**Call Sign:** KNLF251

**File Number:**

**Print Date:**

This license is conditioned upon compliance with the provisions of Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation For Consent to Transfer Control of Licenses and Authorizations, Memorandum Opinion and Order, FCC 04-255 (rel. Oct. 26, 2004).

Spectrum Lease Associated with this License. See Spectrum Leasing Arrangement Letter dated 12/06/2004 and File # 0001918512.

Commission approval of this application and the licenses contained therein are subject to the conditions set forth in the Memorandum Opinion and Order, adopted on December 29, 2006 and released on March 26, 2007, and revised in the Order on Reconsideration, adopted and released on March 26, 2007. See AT&T Inc. and BellSouth Corporation Application for Transfer of Control, WC Docket No. 06-74, Memorandum Opinion and Order, FCC 06-189 (rel. Mar. 26, 2007); AT&T Inc. and BellSouth Corporation, WC Docket No. 06-74, Order on Reconsideration, FCC 07-44 (rel. Mar. 26, 2007).

**Licensee Name:** NEW CINGULAR WIRELESS PCS, LLC

**Call Sign:** KNLF251

**File Number:**

**Print Date:**

**700 MHz Relicensed Area Information:**

<b>Market</b>	<b>Market Name</b>	<b>Buildout Deadline</b>	<b>Buildout Notification</b>	<b>Status</b>
---------------	--------------------	--------------------------	------------------------------	---------------

700 MHz Relicensed Area Information

REFERENCE COPY

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



Federal Communications Commission  
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL J MATHEW  
NEW CINGULAR WIRELESS PCS, LLC  
208 S AKARD ST., RM 1015  
DALLAS, TX 75202

<b>Call Sign</b> KNLH398	<b>File Number</b>
<b>Radio Service</b> CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 04-14-2017	<b>Effective Date</b> 08-31-2018	<b>Expiration Date</b> 04-28-2027	<b>Print Date</b>
<b>Market Number</b> BTA252	<b>Channel Block</b> D	<b>Sub-Market Designator</b> 0	
<b>Market Name</b> Lexington, KY			
<b>1st Build-out Date</b> 04-28-2002	<b>2nd Build-out Date</b>	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

Waivers/Conditions:

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/United States), future coordination of any base station transmitters within 72 km (45 miles) of the United States/Canada border shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at <http://wireless.fcc.gov/uls/index.htm?job=home> and select "License Search". Follow the instructions on how to search for license information.

**Licensee Name:** NEW CINGULAR WIRELESS PCS, LLC

**Call Sign:** KNLH398

**File Number:**

**Print Date:**

**700 MHz Relicensed Area Information:**

<b>Market</b>	<b>Market Name</b>	<b>Buildout Deadline</b>	<b>Buildout Notification</b>	<b>Status</b>
---------------	--------------------	--------------------------	------------------------------	---------------

For Release Copyright

**REFERENCE COPY**

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL J MATHEW  
NEW CINGULAR WIRELESS PCS, LLC  
208 S AKARD ST., RM 1015  
DALLAS, TX 75202

<b>Call Sign</b> WPOI255	<b>File Number</b>
<b>Radio Service</b> CW - PCS Broadband	

**FCC Registration Number (FRN):** 0003291192

<b>Grant Date</b> 05-27-2015	<b>Effective Date</b> 03-12-2020	<b>Expiration Date</b> 06-23-2025	<b>Print Date</b>
<b>Market Number</b> MTA026	<b>Channel Block</b> A	<b>Sub-Market Designator</b> 19	
<b>Market Name</b> Louisville-Lexington-Evansvill			
<b>1st Build-out Date</b> 06-23-2000	<b>2nd Build-out Date</b> 06-23-2005	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/United States), future coordination of any base station transmitters within 72 km (45 miles) of the United States/Canada border shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

This authorization is subject to the condition that the remaining balance of the winning bid amount will be paid in accordance with Part 1 of the Commission's rules, 47 C.F.R. Part 1.

**Conditions:**

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at <http://wireless.fcc.gov/uls/index.htm?job=home> and select "License Search". Follow the instructions on how to search for license information.

**Licensee Name:** NEW CINGULAR WIRELESS PCS, LLC

**Call Sign:** WPOI255

**File Number:**

**Print Date:**

This license is conditioned upon compliance with the provisions of Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation For Consent to Transfer Control of Licenses and Authorizations, Memorandum Opinion and Order, FCC 04-255 (rel. Oct. 26, 2004).

Spectrum Lease Associated with this License. See Spectrum Leasing Arrangement Letter dated 12/06/2004 and File # 0001918558.

The Spectrum Leasing Arrangement, which became effective upon approval of application file number 0001918558, was terminated on 04/14/2005. See file number 0002135370.

Commission approval of this application and the licenses contained therein are subject to the conditions set forth in the Memorandum Opinion and Order, adopted on December 29, 2006 and released on March 26, 2007, and revised in the Order on Reconsideration, adopted and released on March 26, 2007. See AT&T Inc. and BellSouth Corporation Application for Transfer of Control, WC Docket No. 06-74, Memorandum Opinion and Order, FCC 06-189 (rel. Mar. 26, 2007); AT&T Inc. and BellSouth Corporation, WC Docket No. 06-74, Order on Reconsideration, FCC 07-44 (rel. Mar. 26, 2007).



**Licensee Name:** NEW CINGULAR WIRELESS PCS, LLC

**Call Sign:** WPOI255

**File Number:**

**Print Date:**

**700 MHz Relicensed Area Information:**

<b>Market</b>	<b>Market Name</b>	<b>Buildout Deadline</b>	<b>Buildout Notification</b>	<b>Status</b>
---------------	--------------------	--------------------------	------------------------------	---------------

FOR PUBLICATION COPY

**REFERENCE COPY**

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL J MATHEW  
NEW CINGULAR WIRELESS PCS, LLC  
208 S AKARD ST., RM 1015  
DALLAS, TX 75202

<b>Call Sign</b> WQGD755	<b>File Number</b>
<b>Radio Service</b> AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

**FCC Registration Number (FRN):** 0003291192

<b>Grant Date</b> 12-18-2006	<b>Effective Date</b> 08-31-2018	<b>Expiration Date</b> 12-18-2021	<b>Print Date</b>
<b>Market Number</b> BEA047	<b>Channel Block</b> C	<b>Sub-Market Designator</b> 9	
<b>Market Name</b> Lexington, KY-TN-VA-WV			
<b>1st Build-out Date</b>	<b>2nd Build-out Date</b>	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

This authorization is conditioned upon the licensee, prior to initiating operations from any base or fixed station, making reasonable efforts to coordinate frequency usage with known co-channel and adjacent channel incumbent federal users operating in the 1710-1755 MHz band whose facilities could be affected by the proposed operations. See, e.g., FCC and NTIA Coordination Procedures in the 1710-1755 MHz Band, Public Notice, FCC 06-50, WTB Docket No. 02-353, rel. April 20, 2006.

Grant of the request to update licensee name is conditioned on it not reflecting an assignment or transfer of control (see Rule 1.948); if an assignment or transfer occurred without proper notification or FCC approval, the grant is void and the station is licensed under the prior name.

**Conditions:**

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at <http://wireless.fcc.gov/uls/index.htm?job=home> and select "License Search". Follow the instructions on how to search for license information.

**Licensee Name:** NEW CINGULAR WIRELESS PCS, LLC

**Call Sign:** WQGD755

**File Number:**

**Print Date:**

**700 MHz Relicensed Area Information:**

<b>Market</b>	<b>Market Name</b>	<b>Buildout Deadline</b>	<b>Buildout Notification</b>	<b>Status</b>
---------------	--------------------	--------------------------	------------------------------	---------------

Copyright

**REFERENCE COPY**

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL J MATHREW  
NEW CINGULAR WIRELESS PCS, LLC  
208 S AKARD ST. RM 1015  
DALLAS, TX 75202

<b>Call Sign</b> WQUZ670	<b>File Number</b>
<b>Radio Service</b> AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

**FCC Registration Number (FRN):** 0003291192

<b>Grant Date</b> 09-26-2014	<b>Effective Date</b> 02-20-2019	<b>Expiration Date</b> 11-29-2021	<b>Print Date</b>
<b>Market Number</b> REA004	<b>Channel Block</b> D	<b>Sub-Market Designator</b> 10	
<b>Market Name</b> Mississippi Valley			
<b>1st Build-out Date</b>	<b>2nd Build-out Date</b>	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

This authorization is conditioned upon the licensee, prior to initiating operations from any base or fixed station, making reasonable efforts to coordinate frequency usage with known co-channel and adjacent channel incumbent federal users operating in the 1710-1755 MHz band whose facilities could be affected by the proposed operations. See, e.g., FCC and NTIA Coordination Procedures in the 1710-1755 MHz Band, Public Notice, FCC 06-50, WTB Docket No. 02-353, rel. April 20, 2006.

**Conditions:**

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at <http://wireless.fcc.gov/uls/index.htm?job=home> and select "License Search". Follow the instructions on how to search for license information.

**Licensee Name:** NEW CINGULAR WIRELESS PCS, LLC

**Call Sign:** WQUZ670

**File Number:**

**Print Date:**

The license is subject to compliance with the provisions of the January 12, 2001 Agreement between Deutsche Telekom AG, VoiceStream Wireless Corporation, VoiceStream Wireless Holding Corporation and the Department of Justice (DOJ) and the Federal Bureau of Investigation (FBI), which addresses national security, law enforcement, and public safety issues of the FBI and the DOJ regarding the authority granted by this license. Nothing in the Agreement is intended to limit any obligation imposed by Federal law or regulation including, but not limited to, 47 U.S.C. Section 222(a) and (c)(1) and the FCC's implementing regulations. The Agreement is published at VoiceStream-DT Order, IB Docket No. 00-187, FCC 01-142, 16 FCC Rcd 9779, 9853 (2001).

Deutsche Telekom Corporation

**Licensee Name:** NEW CINGULAR WIRELESS PCS, LLC

**Call Sign:** WQUZ670

**File Number:**

**Print Date:**

**700 MHz Relicensed Area Information:**

<b>Market</b>	<b>Market Name</b>	<b>Buildout Deadline</b>	<b>Buildout Notification</b>	<b>Status</b>
---------------	--------------------	--------------------------	------------------------------	---------------

For Release Copyright

**EXHIBIT B**

**SITE DEVELOPMENT PLAN:**

**500' VICINITY MAP  
LEGAL DESCRIPTIONS  
FLOOD PLAIN CERTIFICATION  
SITE PLAN  
VERTICAL TOWER PROFILE**



FA NUMBER: 15147586 / SITE ID: KYLEX2044

PACE #: MRTNK047948

PROJECT TRACKING #: 10110570

SITE NAME: MT. VERNON

OLD U.S. HWY 25

MT. VERNON, KY 40456

ROCKCASTLE COUNTY

PROPOSED 330' SELF-SUPPORT TOWER

ZONING DRAWINGS



at&t mobility corp.

HARMONI TOWERS



HARMONI TOWERS

A/E DOCUMENT REVIEW STATUS

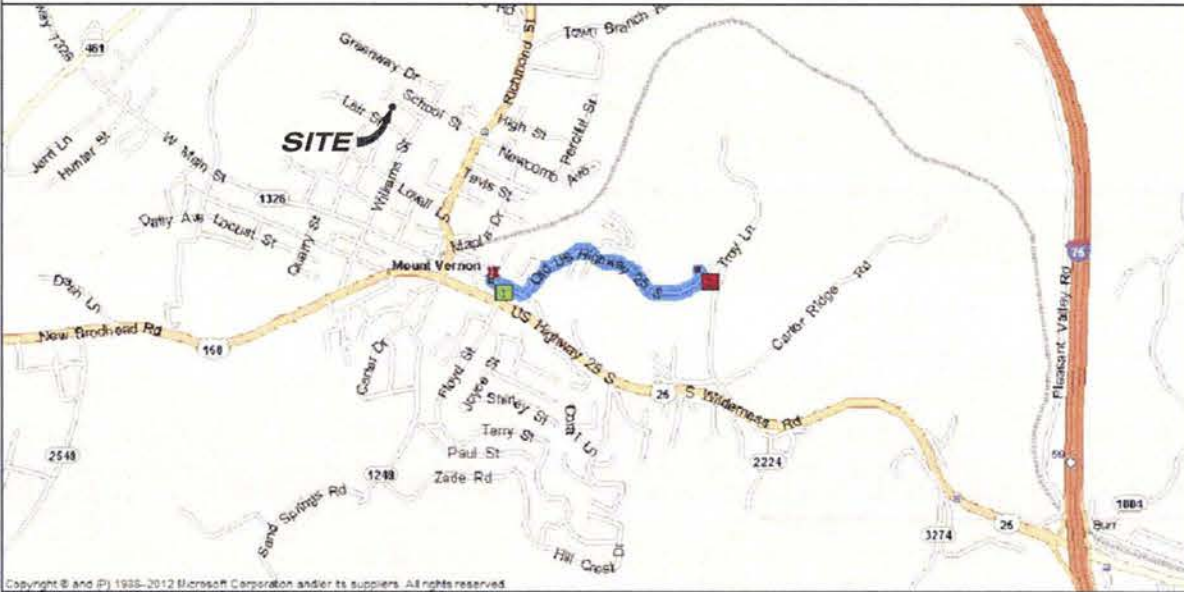
Table with columns: TITLE, SIGNATURE, DATE. Rows include HARMONI TOWERS PROP., HARMONI TOWERS CONST. MGR., INTERCONNECT, HARMONI TOWERS SITE DEV. MGR., PROPERTY OWNER, STATUS CODE (1: ACCEPTED, 2: NOT ACCEPTED).

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR MODIFICATIONS.

PROJECT SUMMARY

SITE NAME: MT. VERNON
SITE NUMBER: FA 15147586
TAX MAP PROPERTY ID: 046-00-001.05
SITE ADDRESS: OLD U.S. HWY 25, MT. VERNON, KY 40456
JURISDICTION: ROCKCASTLE COUNTY
TOWER OWNER: HARMONI TOWERS
NAD83 LATITUDE: 37.353261° N, LONGITUDE: -84.327297° W
APPLICANT: NEW CINGULAR WIRELESS, PCS, LLC, A DELAWARE LIMITED LIABILITY COMPANY
CO-APPLICANT: N/A
OCCUPANCY TYPE: UNMANNED
A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION

LOCATION MAP



NO SCALE

DRAWING INDEX

Table with columns: SHEET #, SHEET DESCRIPTION. Rows include T-1 (TITLE SHEET), 1-2 (SURVEY), C-1 (500' RADIUS & ADJOINER'S DRAWING), C-2 (OVERALL SITE LAYOUT), C-3 (ENLARGED COMPOUND LAYOUT), C-4 (TOWER ELEVATION).

DESIGN INFORMATION

A&E FIRM: B+T GROUP, ELECTRIC: JACKSON ENERGY COOP PROVIDER: 606-256-8408
SURVEYOR: POINT TO POINT, TELCO: WINDSTREAM PROVIDER: XXX-XXX-XXXX

DRIVING DIRECTIONS

DEPART 205 E MAIN ST, MT VERNON, KY 40456 [205 E MAIN ST, MT VERNON, KY 40456] ON KY-1326 [E MAIN ST] (EAST) 174 YDS
TURN LEFT (NORTH-EAST) ONTO OLD US HIGHWAY 25 S [OLD US-25] 0.5 MI
ROAD NAME CHANGES TO OLD DIXIE HWY [OLD US HIGHWAY 25 N] 0.1 MI
TURN LEFT (NORTH-WEST) ONTO LOCAL ROAD(S) 32 YDS
ARRIVE 37.35326°N 84.32730°W

CODE COMPLIANCE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

Table with columns: CODE TYPE, CODE. Rows include BUILDING/DWELLING (IBC 2015), STRUCTURAL (IBC 2015), MECHANICAL (IMC 2015), ELECTRICAL (NEC 2017).

PROJECT DESCRIPTION

- THE PROPOSED PROJECT INCLUDES:
• CONSTRUCT (1) NEW 330' SELF-SUPPORT TOWER
• CONSTRUCT FENCED GRAVEL UTILITY COMPOUND WITH LOCKING ACCESS GATE, 60' x 60' WITHIN 100' x 100' LEASE AREA.
• INSTALL (1) H-FRAME W/ UTILITY EQUIPMENT.
• INSTALL NEW POWER & TELCO UTILITY SERVICES.
• CONSTRUCT 12' WIDE GRAVEL ACCESS ROAD

DO NOT SCALE DRAWINGS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 11X17. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



CALL KENTUCKY ONE CALL (800) 752-6007 CALL 3 WORKING DAYS BEFORE YOU DIG!



TITLE SHEET

SHEET NUMBER:

T-1

HARMONI TOWERS
MT. VERNON
FA# 15147586
PACE# MRTNK047948
PT# 10110570
OLD U.S. HWY 25
MT. VERNON, KY 40456
ROCKCASTLE COUNTY
PROPOSED 330' SELF-SUPPORT TOWER

PROJECT NO: G0137346.00
CHECKED BY: MAS

ISSUED FOR table with columns: REV, DATE, DRWN, DESCRIPTION. Rows show revisions for ZONING DRAWINGS.

B&T ENGINEERING, INC.
E-1403
Expires 12/31/20



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



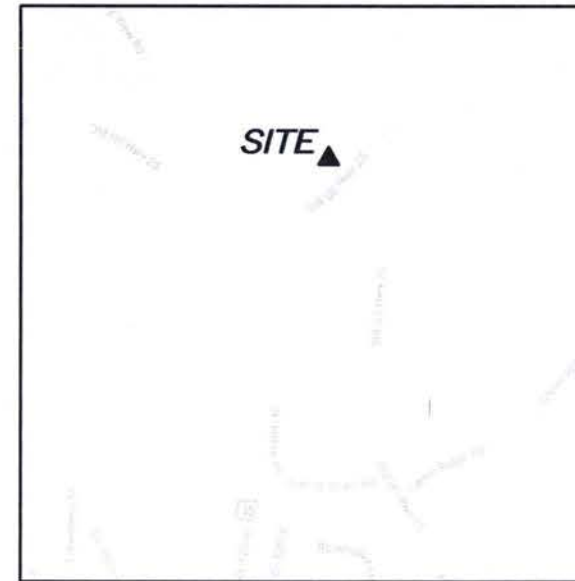


**PARENT PARCEL**

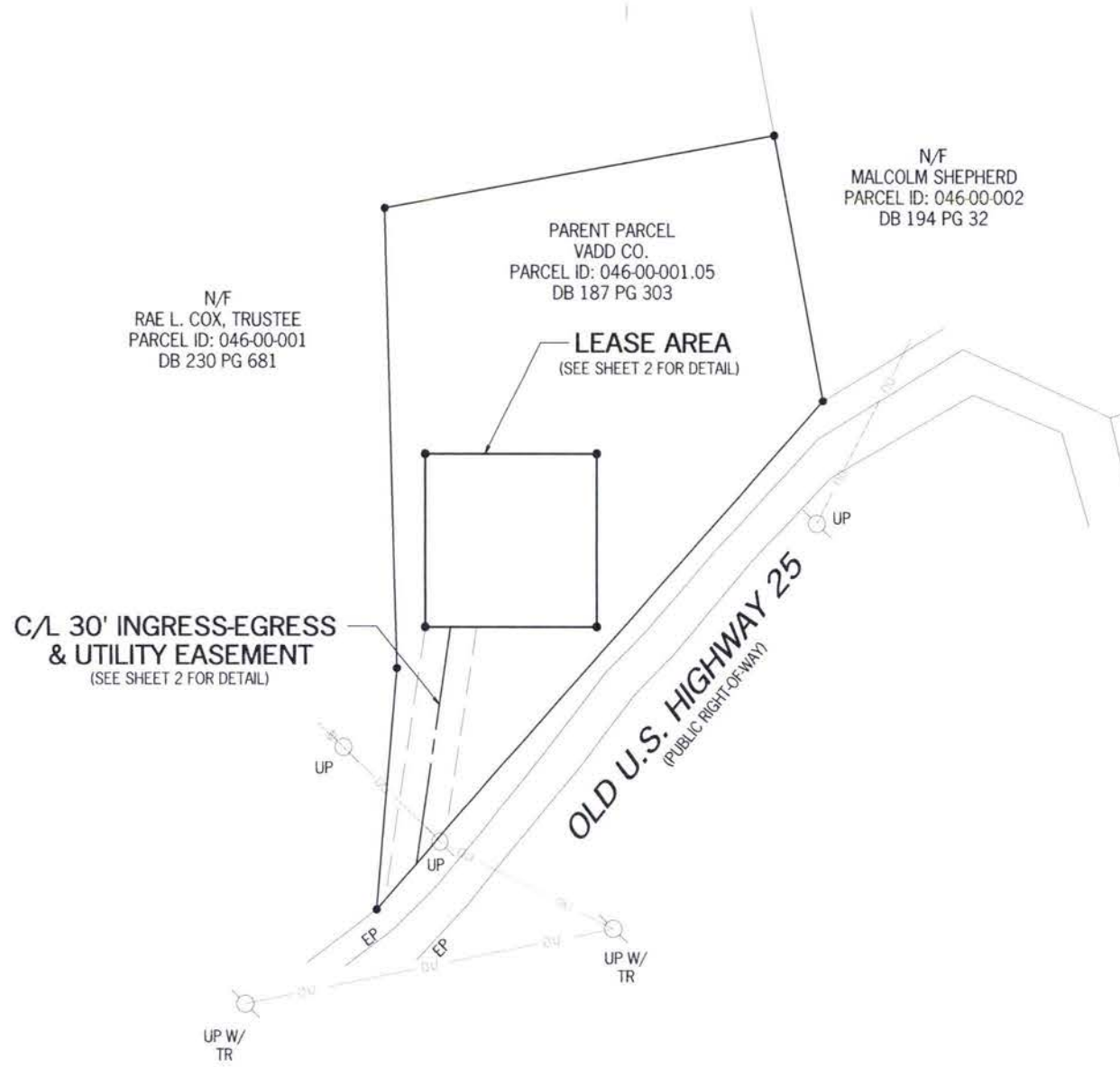
OWNER: VADD CO.  
 SITE ADDRESS: OLD U.S. HIGHWAY 25, MT. VERNON, KY 40456  
 PARCEL ID: 046-00-001.05  
 AREA: 1.5 ACRES (PER TAX ASSESSOR)  
 ZONED: NO ZONING  
 ALL ZONING INFORMATION SHOULD BE VERIFIED WITH THE PROPER ZONING OFFICIALS  
 REFERENCE: BOOK 187 PAGE 303

**GPS NOTES**

THE FOLLOWING GPS STATISTICS UPON WHICH THIS SURVEY IS BASED HAVE BEEN PRODUCED AT THE 95% CONFIDENCE LEVEL:  
 POSITIONAL ACCURACY: 0.09 FEET (HORZ) 0.28 FEET (VERT)  
 TYPE OF EQUIPMENT: GEOMAX ZENITH35 PRO BASE AND ROVER, DUAL FREQUENCY  
 TYPE OF GPS FIELD PROCEDURE: ONLINE POSITION USER INTERFACE  
 DATES OF SURVEY: 01/28/20 & 02/03/2020  
 DATUM / EPOCH: NAD\_83(2011)EPOCH:2010.0000  
 PUBLISHED / FIXED CONTROL USE: N/A  
 GEOID MODEL: 18  
 COMBINED GRID FACTOR(S): 0.99988868 CENTERED ON THE GPS BASE POINT AS SHOWN HEREON.  
 CONVERGENCE ANGLE: 00°52'24.43"



**VICINITY MAP**  
NOT TO SCALE



**GENERAL NOTES**

\* THIS SPECIFIC PURPOSE SURVEY IS FOR THE LEASED PREMISES AND EASEMENTS ONLY. THIS SPECIFIC PURPOSE SURVEY WAS PREPARED FOR THE EXCLUSIVE USE OF UNITI TOWERS, LLC AND EXCLUSIVELY FOR THE TRANSFERRAL OF THE PROPOSED LEASED PREMISES AND THE RIGHTS OF EASEMENT SHOWN HEREON AND SHALL NOT BE USED AS AN EXHIBIT OR EVIDENCE IN THE FEE SIMPLE TRANSFERRAL OF THE PARENT PARCEL NOR ANY PORTION OR PORTIONS THEREOF. BOUNDARY INFORMATION SHOWN HEREON HAS BEEN COMPILED FROM TAX MAPS AND DEED DESCRIPTIONS ONLY. NO BOUNDARY SURVEY OF THE PARENT PARCEL WAS PERFORMED.

THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY.

EQUIPMENT USED FOR ANGULAR & LINEAR MEASUREMENTS: LEICA TPS 1200 ROBOTIC & GEOMAX ZENITH 35. (DATE OF LAST FIELD VISIT: 02/03/2020)

THE 1' CONTOURS AND SPOT ELEVATIONS SHOWN ON THIS SPECIFIC PURPOSE SURVEY ARE ADJUSTED TO NAVD 88 DATUM (COMPUTED USING GEOID18) AND HAVE A VERTICAL ACCURACY OF ± .5'. CONTOURS OUTSIDE THE IMMEDIATE SITE AREA ARE APPROXIMATE.

BEARINGS SHOWN ON THIS SPECIFIC PURPOSE SURVEY ARE BASED ON GRID NORTH (NAD 83) KY SINGLE ZONE.

PER THE FEMA FLOODPLAIN MAPS, THE SITE IS LOCATED IN AN AREA DESIGNATED AS ZONE X. COMMUNITY PANEL NO. : 21203C0200C DATED: 08/03/2009

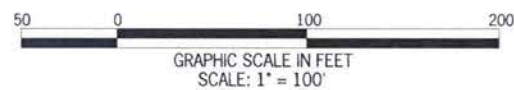
NO WETLAND AREAS HAVE BEEN INVESTIGATED BY THIS SPECIFIC PURPOSE SURVEY.

ALL ZONING INFORMATION SHOULD BE VERIFIED WITH THE PROPER ZONING OFFICIALS.

ANY UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM ABOVE GROUND FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEES THAT ANY UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT ANY UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED ANY UNDERGROUND UTILITIES.

**LEGEND**

- POB POINT OF BEGINNING
- POC POINT OF COMMENCEMENT
- IPS IRON PIN SET
- IPF IRON PIN FOUND
- CMF CONCRETE MONUMENT FOUND
- UP UTILITY POLE
- LP LIGHT POLE
- FP FLAG POLE
- SSMH SANITARY SEWER MANHOLE
- SDMH STORM DRAIN MANHOLE
- INV INVERT
- FH FIRE HYDRANT
- EP EDGE OF PAVEMENT
- TC TOP OF CURB
- BC BACK OF CURB
- TW TOP OF WALL
- BW BOTTOM OF WALL
- OU OVERHEAD UTILITY
- UE UNDERGROUND UTILITY
- CMP CORRUGATED METAL PIPE
- RCF REINFORCED CONCRETE PIPE
- PVC POLYVINYL CHLORIDE PIPE
- GW GUY WIRE ANCHOR
- TR TRANSFORMER
- JB JUNCTION BOX
- SWCB SINGLE WING CATCH BASIN
- DWCB DOUBLE WING CATCH BASIN
- CLF CHAIN LINK FENCE
- WV WATER VALVE
- WM WATER METER
- CO SEWER CLEAN-OUT
- GV GAS VALVE
- N/F NOW OR FORMERLY
- IB ICE BRIDGE
- IBP ICE BRIDGE POLE



**SURVEYOR'S CERTIFICATE**

I, G. DARRELL TAYLOR, A KENTUCKY PROFESSIONAL LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. THE UNADJUSTED PRECISION RATIO OF THE TRAVERSE EXCEEDED 1:10,000 AND WAS NOT ADJUSTED FOR CLOSURE. THIS SURVEY MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR AN URBAN SURVEY AS ESTABLISHED BY THE STATE OF KENTUCKY, PER 201 KAR 18:150 AND IN EFFECT ON THE DATE OF THIS SURVEY.

*G. Darrell Taylor*  
 G. DARRELL TAYLOR, PLS 4179  
 02/26/2020  
 DATE

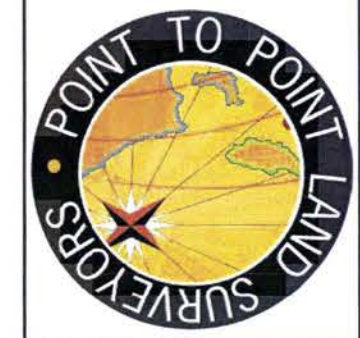


SURVEY NOT VALID WITHOUT SHEET 2 OF 2

STATE of KENTUCKY  
 G. DARRELL TAYLOR  
 4179  
 LICENSED PROFESSIONAL LAND SURVEYOR

NO.	DATE	REVISION
1	2/26/20	ADDED TITLE - JSD

SPECIFIC PURPOSE SURVEY PREPARED BY:  
**POINT TO POINT LAND SURVEYORS**  
 100 Governors Trace, Ste. 103  
 Peachtree City, GA 30269  
 (p) 678.565.4440 (f) 678.565.4497  
 (w) pointpointsurvey.com



SPECIFIC PURPOSE SURVEY PREPARED FOR:



MT. VERNON  
 SITE NO. KYLEX2044  
 ROCKCASTLE COUNTY, KENTUCKY

DRAWN BY: JSD  
 CHECKED BY: JKL  
 APPROVED: D. MILLER  
 DATE: FEBRUARY 6, 2020  
 P2P JOB #: 200099KY

SHEET: **1**  
OF 2

E:\vnc\p2p\p2p\Current Jobs\2020\200099KY\KYLEX2044.Mt. Vernon\200099KY.dwg





**SITE INFORMATION**

LEASE AREA = 10,000 SQUARE FEET (0.2296 ACRES)  
 LATITUDE = 37°21'11.74" (NAD 83) (37.353261°)  
 LONGITUDE = -84°19'38.27" (NAD 83) (-84.327297°)  
 AT CENTER LEASE AREA  
 ELEVATION AT CENTER OF LEASE AREA = 1305.8' A.M.S.L.

STATE of KENTUCKY  
 G. DARRELL TAYLOR  
 4179  
 LICENSED PROFESSIONAL LAND SURVEYOR

NO.	DATE	REVISION
1	2/26/20	ADDED TITLE - JSD

**30' INGRESS-EGRESS & UTILITY EASEMENT**

TOGETHER WITH A 30-FOOT WIDE (15 FEET EACH SIDE OF CENTERLINE) INGRESS-EGRESS & UTILITY EASEMENT LYING AND BEING IN ROCKCASTLE COUNTY, KENTUCKY, AND BEING A PART OF THE LANDS OF VADD CO. AS RECORDED IN DEED BOOK 187, PAGE 303, ROCKCASTLE COUNTY RECORDS, AND BEING DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

BEGINNING AT A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF OLD U.S. HIGHWAY 25, SAID POINT HAVING A KENTUCKY GRID NORTH, NAD 83, SINGLE ZONE VALUE OF N: 3655172.8593 E: 5334701.6398 AND FROM WHENCE A 1/2-INCH OPEN TOP PIPE FOUND ON THE SOUTHERLY RIGHT-OF-WAY LINE OF OLD U.S. HIGHWAY 25 BEARS, SOUTH 30°34'56" EAST, 123.31 FEET; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, NORTH 08°31'07" EAST, 138.48 FEET TO THE ENDING AT A POINT ON THE LEASE AREA, SAID POINT HAVING A KENTUCKY GRID NORTH, NAD 83, SINGLE ZONE VALUE OF N: 3655309.8072 E: 5334722.1521.

BEARINGS BASED ON KENTUCKY GRID NORTH, NAD 83, SINGLE ZONE.

**LEASE AREA**

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN ROCKCASTLE COUNTY, KENTUCKY, AND BEING A PART OF THE LANDS OF VADD CO. AS RECORDED IN DEED BOOK 187, PAGE 303, ROCKCASTLE COUNTY RECORDS, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF OLD U.S. HIGHWAY 25, SAID POINT HAVING A KENTUCKY GRID NORTH, NAD 83, SINGLE ZONE VALUE OF N: 3655172.8593 E: 5334701.6398 AND FROM WHENCE A 1/2-INCH OPEN TOP PIPE FOUND ON THE SOUTHERLY RIGHT-OF-WAY LINE OF OLD U.S. HIGHWAY 25 BEARS, SOUTH 30°34'56" EAST, 123.31 FEET; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, NORTH 08°31'07" EAST, 138.48 FEET TO A POINT ON THE LEASE AREA, SAID POINT HAVING A KENTUCKY GRID NORTH, NAD 83, SINGLE ZONE VALUE OF N: 3655309.8072 E: 5334722.1521; THENCE RUNNING ALONG SAID LEASE AREA LINE, NORTH 90°00'00" WEST, 15.17 FEET TO A POINT AND THE TRUE POINT OF BEGINNING; THENCE, NORTH 00°00'00" EAST, 100.00 FEET TO A POINT; THENCE, NORTH 90°00'00" EAST, 100.00 FEET TO A POINT; THENCE, SOUTH 00°00'00" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 90°00'00" WEST, 100.00 FEET TO A POINT AND THE POINT OF BEGINNING.

BEARINGS BASED ON KENTUCKY GRID NORTH, NAD 83, SINGLE ZONE.

SAID TRACT CONTAINS 0.2296 ACRES (10,000 SQUARE FEET), MORE OR LESS

**TITLE EXCEPTIONS**

THIS SURVEY WAS COMPLETED WITH THE AID OF TITLE WORK PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, ISSUE DATE OF FEBRUARY 18, 2020, SCOPE OF SEARCH BEGINNING APRIL 13, 1978 AND EXTENDING THROUGH FEBRUARY 11, 2020, BEING ORDER NO. 30902325, FOR THE PARENT PARCEL, TO DETERMINE THE IMPACTS OF EXISTING TITLE EXCEPTIONS.

2. DEED OF EASEMENT IN FAVOR OF THE CITY OF MT. VERNON SET FORTH IN INSTRUMENT RECORDED ON FEBRUARY 4, 2002 IN DEED BOOK 188, PAGE 131.

[THIS ITEM CANNOT BE DETERMINED IF IT IS APPLICABLE TO THE PARENT PARCEL BECAUSE THE DESCRIPTION OF THIS EASEMENT IS VAGUE AND THEREFORE WE ARE NOT ABLE TO ASCERTAIN THE EXACT LOCATION THEREOF.]

**PARENT PARCEL**

PER ORDER NO: 30902325

PROPERTY LOCATED IN ROCKCASTLE COUNTY, KENTUCKY

THE FOLLOWING DESCRIBED REAL PROPERTY LOCATED IN ROCKCASTLE COUNTY, KENTUCKY, TO WIT:

BEGINNING ON AN IRON PIN IN THE NORTH RIGHT-OF-WAY LINE OF OLD U.S. HIGHWAY 25, CORNER TO SHEPHARD; THENCE WITH SHEPHARD N 07 DEGREES 00' 00" W 156 FEET TO A POINT, CORNER TO SHEPHARD AND COX; THENCE WITH COX S 83 DEGREES 04' 24" W, 229.88 FEET TO A POINT CORNER TO COX; THENCE WITH COX THE FOLLOWING CALLS ALONG AN EXISTING ROADWAY; S 02 DEGREES 00' 00" W, 266.00 FEET AND S 08 DEGREES 30' 00" W, 140.00 FEET TO A POINT IN THE RIGHT-OF-WAY OF OLD U.S. HIGHWAY 25; THENCE WITH SAID HIGHWAY N 45 DEGREES 00' 00" E, 392 FEET TO THE POINT OF BEGINNING AND CONTAINING 1 1/2 ACRES, MORE OR LESS.

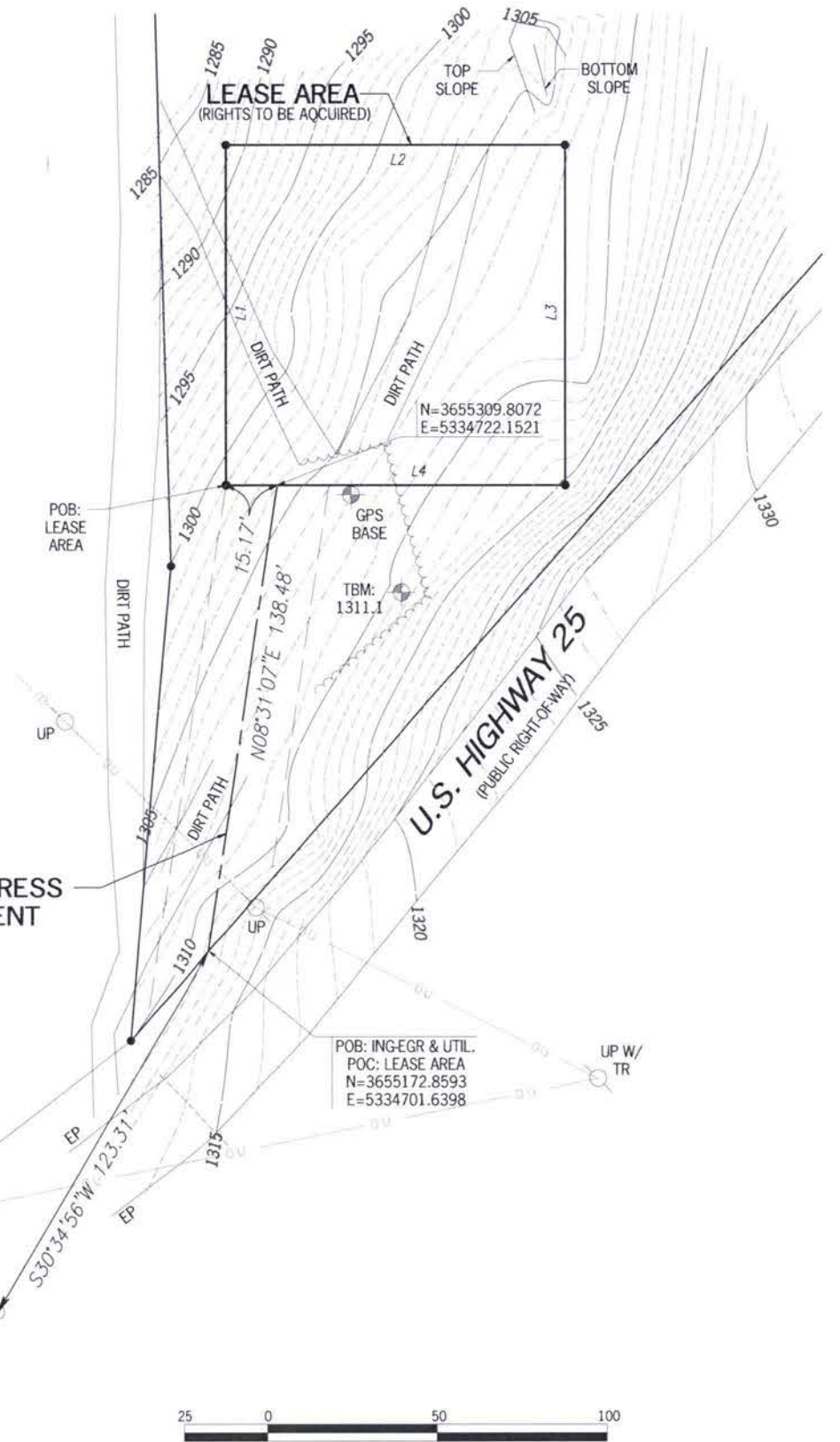
AND BEING THE SAME PROPERTY CONVEYED TO VADD CO. FROM ASHLAND LODGE 640 F&M BY DEED OF CONVEYANCE DATED NOVEMBER 27, 2001 AND RECORDED NOVEMBER 27, 2001 IN DEED BOOK 187, PAGE 303.

TAX PARCEL NO. 046-00-001.05

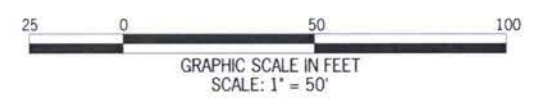
**LINE TABLE**

LINE	BEARING	DISTANCE
L1	N00°00'00"E	100.00'
L2	N90°00'00"E	100.00'
L3	S00°00'00"W	100.00'
L4	N90°00'00"W	100.00'

C/L 30' INGRESS-EGRESS & UTILITY EASEMENT  
 (RIGHTS TO BE ACQUIRED)

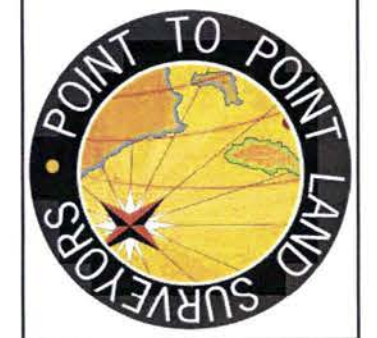


- LEGEND**
- POB POINT OF BEGINNING
  - POC POINT OF COMMENCEMENT
  - IPS IRON PIN SET
  - IPF IRON PIN FOUND
  - CMF CONCRETE MONUMENT FOUND
  - UP UTILITY POLE
  - LP LIGHT POLE
  - FP FLAG POLE
  - SSMH SANITARY SEWER MANHOLE
  - SDMH STORM DRAIN MANHOLE
  - INV INVERT
  - FH FIRE HYDRANT
  - EP EDGE OF PAVEMENT
  - TC TOP OF CURB
  - BC BACK OF CURB
  - TW TOP OF WALL
  - BW BOTTOM OF WALL
  - OU OVERHEAD UTILITY
  - UE UNDERGROUND UTILITY
  - CMP CORRUGATED METAL PIPE
  - RCP REINFORCED CONCRETE PIPE
  - PVC POLYVINYL CHLORIDE PIPE
  - GW GUY WIRE ANCHOR
  - TR TRANSFORMER
  - JB JUNCTION BOX
  - SWCB SINGLE WING CATCH BASIN
  - DWCB DOUBLE WING CATCH BASIN
  - CLF CHAIN LINK FENCE
  - WY WATER VALVE
  - WM WATER METER
  - CO SEWER CLEAN-OUT
  - GV GAS VALVE
  - N/F NOW OR FORMERLY
  - IB ICE BRIDGE
  - IBP ICE BRIDGE POLE



\* SPECIFIC PURPOSE SURVEY PREPARED BY:

**POINT TO POINT LAND SURVEYORS**  
 100 Governors Trace, Ste. 103  
 Peachtree City, GA 30269  
 (p) 678.565.4440 (f) 678.565.4497  
 (w) pointtosurvey.com



SPECIFIC PURPOSE SURVEY PREPARED FOR:



**MT. VERNON**  
**SITE NO. KYLEX2044**  
 ROCKCASTLE COUNTY, KENTUCKY

DRAWN BY: JSD  
 CHECKED BY: JKL  
 APPROVED: D. MILLER  
 DATE: FEBRUARY 6, 2020  
 P2P JOB #: 200099KY

SHEET:  
**2**  
 OF 2













PROPOSED 4' LIGHTNING ROD

FLASH HEAD

PROPOSED AT&T ANTENNA ARRAY  
RAD CENTER=325' AGL

FUTURE ANTENNA ARRAY  
RAD CENTER=315' AGL

FUTURE ANTENNA ARRAY  
RAD CENTER=305' AGL

PROPOSED TOWER  
LIGHTING SHALL BE IN  
ACCORDANCE WITH FAA  
REQUIREMENTS (DESIGN  
BY OTHERS)

TOWER FINISH SHALL BE GALVANIZED  
STEEL

STRUCTURAL ANALYSIS NOTES:

1. ANTENNA PLACEMENT WAS DETERMINED WITHOUT VERIFICATION OF STRUCTURAL ANALYSIS.
2. REFER TO STRUCTURAL ANALYSIS OR STRUCTURAL LETTER FOR APPROVAL OF ADDITIONAL NEW APPURTENANCES.

TOTAL STRUCTURE HEIGHT = 334' TO TOP OF LIGHTNING ROD  
330' TO TOP OF TOWER

PROPOSED ICE BRIDGE  
(12' MIN. CLEARANCE)

PROPOSED AT&T  
EQUIPMENT

PROPOSED FENCED  
COMPOUND

**1** PROPOSED TOWER ELEVATION  
SCALE: N.T.S.

NOTES: CONTRACTOR TO REFER  
TO THE STRUCTURAL DESIGN  
REPORT PREPARED BY HARMONI  
TOWERS PRIOR TO CONSTRUCTION.



HARMONI TOWERS  
**MT. VERNON**  
 FA# 15147586  
 PACE# MRINK047948  
 PT# 10110570  
 OLD U.S. HWY 25  
 MT. VERNON, KY 40456  
 ROCKCASTLE COUNTY  
 PROPOSED 330' SELF-SUPPORT TOWER

PROJECT NO: G0137346.00

CHECKED BY: MAS

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
A	08/19/20	DLS	ZONING DRAWINGS
0	08/31/20	DLS	ZONING DRAWINGS
1	10/30/20	DLS	ZONING DRAWINGS

B&T ENGINEERING, INC.  
E-1403  
Expires 12/31/20



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

TOWER  
ELEVATION

SHEET NUMBER:  
**C-4**

**EXHIBIT C**  
**TOWER AND FOUNDATION DESIGN**



Uniti Group Corporate Headquarters  
10802 Executive Center Drive  
Benton Building, Ste. 300  
Little Rock, AR 72211  
501.850.0820 | uniti.com

July 16,2020

Kentucky Public Service Commission  
211 Sower Blvd.  
P.O. Box 615  
Frankfort, KY 40602-0615

RE: Site Name – McGuire Relo  
Proposed Cell Tower  
37.3532610 North Latitude, 84.3272970 West Longitude

Dear Commissioners:

The Construction Manager for the proposed new communications facility will be Jeremy Culpepper. His contact information is (985) 707-6175 or [Jeremy.Culpepper@uniti.com](mailto:Jeremy.Culpepper@uniti.com). Jeremy has been in the industry completing civil construction and constructing towers since 1998. He has worked at Uniti Towers LLC since 2018 completing project and construction management on new site build projects.

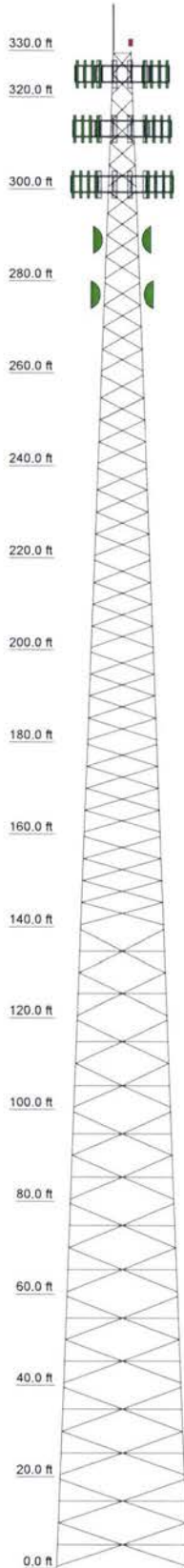
Thank you,

**Jeremy Culpepper** Digitally signed by Jeremy Culpepper  
Date: 2020.07.16 09:32:42 -05'00'

Jeremy Culpeper  
Construction Manager – Tennessee/Kentucky Market  
Uniti Towers LLC  
(985) 707-6175



Section	T17	T16	T15	T14	T13	T12	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs	SR 5	SR 4 3/4	SR 4 1/2	SR 4 3/4	SR 4 1/4	SR 4 1/4	SR 4	SR 4	SR 3 3/4	SR 3 3/4	SR 3 1/2	SR 3 1/4	SR 3	SR 2 3/4	SR 2 1/2	SR 2	A
Leg Grade									A529-50								
Diagonals	2L3x3x1/4x3/8	2L3x3x3/16x3/8	2L3x3x3/16x3/8	2L3x3x3/16x3/8	2L2 1/2x2 1/2x3/16x3/8	2L2 1/2x2 1/2x3/16x3/8	L3x3x1/4	L3x3x3/16	L3x3x3/16	L3x3x3/16	L2 1/2x2 1/2x3/16	L2 1/2x2 1/2x3/16	L2x2x3/16	L2x2x3/16	L1 3/4x1 3/4x3/16		
Diagonal Grade							A36M-50										
Top Girts																	
Horizontals																	
Inner Bracing																	
Face Width (ft)	28.5	27	25.5	24	22.5	21	18	16.5	15	13.5	12	10.5	9	7.5	6	4.5	3.75
# Panels @ (ft)								64 @ 4.75									2 @ 4.5
Weight (K)	70.9	8.9	7.2	7.0	6.5	6.3	6.0	4.7	3.7	3.6	3.2	2.6	2.2	1.8	1.4	1.0	0.4



### DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod 1"x10"	330	Sector1(CaAa=10000 Sq.in)No Ice (Carrier 3)	301
Top Beacon	330	Sector2(CaAa=10000 Sq.in)No Ice (Carrier 3)	301
Sector1(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	325	Sector3(CaAa=10000 Sq.in)No Ice (Carrier 3)	301
Sector2(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	325	4 1/2" OD Dish Mount (Carrier 4)	289
Sector3(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	325	4 1/2" OD Dish Mount (Carrier 4)	289
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 2)	313	6" MW Dish (Carrier 4)	289
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 2)	313	6" MW Dish (Carrier 4)	289
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 2)	313	4 1/2" OD Dish Mount (Carrier 5)	277
		4 1/2" OD Dish Mount (Carrier 5)	277
		6" MW Dish (Carrier 5)	277
		6" MW Dish (Carrier 5)	277

### SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	SR 1 3/4	D	2L2x2x3/16x3/8
B	L1 3/4x1 3/4x3/16	E	2L3x3x3/16x3/8
C	2L1 3/4x1 3/4x3/16x3/8		

### MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A529-50	50 ksi	65 ksi	A36M-50	50 ksi	65 ksi

### TOWER DESIGN NOTES

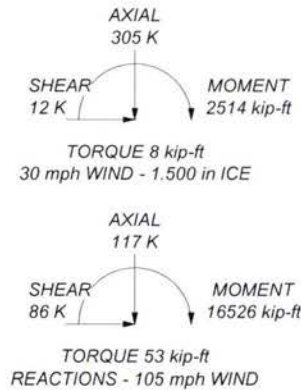
1. Tower is located in Rockcastle County, Kentucky.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 105 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 30 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.000 ft
8. Please see feedline plan for proper feedline placement. Deviation from plan may reduce tower capacity.

ALL REACTIONS  
ARE FACTORED

MAX. CORNER REACTIONS AT BASE:

DOWN: 708 K  
SHEAR: 52 K

UPLIFT: -604 K  
SHEAR: 46 K



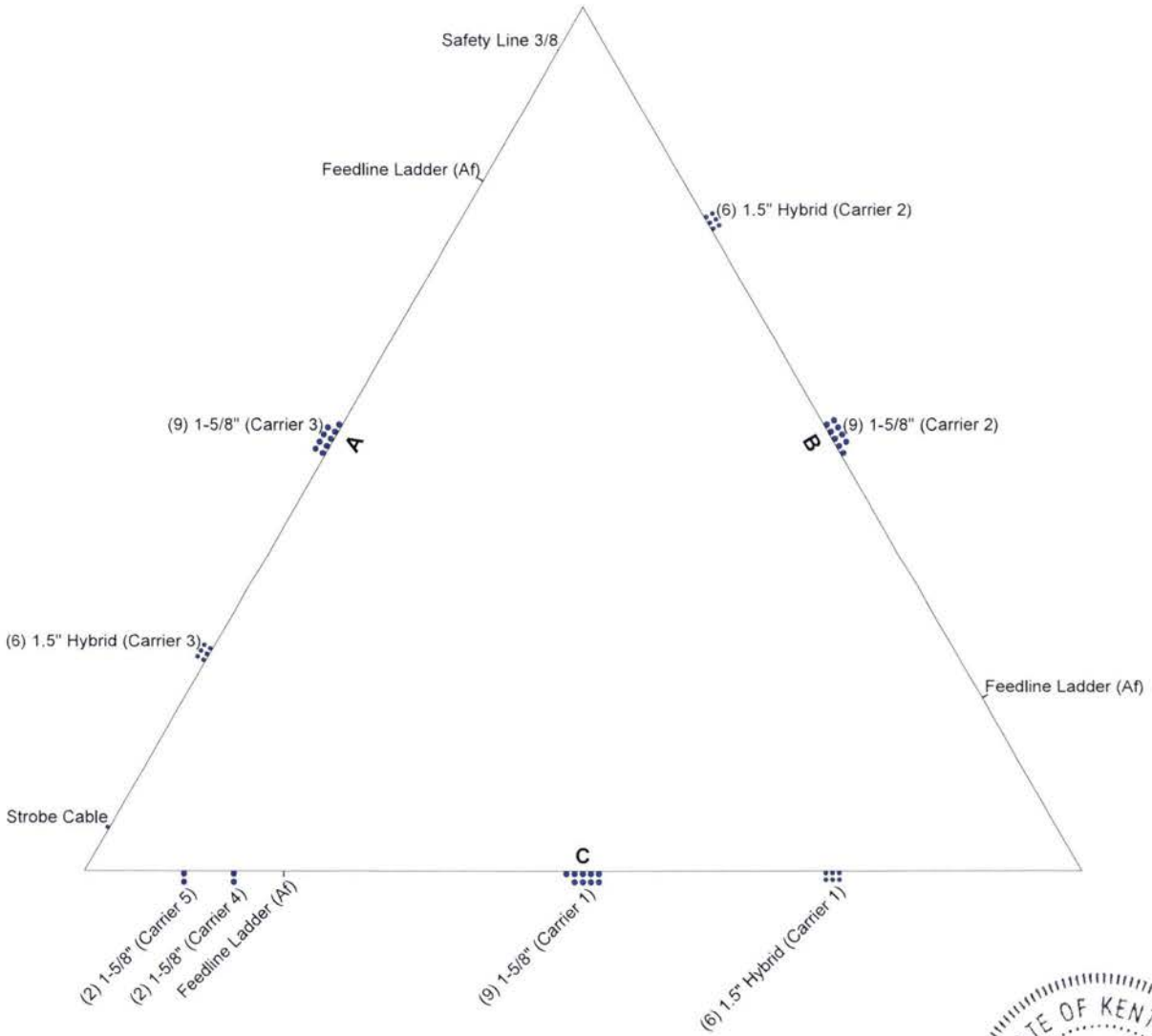
**ARCOSA**  
TELECOM STRUCTURES



**B+T Group**  
1717 S. Boulder Ave, Ste 300  
Tulsa, OK 74119  
Phone: (918) 587-4630  
FAX: (918) 295-0265

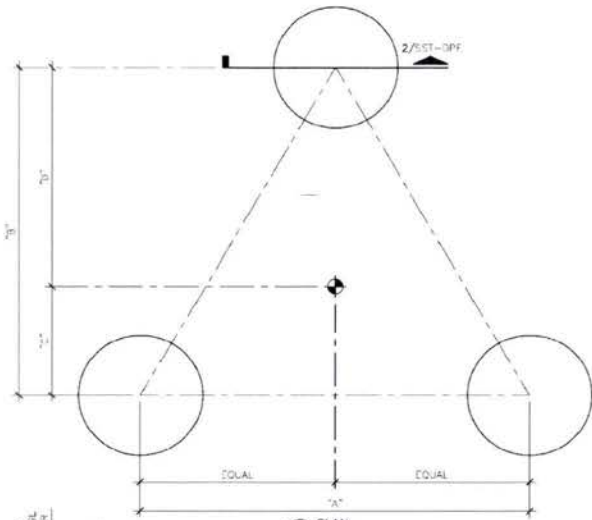
Job: <b>ATS #8657 - Mt Vernon (Site# KYLEX2044)</b>	Project: <b>330' SST/ 37.353261, -84.327297</b>	Client: <b>Harmoni (UNITI) Towers</b>	Drawn by: <b>JLandon</b>	App'd:
Code: <b>TIA-222-H</b>	Date: <b>10/22/20</b>	Scale: <b>NTS</b>	Dwg No. <b>E-1</b>	

# Feed Line Plan



**B+T Group**  
 1717 S. Boulder Ave, Ste 300  
 Tulsa, OK 74119  
 Phone: (918) 587-4630  
 FAX: (918) 295-0265

Job: <b>ATS #8657 - Mt Vernon (Site# KYLEX2044)</b>		
Project: 330' SST/ 37.353261, -84.327297		
Client: Harmoni (UNITI) Towers	Drawn by: JLondon	App'd:
Code: TIA-222-H	Date: 10/22/20	Scale: NTS
Path:		Dwg No. E-7

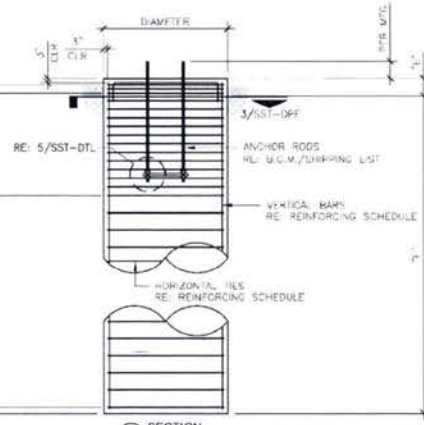


1 PLAN SCALE: N.T.S.

HORIZONTAL TIES AT 6" O.C. TO THE COLUMN BARS WITH MINIMUM 12" LAP. MINIMUM 6" CLEARANCE.

HORIZONTAL TIES AT 6" O.C. TO THE COLUMN BARS WITH MINIMUM 12" LAP. MINIMUM 6" CLEARANCE.

HORIZONTAL TIES AT 6" O.C. BELOW REINFORCING SCHEDULE.



2 SECTION SCALE: N.T.S.

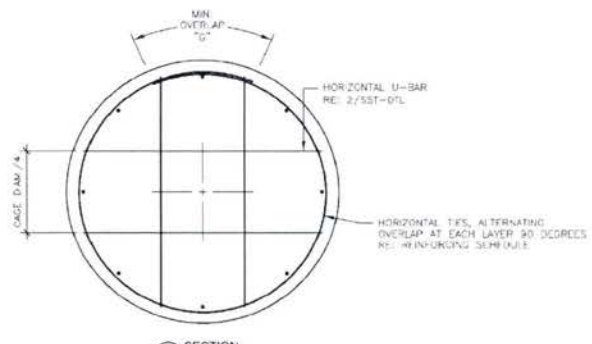
- NOTES:**
- REINFORCEMENT STEEL SHALL CONFIRM TO THE REQUIREMENT OF ASTM A-615 (GRADE 60) EXCEPT THAT TIES MAY BE ASTM-615 (GRADE 40) WITH 3" MINIMUM CLEAR COVER.
  - THE CONTRACTOR SHALL THOROUGHLY REVIEW THE GEOTECH REPORT FOR THIS PROJECT AND FOLLOW THE RECOMMENDATIONS IN THAT REPORT WHEN CONSTRUCTING THE FOUNDATION.
  - GEOTECHNICAL PROPERTIES BY: DELTA OAKS GROUP  
PROJECT NUMBER: GEO20-07031-08  
DATE: SEPTEMBER 29, 2020
  - THIS FOUNDATION HAS BEEN DESIGNED, IN ACCORDANCE WITH THE TIA-222-H STANDARD, SPECIFICALLY FOR THE TOWER AND SOIL CONDITION REFERENCED ABOVE. IF ANYTHING DIFFERS THIS DESIGN SHALL BE CONSIDERED INVALID AND MUST BE REDESIGNED PRIOR TO CONSTRUCTION.
  - TOTAL CONCRETE VOLUME FOR ALL (3) PIERS IN CUBIC YARDS: 64.4
  - ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
  - CONCRETE MIXTURES SHALL MEET DURABILITY REQUIREMENTS OF CHAPTER 19 OF THE ACI 318-14
  - ALL CONCRETE TESTING SHALL BE IN ACCORDANCE WITH ACI 318-14 A MINIMUM OF (2) 6"x12" OR (3) 4"x8" CONCRETE CYLINDERS PER INDIVIDUAL FOUNDATION AND A MINIMUM OF (6) 6"x12" OR (6) 4"x8" CYLINDERS PER BATCH REQUIRED.
  - SUMP TEST SHALL BE MADE IN ACCORDANCE WITH ASTM C143. THE ALLOWABLE CONCRETE SLUMP SHALL BE 4 INCHES (+1") UNLESS ADMIXTURES ARE USED. ADMIXTURE SHALL BE IN ACCORDANCE WITH ASTM C494 STANDARD TYPES A, B, C, D OR E. THE ENGINEER SHALL PRE-APPROVE SUPER PLASTICIZER USE. DO NOT USE CHLORIDE-CONTAINING ADMIXTURES. AIR ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C260.
  - BACK-FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM UNIT WEIGHT SPECIFIED IN GEOTECH REPORT. THE SOIL SHALL BE INSTALLED IN 6" TO 8" LIFTS AND COMPACTED THOROUGHLY TO ACHIEVE APPROPRIATE UNIT WEIGHT UNLESS GEOTECH SPECIFIES OTHER COMPACTION REQUIREMENTS. VERIFY ALL DIMENSIONS AGAINST MANUFACTURER'S DRAWINGS.

**STIPULATION FOR REUSE:**  
1. THIS DRAWING WAS SPECIFICALLY DESIGNED FOR USE BY THE CUSTOMER ON THIS DRAWING AT THE SPECIFIED LOCATION. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF A PROPERLY LICENSED ENGINEER.

DIMENSIONING SCHEDULE	
A	28' 0"
B	34' 8-3/16"
C	8' 2-3/4"
D	16' 5-7/16"
E	0' 6"
F	20' 0"
MIN. OVERLAP "G"	2'-3"
DIAMETER	6' 0"

REINFORCING SCHEDULE			
	SIZE	TOTAL QTY	
VERTICAL BARS	# 8	78	
HORIZONTAL TIES	# 4	84	
U-BAR HORIZONTAL	# 4	12	

BASE REACTIONS: (FACTORED LOADS)	
<b>GLOBAL REACTIONS</b>	
MOMENT	165.26 KIP-FT
AXIAL	11.7 KIPS
SHEAR	86 KIPS
<b>REACTIONS PER LEG</b>	
COMPRESSION AXIAL	708 KIPS
COMPRESSION SHEAR	52 KIPS
UPLIFT AXIAL	654 KIPS
UPLIFT SHEAR	46 KIPS



3 SECTION SCALE: N.T.S.

**B+T GRP**  
1717 S BOULDER AVE #300 TULSA, OK 74119  
(918) 587-4630

**ARCOSA**  
TELECOM STRUCTURES  
4020 TULL AVE, MUSKOGEE, OK 74403

ISSUED FOR:

REV	DATE	DESCRIPTION
0	10/22/20	ISSUED FOR CONSTRUCTION



IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTIONS OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

PROJECT INFORMATION:  
PROJECT NO: 145800.001.01  
SITE NAME: MT. VERNON  
SITE NO: 8657  
CLIENT NAME: ARCOSA TELECOM STRUCTURES  
DRAWN BY: JL  
CHECKED BY:

SHEET TITLE:  
DRILLED PIER FOUNDATION

SHEET NUMBER:	REVISION:
SST-DPF	0



DIMENSIONING SCHEDULE	
A	39' 6"
B	5' 6"
C	28' 6"
D	7' 4-15/16"
E	24' 8-3/16"
F	4' 1-3/8"
G	0' 6"
H	6' 0"
I	2' 3"
J	3' 6"
MIN. OVERLAP "M"	
DIAMETER	

REINFORCING SCHEDULE	SIZE	TOTAL QTY
VERTICAL BARS WITH 90° BEND	#8	54
HORIZONTAL TIES	#4	42
HORIZONTAL L-BAR (PEDESTAL)	#4	12
TOP HORIZONTAL BARS	#8	82
BOTTOM HORIZONTAL BARS	#8	82
CORNER BARS	#4	8
VERTICAL L-BARS (PAD)	#4	82

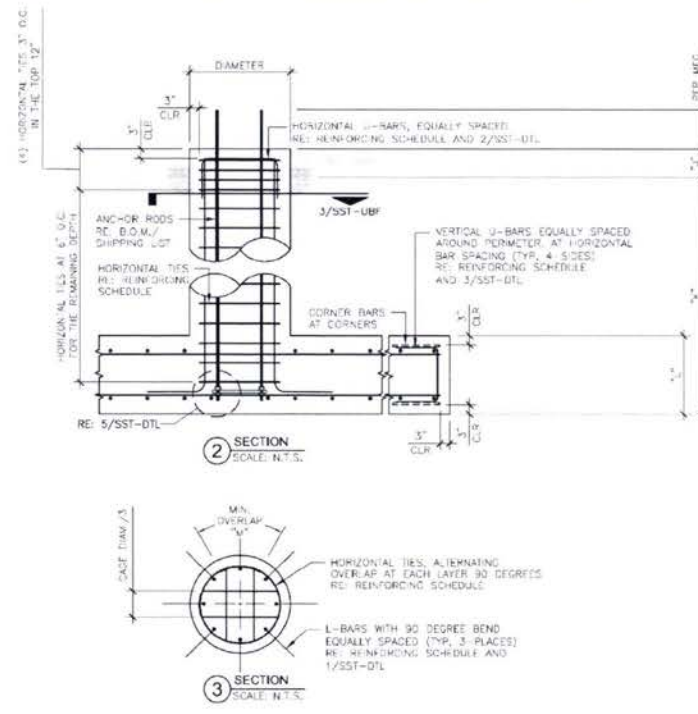
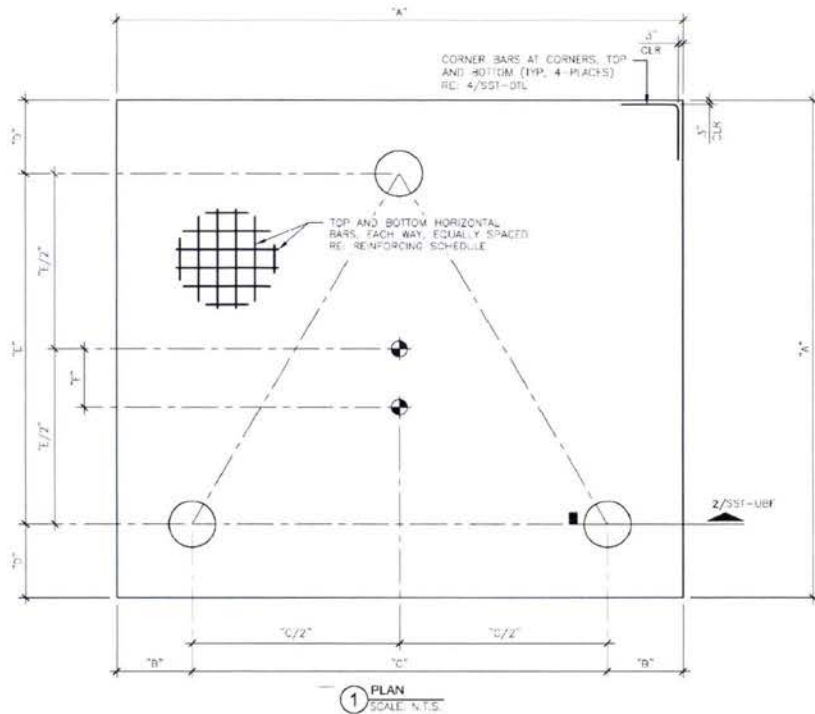
BASE REACTIONS: (FACTORED LOADS)	
<b>GLOBAL REACTIONS</b>	
MOMENT	165.26 KIP-FT
AXIAL	117 KIPS
SHEAR	86 KIPS
<b>REACTIONS PER LEG</b>	
COMPRESSION AXIAL	708 KIPS
COMPRESSION SHEAR	32 KIPS
LIFT/AXIAL	604 KIPS
LIFT/SHEAR	46 KIPS

**NOTES:**

- REINFORCEMENT STEEL SHALL CONFORM TO THE REQUIREMENT OF ASTM A-615 (GRADE 60) EXCEPT THAT TIES MAY BE ASTM-615 (GRADE 40) WITH 3" MINIMUM CLEAR COVER.
- THE CONTRACTOR SHALL THOROUGHLY REVIEW THE GEOTECH REPORT FOR THIS PROJECT AND FOLLOW THE RECOMMENDATIONS IN THAT REPORT WHEN CONSTRUCTING THE FOUNDATION.  
 GEOTECHNICAL PROPERTIES BY: DELTA OAKS GROUP  
 PROJECT NUMBER: GEO-20-07031-08  
 DATE: SEPTEMBER 29, 2020
- THIS FOUNDATION HAS BEEN DESIGNED, IN ACCORDANCE WITH THE TIA 222-H STANDARD, SPECIFICALLY FOR THE TOWER AND SOIL CONDITION REFERENCED ABOVE. IF ANYTHING DIFFERS THIS DESIGN SHALL BE CONSIDERED INVALID AND MUST BE REDESIGNED PRIOR TO CONSTRUCTION.
- CONCRETE VOLUME IN CUBIC YARDS: 134.56
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
- CONCRETE MIXTURES SHALL MEET DURABILITY REQUIREMENTS OF CHAPTER 19 OF THE ACI 318-14.
- ALL CONCRETE TESTING SHALL BE IN ACCORDANCE WITH ACI 318-14. A MINIMUM OF (2) 6"X12" OR (3) 4"X8" CONCRETE CYLINDERS PER INDIVIDUAL FOUNDATION AND A MINIMUM OF (6) 6"X12" OR (6) 4"X8" CYLINDERS PER BATCH REQUIRED.
- SLUMP TEST SHALL BE MADE IN ACCORDANCE WITH ASTM C143. THE ALLOWABLE CONCRETE SLUMP SHALL BE 4 INCHES (±1") UNLESS ADMIXTURES ARE USED. ADMIXTURE SHALL BE IN ACCORDANCE WITH ASTM C494 STANDARD TYPES A, B, C, D OR E. THE ENGINEER SHALL PRE-APPROVE SUPER PLASTICIZER USE. DO NOT USE CHLORIDE-CONTAINING ADMIXTURES. AIR ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C260.
- BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM UNIT WEIGHT SPECIFIED IN GEOTECH REPORT. THE SOIL SHALL BE INSTALLED IN 6" TO 8" LIFTS AND COMPACTED THOROUGHLY TO ACHIEVE APPROPRIATE UNIT WEIGHT UNLESS GEOTECH SPECIFIES OTHER COMPACTION REQUIREMENTS.
- VERIFY ALL DIMENSIONS AGAINST MANUFACTURER'S DRAWINGS

**STIPULATION FOR REUSE:**

- THIS DRAWING WAS SPECIFICALLY DESIGNED FOR USE BY THE CUSTOMER ON THIS DRAWING AT THE SPECIFIED LOCATION. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANY OTHER PROJECT REQUIRES THE SERVICES OF A PROPERLY LICENSED ENGINEER.



**B+T GRP**  
 1717 S BOULDER AVE #300, TULSA, OK 74119  
 (918) 587-4630

**ARCOSA**  
 TELECOM STRUCTURES  
 4020 TULL AVE, MUSKOGEE, OK 74403

ISSUED FOR:

REV	DATE	DESCRIPTION
0	10/22/20	ISSUED FOR CONSTRUCTION

STATE OF KENTUCKY  
 BRADLEY M. MIKULSKI  
 25311  
 LICENSED PROFESSIONAL ENGINEER  
 10/22/20

IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTIONS OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PROJECT INFORMATION:  
 PROJECT NO.: 145800.001.01  
 SITE NAME: MT. VERNON  
 SITE NO.: 8657  
 CLIENT NAME: ARCOSA TELECOM STRUCTURES  
 DRAWN BY: JL  
 CHECKED BY:

SHEET TITLE:  
 UNIT BASE FOUNDATION

SHEET NUMBER:	REVISION:
SST-UBF	0



1717 S BOULDER AVE #300, TULSA, OK 74119  
(918) 587-4630

**ARCOSA**  
TELECOM STRUCTURES

4020 TULL AVE, MUSKOGEE, OK 74403

ISSUED FOR:

REV	DATE	DESCRIPTION
0	10/22/20	ISSUED FOR CONSTRUCTION



IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTIONS OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT

PROJECT INFORMATION:

PROJECT NO: 145800.001.01  
SITE NAME: MT. VERNON  
SITE NO: 8657  
CLIENT NAME: ARCOSA TELECOM STRUCTURES

DRAWN BY: JL  
CHECKED BY:

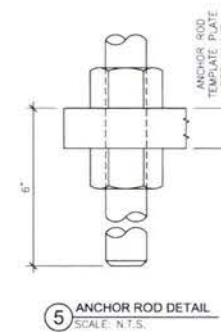
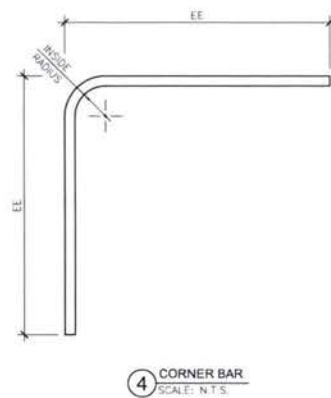
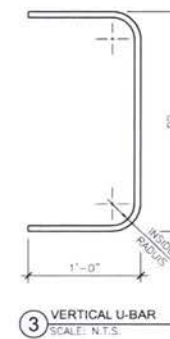
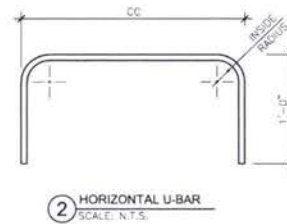
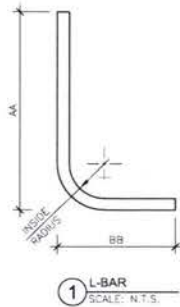
SHEET TITLE:

DIMENSIONING DETAIL

SHEET NUMBER:  
**SST-DTL**

REVISION:  
**0**

DIMENSIONING SCHEDULE	
AA	5'-10"
BB	1'-3"
CC SST-DIP	5'-3-7/8"
CC SST-LIBP	2'-9-15/16"
DD	1'-9"
EE	3'-0"
INSIDE RADIUS DETAIL 1	0'-3"
INSIDE RADIUS DETAIL 2	0'-1-1/2"
INSIDE RADIUS DETAIL 3	0'-1-1/2"
INSIDE RADIUS DETAIL 4	0'-1-1/2"



# SST Unit Base Foundation

Project #: 145800.001.01  
 Site Name: Mt. Vernon  
 Site #: 8657

TIA-222 Revision: H

Top & Bot. Pad Rein. Different?:	<input type="checkbox"/>
Tower Centroid Offset?:	<input checked="" type="checkbox"/>
Block Foundation?:	<input type="checkbox"/>

Superstructure Analysis Reactions		
Global Moment, <b>M</b> :	16526	ft-kips
Global Axial, <b>P</b> :	117	kips
Global Shear, <b>V</b> :	86	kips
Leg Compression, <b>P<sub>comp</sub></b> :	708	kips
Leg Comp. Shear, <b>V<sub>u,comp</sub></b> :	52	kips
Leg Uplift, <b>P<sub>uplift</sub></b> :	604	kips
Leg Uplift. Shear, <b>V<sub>u,uplift</sub></b> :	46	kips
Tower Height, <b>H</b> :	330	ft
Base Face Width, <b>BW</b> :	28.5	ft
BP Dist. Above Fdn, <b>bp<sub>dist</sub></b> :	3	in

Foundation Analysis Checks				
	Capacity	Demand	Rating	Check
<i>Lateral (Sliding) (kips)</i>	572.49	86.00	15.0%	Pass
<i>Bearing Pressure (ksf)</i>	8.77	3.14	35.8%	Pass
<i>Overturning (kip*ft)</i>	21713.92	17535.59	80.8%	Pass
<i>Pier Flexure (Comp.) (kip*ft)</i>	1628.34	221.00	13.6%	Pass
<i>Pier Flexure (Tension) (kip*ft)</i>	339.71	195.50	57.5%	Pass
<i>Pier Compression (kip)</i>	6123.66	715.36	11.7%	Pass
<i>Pad Flexure (kip*ft)</i>	3191.61	2939.97	92.1%	Pass
<i>Pad Shear - 1-way (kips)</i>	1011.77	432.28	42.7%	Pass
<i>Pad Shear - Comp 2-way (ksi)</i>	0.190	0.160	84.5%	Pass
<i>Flexural 2-way (Comp) (kip*ft)</i>	1640.67	132.60	8.1%	Pass
<i>Pad Shear - Tension 2-way (ksi)</i>	0.190	0.146	76.8%	Pass
<i>Flexural 2-way (Tension) (kip*ft)</i>	1640.67	117.30	7.1%	Pass

Pier Properties		
Pier Shape:	Circular	
Pier Diameter, <b>dpier</b> :	3.5	ft
Ext. Above Grade, <b>E</b> :	0.50	ft
Pier Rebar Size, <b>Sc</b> :	8	
Pier Rebar Quantity, <b>mc</b> :	18	
Pier Tie/Spiral Size, <b>St</b> :	4	
Pier Tie/Spiral Quantity, <b>mt</b> :	14	
Pier Reinforcement Type:	Tie	
Pier Clear Cover, <b>cc<sub>pier</sub></b> :	3	in

Soil Rating:	80.8%
Structural Rating:	92.1%

Pad Properties		
Depth, <b>D</b> :	6.00	ft
Pad Width, <b>W</b> :	39.50	ft
Pad Thickness, <b>T</b> :	2.25	ft
Pad Rebar Size (Bottom), <b>Sp</b> :	8	
Pad Rebar Quantity (Bottom), <b>mp</b> :	41	
Pad Clear Cover, <b>cc<sub>pad</sub></b> :	3	in

Material Properties		
Rebar Grade, <b>Fy</b> :	60	ksi
Concrete Compressive Strength, <b>F'c</b> :	4	ksi
Dry Concrete Density, <b>dc</b> :	150	pcf

Soil Properties		
Total Soil Unit Weight, <b>γ</b> :	115	pcf
Ultimate Net Bearing, <b>Qnet</b> :	11.000	ksf
Cohesion, <b>Cu</b> :	1.750	ksf
Friction Angle, <b>φ</b> :	0	degrees
SPT Blow Count, <b>N<sub>blows</sub></b> :		
Base Friction, <b>μ</b> :	0.3	
Neglected Depth, <b>N</b> :	2.5	ft
Foundation Bearing on Rock?	No	
Groundwater Depth, <b>gw</b> :	None	ft

<-- Toggle between Gross and Net



## Drilled Pier Foundation

Project #	145800.001.01
Site Name:	Mt. Vernon
Order Number:	8657

TIA-222 Revision:	H
Tower Type:	Self Support

Applied Loads		
	Comp.	Uplift
Moment (kip-ft)		
Axial Force (kips)	708	604
Shear Force (kips)	52	46

Material Properties	
Concrete Strength, f <sub>c</sub> :	4 ksi
Rebar Strength, F <sub>y</sub> :	60 ksi
Tie Yield Strength, F <sub>yt</sub> :	40 ksi

Pier Design Data	
Depth	20 ft
Ext. Above Grade	0.5 ft
Pier Section 1	
<i>From 0.5' above grade to 20' below grade</i>	
Pier Diameter	6 ft
Rebar Quantity	26
Rebar Size	8
Clear Cover to Ties	3 in
Tie Size	4
Tie Spacing	12 in

Rebar & Pier Options

Embedded Pole Inputs

Belled Pier Inputs

Analysis Results		
Soil Lateral Check	Compression	Uplift
D <sub>void</sub> (ft from TOC)	10.95	10.95
Soil Safety Factor	19.33	21.86
Max Moment (kip-ft)	434.52	384.38
Rating	6.9%	6.1%

Soil Vertical Check	Compression	Uplift
Skin Friction (kips)	558.14	558.14
End Bearing (kips)	1737.39	-
Weight of Concrete (kips)	104.33	78.25
Total Capacity (kips)	2295.52	636.38
Axial (kips)	812.33	604.00
Rating	35.4%	94.9%

Reinforced Concrete Flexure	Compression	Uplift
Critical Depth (ft from TOC)	11.05	9.70
Critical Moment (kip-ft)	434.43	374.16
Critical Moment Capacity	4200.04	1822.55
Rating	10.3%	20.5%

Reinforced Concrete Shear	Compression	Uplift
Critical Depth (ft from TOC)	17.58	17.58
Critical Shear (kip)	87.03	76.99
Critical Shear Capacity	723.19	357.02
Rating	12.0%	21.6%

Soil Interaction Rating	94.9%
Structural Foundation Rating	21.6%

Check Limitation	
Apply TIA-222-H Section 15.5:	<input type="checkbox"/>
	N/A <input type="checkbox"/>
Shear Design Options	
Check Shear along Depth of Pier:	<input checked="" type="checkbox"/>
Utilize Shear-Friction Methodology:	<input type="checkbox"/>

[Go to Soil Calculations](#)

### Soil Profile

Groundwater Depth	N/A	# of Layers	7
-------------------	-----	-------------	---

Layer	Top (ft)	Bottom (ft)	Thickness (ft)	Y <sub>soil</sub> (pcf)	Y <sub>concrete</sub> (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Net Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	3	3	110	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
2	3	4	1	110	150	1.5	0	0.825	0.825	0.82	0.82			Cohesive
3	4	7	3	115	150	1.75	0	0.963	0.963	0.96	0.96			Cohesive
4	7	9	2	120	150	2.75	0	1.513	1.513	1.51	1.51			Cohesive
5	9	14	5	130	150	6	0	2.700	2.700	2.40	2.40			Cohesive
6	14	17	3	125	150	4.25	0	2.123	2.123	2.12	2.12			Cohesive
7	17	20	3	140	150	12	0	5.40	5.40	4.80	4.80	79.46		Cohesive

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 1 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

## Tower Input Data

The main tower is a 3x free standing tower with an overall height of 330.000 ft above the ground line.

The base of the tower is set at an elevation of 0.000 ft above the ground line.

The face width of the tower is 3.750 ft at the top and 28.500 ft at the base.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

Tower is located in Rockcastle County, Kentucky.

Tower base elevation above sea level: 1317.000 ft.

Basic wind speed of 105 mph.

Risk Category II.

Exposure Category C.

Simplified Topographic Factor Procedure for wind speed-up calculations is used.

Topographic Category: I.

Crest Height: 0.000 ft.

Nominal ice thickness of 1.500 in.

Ice thickness is considered to increase with height.

Ice density of 56.000 pcf.

A wind speed of 30 mph is used in combination with ice.

Temperature drop of 50.000 °F.

Deflections calculated using a wind speed of 60 mph.

Please see feedline plan for proper feedline placement. Deviation from plan may reduce tower capacity..

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in tower member design is 1.

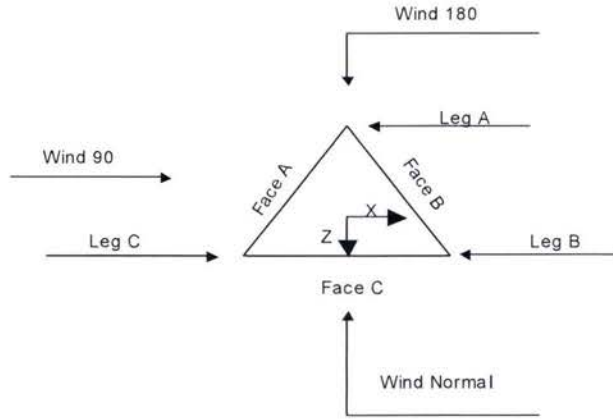
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

## Options

- |  |   |  |
|--|---|--|
| <ul style="list-style-type: none"> <li>Consider Moments - Legs</li> <li>Consider Moments - Horizontals</li> <li>Consider Moments - Diagonals</li> <li>Use Moment Magnification</li> <li>√ Use Code Stress Ratios</li> <li>√ Use Code Safety Factors - Guys</li> <li>Escalate Ice</li> <li>Always Use Max Kz</li> <li>Use Special Wind Profile</li> <li>√ Include Bolts In Member Capacity</li> <li>√ Leg Bolts Are At Top Of Section</li> <li>√ Secondary Horizontal Braces Leg</li> <li>Use Diamond Inner Bracing (4 Sided)</li> <li>SR Members Have Cut Ends</li> <li>SR Members Are Concentric</li> </ul> | <ul style="list-style-type: none"> <li>Distribute Leg Loads As Uniform</li> <li>Assume Legs Pinned</li> <li>√ Assume Rigid Index Plate</li> <li>√ Use Clear Spans For Wind Area</li> <li>√ Use Clear Spans For KL/r</li> <li>Retention Guys To Initial Tension</li> <li>√ Bypass Mast Stability Checks</li> <li>√ Use Azimuth Dish Coefficients</li> <li>√ Project Wind Area of Appurt</li> <li>Autocalc Torque Arm Areas</li> <li>Add IBC 6D+W Combination</li> <li>√ Sort Capacity Reports By Component</li> <li>Triangulate Diamond Inner Bracing</li> <li>Treat Feed Line Bundles As Cylinder</li> <li>Ignore KL/ry For 60 Deg. Angle Legs</li> </ul> | <ul style="list-style-type: none"> <li>Use ASCE 10 X-Brace Ly Rules</li> <li>√ Calculate Redundant Bracing Forces</li> <li>Ignore Redundant Members in FEA</li> <li>√ SR Leg Bolts Resist Compression</li> <li>All Leg Panels Have Same Allowable</li> <li>Offset Girt At Foundation</li> <li>√ Consider Feed Line Torque</li> <li>√ Include Angle Block Shear Check</li> <li>Use TIA-222-H Bracing Resist Exemption</li> <li>Use TIA-222-H Tension Splice Exemption</li> <li style="text-align: center;">Poles</li> <li>Include Shear-Torsion Interaction</li> <li>Always Use Sub-Critical Flow</li> <li>Use Top Mounted Sockets</li> <li>Pole Without Linear Attachments</li> <li>Pole With Shroud Or No Appurtenances</li> <li>Outside and Inside Corner Radii Are Known</li> </ul> |
|--|---|--|



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 2 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon



Triangular Tower

**Tower Section Geometry**

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	330.000-320.000			3.750	1	10.000
T2	320.000-300.000			4.500	1	20.000
T3	300.000-280.000			6.000	1	20.000
T4	280.000-260.000			7.500	1	20.000
T5	260.000-240.000			9.000	1	20.000
T6	240.000-220.000			10.500	1	20.000
T7	220.000-200.000			12.000	1	20.000
T8	200.000-180.000			13.500	1	20.000
T9	180.000-160.000			15.000	1	20.000
T10	160.000-140.000			16.500	1	20.000
T11	140.000-120.000			18.000	1	20.000
T12	120.000-100.000			19.500	1	20.000
T13	100.000-80.000			21.000	1	20.000
T14	80.000-60.000			22.500	1	20.000
T15	60.000-40.000			24.000	1	20.000
T16	40.000-20.000			25.500	1	20.000
T17	20.000-0.000			27.000	1	20.000

**Tower Section Geometry (cont'd)**

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b>	ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b>	3 of 40
	<b>Project</b>	330' SST/ 37.353261, -84.327297	<b>Date</b>	09:06:59 10/22/20
	<b>Client</b>	Harmoni (UNITI) Towers	<b>Designed by</b>	JLandon

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T1	330.000-320.000	4.500	X Brace	No	No	6.000	6.000
T2	320.000-300.000	4.750	X Brace	No	No	6.000	6.000
T3	300.000-280.000	4.750	X Brace	No	No	6.000	6.000
T4	280.000-260.000	4.750	X Brace	No	No	6.000	6.000
T5	260.000-240.000	4.750	X Brace	No	No	6.000	6.000
T6	240.000-220.000	4.750	X Brace	No	No	6.000	6.000
T7	220.000-200.000	4.750	X Brace	No	No	6.000	6.000
T8	200.000-180.000	4.750	X Brace	No	No	6.000	6.000
T9	180.000-160.000	4.750	X Brace	No	No	6.000	6.000
T10	160.000-140.000	4.750	X Brace	No	No	6.000	6.000
T11	140.000-120.000	4.750	Double K	No	Yes	6.000	6.000
T12	120.000-100.000	4.750	Double K	No	Yes	6.000	6.000
T13	100.000-80.000	4.750	Double K	No	Yes	6.000	6.000
T14	80.000-60.000	4.750	Double K	No	Yes	6.000	6.000
T15	60.000-40.000	4.750	Double K	No	Yes	6.000	6.000
T16	40.000-20.000	4.750	Double K	No	Yes	6.000	6.000
T17	20.000-0.000	4.750	Double K	No	Yes	6.000	6.000

### Tower Section Geometry (cont'd)

Tower Elevation	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
ft						
T1	Solid Round	1 3/4	A529-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
330.000-320.000						
T2	Solid Round	2	A529-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
320.000-300.000						
T3	Solid Round	2 1/2	A529-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
300.000-280.000						
T4	Solid Round	2 3/4	A529-50 (50 ksi)	Equal Angle	L2x2x3/16	A36M-50 (50 ksi)
280.000-260.000						
T5	Solid Round	3	A529-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36M-50 (50 ksi)
260.000-240.000						
T6	Solid Round	3 1/4	A529-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36M-50 (50 ksi)
240.000-220.000						
T7	Solid Round	3 1/2	A529-50 (50 ksi)	Equal Angle	L3x3x3/16	A36M-50 (50 ksi)
220.000-200.000						
T8	Solid Round	3 3/4	A529-50 (50 ksi)	Equal Angle	L3x3x3/16	A36M-50 (50 ksi)
200.000-180.000						
T9	Solid Round	3 3/4	A529-50 (50 ksi)	Equal Angle	L3x3x3/16	A36M-50 (50 ksi)
180.000-160.000						
T10	Solid Round	4	A529-50 (50 ksi)	Equal Angle	L3x3x1/4	A36M-50 (50 ksi)
160.000-140.000						
T11	Solid Round	4 1/4	A529-50 (50 ksi)	Double Angle	2L2 1/2x2 1/2x3/16x3/8	A36M-50 (50 ksi)
140.000-120.000						
T12	Solid Round	4 1/4	A529-50 (50 ksi)	Double Angle	2L2 1/2x2 1/2x3/16x3/8	A36M-50 (50 ksi)
120.000-100.000						
T13	Solid Round	4 1/2	A529-50 (50 ksi)	Double Angle	2L3x3x3/16x3/8	A36M-50 (50 ksi)
100.000-80.000						
T14	Solid Round	4 1/2	A529-50 (50 ksi)	Double Angle	2L3x3x3/16x3/8	A36M-50 (50 ksi)
80.000-60.000						
T15	Solid Round	4 3/4	A529-50 (50 ksi)	Double Angle	2L3x3x3/16x3/8	A36M-50 (50 ksi)
60.000-40.000						
T16	Solid Round	4 3/4	A529-50 (50 ksi)	Double Angle	2L3x3x3/16x3/8	A36M-50 (50 ksi)
40.000-20.000						
T17	Solid Round	5	A529-50 (50 ksi)	Double Angle	2L3x3x1/4x3/8	A36M-50 (50 ksi)
20.000-0.000						

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 4 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
			(50 ksi)			(50 ksi)

### Tower Section Geometry (cont'd)

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
330.000-320.000	Equal Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)	Solid Round		A529-50 (50 ksi)

### Tower Section Geometry (cont'd)

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
140.000-120.000	T11	None	Flat Bar	A36 (36 ksi)	Double Angle	2L1 3/4x1 3/4x3/16x3/8	A36M-50 (50 ksi)
120.000-100.000	T12	None	Flat Bar	A36 (36 ksi)	Double Angle	2L2x2x3/16x3/8	A36M-50 (50 ksi)
100.000-80.000	T13	None	Flat Bar	A36 (36 ksi)	Double Angle	2L2 1/2x2 1/2x3/16x3/8	A36M-50 (50 ksi)
80.000-60.000	T14	None	Flat Bar	A36 (36 ksi)	Double Angle	2L2 1/2x2 1/2x3/16x3/8	A36M-50 (50 ksi)
60.000-40.000	T15	None	Flat Bar	A36 (36 ksi)	Double Angle	2L2 1/2x2 1/2x3/16x3/8	A36M-50 (50 ksi)
40.000-20.000	T16	None	Flat Bar	A36 (36 ksi)	Double Angle	2L2 1/2x2 1/2x3/16x3/8	A36M-50 (50 ksi)
T17 20.000-0.000	None	None	Flat Bar	A36 (36 ksi)	Double Angle	2L3x3x3/16x3/8	A36M-50 (50 ksi)

### Tower Section Geometry (cont'd)

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
140.000-120.000	T11	Solid Round	A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
120.000-100.000	T12	Solid Round	A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
100.000-80.000	T13	Solid Round	A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
80.000-60.000	T14	Solid Round	A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
60.000-40.000	T15	Solid Round	A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 5 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Tower Elevation	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
<i>ft</i>						
T16 40.000-20.000	Solid Round		A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
T17 20.000-0.000	Solid Round		A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)

### Tower Section Geometry (cont'd)

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor $A_f$	Adjust. Factor $A_r$	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
<i>ft</i>	<i>ft<sup>2</sup></i>	<i>in</i>					<i>in</i>	<i>in</i>	<i>in</i>
T1 330.000-320.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T2 320.000-300.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T3 300.000-280.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T4 280.000-260.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T5 260.000-240.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T6 240.000-220.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T7 220.000-200.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T8 200.000-180.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T9 180.000-160.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T10 160.000-140.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T11 140.000-120.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	Mid-Pt	Mid-Pt	36.000
T12 120.000-100.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	Mid-Pt	Mid-Pt	36.000
T13 100.000-80.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	Mid-Pt	Mid-Pt	36.000
T14 80.000-60.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	Mid-Pt	Mid-Pt	36.000
T15 60.000-40.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	Mid-Pt	Mid-Pt	36.000





<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 8 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T13 100.000-80.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T14 80.000-60.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T15 60.000-40.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T16 40.000-20.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T17 20.000-0.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

### Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 330.000-320.000	Flange	0.000 A325N	0	0.625 A325X	1	0.625 A325X	1	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T2 320.000-300.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T3 300.000-280.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T4 280.000-260.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T5 260.000-240.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T6 240.000-220.000	Flange	1.000 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T7 220.000-200.000	Flange	1.000 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T8 200.000-180.000	Flange	1.000 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T9 180.000-160.000	Flange	1.000 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T10 160.000-140.000	Flange	1.250 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T11 140.000-120.000	Flange	1.250 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325X	1	0.625 A325N	0



<p><b>tnxTower</b></p> <p><b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265</p>	<p><b>Job</b></p> <p>ATS #8657 - Mt Vernon (Site# KYLEX2044)</p>	<p><b>Page</b></p> <p>9 of 40</p>
	<p><b>Project</b></p> <p>330' SST/ 37.353261, -84.327297</p>	<p><b>Date</b></p> <p>09:06:59 10/22/20</p>
	<p><b>Client</b></p> <p>Harmoni (UNITI) Towers</p>	<p><b>Designed by</b></p> <p>JLandon</p>

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
120.000-100.000	T12 Flange	1.250 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325X	1	0.625 A325N	0
100.000-80.000	T13 Flange	1.250 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325X	1	0.625 A325N	0
80.000-60.000	T14 Flange	1.250 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325X	1	0.625 A325N	0
60.000-40.000	T15 Flange	1.250 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325X	1	0.625 A325N	0
40.000-20.000	T16 Flange	1.500 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325X	1	0.625 A325N	0
20.000-0.000	T17 Flange	1.500 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.625 A325X	1	0.625 A325N	0

**Feed Line/Linear Appurtenances - Entered As Round Or Flat**

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight klf
1-5/8" (Carrier 1)	C	No	No	Ar (CaAa)	325.000 - 10.000	0.000	0	9	5	0.750	1.980		0.001
1.5" Hybrid (Carrier 1)	C	No	No	Ar (CaAa)	325.000 - 10.000	0.000	-0.25	6	3	0.750	1.500		0.001
**													
1-5/8" (Carrier 2)	B	No	No	Ar (CaAa)	313.000 - 10.000	0.000	0	9	5	0.750	1.980		0.001
1.5" Hybrid (Carrier 2)	B	No	No	Ar (CaAa)	313.000 - 10.000	0.000	-0.25	6	3	0.750	1.500		0.001
**													
1-5/8" (Carrier 3)	A	No	No	Ar (CaAa)	301.000 - 10.000	0.000	0	9	5	0.750	1.980		0.001
1.5" Hybrid (Carrier 3)	A	No	No	Ar (CaAa)	301.000 - 10.000	0.000	-0.25	6	3	0.750	1.500		0.001
**													
1-5/8" (Carrier 4)	C	No	No	Ar (CaAa)	289.000 - 10.000	0.000	0.35	2	1	0.750	1.980		0.001
**													
1-5/8" (Carrier 5)	C	No	No	Ar (CaAa)	277.000 - 10.000	0.000	0.4	2	1	0.750	1.980		0.001
**													
Safety Line 3/8	A	No	No	Ar (CaAa)	330.000 - 10.000	0.000	0.45	1	1	0.375	0.375		0.000
Strobe Cable	A	No	No	Ar (CaAa)	330.000 - 10.000	0.000	-0.45	1	1	1.250	1.250		0.001
**													
Feedline Ladder (Af)	C	No	No	Af (CaAa)	325.000 - 10.000	0.000	0.3	1	1	3.000	0.250		0.008
Feedline Ladder (Af)	B	No	No	Af (CaAa)	313.000 - 10.000	0.000	0.3	1	1	3.000	0.250		0.008
Feedline Ladder (Af)	A	No	No	Af (CaAa)	301.000 - 10.000	0.000	0.3	1	1	3.000	0.250		0.008



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 10 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

**Feed Line/Linear Appurtenances Section Areas**

Tower Section	Tower Elevation ft	Face	$A_R$ ft <sup>2</sup>	$A_F$ ft <sup>2</sup>	$C_A A_A$ In Face ft <sup>2</sup>	$C_A A_A$ Out Face ft <sup>2</sup>	Weight K
T1	330.000-320.000	A	0.000	0.000	1.625	0.000	0.009
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	13.618	0.000	0.103
T2	320.000-300.000	A	0.000	0.000	5.974	0.000	0.039
		B	0.000	0.000	35.408	0.000	0.267
		C	0.000	0.000	54.473	0.000	0.410
T3	300.000-280.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	58.037	0.000	0.423
T4	280.000-260.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	69.125	0.000	0.464
T5	260.000-240.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	70.313	0.000	0.468
T6	240.000-220.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	70.313	0.000	0.468
T7	220.000-200.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	70.313	0.000	0.468
T8	200.000-180.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	70.313	0.000	0.468
T9	180.000-160.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	70.313	0.000	0.468
T10	160.000-140.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	70.313	0.000	0.468
T11	140.000-120.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	70.313	0.000	0.468
T12	120.000-100.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	70.313	0.000	0.468
T13	100.000-80.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	70.313	0.000	0.468
T14	80.000-60.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	70.313	0.000	0.468
T15	60.000-40.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	70.313	0.000	0.468
T16	40.000-20.000	A	0.000	0.000	57.723	0.000	0.429
		B	0.000	0.000	54.473	0.000	0.410
		C	0.000	0.000	70.313	0.000	0.468
T17	20.000-0.000	A	0.000	0.000	28.862	0.000	0.214
		B	0.000	0.000	27.237	0.000	0.205
		C	0.000	0.000	35.157	0.000	0.234

**Feed Line/Linear Appurtenances Section Areas - With Ice**

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 11 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	$A_R$ ft <sup>2</sup>	$A_F$ ft <sup>2</sup>	$C_i A_i$ In Face ft <sup>2</sup>	$C_i A_i$ Out Face ft <sup>2</sup>	Weight K
T1	330.000-320.000	A	1.886	0.000	0.000	9.167	0.000	0.134
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	21.491	0.000	0.445
T2	320.000-300.000	A	1.877	0.000	0.000	22.553	0.000	0.354
		B		0.000	0.000	55.773	0.000	1.153
		C		0.000	0.000	85.804	0.000	1.775
T3	300.000-280.000	A	1.864	0.000	0.000	103.746	0.000	2.028
		B		0.000	0.000	85.583	0.000	1.766
		C		0.000	0.000	97.044	0.000	1.936
T4	280.000-260.000	A	1.851	0.000	0.000	103.405	0.000	2.015
		B		0.000	0.000	85.348	0.000	1.756
		C		0.000	0.000	132.295	0.000	2.450
T5	260.000-240.000	A	1.837	0.000	0.000	103.040	0.000	2.002
		B		0.000	0.000	85.096	0.000	1.746
		C		0.000	0.000	135.653	0.000	2.489
T6	240.000-220.000	A	1.821	0.000	0.000	102.647	0.000	1.988
		B		0.000	0.000	84.826	0.000	1.735
		C		0.000	0.000	135.171	0.000	2.469
T7	220.000-200.000	A	1.805	0.000	0.000	102.223	0.000	1.972
		B		0.000	0.000	84.533	0.000	1.723
		C		0.000	0.000	134.650	0.000	2.449
T8	200.000-180.000	A	1.787	0.000	0.000	101.761	0.000	1.956
		B		0.000	0.000	84.215	0.000	1.710
		C		0.000	0.000	134.082	0.000	2.426
T9	180.000-160.000	A	1.767	0.000	0.000	101.252	0.000	1.938
		B		0.000	0.000	83.865	0.000	1.696
		C		0.000	0.000	133.458	0.000	2.401
T10	160.000-140.000	A	1.745	0.000	0.000	100.687	0.000	1.918
		B		0.000	0.000	83.475	0.000	1.681
		C		0.000	0.000	132.763	0.000	2.374
T11	140.000-120.000	A	1.720	0.000	0.000	100.049	0.000	1.895
		B		0.000	0.000	83.036	0.000	1.664
		C		0.000	0.000	131.980	0.000	2.344
T12	120.000-100.000	A	1.692	0.000	0.000	99.316	0.000	1.869
		B		0.000	0.000	82.531	0.000	1.644
		C		0.000	0.000	131.080	0.000	2.309
T13	100.000-80.000	A	1.658	0.000	0.000	98.452	0.000	1.839
		B		0.000	0.000	81.936	0.000	1.621
		C		0.000	0.000	130.019	0.000	2.268
T14	80.000-60.000	A	1.617	0.000	0.000	97.395	0.000	1.803
		B		0.000	0.000	81.207	0.000	1.592
		C		0.000	0.000	128.721	0.000	2.219
T15	60.000-40.000	A	1.564	0.000	0.000	96.020	0.000	1.756
		B		0.000	0.000	80.261	0.000	1.556
		C		0.000	0.000	127.033	0.000	2.155
T16	40.000-20.000	A	1.486	0.000	0.000	94.020	0.000	1.689
		B		0.000	0.000	78.884	0.000	1.504
		C		0.000	0.000	124.579	0.000	2.065
T17	20.000-0.000	A	1.331	0.000	0.000	45.026	0.000	0.781
		B		0.000	0.000	38.076	0.000	0.702
		C		0.000	0.000	59.857	0.000	0.946

**Feed Line Center of Pressure**

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 12 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Section	Elevation	CP <sub>x</sub>	CP <sub>z</sub>	CP <sub>x</sub>	CP <sub>z</sub>
		in	in	Ice in	Ice in
T1	330.000-320.000	0.395	3.280	-0.928	1.980
T2	320.000-300.000	3.181	0.385	1.860	1.053
T3	300.000-280.000	-0.427	-2.257	-1.544	-1.224
T4	280.000-260.000	-1.746	-0.644	-3.654	1.088
T5	260.000-240.000	-1.963	-0.492	-4.199	1.430
T6	240.000-220.000	-2.137	-0.534	-4.602	1.556
T7	220.000-200.000	-2.143	-0.539	-4.811	1.626
T8	200.000-180.000	-2.263	-0.569	-5.110	1.723
T9	180.000-160.000	-2.381	-0.599	-5.389	1.813
T10	160.000-140.000	-2.479	-0.624	-5.624	1.890
T11	140.000-120.000	-3.187	-0.784	-6.677	2.210
T12	120.000-100.000	-3.290	-0.811	-6.915	2.290
T13	100.000-80.000	-3.143	-0.782	-6.857	2.285
T14	80.000-60.000	-3.248	-0.809	-7.047	2.350
T15	60.000-40.000	-3.335	-0.831	-7.177	2.396
T16	40.000-20.000	-3.422	-0.854	-7.262	2.430
T17	20.000-0.000	-1.992	-0.511	-4.248	1.464

### Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
T1	1	1-5/8"	320.00 - 325.00	0.6000	0.5262
T1	2	1.5" Hybrid	320.00 - 325.00	0.6000	0.5262
T1	14	Safety Line 3/8	320.00 - 330.00	0.6000	0.5262
T1	15	Strobe Cable	320.00 - 330.00	0.6000	0.5262
T1	17	Feedline Ladder (Af)	320.00 - 325.00	0.6000	0.5262
T2	1	1-5/8"	300.00 - 320.00	0.6000	0.6000
T2	2	1.5" Hybrid	300.00 - 320.00	0.6000	0.6000
T2	4	1-5/8"	300.00 - 313.00	0.6000	0.6000
T2	5	1.5" Hybrid	300.00 - 313.00	0.6000	0.6000
T2	7	1-5/8"	300.00 - 301.00	0.6000	0.6000
T2	8	1.5" Hybrid	300.00 - 301.00	0.6000	0.6000
T2	14	Safety Line 3/8	300.00 - 320.00	0.6000	0.6000
T2	15	Strobe Cable	300.00 - 320.00	0.6000	0.6000
T2	17	Feedline Ladder (Af)	300.00 - 320.00	0.6000	0.6000
T2	18	Feedline Ladder (Af)	300.00 - 313.00	0.6000	0.6000
T2	19	Feedline Ladder (Af)	300.00 - 301.00	0.6000	0.6000
T3	1	1-5/8"	280.00 -	0.6000	0.6000



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 13 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
			300.00		
T3	2	1.5" Hybrid	280.00 -	0.6000	0.6000
			300.00		
T3	4	1-5/8"	280.00 -	0.6000	0.6000
			300.00		
T3	5	1.5" Hybrid	280.00 -	0.6000	0.6000
			300.00		
T3	7	1-5/8"	280.00 -	0.6000	0.6000
			300.00		
T3	8	1.5" Hybrid	280.00 -	0.6000	0.6000
			300.00		
T3	10	1-5/8"	280.00 -	0.6000	0.6000
			289.00		
T3	14	Safety Line 3/8	280.00 -	0.6000	0.6000
			300.00		
T3	15	Strobe Cable	280.00 -	0.6000	0.6000
			300.00		
T3	17	Feedline Ladder (Af)	280.00 -	0.6000	0.6000
			300.00		
T3	18	Feedline Ladder (Af)	280.00 -	0.6000	0.6000
			300.00		
T3	19	Feedline Ladder (Af)	280.00 -	0.6000	0.6000
			300.00		
T4	1	1-5/8"	260.00 -	0.6000	0.6000
			280.00		
T4	2	1.5" Hybrid	260.00 -	0.6000	0.6000
			280.00		
T4	4	1-5/8"	260.00 -	0.6000	0.6000
			280.00		
T4	5	1.5" Hybrid	260.00 -	0.6000	0.6000
			280.00		
T4	7	1-5/8"	260.00 -	0.6000	0.6000
			280.00		
T4	8	1.5" Hybrid	260.00 -	0.6000	0.6000
			280.00		
T4	10	1-5/8"	260.00 -	0.6000	0.6000
			280.00		
T4	12	1-5/8"	260.00 -	0.6000	0.6000
			277.00		
T4	14	Safety Line 3/8	260.00 -	0.6000	0.6000
			280.00		
T4	15	Strobe Cable	260.00 -	0.6000	0.6000
			280.00		
T4	17	Feedline Ladder (Af)	260.00 -	0.6000	0.6000
			280.00		
T4	18	Feedline Ladder (Af)	260.00 -	0.6000	0.6000
			280.00		
T4	19	Feedline Ladder (Af)	260.00 -	0.6000	0.6000
			280.00		
T5	1	1-5/8"	240.00 -	0.6000	0.6000
			260.00		
T5	2	1.5" Hybrid	240.00 -	0.6000	0.6000
			260.00		
T5	4	1-5/8"	240.00 -	0.6000	0.6000
			260.00		
T5	5	1.5" Hybrid	240.00 -	0.6000	0.6000
			260.00		
T5	7	1-5/8"	240.00 -	0.6000	0.6000
			260.00		
T5	8	1.5" Hybrid	240.00 -	0.6000	0.6000
			260.00		
T5	10	1-5/8"	240.00 -	0.6000	0.6000

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave. Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 14 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
			260.00		
T5	12	1-5/8"	240.00 -	0.6000	0.6000
			260.00		
T5	14	Safety Line 3/8	240.00 -	0.6000	0.6000
			260.00		
T5	15	Strobe Cable	240.00 -	0.6000	0.6000
			260.00		
T5	17	Feedline Ladder (Af)	240.00 -	0.6000	0.6000
			260.00		
T5	18	Feedline Ladder (Af)	240.00 -	0.6000	0.6000
			260.00		
T5	19	Feedline Ladder (Af)	240.00 -	0.6000	0.6000
			260.00		
T6	1	1-5/8"	220.00 -	0.6000	0.6000
			240.00		
T6	2	1.5" Hybrid	220.00 -	0.6000	0.6000
			240.00		
T6	4	1-5/8"	220.00 -	0.6000	0.6000
			240.00		
T6	5	1.5" Hybrid	220.00 -	0.6000	0.6000
			240.00		
T6	7	1-5/8"	220.00 -	0.6000	0.6000
			240.00		
T6	8	1.5" Hybrid	220.00 -	0.6000	0.6000
			240.00		
T6	10	1-5/8"	220.00 -	0.6000	0.6000
			240.00		
T6	12	1-5/8"	220.00 -	0.6000	0.6000
			240.00		
T6	14	Safety Line 3/8	220.00 -	0.6000	0.6000
			240.00		
T6	15	Strobe Cable	220.00 -	0.6000	0.6000
			240.00		
T6	17	Feedline Ladder (Af)	220.00 -	0.6000	0.6000
			240.00		
T6	18	Feedline Ladder (Af)	220.00 -	0.6000	0.6000
			240.00		
T6	19	Feedline Ladder (Af)	220.00 -	0.6000	0.6000
			240.00		
T7	1	1-5/8"	200.00 -	0.6000	0.6000
			220.00		
T7	2	1.5" Hybrid	200.00 -	0.6000	0.6000
			220.00		
T7	4	1-5/8"	200.00 -	0.6000	0.6000
			220.00		
T7	5	1.5" Hybrid	200.00 -	0.6000	0.6000
			220.00		
T7	7	1-5/8"	200.00 -	0.6000	0.6000
			220.00		
T7	8	1.5" Hybrid	200.00 -	0.6000	0.6000
			220.00		
T7	10	1-5/8"	200.00 -	0.6000	0.6000
			220.00		
T7	12	1-5/8"	200.00 -	0.6000	0.6000
			220.00		
T7	14	Safety Line 3/8	200.00 -	0.6000	0.6000
			220.00		
T7	15	Strobe Cable	200.00 -	0.6000	0.6000
			220.00		
T7	17	Feedline Ladder (Af)	200.00 -	0.6000	0.6000
			220.00		
T7	18	Feedline Ladder (Af)	200.00 -	0.6000	0.6000

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 15 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
			220.00		
T7	19	Feedline Ladder (Af)	200.00 -	0.6000	0.6000
			220.00		
T8	1	1-5/8"	180.00 -	0.6000	0.6000
			200.00		
T8	2	1.5" Hybrid	180.00 -	0.6000	0.6000
			200.00		
T8	4	1-5/8"	180.00 -	0.6000	0.6000
			200.00		
T8	5	1.5" Hybrid	180.00 -	0.6000	0.6000
			200.00		
T8	7	1-5/8"	180.00 -	0.6000	0.6000
			200.00		
T8	8	1.5" Hybrid	180.00 -	0.6000	0.6000
			200.00		
T8	10	1-5/8"	180.00 -	0.6000	0.6000
			200.00		
T8	12	1-5/8"	180.00 -	0.6000	0.6000
			200.00		
T8	14	Safety Line 3/8	180.00 -	0.6000	0.6000
			200.00		
T8	15	Strobe Cable	180.00 -	0.6000	0.6000
			200.00		
T8	17	Feedline Ladder (Af)	180.00 -	0.6000	0.6000
			200.00		
T8	18	Feedline Ladder (Af)	180.00 -	0.6000	0.6000
			200.00		
T8	19	Feedline Ladder (Af)	180.00 -	0.6000	0.6000
			200.00		
T9	1	1-5/8"	160.00 -	0.6000	0.6000
			180.00		
T9	2	1.5" Hybrid	160.00 -	0.6000	0.6000
			180.00		
T9	4	1-5/8"	160.00 -	0.6000	0.6000
			180.00		
T9	5	1.5" Hybrid	160.00 -	0.6000	0.6000
			180.00		
T9	7	1-5/8"	160.00 -	0.6000	0.6000
			180.00		
T9	8	1.5" Hybrid	160.00 -	0.6000	0.6000
			180.00		
T9	10	1-5/8"	160.00 -	0.6000	0.6000
			180.00		
T9	12	1-5/8"	160.00 -	0.6000	0.6000
			180.00		
T9	14	Safety Line 3/8	160.00 -	0.6000	0.6000
			180.00		
T9	15	Strobe Cable	160.00 -	0.6000	0.6000
			180.00		
T9	17	Feedline Ladder (Af)	160.00 -	0.6000	0.6000
			180.00		
T9	18	Feedline Ladder (Af)	160.00 -	0.6000	0.6000
			180.00		
T9	19	Feedline Ladder (Af)	160.00 -	0.6000	0.6000
			180.00		
T10	1	1-5/8"	140.00 -	0.6000	0.6000
			160.00		
T10	2	1.5" Hybrid	140.00 -	0.6000	0.6000
			160.00		
T10	4	1-5/8"	140.00 -	0.6000	0.6000
			160.00		
T10	5	1.5" Hybrid	140.00 -	0.6000	0.6000

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 16 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
T10	7	1-5/8"	160.00 - 140.00	0.6000	0.6000
T10	8	1.5" Hybrid	160.00 - 140.00	0.6000	0.6000
T10	10	1-5/8"	160.00 - 140.00	0.6000	0.6000
T10	12	1-5/8"	160.00 - 140.00	0.6000	0.6000
T10	14	Safety Line 3/8	160.00 - 140.00	0.6000	0.6000
T10	15	Strobe Cable	160.00 - 140.00	0.6000	0.6000
T10	17	Feedline Ladder (Af)	160.00 - 140.00	0.6000	0.6000
T10	18	Feedline Ladder (Af)	160.00 - 140.00	0.6000	0.6000
T10	19	Feedline Ladder (Af)	160.00 - 140.00	0.6000	0.6000
T11	1	1-5/8"	120.00 - 140.00	0.6000	0.6000
T11	2	1.5" Hybrid	120.00 - 140.00	0.6000	0.6000
T11	4	1-5/8"	120.00 - 140.00	0.6000	0.6000
T11	5	1.5" Hybrid	120.00 - 140.00	0.6000	0.6000
T11	7	1-5/8"	120.00 - 140.00	0.6000	0.6000
T11	8	1.5" Hybrid	120.00 - 140.00	0.6000	0.6000
T11	10	1-5/8"	120.00 - 140.00	0.6000	0.6000
T11	12	1-5/8"	120.00 - 140.00	0.6000	0.6000
T11	14	Safety Line 3/8	120.00 - 140.00	0.6000	0.6000
T11	15	Strobe Cable	120.00 - 140.00	0.6000	0.6000
T11	17	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T11	18	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T11	19	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T12	1	1-5/8"	100.00 - 120.00	0.6000	0.6000
T12	2	1.5" Hybrid	100.00 - 120.00	0.6000	0.6000
T12	4	1-5/8"	100.00 - 120.00	0.6000	0.6000
T12	5	1.5" Hybrid	100.00 - 120.00	0.6000	0.6000
T12	7	1-5/8"	100.00 - 120.00	0.6000	0.6000
T12	8	1.5" Hybrid	100.00 - 120.00	0.6000	0.6000
T12	10	1-5/8"	100.00 - 120.00	0.6000	0.6000
T12	12	1-5/8"	100.00 - 120.00	0.6000	0.6000
T12	14	Safety Line 3/8	100.00 - 120.00	0.6000	0.6000



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 17 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
			120.00		
T12	15	Strobe Cable	100.00 - 120.00	0.6000	0.6000
T12	17	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T12	18	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T12	19	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T13	1	1-5/8"	80.00 - 100.00	0.6000	0.6000
T13	2	1.5" Hybrid	80.00 - 100.00	0.6000	0.6000
T13	4	1-5/8"	80.00 - 100.00	0.6000	0.6000
T13	5	1.5" Hybrid	80.00 - 100.00	0.6000	0.6000
T13	7	1-5/8"	80.00 - 100.00	0.6000	0.6000
T13	8	1.5" Hybrid	80.00 - 100.00	0.6000	0.6000
T13	10	1-5/8"	80.00 - 100.00	0.6000	0.6000
T13	12	1-5/8"	80.00 - 100.00	0.6000	0.6000
T13	14	Safety Line 3/8	80.00 - 100.00	0.6000	0.6000
T13	15	Strobe Cable	80.00 - 100.00	0.6000	0.6000
T13	17	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T13	18	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T13	19	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T14	1	1-5/8"	60.00 - 80.00	0.6000	0.6000
T14	2	1.5" Hybrid	60.00 - 80.00	0.6000	0.6000
T14	4	1-5/8"	60.00 - 80.00	0.6000	0.6000
T14	5	1.5" Hybrid	60.00 - 80.00	0.6000	0.6000
T14	7	1-5/8"	60.00 - 80.00	0.6000	0.6000
T14	8	1.5" Hybrid	60.00 - 80.00	0.6000	0.6000
T14	10	1-5/8"	60.00 - 80.00	0.6000	0.6000
T14	12	1-5/8"	60.00 - 80.00	0.6000	0.6000
T14	14	Safety Line 3/8	60.00 - 80.00	0.6000	0.6000
T14	15	Strobe Cable	60.00 - 80.00	0.6000	0.6000
T14	17	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T14	18	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T14	19	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T15	1	1-5/8"	40.00 - 60.00	0.6000	0.6000
T15	2	1.5" Hybrid	40.00 - 60.00	0.6000	0.6000
T15	4	1-5/8"	40.00 - 60.00	0.6000	0.6000
T15	5	1.5" Hybrid	40.00 - 60.00	0.6000	0.6000
T15	7	1-5/8"	40.00 - 60.00	0.6000	0.6000
T15	8	1.5" Hybrid	40.00 - 60.00	0.6000	0.6000
T15	10	1-5/8"	40.00 - 60.00	0.6000	0.6000
T15	12	1-5/8"	40.00 - 60.00	0.6000	0.6000
T15	14	Safety Line 3/8	40.00 - 60.00	0.6000	0.6000
T15	15	Strobe Cable	40.00 - 60.00	0.6000	0.6000
T15	17	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T15	18	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T15	19	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T16	1	1-5/8"	20.00 - 40.00	0.6000	0.6000
T16	2	1.5" Hybrid	20.00 - 40.00	0.6000	0.6000
T16	4	1-5/8"	20.00 - 40.00	0.6000	0.6000
T16	5	1.5" Hybrid	20.00 - 40.00	0.6000	0.6000
T16	7	1-5/8"	20.00 - 40.00	0.6000	0.6000
T16	8	1.5" Hybrid	20.00 - 40.00	0.6000	0.6000
T16	10	1-5/8"	20.00 - 40.00	0.6000	0.6000
T16	12	1-5/8"	20.00 - 40.00	0.6000	0.6000
T16	14	Safety Line 3/8	20.00 - 40.00	0.6000	0.6000
T16	15	Strobe Cable	20.00 - 40.00	0.6000	0.6000
T16	17	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T16	18	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T16	19	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T17	1	1-5/8"	10.00 - 20.00	0.6000	0.6000



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 18 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	$K_a$ No Ice	$K_a$ Ice
T17	2	1.5" Hybrid	10.00 - 20.00	0.6000	0.6000
T17	4	1-5/8"	10.00 - 20.00	0.6000	0.6000
T17	5	1.5" Hybrid	10.00 - 20.00	0.6000	0.6000
T17	7	1-5/8"	10.00 - 20.00	0.6000	0.6000
T17	8	1.5" Hybrid	10.00 - 20.00	0.6000	0.6000
T17	10	1-5/8"	10.00 - 20.00	0.6000	0.6000
T17	12	1-5/8"	10.00 - 20.00	0.6000	0.6000
T17	14	Safety Line 3/8"	10.00 - 20.00	0.6000	0.6000
T17	15	Strobe Cable	10.00 - 20.00	0.6000	0.6000
T17	17	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000
T17	18	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000
T17	19	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000

### Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	$C_i A_i$ Front	$C_i A_i$ Side	Weight	
			Horz	Vert						
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K	
Lightning Rod 1"x10'	C	From Leg	0.000	0.000	0.000	330.000	No Ice	1.000	1.000	0.040
			0.000				1/2" Ice	2.017	2.017	0.049
			5.000				1" Ice	3.050	3.050	0.065
							2" Ice	5.148	5.148	0.116
Top Beacon	B	From Leg	0.000	0.000	0.000	330.000	No Ice	2.700	2.700	0.050
			0.000				1/2" Ice	3.100	3.100	0.070
			1.000				1" Ice	3.500	3.500	0.090
							2" Ice	4.300	4.300	0.130
**										
Sector1(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	A	From Leg	4.000	0.000	0.000	325.000	No Ice	92.592	62.037	0.700
			0.000				1/2" Ice	115.740	77.546	1.400
			0.000				1" Ice	138.888	93.055	2.100
							2" Ice	185.184	124.073	3.500
Sector2(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	B	From Leg	4.000	0.000	0.000	325.000	No Ice	92.592	62.037	0.700
			0.000				1/2" Ice	115.740	77.546	1.400
			0.000				1" Ice	138.888	93.055	2.100
							2" Ice	185.184	124.073	3.500
Sector3(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	C	From Leg	4.000	0.000	0.000	325.000	No Ice	92.592	62.037	0.700
			0.000				1/2" Ice	115.740	77.546	1.400
			0.000				1" Ice	138.888	93.055	2.100
							2" Ice	185.184	124.073	3.500
**										
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 2)	A	From Leg	4.000	0.000	0.000	313.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
							2" Ice	138.880	93.050	3.500
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 2)	B	From Leg	4.000	0.000	0.000	313.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
							2" Ice	138.880	93.050	3.500
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 2)	C	From Leg	4.000	0.000	0.000	313.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
							2" Ice	138.880	93.050	3.500

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 19 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>1</sub> A <sub>1</sub> Front	C <sub>1</sub> A <sub>1</sub> Side	Weight	
			Horz	Lateral						ft
							2" Ice	138.880	93.050	3.500
**										
Sector1(CaAa=10000 Sq in)No Ice (Carrier 3)	A	From Leg	4.000	0.000	0.000	301.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
							2" Ice	138.880	93.050	3.500
Sector2(CaAa=10000 Sq in)No Ice (Carrier 3)	B	From Leg	4.000	0.000	0.000	301.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
							2" Ice	138.880	93.050	3.500
Sector3(CaAa=10000 Sq in)No Ice (Carrier 3)	C	From Leg	4.000	0.000	0.000	301.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
							2" Ice	138.880	93.050	3.500
**										
4 1/2" OD Dish Mount (Carrier 4)	C	From Leg	0.500	0.000	0.000	289.000	No Ice	1.646	1.646	0.057
			0.000				1/2" Ice	2.207	2.207	0.074
			0.000				1" Ice	2.543	2.543	0.094
							2" Ice	3.241	3.241	0.148
4 1/2" OD Dish Mount (Carrier 4)	B	From Leg	0.500	0.000	0.000	289.000	No Ice	1.646	1.646	0.057
			0.000				1/2" Ice	2.207	2.207	0.074
			0.000				1" Ice	2.543	2.543	0.094
							2" Ice	3.241	3.241	0.148
**										
4 1/2" OD Dish Mount (Carrier 5)	C	From Leg	0.500	0.000	0.000	277.000	No Ice	1.646	1.646	0.057
			0.000				1/2" Ice	2.207	2.207	0.074
			0.000				1" Ice	2.543	2.543	0.094
							2" Ice	3.241	3.241	0.148
4 1/2" OD Dish Mount (Carrier 5)	B	From Leg	0.500	0.000	0.000	277.000	No Ice	1.646	1.646	0.057
			0.000				1/2" Ice	2.207	2.207	0.074
			0.000				1" Ice	2.543	2.543	0.094
							2" Ice	3.241	3.241	0.148
**										

### Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets:		Azimuth Adjustment	3 dB Beam Width	Elevation	Outside Diameter	Aperture Area	Weight	
				Horz	Lateral							ft
6' MW Dish (Carrier 4)	C	Paraboloid w/o Radome	From Leg	1.000	0.000	0.000		289.000	6.000	No Ice	28.270	0.143
				0.000						1/2" Ice	29.050	0.292
				0.000						1" Ice	29.831	0.441
										2" Ice	31.392	0.740
6' MW Dish (Carrier 4)	B	Paraboloid w/o Radome	From Leg	1.000	0.000	0.000		289.000	6.000	No Ice	28.270	0.143
				0.000						1/2" Ice	29.050	0.292
				0.000						1" Ice	29.831	0.441
										2" Ice	31.392	0.740
**												
6' MW Dish	C	Paraboloid w/o Radome	From Leg	1.000	0.000	0.000		277.000	6.000	No Ice	28.270	0.143

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 20 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft	Aperture Area ft <sup>2</sup>	Weight K
(Carrier 5)		Radome	Leg	0.000 0.000					1/2" Ice 29.050 1" Ice 29.831 2" Ice 31.392	0.292 0.441 0.740
6' MW Dish (Carrier 5)	B	Paraboloid w/o Radome	From Leg	1.000 0.000 0.000	0.000		277.000	6.000	No Ice 28.270 1/2" Ice 29.050 1" Ice 29.831 2" Ice 31.392	0.143 0.292 0.441 0.740
**										

## Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 21 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Comb. No.	Description
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

### Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	330 - 320	Leg	Max Tension	15	8.206	1.132	-0.004
			Max. Compression	18	-9.850	0.157	0.006
			Max. Mx	2	-9.845	-1.176	0.004
			Max. My	4	-1.070	0.004	0.613
			Max. Vy	2	-2.673	0.160	-0.004
			Max. Vx	4	-2.152	0.001	-0.082
		Diagonal	Max Tension	8	3.570	0.000	0.000
			Max. Compression	6	-3.240	0.000	0.000
			Max. Mx	2	-0.831	0.045	-0.002
			Max. My	20	-3.210	-0.002	0.031
			Max. Vy	35	0.018	0.013	-0.002
			Max. Vx	20	-0.010	0.000	0.000
		Top Girt	Max Tension	14	1.853	0.000	0.000
			Max. Compression	2	-1.839	0.000	0.000
			Max. Mx	35	-0.270	-0.023	0.000
			Max. My	38	0.041	0.000	0.000
			Max. Vy	35	0.024	0.000	0.000
			Max. Vx	38	-0.001	0.000	0.000
T2	320 - 300	Leg	Max Tension	15	46.214	1.493	-0.018
			Max. Compression	2	-52.105	1.690	-0.017
			Max. Mx	2	-46.767	-2.370	0.025
			Max. My	4	-3.531	-0.008	1.376
			Max. Vy	2	-7.385	1.690	-0.017
			Max. Vx	16	-3.520	-0.032	0.940
		Diagonal	Max Tension	24	5.404	0.000	0.000
			Max. Compression	20	-4.919	0.000	0.000
			Max. Mx	2	-0.502	0.024	-0.002
			Max. My	2	-4.197	-0.019	-0.013
			Max. Vy	34	0.024	0.021	-0.002
			Max. Vx	2	0.004	0.000	0.000
T3	300 - 280	Leg	Max Tension	15	97.423	2.511	-0.020
			Max. Compression	2	-107.292	0.883	-0.003
			Max. Mx	2	-52.133	5.319	-0.059
			Max. My	16	-3.458	-0.057	2.700
			Max. Vy	2	-8.459	0.883	-0.003
			Max. Vx	4	3.882	0.042	-0.476
		Diagonal	Max Tension	20	7.619	0.000	0.000
			Max. Compression	20	-7.626	0.000	0.000
			Max. Mx	2	1.449	0.033	-0.002
			Max. My	20	-7.599	-0.002	0.027
			Max. Vy	34	0.029	0.027	-0.003
			Max. Vx	20	-0.007	0.000	0.000
T4	280 - 260	Leg	Max Tension	7	146.742	3.190	0.168
			Max. Compression	2	-160.273	0.859	0.002
			Max. Mx	2	-107.309	5.081	-0.031
			Max. My	4	-5.969	0.130	-2.419

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b>	ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b>	22 of 40
	<b>Project</b>	330' SST/ 37.353261, -84.327297	<b>Date</b>	09:06:59 10/22/20
	<b>Client</b>	Harmoni (UNITI) Towers	<b>Designed by</b>	JLandon

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T5	260 - 240	Diagonal	Max. Vy	2	-10.053	0.859	0.002
			Max. Vx	24	-4.239	0.020	0.473
			Max Tension	20	8.466	0.000	0.000
			Max. Compression	20	-8.201	0.000	0.000
			Max. Mx	32	0.409	0.040	0.004
			Max. My	20	-8.161	-0.006	0.018
			Max. Vy	32	0.038	0.040	0.004
		Leg	Max. Vx	20	-0.004	0.000	0.000
			Max Tension	7	190.805	3.456	0.149
			Max. Compression	2	-207.960	0.872	0.005
			Max. Mx	2	-160.291	5.857	-0.000
			Max. My	24	-10.975	0.246	2.595
			Max. Vy	18	-10.767	0.873	0.037
			Max. Vx	24	-4.408	0.025	0.419
T6	240 - 220	Diagonal	Max Tension	8	8.538	0.000	0.000
			Max. Compression	8	-8.850	0.000	0.000
			Max. Mx	36	1.390	0.061	-0.004
			Max. My	20	-8.787	-0.014	0.018
			Max. Vy	32	0.052	0.060	0.006
			Max. Vx	20	-0.004	0.000	0.000
			Max Tension	7	231.125	3.745	0.127
		Leg	Max. Compression	2	-252.289	0.953	0.008
			Max. Mx	18	-207.568	6.230	0.293
			Max. My	24	-15.018	0.218	2.626
			Max. Vy	18	-11.648	0.958	0.039
			Max. Vx	24	-4.633	0.026	0.520
			Max Tension	8	8.801	0.000	0.000
			Max. Compression	8	-8.948	0.000	0.000
T7	220 - 200	Diagonal	Max. Mx	32	0.446	0.076	0.007
			Max. My	22	-7.714	0.009	0.016
			Max. Vy	32	0.058	0.076	0.007
			Max. Vx	22	-0.003	0.000	0.000
			Max Tension	7	269.312	4.230	0.118
			Max. Compression	18	-295.442	0.940	0.029
			Max. Mx	18	-252.217	6.755	0.252
		Leg	Max. My	24	-18.524	0.202	2.839
			Max. Vy	18	-12.787	0.940	0.029
			Max. Vx	24	-4.964	0.022	0.471
			Max Tension	8	9.401	0.000	0.000
			Max. Compression	8	-9.356	0.000	0.000
			Max. Mx	36	1.616	0.107	-0.009
			Max. My	22	-8.140	0.013	0.017
T8	200 - 180	Diagonal	Max. Vy	32	0.075	0.106	0.010
			Max. Vx	38	-0.003	0.000	0.000
			Max Tension	7	306.454	5.265	0.119
			Max. Compression	18	-338.254	0.215	0.011
			Max. Mx	18	-295.468	7.313	0.211
			Max. My	24	-21.818	0.190	2.957
			Max. Vy	18	-14.148	0.215	0.011
		Leg	Max. Vx	24	-5.359	0.006	0.206
			Max Tension	8	10.233	0.000	0.000
			Max. Compression	8	-9.937	0.000	0.000
			Max. Mx	38	0.561	0.128	-0.012
			Max. My	22	-9.284	0.025	0.017
			Max. Vy	38	0.082	0.128	-0.012
			Max. Vx	38	0.003	0.000	0.000
T9	180 - 160	Leg	Max Tension	7	342.696	4.931	0.088
			Max. Compression	18	-380.536	1.275	0.039
			Max. Mx	18	-338.278	7.288	0.170
			Max. My	24	-24.942	0.163	2.890
			Max. Vy	18	-15.545	1.275	0.039



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b>	ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b>	23 of 40
	<b>Project</b>	330' SST/ 37.353261, -84.327297	<b>Date</b>	09:06:59 10/22/20
	<b>Client</b>	Harmoni (UNITI) Towers	<b>Designed by</b>	JLandon

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T10	160 - 140	Diagonal	Max. Vx	24	-5.806	0.026	0.754
			Max. Tension	8	10.790	0.000	0.000
			Max. Compression	8	-10.562	0.000	0.000
			Max. Mx	38	0.559	0.152	-0.014
			Max. My	22	-9.820	0.032	0.018
			Max. Vy	38	0.089	0.152	-0.014
		Leg	Max. Vx	38	0.003	0.000	0.000
			Max. Tension	7	378.400	5.509	0.076
			Max. Compression	18	-423.228	0.930	0.061
			Max. Mx	18	-380.566	9.016	0.178
			Max. My	24	-27.876	0.176	3.660
			Max. Vy	18	-16.344	0.930	0.061
		Diagonal	Max. Vx	24	-6.710	-0.026	1.284
			Max. Tension	10	11.646	0.000	0.000
Max. Compression	8		-11.601	0.000	0.000		
Max. Mx	36		0.513	0.188	0.018		
Max. My	22		-10.806	0.057	0.024		
Max. Vy	36		0.104	0.188	0.018		
T11	140 - 120	Leg	Max. Vx	38	0.004	0.000	0.000
			Max. Tension	7	413.504	7.238	0.087
			Max. Compression	18	-465.686	-0.671	0.035
			Max. Mx	18	-465.656	-9.320	-0.084
			Max. My	24	-31.045	0.127	4.642
			Max. Vy	18	-17.284	-0.671	0.035
		Diagonal	Max. Vx	24	-6.884	-0.061	0.645
			Max. Tension	9	13.222	0.000	0.000
			Max. Compression	10	-13.688	0.000	0.000
			Max. Mx	36	1.594	0.293	0.000
			Max. My	31	-0.369	0.000	-0.007
			Max. Vy	36	0.108	0.000	0.000
		Horizontal	Max. Vx	31	0.003	0.000	0.000
			Max. Tension	18	7.879	0.000	0.000
Max. Compression	18		-7.879	-0.058	0.000		
Max. Mx	26		-0.990	-0.191	0.004		
Max. My	6		4.014	-0.050	0.005		
Max. Vy	33		0.100	-0.191	0.003		
Inner Bracing	Max. Vx	35	-0.002	-0.191	0.004		
	Max. Tension	25	0.001	0.000	0.000		
	Max. Compression	37	-0.011	0.000	0.000		
	Max. Mx	26	-0.010	-0.130	0.000		
	Max. My	18	-0.003	0.000	-0.000		
	Max. Vy	26	-0.054	0.000	0.000		
T12	120 - 100	Leg	Max. Vx	18	0.000	0.000	0.000
			Max. Tension	7	447.305	6.921	0.068
			Max. Compression	18	-506.967	0.243	0.054
			Max. Mx	18	-506.936	-8.951	-0.051
			Max. My	24	-34.280	0.073	4.091
			Max. Vy	18	-18.374	0.243	0.054
		Diagonal	Max. Vx	24	-7.129	-0.057	1.231
			Max. Tension	9	13.471	0.000	0.000
			Max. Compression	10	-13.732	0.000	0.000
			Max. Mx	36	1.575	0.331	0.000
			Max. My	31	-0.389	0.000	-0.008
			Max. Vy	36	-0.115	0.000	0.000
		Horizontal	Max. Vx	31	-0.003	0.000	0.000
			Max. Tension	18	8.598	0.000	0.000
Max. Compression	18		-8.598	-0.077	0.000		
Max. Mx	31		0.492	-0.242	0.005		
Max. My	6		4.374	-0.069	0.006		
Max. Vy	31		-0.118	-0.242	0.005		
		Max. Vx	35	-0.003	-0.242	0.006	

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b>	ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b>	24 of 40
	<b>Project</b>	330' SST/ 37.353261, -84.327297	<b>Date</b>	09:06:59 10/22/20
	<b>Client</b>	Harmoni (UNITI) Towers	<b>Designed by</b>	JLandon

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T13	100 - 80	Inner Bracing	Max Tension	23	0.000	0.000	0.000
			Max. Compression	37	-0.012	0.000	0.000
			Max. Mx	26	-0.011	-0.148	0.000
			Max. My	18	-0.003	0.000	-0.000
			Max. Vy	26	-0.057	0.000	0.000
			Max. Vx	18	0.000	0.000	0.000
		Leg	Max Tension	7	480.364	8.207	0.072
			Max. Compression	18	-548.309	-0.831	0.042
			Max. Mx	18	-548.275	-10.627	-0.051
			Max. My	24	-37.494	0.081	4.798
			Max. Vy	18	-19.577	-0.831	0.042
			Max. Vx	24	-7.438	-0.082	0.809
		Diagonal	Max Tension	9	14.255	0.000	0.000
			Max. Compression	10	-14.387	0.000	0.000
			Max. Mx	36	1.647	0.431	0.000
			Max. My	31	-0.390	0.000	-0.010
			Max. Vy	36	0.141	0.000	0.000
			Max. Vx	31	0.003	0.000	0.000
		Horizontal	Max Tension	18	9.311	0.000	0.000
			Max. Compression	18	-9.311	-0.111	0.000
			Max. Mx	31	0.569	-0.323	0.007
			Max. My	6	4.733	-0.102	0.009
			Max. Vy	31	-0.149	-0.323	0.007
			Max. Vx	35	-0.003	-0.323	0.007
T14	80 - 60	Inner Bracing	Max Tension	1	0.000	0.000	0.000
			Max. Compression	37	-0.014	0.000	0.000
			Max. Mx	26	-0.013	-0.167	0.000
			Max. My	18	-0.003	0.000	-0.000
			Max. Vy	26	0.060	0.000	0.000
			Max. Vx	18	0.000	0.000	0.000
		Leg	Max Tension	7	512.731	7.934	0.060
			Max. Compression	18	-589.149	0.065	0.047
			Max. Mx	18	-589.115	-10.355	-0.035
			Max. My	24	-41.035	0.084	4.532
			Max. Vy	18	-20.824	0.065	0.047
			Max. Vx	24	-7.716	-0.067	1.126
		Diagonal	Max Tension	9	14.681	0.000	0.000
			Max. Compression	8	-14.880	0.000	0.000
			Max. Mx	36	1.730	0.477	0.000
			Max. My	31	-0.327	0.000	-0.011
			Max. Vy	36	-0.148	0.000	0.000
			Max. Vx	31	0.003	0.000	0.000
		Horizontal	Max Tension	18	10.020	0.000	0.000
			Max. Compression	18	-10.020	-0.127	0.001
			Max. Mx	31	0.649	-0.358	0.008
			Max. My	6	5.090	-0.116	0.009
			Max. Vy	31	-0.155	-0.358	0.008
			Max. Vx	35	-0.003	-0.358	0.008
Inner Bracing	Max Tension	1	0.000	0.000	0.000		
	Max. Compression	37	-0.014	0.000	0.000		
	Max. Mx	26	-0.013	-0.185	0.000		
	Max. My	18	-0.004	0.000	-0.000		
	Max. Vy	26	0.063	0.000	0.000		
	Max. Vx	18	-0.000	0.000	0.000		
T15	60 - 40	Leg	Max Tension	7	544.578	9.047	0.060
			Max. Compression	18	-629.939	-0.847	0.035
			Max. Mx	18	-629.901	-11.844	-0.037
			Max. My	24	-44.583	0.124	4.988
			Max. Vy	18	-21.976	-0.847	0.035
			Max. Vx	24	-7.945	-0.067	0.753
		Diagonal	Max Tension	9	15.340	0.000	0.000

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 25 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft	
T16	40 - 20	Horizontal	Max. Compression	8	-15.666	0.000	0.000	
			Max. Mx	36	1.976	0.521	0.000	
			Max. My	31	-0.127	0.000	-0.012	
			Max. Vy	36	-0.153	0.000	0.000	
			Max. Vx	31	0.004	0.000	0.000	
			Max Tension	18	10.724	0.000	0.000	
			Max. Compression	18	-10.724	-0.144	0.001	
			Max. Mx	33	-2.190	-0.392	0.009	
			Max. My	29	2.215	-0.392	0.009	
			Max. Vy	35	-0.160	-0.391	0.008	
			Max. Vx	35	-0.004	-0.391	0.008	
			Max Tension	1	0.000	0.000	0.000	
		Inner Bracing	Max. Compression	37	-0.015	0.000	0.000	
			Max. Mx	26	-0.014	-0.202	0.000	
			Max. My	18	-0.005	0.000	-0.000	
			Max. Vy	26	0.064	0.000	0.000	
			Max. Vx	18	0.000	0.000	0.000	
			Max Tension	7	575.557	8.389	0.047	
			Leg	Max. Compression	18	-670.024	0.502	0.033
				Max. Mx	18	-669.986	-11.011	-0.029
				Max. My	24	-48.282	0.158	4.730
				Max. Vy	18	-23.007	0.502	0.033
				Max. Vx	24	-8.066	-0.016	1.213
				Max Tension	9	15.560	0.000	0.000
		Diagonal		Max. Compression	8	-15.992	0.000	0.000
				Max. Mx	36	2.358	0.558	0.000
				Max. My	31	0.302	0.000	-0.013
				Max. Vy	36	0.156	0.000	0.000
				Max. Vx	31	-0.004	0.000	0.000
				Max Tension	18	11.422	0.000	0.000
			Horizontal	Max. Compression	18	-11.422	-0.163	0.002
				Max. Mx	27	0.908	-0.430	0.009
				Max. My	29	2.387	-0.430	0.010
				Max. Vy	31	-0.163	-0.415	0.008
				Max. Vx	31	-0.004	-0.415	0.009
				Max Tension	1	0.000	0.000	0.000
		Inner Bracing		Max. Compression	37	-0.014	0.000	0.000
				Max. Mx	31	-0.013	-0.215	0.000
				Max. My	18	-0.006	0.000	-0.000
				Max. Vy	31	0.065	0.000	0.000
Max. Vx	18			0.000	0.000	0.000		
Max Tension	7			605.385	9.192	0.055		
Leg	Max. Compression		18	-709.666	0.000	-0.000		
	Max. Mx		18	-670.065	12.014	0.094		
	Max. My		24	-52.006	0.229	5.249		
	Max. Vy		18	-23.824	0.000	-0.000		
	Max. Vx		24	-8.067	0.229	5.249		
	Max Tension		9	15.936	0.000	0.000		
	Diagonal	Max. Compression	8	-16.469	0.000	0.000		
		Max. Mx	31	3.330	0.648	0.000		
		Max. My	31	1.426	0.000	-0.015		
		Max. Vy	31	-0.173	0.000	0.000		
		Max. Vx	31	0.004	0.000	0.000		
		Max Tension	18	12.108	0.000	0.000		
Horizontal		Max. Compression	18	-12.108	-0.224	0.003		
		Max. Mx	35	-0.921	-0.549	0.012		
		Max. My	29	2.563	-0.547	0.014		
		Max. Vy	35	0.187	-0.549	0.012		
		Max. Vx	29	0.004	-0.547	0.014		
		Max Tension	1	0.000	0.000	0.000		
	Inner Bracing	Max. Compression	29	-0.015	0.000	0.000		



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 26 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	35	-0.015	-0.215	0.000
			Max. My	35	-0.015	0.000	-0.000
			Max. Vy	35	-0.061	0.000	0.000
			Max. Vx	35	-0.000	0.000	0.000

### Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	708.160	45.060	-25.922
	Max. H <sub>x</sub>	18	708.160	45.060	-25.922
	Max. H <sub>z</sub>	7	-603.862	-40.147	23.032
	Min. Vert	7	-603.862	-40.147	23.032
	Min. H <sub>x</sub>	7	-603.862	-40.147	23.032
Leg B	Max. Vert	18	708.160	45.060	-25.922
	Max. H <sub>x</sub>	23	-601.523	40.378	22.352
	Max. H <sub>z</sub>	23	-601.523	40.378	22.352
	Min. Vert	23	-601.523	40.378	22.352
	Min. H <sub>x</sub>	10	704.836	-45.247	-25.308
Leg A	Max. Vert	10	704.836	-45.247	-25.308
	Max. H <sub>x</sub>	10	704.836	-45.247	-25.308
	Max. H <sub>z</sub>	2	701.696	-0.244	51.404
	Min. Vert	21	44.217	6.553	2.300
	Min. H <sub>x</sub>	2	701.696	-0.244	51.404
	Min. H <sub>z</sub>	15	-580.689	0.269	-44.655
	Min. H <sub>x</sub>	9	44.217	-6.560	2.300
	Min. H <sub>z</sub>	15	-580.689	0.269	-44.655

### Tower Mast Reaction Summary

Load Combination	Vertical K	Shear <sub>x</sub> K	Shear <sub>z</sub> K	Overturning Moment, M <sub>x</sub> kip-ft	Overturning Moment, M <sub>z</sub> kip-ft	Torque kip-ft
Dead Only	97.794	-0.000	0.000	7.150	6.585	-0.000
1.2 Dead+1.0 Wind 0 deg - No Ice	117.352	0.000	-85.364	-16353.571	8.025	-12.740
0.9 Dead+1.0 Wind 0 deg - No Ice	88.014	0.000	-85.361	-16315.493	6.021	-12.720
1.2 Dead+1.0 Wind 30 deg - No Ice	117.352	41.675	-69.356	-13332.952	-8161.596	16.449
0.9 Dead+1.0 Wind 30 deg - No Ice	88.014	41.674	-69.354	-13302.254	-8143.347	16.446
1.2 Dead+1.0 Wind 60 deg - No Ice	117.352	69.872	-40.006	-7757.533	-13608.883	5.494
0.9 Dead+1.0 Wind 60 deg - No Ice	88.014	69.870	-40.005	-7740.544	-13577.203	5.471
1.2 Dead+1.0 Wind 90 deg - No Ice	117.352	81.897	-1.309	-366.057	-15834.390	1.153
0.9 Dead+1.0 Wind 90 deg - No Ice	88.014	81.895	-1.309	-367.233	-15797.314	1.114
1.2 Dead+1.0 Wind 120 deg - No Ice	117.352	75.798	41.150	7664.888	-14547.666	34.122

<p><b>tnxTower</b></p> <p><b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265</p>	<b>Job</b>	ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b>	27 of 40
	<b>Project</b>	330' SST/ 37.353261, -84.327297	<b>Date</b>	09:06:59 10/22/20
	<b>Client</b>	Harmoni (UNITI) Towers	<b>Designed by</b>	JLandon

Load Combination	Vertical K	Shear <sub>x</sub> K	Shear <sub>y</sub> K	Overturning Moment, M <sub>x</sub> kip-ft	Overturning Moment, M <sub>y</sub> kip-ft	Torque kip-ft
0.9 Dead+1.0 Wind 120 deg - No Ice	88.014	75.796	41.148	7644.155	-14513.867	34.078
1.2 Dead+1.0 Wind 150 deg - No Ice	117.352	39.993	69.142	13283.890	-7677.326	48.095
0.9 Dead+1.0 Wind 150 deg - No Ice	88.014	39.991	69.140	13249.057	-7660.362	48.063
1.2 Dead+1.0 Wind 180 deg - No Ice	117.352	0.000	77.874	15095.992	8.019	12.737
0.9 Dead+1.0 Wind 180 deg - No Ice	88.014	0.000	77.871	15056.515	6.015	12.719
1.2 Dead+1.0 Wind 210 deg - No Ice	117.352	-40.103	69.333	13343.554	7727.896	-11.084
0.9 Dead+1.0 Wind 210 deg - No Ice	88.014	-40.101	69.331	13308.539	7706.819	-11.083
1.2 Dead+1.0 Wind 240 deg - No Ice	117.352	-75.987	41.259	7698.872	14622.779	-1.175
0.9 Dead+1.0 Wind 240 deg - No Ice	88.014	-75.984	41.257	7678.035	14584.792	-1.149
1.2 Dead+1.0 Wind 270 deg - No Ice	117.352	-81.897	-1.309	-366.058	15850.316	-1.157
0.9 Dead+1.0 Wind 270 deg - No Ice	88.014	-81.895	-1.309	-367.234	15809.234	-1.117
1.2 Dead+1.0 Wind 300 deg - No Ice	117.352	-69.684	-39.897	-7723.263	13565.776	-38.441
0.9 Dead+1.0 Wind 300 deg - No Ice	88.014	-69.681	-39.896	-7706.379	13530.268	-38.399
1.2 Dead+1.0 Wind 330 deg - No Ice	117.352	-41.565	-69.166	-13273.112	8143.182	-53.461
0.9 Dead+1.0 Wind 330 deg - No Ice	88.014	-41.564	-69.163	-13242.597	8121.030	-53.426
1.2 Dead+1.0 Ice+1.0 Temp	304.687	0.001	-0.001	57.391	76.328	-0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	304.687	0.000	-11.828	-2336.139	76.957	-4.017
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	304.687	5.867	-9.907	-1951.119	-1126.121	-0.631
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	304.687	10.048	-5.771	-1116.857	-1973.275	0.051
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	304.687	11.736	-0.118	23.432	-2305.494	1.853
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	304.687	10.470	5.810	1212.362	-2041.949	5.733
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	304.687	5.716	9.889	2061.490	-1081.710	7.021
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	304.687	0.000	11.284	2355.698	76.943	4.013
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	304.687	-5.725	9.905	2066.496	1238.494	1.121
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	304.687	-10.486	5.819	1215.231	2200.834	0.333
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	304.687	-11.736	-0.118	23.423	2459.387	-1.862
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	304.687	-10.032	-5.762	-1113.968	2122.162	-6.121
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	304.687	-5.858	-9.892	-1946.108	1277.135	-7.506
Dead+Wind 0 deg - Service	97.794	0.000	-27.874	-5327.557	6.636	-4.155
Dead+Wind 30 deg - Service	97.794	13.608	-22.647	-4342.621	-2656.985	5.392
Dead+Wind 60 deg - Service	97.794	22.816	-13.063	-2524.770	-4432.975	1.787
Dead+Wind 90 deg - Service	97.794	26.742	-0.427	-114.869	-5158.586	0.348
Dead+Wind 120 deg - Service	97.794	24.751	13.437	2503.542	-4739.114	11.133
Dead+Wind 150 deg - Service	97.794	13.059	22.577	4335.431	-2499.082	15.719



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 28 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Load Combination	Vertical K	Shear <sub>x</sub> K	Shear <sub>z</sub> K	Overturning Moment, M <sub>x</sub> kip-ft	Overturning Moment, M <sub>z</sub> kip-ft	Torque kip-ft
Dead+Wind 180 deg - Service	97.794	0.000	25.429	4926.194	6.633	4.157
Dead+Wind 210 deg - Service	97.794	-13.095	22.640	4354.902	2523.602	-3.640
Dead+Wind 240 deg - Service	97.794	-24.812	13.472	2514.652	4771.652	-0.379
Dead+Wind 270 deg - Service	97.794	-26.742	-0.427	-114.870	5171.843	-0.349
Dead+Wind 300 deg - Service	97.794	-22.754	-13.028	-2513.628	4426.971	-12.543
Dead+Wind 330 deg - Service	97.794	-13.572	-22.585	-4323.132	2659.011	-17.467

### Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.000	-97.794	0.000	0.000	97.794	-0.000	0.000%
2	0.000	-117.352	-85.371	-0.000	117.352	85.364	0.005%
3	0.000	-88.014	-85.371	-0.000	88.014	85.361	0.008%
4	41.678	-117.352	-69.362	-41.675	117.352	69.356	0.005%
5	41.678	-88.014	-69.362	-41.674	88.014	69.354	0.008%
6	69.878	-117.352	-40.009	-69.872	117.352	40.006	0.004%
7	69.878	-88.014	-40.009	-69.870	88.014	40.005	0.007%
8	81.904	-117.352	-1.309	-81.897	117.352	1.309	0.005%
9	81.904	-88.014	-1.309	-81.895	88.014	1.309	0.008%
10	75.804	-117.352	41.153	-75.798	117.352	-41.150	0.005%
11	75.804	-88.014	41.153	-75.796	88.014	-41.148	0.008%
12	39.996	-117.352	69.148	-39.993	117.352	-69.142	0.005%
13	39.996	-88.014	69.148	-39.991	88.014	-69.140	0.008%
14	0.000	-117.352	77.880	-0.000	117.352	-77.874	0.004%
15	0.000	-88.014	77.880	-0.000	88.014	-77.871	0.007%
16	-40.106	-117.352	69.338	40.103	117.352	-69.333	0.005%
17	-40.106	-88.014	69.338	40.101	88.014	-69.331	0.008%
18	-75.993	-117.352	41.262	75.987	117.352	-41.259	0.005%
19	-75.993	-88.014	41.262	75.984	88.014	-41.257	0.008%
20	-81.904	-117.352	-1.309	81.897	117.352	1.309	0.005%
21	-81.904	-88.014	-1.309	81.895	88.014	1.309	0.008%
22	-69.689	-117.352	-39.900	69.684	117.352	39.897	0.004%
23	-69.689	-88.014	-39.900	69.681	88.014	39.896	0.007%
24	-41.568	-117.352	-69.171	41.565	117.352	69.166	0.005%
25	-41.568	-88.014	-69.171	41.564	88.014	69.163	0.008%
26	0.000	-304.687	0.000	-0.001	304.687	0.001	0.001%
27	0.000	-304.687	-11.830	-0.000	304.687	11.828	0.001%
28	5.868	-304.687	-9.909	-5.867	304.687	9.907	0.001%
29	10.050	-304.687	-5.772	-10.048	304.687	5.771	0.001%
30	11.738	-304.687	-0.118	-11.736	304.687	0.118	0.001%
31	10.472	-304.687	5.811	-10.470	304.687	-5.810	0.001%
32	5.717	-304.687	9.891	-5.716	304.687	-9.889	0.001%
33	0.000	-304.687	11.286	-0.000	304.687	-11.284	0.001%
34	-5.726	-304.687	9.907	5.725	304.687	-9.905	0.001%
35	-10.488	-304.687	5.820	-10.486	304.687	-5.819	0.001%
36	-11.738	-304.687	-0.118	11.736	304.687	0.118	0.001%
37	-10.034	-304.687	-5.763	10.032	304.687	5.762	0.001%
38	-5.859	-304.687	-9.893	5.858	304.687	9.892	0.001%
39	0.000	-97.794	-27.876	-0.000	97.794	27.874	0.002%
40	13.609	-97.794	-22.649	-13.608	97.794	22.647	0.002%
41	22.817	-97.794	-13.064	-22.816	97.794	13.063	0.002%
42	26.744	-97.794	-0.428	-26.742	97.794	0.427	0.002%
43	24.752	-97.794	13.438	-24.751	97.794	-13.437	0.002%
44	13.060	-97.794	22.579	-13.059	97.794	-22.577	0.002%
45	-0.000	-97.794	25.430	-0.000	97.794	-25.429	0.002%
46	-13.096	-97.794	22.641	13.095	97.794	-22.640	0.002%

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 29 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
47	-24.814	-97.794	13.473	24.812	97.794	-13.472	0.002%
48	-26.744	-97.794	-0.428	26.742	97.794	0.427	0.002%
49	-22.756	-97.794	-13.029	22.754	97.794	13.028	0.002%
50	-13.573	-97.794	-22.587	13.572	97.794	22.585	0.002%

### Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	6	0.00000001	0.00000001
2	Yes	15	0.00006093	0.00011056
3	Yes	14	0.00008412	0.00014944
4	Yes	15	0.00005908	0.00010748
5	Yes	14	0.00008089	0.00014404
6	Yes	15	0.00005751	0.00010478
7	Yes	14	0.00007811	0.00013931
8	Yes	15	0.00005907	0.00010740
9	Yes	14	0.00008087	0.00014393
10	Yes	15	0.00006085	0.00011030
11	Yes	14	0.00008401	0.00014906
12	Yes	15	0.00005919	0.00010760
13	Yes	14	0.00008108	0.00014428
14	Yes	15	0.00005757	0.00010493
15	Yes	14	0.00007820	0.00013953
16	Yes	15	0.00005921	0.00010767
17	Yes	14	0.00008111	0.00014438
18	Yes	15	0.00006088	0.00011037
19	Yes	14	0.00008405	0.00014917
20	Yes	15	0.00005907	0.00010739
21	Yes	14	0.00008087	0.00014392
22	Yes	15	0.00005752	0.00010474
23	Yes	14	0.00007813	0.00013928
24	Yes	15	0.00005907	0.00010741
25	Yes	14	0.00008086	0.00014395
26	Yes	11	0.00000001	0.00009970
27	Yes	16	0.00012584	0.00013842
28	Yes	16	0.00012545	0.00013554
29	Yes	16	0.00012543	0.00013647
30	Yes	16	0.00012589	0.00013835
31	Yes	16	0.00012640	0.00014119
32	Yes	16	0.00012641	0.00014019
33	Yes	16	0.00012645	0.00014150
34	Yes	16	0.00012666	0.00014298
35	Yes	16	0.00012678	0.00014579
36	Yes	16	0.00012638	0.00014353
37	Yes	16	0.00012592	0.00014090
38	Yes	16	0.00012575	0.00013815
39	Yes	15	0.00004909	0.00008819
40	Yes	15	0.00000001	0.00008727
41	Yes	15	0.00000001	0.00008651
42	Yes	15	0.00000001	0.00008724
43	Yes	15	0.00004905	0.00008804
44	Yes	15	0.00000001	0.00008724
45	Yes	15	0.00000001	0.00008654
46	Yes	15	0.00000001	0.00008730
47	Yes	15	0.00004906	0.00008808

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 30 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

48	Yes	15	0.00000001	0.00008723
49	Yes	15	0.00000001	0.00008644
50	Yes	15	0.00000001	0.00008720

### Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	330 - 320	21.335	47	0.613	0.097
T2	320 - 300	20.006	47	0.614	0.096
T3	300 - 280	17.373	47	0.586	0.095
T4	280 - 260	14.883	47	0.542	0.090
T5	260 - 240	12.620	47	0.488	0.078
T6	240 - 220	10.600	47	0.433	0.067
T7	220 - 200	8.798	47	0.383	0.057
T8	200 - 180	7.204	47	0.337	0.048
T9	180 - 160	5.783	47	0.296	0.039
T10	160 - 140	4.523	47	0.254	0.030
T11	140 - 120	3.441	47	0.216	0.023
T12	120 - 100	2.544	47	0.182	0.019
T13	100 - 80	1.792	47	0.147	0.015
T14	80 - 60	1.185	47	0.115	0.012
T15	60 - 40	0.707	47	0.083	0.009
T16	40 - 20	0.351	47	0.055	0.006
T17	20 - 0	0.112	47	0.026	0.002

### Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
330.000	Lightning Rod 1"x10'	47	21.335	0.613	0.097	Inf
325.000	Sector1(CaAa=13333.33 Sq in)No Ice	47	20.670	0.614	0.096	Inf
313.000	Sector1(CaAa=10000 Sq in)No Ice	47	19.076	0.608	0.096	86310
301.000	Sector1(CaAa=10000 Sq in)No Ice	47	17.502	0.588	0.095	32242
289.000	6' MW Dish	47	15.979	0.563	0.093	23235
277.000	6' MW Dish	47	14.528	0.534	0.089	19521

### Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	330 - 320	65.419	18	1.878	0.296
T2	320 - 300	61.343	18	1.883	0.295
T3	300 - 280	53.269	18	1.796	0.292
T4	280 - 260	45.635	18	1.660	0.276
T5	260 - 240	38.695	18	1.495	0.238
T6	240 - 220	32.501	18	1.328	0.205



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 31 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T7	220 - 200	26.976	18	1.174	0.174
T8	200 - 180	22.090	18	1.034	0.147
T9	180 - 160	17.731	18	0.908	0.121
T10	160 - 140	13.868	18	0.779	0.093
T11	140 - 120	10.551	18	0.663	0.072
T12	120 - 100	7.802	18	0.557	0.060
T13	100 - 80	5.495	18	0.449	0.048
T14	80 - 60	3.634	18	0.353	0.038
T15	60 - 40	2.168	18	0.255	0.028
T16	40 - 20	1.078	18	0.168	0.017
T17	20 - 0	0.344	18	0.080	0.008

### Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
330.000	Lightning Rod 1"x10'	18	65.419	1.878	0.296	912392
325.000	Sector1(CaAa=13333.33 Sq in)No Ice	18	63.381	1.883	0.296	912392
313.000	Sector1(CaAa=10000 Sq in)No Ice	18	58.493	1.865	0.294	28808
301.000	Sector1(CaAa=10000 Sq in)No Ice	18	53.666	1.802	0.292	10560
289.000	6' MW Dish	18	48.995	1.725	0.286	7610
277.000	6' MW Dish	18	44.546	1.637	0.272	6397

### Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load Allowable	Allowable Ratio	Criteria	
T1	330	Diagonal	A325X	0.625	1	3.570	9.598	0.372	✓	1	Member Block Shear
		Top Girt	A325X	0.625	1	1.853	9.598	0.193	✓	1	Member Block Shear
T2	320	Leg	A325N	0.750	6	1.367	30.101	0.045	✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	5.404	9.598	0.563	✓	1	Member Block Shear
T3	300	Leg	A325N	0.750	6	7.700	30.101	0.256	✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	7.619	9.598	0.794	✓	1	Member Block Shear
T4	280	Leg	A325N	0.750	6	16.235	30.101	0.539	✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	8.466	10.740	0.788	✓	1	Member Block Shear
T5	260	Leg	A325N	0.750	6	24.455	30.101	0.812	✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	8.538	13.025	0.655	✓	1	Member Block Shear
T6	240	Leg	A325N	1.000	6	31.799	54.517	0.583	✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	8.801	13.025	0.676	✓	1	Member Block Shear



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 32 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load Allowable	Allowable Ratio	Criteria
T7	220	Leg	A325N	1.000	6	38.518	54.517	0.707 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	9.401	14.168	0.664 ✓	1	Member Block Shear
T8	200	Leg	A325N	1.000	6	44.883	54.517	0.823 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	10.233	14.168	0.722 ✓	1	Member Block Shear
T9	180	Leg	A325N	1.000	6	51.073	54.517	0.937 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	10.790	14.168	0.762 ✓	1	Member Block Shear
T10	160	Leg	A325N	1.250	6	57.113	87.220	0.655 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	11.646	17.257	0.675 ✓	1	Bolt Shear
T11	140	Leg	A325N	1.250	6	63.063	87.220	0.723 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	13.222	26.051	0.508 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	7.879	19.195	0.410 ✓	1	Member Block Shear
T12	120	Leg	A325N	1.250	6	68.914	87.220	0.790 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	13.471	26.051	0.517 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	8.598	21.480	0.400 ✓	1	Member Block Shear
T13	100	Leg	A325N	1.250	6	74.547	87.220	0.855 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	14.255	28.336	0.503 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	9.311	26.051	0.357 ✓	1	Member Block Shear
T14	80	Leg	A325N	1.250	6	80.057	87.220	0.918 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	14.681	28.336	0.518 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	10.020	26.051	0.385 ✓	1	Member Block Shear
T15	60	Leg	A325N	1.250	6	85.451	87.220	0.980 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	15.340	28.336	0.541 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	10.724	26.051	0.412 ✓	1	Member Block Shear
T16	40	Leg	A325N	1.500	6	90.759	126.472	0.718 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	15.560	28.336	0.549 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	11.422	26.051	0.438 ✓	1	Member Block Shear
T17	20	Leg	A325N	1.500	6	95.921	126.472	0.758 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	16.469	29.250	0.563 ✓	1	Gusset Bearing
		Horizontal	A325X	0.625	1	12.108	28.336	0.427 ✓	1	Member Block Shear

**Compression Checks**

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 33 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

### Leg Design Data (Compression)

Section No.	Elevation <i>ft</i>	Size	L <i>ft</i>	L <sub>u</sub> <i>ft</i>	Kl/r	A <i>in</i> <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T1	330 - 320	1 3/4	10.009	4.504	123.5 K=1.00	2.405	-6.285	35.601	0.177 <sup>1</sup> ✓
T2	320 - 300	2	20.019	4.754	114.1 K=1.00	3.142	-46.767	54.509	0.858 <sup>1</sup> ✓
T3	300 - 280	2 1/2	20.019	4.754	91.3 K=1.00	4.909	-100.906	120.108	0.840 <sup>1</sup> ✓
T4	280 - 260	2 3/4	20.019	4.754	83.0 K=1.00	5.940	-153.975	161.540	0.953 <sup>1</sup> ✓
T5	260 - 240	3	20.019	4.754	76.1 K=1.00	7.069	-202.065	208.347	0.970 <sup>1</sup> ✓
T6	240 - 220	3 1/4	20.019	4.754	70.2 K=1.00	8.296	-246.561	260.312	0.947 <sup>1</sup> ✓
T7	220 - 200	3 1/2	20.019	4.754	65.2 K=1.00	9.621	-289.647	317.273	0.913 <sup>1</sup> ✓
T8	200 - 180	3 3/4	20.019	4.754	60.9 K=1.00	11.045	-332.344	379.106	0.877 <sup>1</sup> ✓
T9	180 - 160	3 3/4	20.019	4.754	60.9 K=1.00	11.045	-374.664	379.106	0.988 <sup>1</sup> ✓
T10	160 - 140	4	20.019	4.754	57.1 K=1.00	12.566	-417.384	445.717	0.936 <sup>1</sup> ✓
T11	140 - 120	4 1/4	20.019	4.754	53.7 K=1.00	14.186	-454.552	517.034	0.879 <sup>1</sup> ✓
T12	120 - 100	4 1/4	20.019	4.754	53.7 K=1.00	14.186	-496.036	517.034	0.959 <sup>1</sup> ✓
T13	100 - 80	4 1/2	20.019	4.754	50.7 K=1.00	15.904	-537.178	593.004	0.906 <sup>1</sup> ✓
T14	80 - 60	4 1/2	20.019	4.754	50.7 K=1.00	15.904	-578.095	593.004	0.975 <sup>1</sup> ✓
T15	60 - 40	4 3/4	20.019	4.754	48.0 K=1.00	17.721	-618.726	673.582	0.919 <sup>1</sup> ✓
T16	40 - 20	4 3/4	20.019	4.754	48.0 K=1.00	17.721	-658.963	673.582	0.978 <sup>1</sup> ✓
T17	20 - 0	5	20.019	4.754	45.6 K=1.00	19.635	-698.572	758.734	0.921 <sup>1</sup> ✓

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Diagonal Design Data (Compression)

Section No.	Elevation <i>ft</i>	Size	L <i>ft</i>	L <sub>u</sub> <i>ft</i>	Kl/r	A <i>in</i> <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T1	330 - 320	L1 3/4x1 3/4x3/16	6.221	3.127	109.3 K=1.00	0.621	-3.240	14.893	0.218 <sup>1</sup> ✓
T2	320 - 300	L1 3/4x1 3/4x3/16	7.485	3.750	131.0 K=1.00	0.621	-4.707	10.354	0.455 <sup>1</sup> ✓

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 34 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Section No.	Elevation ft	Size	L ft	L <sub>n</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T3	300 - 280	L1 3/4x1 3/4x3/16	8.697	4.330	151.3 K=1.00	0.621	-7.198	7.765	0.927 <sup>1</sup>
T4	280 - 260	L2x2x3/16	9.987	4.964	151.2 K=1.00	0.715	-7.901	8.951	0.883 <sup>1</sup>
T5	260 - 240	L2 1/2x2 1/2x3/16	11.329	5.625	136.4 K=1.00	0.902	-8.061	13.885	0.581 <sup>1</sup>
T6	240 - 220	L2 1/2x2 1/2x3/16	12.706	6.303	152.8 K=1.00	0.902	-8.465	11.057	0.766 <sup>1</sup>
T7	220 - 200	L3x3x3/16	14.108	6.994	140.8 K=1.00	1.090	-9.099	15.733	0.578 <sup>1</sup>
T8	200 - 180	L3x3x3/16	15.529	7.694	154.9 K=1.00	1.090	-9.937	13.000	0.764 <sup>1</sup>
T9	180 - 160	L3x3x3/16	16.963	8.412	169.4 K=1.00	1.090	-10.562	10.877	0.971 <sup>1</sup>
T10	160 - 140	L3x3x1/4	18.408	9.124	184.9 K=1.00	1.440	-11.446	12.050	0.950 <sup>1</sup>
T11	140 - 120	2L2 1/2x2 1/2x3/16x3/8	10.829	10.632	168.2 K=1.00	1.800	-13.207	17.635	0.749 <sup>1</sup>
T12	120 - 100	2L 'a' > 60.882 in - 267 2L2 1/2x2 1/2x3/16x3/8	11.508	11.313	179.0 K=1.00	1.800	-13.564	15.641	0.867 <sup>1</sup>
T13	100 - 80	2L 'a' > 64.783 in - 306 2L3x3x3/16x3/8	12.195	11.991	159.5 K=1.00	2.180	-14.379	23.170	0.621 <sup>1</sup>
T14	80 - 60	2L 'a' > 68.500 in - 345 2L3x3x3/16x3/8	12.889	12.687	168.8 K=1.00	2.180	-14.880	20.849	0.714 <sup>1</sup>
T15	60 - 40	2L 'a' > 72.475 in - 384 2L3x3x3/16x3/8	13.589	13.378	178.0 K=1.00	2.180	-15.666	18.864	0.830 <sup>1</sup>
T16	40 - 20	2L 'a' > 76.419 in - 423 2L3x3x3/16x3/8	14.294	14.084	187.4 K=1.00	2.180	-15.992	17.103	0.935 <sup>1</sup>
T17	20 - 0	2L 'a' > 80.455 in - 462 2L3x3x1/4x3/8  2L 'a' > 84.697 in - 501	15.003	14.784	196.8 K=1.00	2.880	-16.469	20.903	0.788 <sup>1</sup>

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L <sub>n</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T11	140 - 120	2L1 3/4x1 3/4x3/16x3/8	19.106	9.376	209.5 K=1.00	1.242	-7.879	8.097	0.973 <sup>1</sup>
T12	120 - 100	2L 'a' > 53.975 in - 265 2L2x2x3/16x3/8  2L 'a' > 58.196 in - 304	20.606	10.126	198.1 K=1.00	1.430	-8.598	10.289	0.836 <sup>1</sup>

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b>	ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b>	35 of 40
	<b>Project</b>	330' SST/ 37.353261, -84.327297	<b>Date</b>	09:06:59 10/22/20
	<b>Client</b>	Harmoni (UNITI) Towers	<b>Designed by</b>	JLandon

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T13	100 - 80	2L2 1/2x2 1/2x3/16x3/8	22.106	10.866	171.9 K=1.00	1.800	-9.311	16.912	0.551 <sup>1</sup> ✓
T14	80 - 60	2L 'a' > 62.219 in - 343 2L2 1/2x2 1/2x3/16x3/8	23.606	11.616	183.8 K=1.00	1.800	-10.020	14.861	0.674 <sup>1</sup> ✓
T15	60 - 40	2L 'a' > 66.514 in - 382 2L2 1/2x2 1/2x3/16x3/8	25.106	12.355	195.5 K=1.00	1.800	-10.724	13.179	0.814 <sup>1</sup> ✓
T16	40 - 20	2L 'a' > 70.749 in - 421 2L2 1/2x2 1/2x3/16x3/8	26.606	13.105	207.4 K=1.00	1.800	-11.422	11.746	0.972 <sup>1</sup> ✓
T17	20 - 0	2L 'a' > 75.043 in - 460 2L3x3x3/16x3/8  2L 'a' > 79.088 in - 499	28.106	13.845	184.2 K=1.00	2.180	-12.108	17.672	0.685 <sup>1</sup> ✓

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T1	330 - 320	L1 3/4x1 3/4x3/16	3.788	3.642	127.2 K=1.00	0.621	-1.839	10.980	0.167 <sup>1</sup> ✓

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Inner Bracing Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T11	140 - 120	L1 3/4x1 3/4x3/16	9.553	9.553	333.8 K=1.00	0.621	-0.011	1.596	0.007 <sup>1</sup> ✓
T12	120 - 100	KL/R > 250 (C) - 274 L1 3/4x1 3/4x3/16	10.303	10.303	360.0 K=1.00	0.621	-0.012	1.372	0.009 <sup>1</sup> ✓
T13	100 - 80	KL/R > 250 (C) - 313 L1 3/4x1 3/4x3/16	11.053	11.053	386.2 K=1.00	0.621	-0.014	1.192	0.012 <sup>1</sup> ✓
T14	80 - 60	KL/R > 250 (C) - 352 L1 3/4x1 3/4x3/16	11.803	11.803	412.4 K=1.00	0.621	-0.014	1.045	0.014 <sup>1</sup> ✓
T15	60 - 40	KL/R > 250 (C) - 391 L1 3/4x1 3/4x3/16  KL/R > 250 (C) - 430	12.553	12.553	438.6 K=1.00	0.621	-0.015	0.924	0.016 <sup>1</sup> ✓



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b>	ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b>	36 of 40
	<b>Project</b>	330' SST/ 37.353261, -84.327297	<b>Date</b>	09:06:59 10/22/20
	<b>Client</b>	Harmoni (UNITI) Towers	<b>Designed by</b>	JLandon

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio P <sub>u</sub> / φP <sub>n</sub> <sup>1</sup>
T16	40 - 20	L1 3/4x1 3/4x3/16	13.303	13.303	464.8 K=1.00	0.621	-0.014	0.823	0.018 <sup>1</sup> ✓
T17	20 - 0	KL/R > 250 (C) - 469 L1 3/4x1 3/4x3/16	14.053	14.053	491.0 K=1.00	0.621	-0.015	0.737	0.021 <sup>1</sup> ✓
		KL/R > 250 (C) - 510							

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Tension Checks

### Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio P <sub>u</sub> / φP <sub>n</sub> <sup>1</sup>
T1	330 - 320	1 3/4	10.009	0.500	13.7	2.405	8.206	108.238	0.076 <sup>1</sup> ✓
T2	320 - 300	2	20.019	0.500	12.0	3.142	46.214	141.372	0.327 <sup>1</sup> ✓
T3	300 - 280	2 1/2	20.019	0.500	9.6	4.909	97.423	220.893	0.441 <sup>1</sup> ✓
T4	280 - 260	2 3/4	20.019	0.500	8.7	5.940	146.742	267.281	0.549 <sup>1</sup> ✓
T5	260 - 240	3	20.019	0.500	8.0	7.069	190.805	318.086	0.600 <sup>1</sup> ✓
T6	240 - 220	3 1/4	20.019	0.500	7.4	8.296	231.125	373.310	0.619 <sup>1</sup> ✓
T7	220 - 200	3 1/2	20.019	0.500	6.9	9.621	269.312	432.951	0.622 <sup>1</sup> ✓
T8	200 - 180	3 3/4	20.019	0.500	6.4	11.045	306.454	497.010	0.617 <sup>1</sup> ✓
T9	180 - 160	3 3/4	20.019	0.500	6.4	11.045	342.696	497.010	0.690 <sup>1</sup> ✓
T10	160 - 140	4	20.019	0.500	6.0	12.566	378.400	565.487	0.669 <sup>1</sup> ✓
T11	140 - 120	4 1/4	20.019	0.500	5.7	14.186	413.504	638.381	0.648 <sup>1</sup> ✓
T12	120 - 100	4 1/4	20.019	0.500	5.7	14.186	447.305	638.381	0.701 <sup>1</sup> ✓
T13	100 - 80	4 1/2	20.019	0.500	5.3	15.904	480.364	715.694	0.671 <sup>1</sup> ✓
T14	80 - 60	4 1/2	20.019	0.500	5.3	15.904	512.731	715.694	0.716 <sup>1</sup> ✓
T15	60 - 40	4 3/4	20.019	0.500	5.1	17.721	544.578	797.425	0.683 <sup>1</sup> ✓
T16	40 - 20	4 3/4	20.019	0.500	5.1	17.721	575.557	797.425	0.722 <sup>1</sup> ✓

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 37 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T17	20 - 0	5	20.019	0.500	4.8	19.635	605.385	883.573	0.685 <sup>1</sup> ✓

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T1	330 - 320	L1 3/4x1 3/4x3/16	6.221	3.127	69.9	0.360	3.570	17.567	0.203 <sup>1</sup> ✓
T2	320 - 300	L1 3/4x1 3/4x3/16	7.485	3.750	83.8	0.360	5.404	17.567	0.308 <sup>1</sup> ✓
T3	300 - 280	L1 3/4x1 3/4x3/16	8.697	4.330	96.8	0.360	7.619	17.567	0.434 <sup>1</sup> ✓
T4	280 - 260	L2x2x3/16	9.987	4.964	96.6	0.431	8.466	21.001	0.403 <sup>1</sup> ✓
T5	260 - 240	L2 1/2x2 1/2x3/16	11.329	5.625	86.8	0.571	8.538	27.838	0.307 <sup>1</sup> ✓
T6	240 - 220	L2 1/2x2 1/2x3/16	12.706	6.303	97.2	0.571	8.801	27.838	0.316 <sup>1</sup> ✓
T7	220 - 200	L3x3x3/16	14.108	6.994	89.4	0.712	9.401	34.712	0.271 <sup>1</sup> ✓
T8	200 - 180	L3x3x3/16	15.529	7.694	98.3	0.712	10.233	34.712	0.295 <sup>1</sup> ✓
T9	180 - 160	L3x3x3/16	16.963	8.412	107.5	0.712	10.790	34.712	0.311 <sup>1</sup> ✓
T10	160 - 140	L3x3x1/4	18.408	9.124	117.7	0.939	11.646	45.794	0.254 <sup>1</sup> ✓
T11	140 - 120	2L2 1/2x2 1/2x3/16x3/8	10.829	10.632	164.0	1.139	13.222	55.529	0.238 <sup>1</sup> ✓
T12	120 - 100	2L 'a' > 60.882 in - 266 2L2 1/2x2 1/2x3/16x3/8	11.508	11.313	174.5	1.139	13.471	55.529	0.243 <sup>1</sup> ✓
T13	100 - 80	2L 'a' > 64.783 in - 305 2L3x3x3/16x3/8	12.195	11.991	153.2	1.424	14.255	69.423	0.205 <sup>1</sup> ✓
T14	80 - 60	2L 'a' > 68.500 in - 344 2L3x3x3/16x3/8	12.889	12.687	162.1	1.424	14.681	69.423	0.211 <sup>1</sup> ✓
T15	60 - 40	2L 'a' > 72.475 in - 383 2L3x3x3/16x3/8	13.589	13.378	171.0	1.424	15.340	69.423	0.221 <sup>1</sup> ✓
T16	40 - 20	2L 'a' > 76.419 in - 422 2L3x3x3/16x3/8	14.294	14.084	180.0	1.424	15.560	69.423	0.224 <sup>1</sup> ✓
T17	20 - 0	2L 'a' > 80.455 in - 461 2L3x3x1/4x3/8	15.003	14.784	190.8	1.879	15.936	91.589	0.174 <sup>1</sup> ✓

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 38 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
2L 'a' > 84.697 in - 500									

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T11	140 - 120	2L1 3/4x1 3/4x3/16x3/8	19.106	9.376	209.5	0.721	7.879	35.134	0.224 <sup>1</sup> ✓
T12	120 - 100	2L 'a' > 53.975 in - 265 2L2x2x3/16x3/8	20.606	10.126	196.9	0.862	8.598	42.001	0.205 <sup>1</sup> ✓
T13	100 - 80	2L 'a' > 58.196 in - 304 2L2 1/2x2 1/2x3/16x3/8	22.106	10.866	167.6	1.139	9.311	55.529	0.168 <sup>1</sup> ✓
T14	80 - 60	2L 'a' > 62.219 in - 349 2L2 1/2x2 1/2x3/16x3/8	23.606	11.616	179.2	1.139	10.020	55.529	0.180 <sup>1</sup> ✓
T15	60 - 40	2L 'a' > 66.514 in - 388 2L2 1/2x2 1/2x3/16x3/8	25.106	12.355	190.6	1.139	10.724	55.529	0.193 <sup>1</sup> ✓
T16	40 - 20	2L 'a' > 70.749 in - 421 2L2 1/2x2 1/2x3/16x3/8	26.606	13.105	202.1	1.139	11.422	55.529	0.206 <sup>1</sup> ✓
T17	20 - 0	2L 'a' > 75.043 in - 460 2L3x3x3/16x3/8	28.106	13.845	176.9	1.424	12.108	69.423	0.174 <sup>1</sup> ✓
2L 'a' > 79.088 in - 499									

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T1	330 - 320	L1 3/4x1 3/4x3/16	3.788	3.642	81.4	0.360	1.853	17.567	0.105 <sup>1</sup> ✓

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Inner Bracing Design Data (Tension)

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 39 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio P <sub>u</sub> / φP <sub>n</sub> <sup>1</sup>
T11	140 - 120	L1 3/4x1 3/4x3/16	9.553	9.553	213.5	0.621	0.001	27.949	0.000 <sup>1</sup> ✓
T12	120 - 100	L1 3/4x1 3/4x3/16	10.303	10.303	230.3	0.621	0.000	27.949	0.000 <sup>1</sup> ✓

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	φP <sub>allow</sub> K	% Capacity	Pass Fail
T1	330 - 320	Leg	1 3/4	1	-6.285	35.601	17.7	Pass
T2	320 - 300	Leg	2	21	-46.767	54.509	85.8	Pass
T3	300 - 280	Leg	2 1/2	48	-100.906	120.108	84.0	Pass
T4	280 - 260	Leg	2 3/4	75	-153.975	161.540	95.3	Pass
T5	260 - 240	Leg	3	102	-202.065	208.347	97.0	Pass
T6	240 - 220	Leg	3 1/4	129	-246.561	260.312	94.7	Pass
T7	220 - 200	Leg	3 1/2	154	-289.647	317.273	91.3	Pass
T8	200 - 180	Leg	3 3/4	181	-332.344	379.106	87.7	Pass
T9	180 - 160	Leg	3 3/4	208	-374.664	379.106	98.8	Pass
T10	160 - 140	Leg	4	235	-417.384	445.717	93.6	Pass
T11	140 - 120	Leg	4 1/4	262	-454.552	517.034	87.9	Pass
T12	120 - 100	Leg	4 1/4	301	-496.036	517.034	95.9	Pass
T13	100 - 80	Leg	4 1/2	340	-537.178	593.004	90.6	Pass
T14	80 - 60	Leg	4 1/2	379	-578.095	593.004	97.5	Pass
T15	60 - 40	Leg	4 3/4	418	-618.726	673.582	91.9	Pass
T16	40 - 20	Leg	4 3/4	457	-658.963	673.582	97.8	Pass
T17	20 - 0	Leg	5	496	-698.572	758.734	92.1	Pass
T1	330 - 320	Diagonal	L1 3/4x1 3/4x3/16	8	-3.240	14.893	21.8	Pass
T2	320 - 300	Diagonal	L1 3/4x1 3/4x3/16	25	-4.707	10.354	45.5	Pass
T3	300 - 280	Diagonal	L1 3/4x1 3/4x3/16	49	-7.198	7.765	92.7	Pass
T4	280 - 260	Diagonal	L2x2x3/16	77	-7.901	8.951	88.3	Pass
T5	260 - 240	Diagonal	L2 1/2x2 1/2x3/16	104	-8.061	13.885	58.1	Pass
T6	240 - 220	Diagonal	L2 1/2x2 1/2x3/16	131	-8.465	11.057	76.6	Pass
T7	220 - 200	Diagonal	L3x3x3/16	158	-9.099	15.733	57.8	Pass
T8	200 - 180	Diagonal	L3x3x3/16	185	-9.937	13.000	76.4	Pass
T9	180 - 160	Diagonal	L3x3x3/16	212	-10.562	10.877	97.1	Pass
T10	160 - 140	Diagonal	L3x3x1/4	239	-11.446	12.050	95.0	Pass
T11	140 - 120	Diagonal	2L2 1/2x2 1/2x3/16x3/8	267	-13.207	17.635	74.9	Pass
T12	120 - 100	Diagonal	2L2 1/2x2 1/2x3/16x3/8	306	-13.564	15.641	86.7	Pass
T13	100 - 80	Diagonal	2L3x3x3/16x3/8	345	-14.379	23.170	62.1	Pass
T14	80 - 60	Diagonal	2L3x3x3/16x3/8	384	-14.880	20.849	71.4	Pass
T15	60 - 40	Diagonal	2L3x3x3/16x3/8	423	-15.666	18.864	83.0	Pass
T16	40 - 20	Diagonal	2L3x3x3/16x3/8	462	-15.992	17.103	93.5	Pass
T17	20 - 0	Diagonal	2L3x3x1/4x3/8	501	-16.469	20.903	78.8	Pass
T11	140 - 120	Horizontal	2L1 3/4x1 3/4x3/16x3/8	265	-7.879	8.097	97.3	Pass
T12	120 - 100	Horizontal	2L2x2x3/16x3/8	304	-8.598	10.289	83.6	Pass
T13	100 - 80	Horizontal	2L2 1/2x2 1/2x3/16x3/8	343	-9.311	16.912	55.1	Pass
T14	80 - 60	Horizontal	2L2 1/2x2 1/2x3/16x3/8	382	-10.020	14.861	67.4	Pass
T15	60 - 40	Horizontal	2L2 1/2x2 1/2x3/16x3/8	421	-10.724	13.179	81.4	Pass



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> ATS #8657 - Mt Vernon (Site# KYLEX2044)	<b>Page</b> 40 of 40
	<b>Project</b> 330' SST/ 37.353261, -84.327297	<b>Date</b> 09:06:59 10/22/20
	<b>Client</b> Harmoni (UNITI) Towers	<b>Designed by</b> JLandon

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$\phi P_{allow}$ K	% Capacity	Pass Fail	
T16	40 - 20	Horizontal	2L2 1/2x2 1/2x3/16x3/8	466	-11.422	11.746	97.2	Pass	
T17	20 - 0	Horizontal	2L3x3x3/16x3/8	499	-12.108	17.672	68.5	Pass	
T1	330 - 320	Top Girt	L1 3/4x1 3/4x3/16	4	-1.839	10.980	16.7	Pass	
							19.3 (b)		
T11	140 - 120	Inner Bracing	L1 3/4x1 3/4x3/16	274	-0.011	1.596	0.7	Pass	
T12	120 - 100	Inner Bracing	L1 3/4x1 3/4x3/16	313	-0.012	1.372	0.9	Pass	
T13	100 - 80	Inner Bracing	L1 3/4x1 3/4x3/16	352	-0.014	1.192	1.2	Pass	
T14	80 - 60	Inner Bracing	L1 3/4x1 3/4x3/16	391	-0.014	1.045	1.4	Pass	
T15	60 - 40	Inner Bracing	L1 3/4x1 3/4x3/16	430	-0.015	0.924	1.6	Pass	
T16	40 - 20	Inner Bracing	L1 3/4x1 3/4x3/16	469	-0.014	0.823	1.8	Pass	
T17	20 - 0	Inner Bracing	L1 3/4x1 3/4x3/16	510	-0.015	0.737	2.1	Pass	
							Summary		
							Leg (T9)	98.8	Pass
							Diagonal (T9)	97.1	Pass
							Horizontal (T11)	97.3	Pass
							Top Girt (T1)	19.3	Pass
							Inner Bracing (T17)	2.1	Pass
							Bolt Checks	98.0	Pass
							<b>RATING =</b>	<b>98.8</b>	<b>Pass</b>

**EXHIBIT D**  
**COMPETING UTILITIES, CORPORATIONS, OR PERSONS LIST**

# KY Public Service Commission

## Master Utility Search

- Search for the utility of interest by using any single or combination of criteria.
- Enter Partial names to return the closest match for Utility Name and Address/City/Contact entries.

**Utility ID      Utility Name      Address/City/Contact      Utility Type      Status**

▼ Active ▼

	Utility ID	Utility Name	Utility Type	Class	City	State
<input type="button" value="View"/>	4111300	2600Hz, Inc. dba ZSWITCH	Cellular	D	San Francisco	CA
<input type="button" value="View"/>	4108300	Air Voice Wireless, LLC	Cellular	B	Bloomfield Hill	MI
<input type="button" value="View"/>	4110650	Alliant Technologies of KY, L.L.C.	Cellular	D	Morristown	NJ
<input type="button" value="View"/>	4111900	ALLNETAIR, INC.	Cellular	C	West Palm Beach	FL
<input type="button" value="View"/>	44451184	Alltel Corporation d/b/a Verizon Wireless	Cellular	A	Lisle	IL
<input type="button" value="View"/>	4110850	AltaWorx, LLC	Cellular	D	Fairhope	AL
<input type="button" value="View"/>	4107800	American Broadband and Telecommunications Company	Cellular	D	Toledo	OH
<input type="button" value="View"/>	4108650	AmeriMex Communications Corp.	Cellular	D	Dunedin	FL
<input type="button" value="View"/>	4105100	AmeriVision Communications, Inc. d/b/a Affinity 4	Cellular	D	Virginia Beach	VA
<input type="button" value="View"/>	4110700	Andrew David Balholm dba Norcell	Cellular	D	Buford	GA
<input type="button" value="View"/>	4105700	Assurance Wireless USA, L.P.	Cellular	A	Atlanta	GA
<input type="button" value="View"/>	4108600	BCN Telecom, Inc.	Cellular	D	Morristown	NJ
<input type="button" value="View"/>	4106000	Best Buy Health, Inc. d/b/a GreatCall d/b/a Jitterbug	Cellular	A	San Diego	CA
<input type="button" value="View"/>	4110550	Blue Casa Mobile, LLC	Cellular	D	Santa Barbara	CA
<input type="button" value="View"/>	4111050	BlueBird Communications, LLC	Cellular	D	New York	NY
<input type="button" value="View"/>	4202300	Bluegrass Wireless, LLC	Cellular	A	Elizabethtown	KY

<a href="#">View</a>	4107600	Boomerang Wireless, LLC	Cellular	D	Hiawatha	IA
<a href="#">View</a>	4105500	BullsEye Telecom, Inc.	Cellular	D	Southfield	MI
<a href="#">View</a>	4100700	Cellco Partnership dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4106600	Cintex Wireless, LLC	Cellular	D	Houston	TX
<a href="#">View</a>	4111150	Comcast OTR1, LLC	Cellular	C	Phoeniexville	PA
<a href="#">View</a>	4101900	Consumer Cellular, Incorporated	Cellular	A	Portland	OR
<a href="#">View</a>	4106400	Credo Mobile, Inc.	Cellular	A	San Francisco	CA
<a href="#">View</a>	4108850	Cricket Wireless, LLC	Cellular	A	San Antonio	TX
<a href="#">View</a>	4111500	CSC Wireless, LLC d/b/a Altice Wireless	Cellular	D	Long Island City	NY
<a href="#">View</a>	10640	Cumberland Cellular Partnership	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	4111650	DataBytes, Inc.	Cellular	D	Rogers	AR
<a href="#">View</a>	4112000	DISH Wireless L.L.C.	Cellular	C	Englewood	CO
<a href="#">View</a>	4111200	Dynalink Communications, Inc.	Cellular	C	Brooklyn	NY
<a href="#">View</a>	4111800	Earthlink, LLC	Cellular	C	Atlanta	GA
<a href="#">View</a>	4101000	East Kentucky Network, LLC dba Appalachian Wireless	Cellular	A	Ivel	KY
<a href="#">View</a>	4002300	Easy Telephone Service Company dba Easy Wireless	Cellular	D	Ocala	FL
<a href="#">View</a>	4109500	Enhanced Communications Group, LLC	Cellular	D	Bartlesville	OK
<a href="#">View</a>	4110450	Excellus Communications, LLC	Cellular	D	Chattanooga	TN
<a href="#">View</a>	4105900	Flash Wireless, LLC	Cellular	C	Concord	NC
<a href="#">View</a>	4104800	France Telecom Corporate Solutions L.L.C.	Cellular	D	Herndon	VA
<a href="#">View</a>	4111750	Gabb Wireless, Inc.	Cellular	D	Provo	UT
<a href="#">View</a>	4109350	Global Connection Inc. of America	Cellular	D	Norcross	GA
<a href="#">View</a>	4102200	Globalstar USA, LLC	Cellular	B	Covington	LA
<a href="#">View</a>	4112050	GLOTELL US, Corp.	Cellular	C	Hallandale	FL
<a href="#">View</a>	4109600	Google North America Inc.	Cellular	A	Mountain View	CA
<a href="#">View</a>	33350363	Granite Telecommunications, LLC	Cellular	D	Quincy	MA
<a href="#">View</a>	10630	GTE Wireless of the Midwest dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4111350	HELLO MOBILE TELECOM LLC	Cellular	D	Dania Beach	FL
<a href="#">View</a>	4103100	i-Wireless, LLC	Cellular	B	Newport	KY
<a href="#">View</a>	4109800	IM Telecom, LLC d/b/a Infiniti Mobile	Cellular	D	Dallas	TX
<a href="#">View</a>	4111950	J Rhodes Enterprises LLC	Cellular	C	Gulf Breeze	FL
<a href="#">View</a>	22215360	KDDI America, Inc.	Cellular	D	Staten Island	NY
<a href="#">View</a>	10872	Kentucky RSA #1 Partnership	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	10680	Kentucky RSA #3 Cellular General	Cellular	A	Elizabethtown	KY



<a href="#">View</a>	10681	Kentucky RSA #4 Cellular General	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	4109550	Kynect Communications, LLC	Cellular	D	Dallas	TX
<a href="#">View</a>	4111250	Liberty Mobile Wireless, LLC	Cellular	D	Sunny Isles Beach	FL
<a href="#">View</a>	4111400	Locus Telecommunications, LLC	Cellular	A	Fort Lee	NJ
<a href="#">View</a>	4107300	Lycamobile USA, Inc.	Cellular	D	Newark	NJ
<a href="#">View</a>	4108800	MetroPCS Michigan, LLC	Cellular	A	Bellevue	WA
<a href="#">View</a>	4111700	Mint Mobile, LLC	Cellular	D	Costa Mesa	CA
<a href="#">View</a>	4109650	Mitel Cloud Services, Inc.	Cellular	D	Mesa	AZ
<a href="#">View</a>	4111850	Mobi, Inc.	Cellular	C	Honolulu	HI
<a href="#">View</a>	4202400	New Cingular Wireless PCS, LLC dba AT&T Mobility, PCS	Cellular	A	San Antonio	TX
<a href="#">View</a>	4000800	Nextel West Corporation	Cellular	D	Overland Park	KS
<a href="#">View</a>	4001300	NPCR, Inc. dba Nextel Partners	Cellular	D	Overland Park	KS
<a href="#">View</a>	4001800	OnStar, LLC	Cellular	A	Detroit	MI
<a href="#">View</a>	4110750	Onvoy Spectrum, LLC	Cellular	D	Chicago	IL
<a href="#">View</a>	4109050	Patriot Mobile LLC	Cellular	D	Irving	TX
<a href="#">View</a>	4110250	Plintron Technologies USA LLC	Cellular	D	Bellevue	WA
<a href="#">View</a>	33351182	PNG Telecommunications, Inc. dba PowerNet Global Communications	Cellular	D	Cincinnati	OH
<a href="#">View</a>	4107700	Puretalk Holdings, LLC	Cellular	A	Covington	GA
<a href="#">View</a>	4106700	Q Link Wireless, LLC	Cellular	A	Dania	FL
<a href="#">View</a>	4108700	Ready Wireless, LLC	Cellular	C	Hiawatha	IA
<a href="#">View</a>	4110500	Republic Wireless, Inc.	Cellular	A	Raleigh	NC
<a href="#">View</a>	4106200	Rural Cellular Corporation	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4108550	Sage Telecom Communications, LLC dba TruConnect	Cellular	D	Los Angeles	CA
<a href="#">View</a>	4109150	SelecTel, Inc. d/b/a SelecTel Wireless	Cellular	D	Fremont	NE
<a href="#">View</a>	4110150	Spectrotel, Inc. d/b/a Touch Base Communications	Cellular	D	Neptune	NJ
<a href="#">View</a>	4111450	Spectrum Mobile, LLC	Cellular	A	St. Louis	MO
<a href="#">View</a>	4200100	Sprint Spectrum, L.P.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4200500	SprintCom, Inc.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4111600	STX Group LLC dba Twigby	Cellular	D	Murfreesboro	TN
<a href="#">View</a>	4110200	T C Telephone LLC d/b/a Horizon Cellular	Cellular	D	Red Bluff	CA
<a href="#">View</a>	4202200	T-Mobile Central, LLC dba T-Mobile	Cellular	A	Bellevue	WA
<a href="#">View</a>	4002500	TAG Mobile, LLC	Cellular	D	Plano	TX
<a href="#">View</a>	4109700	Telecom Management, Inc. dba Pioneer Telephone	Cellular	D	Portland	ME
<a href="#">View</a>	4107200	Telefonica USA, Inc.	Cellular	D	Miami	FL

<a href="#">View</a>	4112100	Tello LLC	Cellular	C	Atlanta	GA
<a href="#">View</a>	4108900	Telrite Corporation	Cellular	D	Covington	GA
<a href="#">View</a>	4108450	Tempo Telecom, LLC	Cellular	B	Atlanta	GA
<a href="#">View</a>	4109000	Ting, Inc.	Cellular	A	Toronto	ON
<a href="#">View</a>	4110400	Torch Wireless Corp.	Cellular	D	Jacksonville	FL
<a href="#">View</a>	4103300	Touchtone Communications, Inc.	Cellular	D	Whippany	NJ
<a href="#">View</a>	4104200	TracFone Wireless, Inc.	Cellular	D	Miami	FL
<a href="#">View</a>	4002000	Truphone, Inc.	Cellular	D	Durham	NC
<a href="#">View</a>	4110300	UVNV, Inc. d/b/a Mint Mobile	Cellular	D	Costa Mesa	CA
<a href="#">View</a>	4110800	Visible Service LLC	Cellular	D	Basking Ridge	NJ
<a href="#">View</a>	4106500	WiMacTel, Inc.	Cellular	D	Palo Alto	CA
<a href="#">View</a>	4110950	Wing Tel Inc.	Cellular	D	New York	NY

**EXHIBIT E**  
**FAA**



Mail Processing Center  
 Federal Aviation Administration  
 Southwest Regional Office  
 Obstruction Evaluation Group  
 10101 Hillwood Parkway  
 Fort Worth, TX 76177

Aeronautical Study No.  
 2020-ASO-11449-OE

Issued Date: 05/14/2020

Kristy Hurst  
 B+T Group Holdings, Inc.  
 1717 S. Boulder Ave.  
 Suite 300  
 Tulsa, OK 74119

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Antenna Tower KYLEX2044 (Mt Vernon)  
 Location: Mount Vernon, KY  
 Latitude: 37-21-11.70N NAD 83  
 Longitude: 84-19-38.30W  
 Heights: 1306 feet site elevation (SE)  
 342 feet above ground level (AGL)  
 1648 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 2, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(M-Dual),&12.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part 1)
- Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

This determination expires on 11/14/2021 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.



- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (404) 305-6582, or [Stephanie.Kimmel@faa.gov](mailto:Stephanie.Kimmel@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASO-11449-OE.

**Signature Control No: 437235531-439978246**  
Stephanie Kimmel  
Specialist

( DNE )

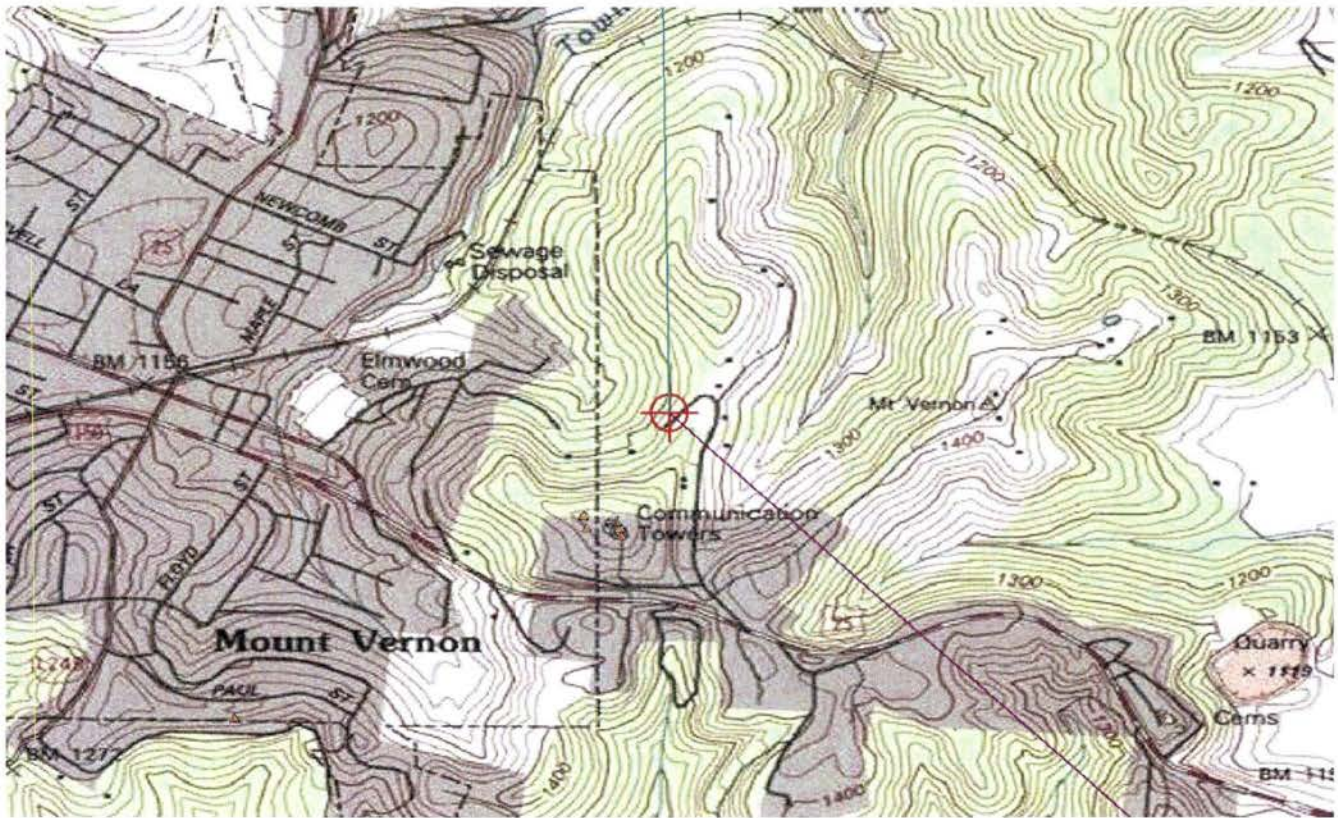
Attachment(s)  
Frequency Data  
Map(s)

cc: FCC

**Frequency Data for ASN 2020-ASO-11449-OE**

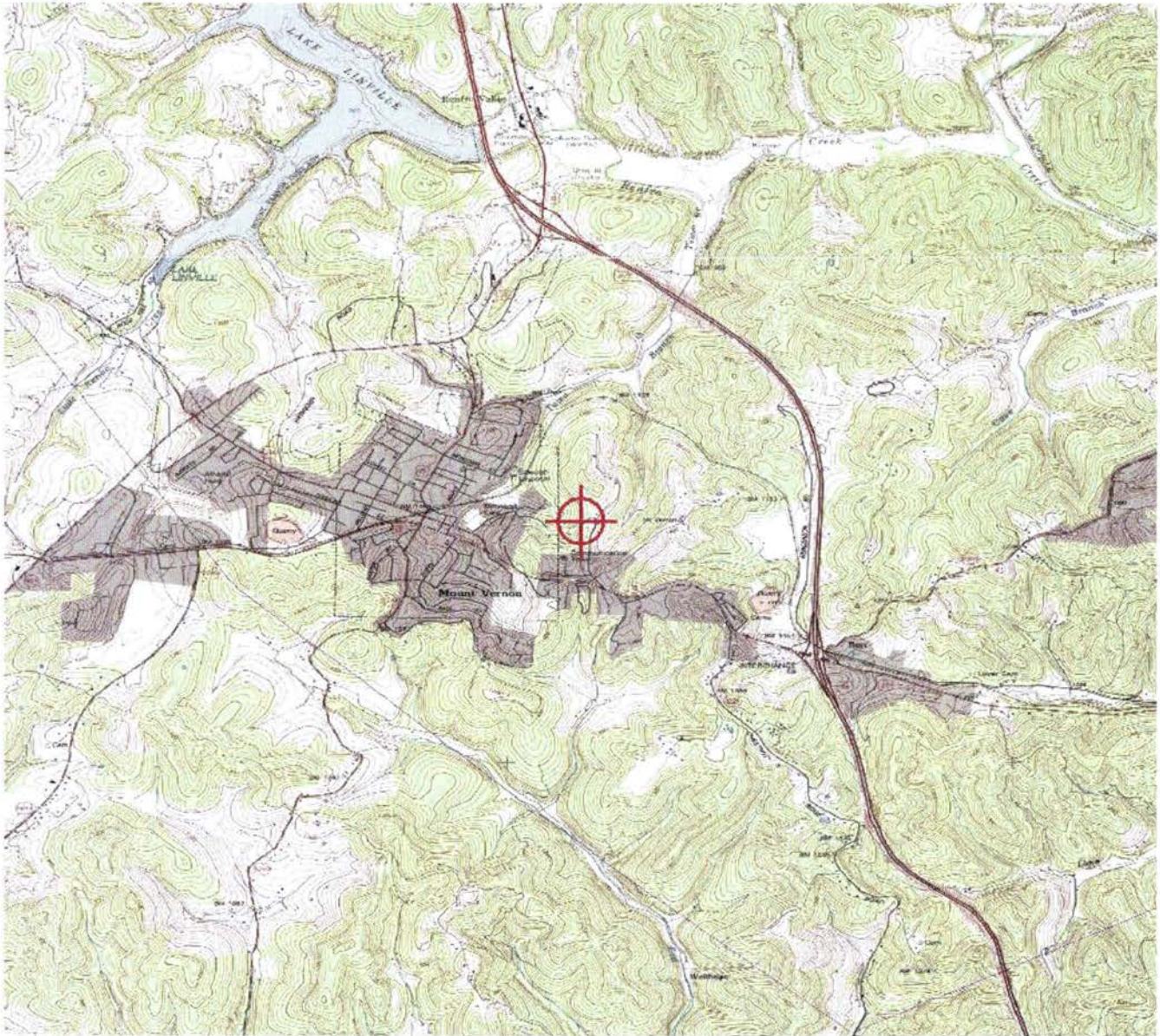
<b>LOW FREQUENCY</b>	<b>HIGH FREQUENCY</b>	<b>FREQUENCY UNIT</b>	<b>ERP</b>	<b>ERP UNIT</b>
6	7	GHz	55	dBW
6	7	GHz	42	dBW
10	11.7	GHz	55	dBW
10	11.7	GHz	42	dBW
17.7	19.7	GHz	55	dBW
17.7	19.7	GHz	42	dBW
21.2	23.6	GHz	55	dBW
21.2	23.6	GHz	42	dBW
614	698	MHz	1000	W
614	698	MHz	2000	W
698	806	MHz	1000	W
806	901	MHz	500	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
929	932	MHz	3500	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1670	1675	MHz	500	W
1710	1755	MHz	500	W
1850	1910	MHz	1640	W
1850	1990	MHz	1640	W
1930	1990	MHz	1640	W
1990	2025	MHz	500	W
2110	2200	MHz	500	W
2305	2360	MHz	2000	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W
2496	2690	MHz	500	W

Verified Map for ASN 2020-ASO-11449-OE





TOPO Map for ASN 2020-ASO-11449-OE





**EXHIBIT F**  
**KENTUCKY AIRPORT ZONING COMMISSION**



**KENTUCKY AIRPORT ZONING COMMISSION**

ANDY BESHEAR  
Governor

Office of Audits, 200 Mero Street, 4th floor  
Frankfort, KY 40622  
[www.transportation.ky.gov](http://www.transportation.ky.gov)  
502-782-4043

**APPROVAL OF APPLICATION**

August 13, 2020

**APPLICANT**

Uniti Towers  
B&T Group - Patricia Parr  
10802 Executive Center Dr. Ste 300  
Little Rock, AR 72211

**SUBJECT:** AS-ROCKCASTLE-RGA-2020-105

**STRUCTURE:** Antenna Tower  
**LOCATION:** Mt.Vernon, KY  
**COORDINATES:** 37° 21' 11.7" N / 84° 19' 38.3" W  
**HEIGHT:** 342' AGL/1648' AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 342' AGL/1648' AMSL Antenna Tower near Mt.Vernon, KY 37° 21' 11.7" N / 84° 19' 38.3" W.

This permit is valid for a period of 18 Month(s) from its date of issuance. If construction is not completed within said 18-Month period, this permit shall lapse and be void, and no work shall be performed without the issuance of a new permit.

Dual - Red & Medium Intensity White Obstruction Lighting Required

***Randall S. Royer***

Randall S. Royer, Executive Director  
Office of Audits  
Acting Administrator  
[Randall.Royer@ky.gov](mailto:Randall.Royer@ky.gov)  
[Jason.Salazar-Munoz@ky.gov](mailto:Jason.Salazar-Munoz@ky.gov)



An Equal Opportunity Employer M/F/D

**EXHIBIT G**  
**GEOTECHNICAL REPORT**



**GEOTECHNICAL INVESTIGATION REPORT**

September 29, 2020

Prepared For:

B+T Group



**Mount Vernon  
KYLEX2044**

**Proposed 330-Foot Self-Supporting Tower**

Old U.S. Highway 25, Mount Vernon (Rockcastle County), Kentucky 40456  
Latitude N 37° 21' 11.7" Longitude W 84° 19' 38.3"

Delta Oaks Group Project GEO20-07031-08  
Revision 0  
[geotech@deltaoaksgroup.com](mailto:geotech@deltaoaksgroup.com)

Performed By:

Justin Brosseau, E.I.

Reviewed By:

Joseph V. Borrelli, Jr., P.E.







## INTRODUCTION

This geotechnical investigation report has been completed for the proposed 330-foot self-supporting tower located on Old U.S. Highway 25 in Mount Vernon (Rockcastle County), Kentucky. The purpose of this investigation was to provide engineering recommendations and subsurface condition data at the proposed tower location. A geotechnical engineering interpretation of the collected information was completed and utilized to suggest design parameters regarding the adequacy of the structure's proposed foundation capacity under various loading conditions. This report provides the scope of the geotechnical investigation; geologic material identification; results of the geotechnical laboratory testing; and design parameter recommendations for use in the design of the telecommunication facility's foundation and site development.

## SITE CONDITION SUMMARY

The proposed tower and compound are located on a heavily wooded hill exhibiting a steep sloping topography from the east to west across the tower compound and subject property.

## REFERENCES

- Survey Drawings, prepared by Point to Point Land Surveyors, dated February 5, 2020
- TIA Standard (TIA-222-G), dated August 2005

## SUBSURFACE FIELD INVESTIGATION SUMMARY

The subsurface field investigation was conducted through the advancement of one mechanical soil test boring to the auger refusal depth of 16.5 feet bgs. Samples were obtained at selected intervals in accordance with ASTM D 1586. The sampling was conducted at the staked centerline of the proposed tower. Upon encountering auger refusal 5.0 feet of rock coring was conducted in accordance with ASTM D 2113. Soil and rock samples were transported to our laboratory and classified by a geotechnical engineer in accordance with ASTM D 2487. A detailed breakdown of the material encountered in our subsurface field investigation can be found in the boring log presented in the Appendix of this report.

Additional testing was performed on selected samples in accordance with ASTM D 7012 (Unconfined Compressive Strength – Rock). Laboratory data can be found in the Appendix of this report.

A boring plan portraying the spatial location of the boring in relation to the proposed tower, tower compound and immediate surrounding area can be found in the Appendix.



## **SUBSURFACE CONDITION SUMMARY**

The following provides a general overview of the site's subsurface conditions based on the data obtained during our field investigation.

### **FILL**

Fill material was not encountered during the subsurface field investigation.

### **SOIL**

The residual soil encountered in the subsurface field investigation began at the existing ground surface in the boring and consisted of sandy lean clay, silty clay, and clayey silt. The materials ranged from a stiff to very hard cohesion.

Auger advancement refusal was encountered during the subsurface field investigation at a depth of 16.5 feet bgs.

### **ROCK**

Rock was encountered during the subsurface investigation at a depth of 16.5 feet bgs. The rock can be described as moderately fractured, slightly weathered, hard limestone.

### **SUBSURFACE WATER**

At the time of drilling, subsurface water was not encountered during the subsurface investigation. However, subsurface water elevations can fluctuate throughout the year due to variations in climate, hydraulic parameters, nearby construction activity and other factors.

### **FROST PENETRATION**

The frost penetration depth for Rockcastle County, Kentucky is 30 inches (2.5 feet).

### **CORROSIVITY**

Soil resistivity was performed in accordance with ASTM G187 with a test result of 1,750 ohms-cm.



## FOUNDATION DESIGN SUMMARY

In consideration of the provided tower parameters and the determined soil characteristics, Delta Oaks Group recommends utilizing a shallow foundation and/or drilled shaft foundation for the proposed structure. The strength parameters presented in the following sections can be utilized for design of the foundation.

### GENERAL SUBSURFACE STRENGTH PARAMETERS

Boring	Depth (bgs)	USCS	Moist/Buoyant Unit Weight (pcf)	Phi Angle (degrees)	Cohesion (psf)
B-1	0.0 – 1.5	CL	110	0	1,250
	1.5 – 4.0	CL	110	0	1,500
	4.0 – 6.5	CL	115	0	1,750
	6.5 – 9.0	CL – ML	120	0	2,750
	9.0 – 14.0	CL – ML	130	0	6,000
	14.0 – 16.5	CL – ML	125	0	4,250
	16..5 – 21.5	LIMESTONE	140	0	12,000

- The unit weight provided assumes overburden soil was compacted to a minimum of 95% of the maximum dry density as obtained by the standard Proctor method (ASTM D 698) and maintained a moisture content within 3 percent of optimum
- The values provided for phi angle and cohesion should be considered ultimate.



## SUBSURFACE STRENGTH PARAMETERS – SHALLOW FOUNDATION

Boring	Dimensions (feet)	Depth (feet bgs)	Net Ultimate Bearing Capacity (psf)
B-1	5.0 x 5.0	3.0	10,360
		4.0	12,520
		5.0	12,950
		6.0	13,380
	10.0 x 10.0	3.0	9,810
		4.0	11,660
		5.0	11,870
		6.0	12,090
	15.0 x 15.0	3.0	9,620
		4.0	11,370
		5.0	11,510
		6.0	11,660
	20.0 x 20.0	3.0	9,530
		4.0	11,230
		5.0	11,330
		6.0	11,440
25.0 x 25.0	3.0	9,470	
	4.0	11,140	
	5.0	11,230	
	6.0	11,310	

- Delta Oaks Group recommends the foundation bear a minimum of 3.0 feet bgs.
- A sliding friction factor of 0.30 can be utilized along the base of the proposed foundation.
- The bearing capacity can be increased by 1/3 for transient loading.
- An Ultimate Passive Pressure Table with a reduction due to frost penetration to a depth of 2.5 feet bgs is presented on the following page.
- Delta Oaks Group recommends an appropriate factor of safety be utilized for the design of the foundation.





## ULTIMATE PASSIVE PRESSURE VS. DEPTH - TOWER FOUNDATION

Soil Layers (feet)		Moist Unit Weight	Phi Angle	Cohesion	PV	KP	Ph
Top	0.0	110	0	1250	0.00	1.00	1250.00
Bottom	1.5	110	0	1250	165.00	1.00	1332.50
Top	1.5	110	0	1250	165.00	1.00	1332.50
Bottom	2.5	110	0	1250	275.00	1.00	1387.50
Top	2.5	110	0	1500	275.00	1.00	3275.00
Bottom	4.0	110	0	1500	440.00	1.00	3440.00
Top	4.0	115	0	1750	440.00	1.00	3940.00
Bottom	6.5	115	0	1750	727.50	1.00	4227.50
Top	6.5	120	0	2750	727.50	1.00	6227.50
Bottom	9.0	120	0	2750	1027.50	1.00	6527.50
Top	9.0	130	0	6000	1027.50	1.00	13027.50
Bottom	10.0	130	0	6000	1157.50	1.00	13157.50



## SUBSURFACE STRENGTH PARAMETERS - DRILLED SHAFT FOUNDATION

Boring	Depth (bgs)	Net Ultimate Bearing Capacity (psf)	Ultimate Skin Friction - Compression (psf)	Ultimate Skin Friction - Uplift (psf)
B-1	0.0 – 3.0	–	–	–
	3.0 – 4.0	28,180	820	820
	4.0 – 7.0	37,000	960	960
	7.0 – 9.0	50,340	1,510	1,510
	9.0 – 14.0	42,180	2,400	2,400
	14.0 – 17.0	75,763	2,120	2,120
	17.0 – 21.5	79,460	4,800	4,800

- The top 3.0 feet of soil should be ignored due to the frost penetration and the potential soil disturbance during construction.
- The bearing capacity can be increased by 1/3 for transient loading.
- The values presented assume the concrete is cast-in-place against earth walls and any casing utilized during construction of the foundation was removed.
- Delta Oaks Group recommends an appropriate factor of safety be utilized for the design of the foundation.



## SUBSURFACE STRENGTH PARAMETERS – SUPPORT STRUCTURE FOUNDATION

Boring	Depth (bgs)	Net Ultimate Bearing Capacity (psf)	Minimum Design Footing Width (ft)	Modulus of Subgrade Reaction (pci)
B-1	2.0	9,340	2.0	300
	3.0	10,120		
	4.0	12,710		350
	5.0	13,620		

- Delta Oaks Group recommends utilizing a slab on grade in conjunction with continuous perimeter footings that bear on residual soil or properly compacted structural fill placed in accordance with the recommendations provided in the *CONSTRUCTION* section of this report.
- The slab on grade should be properly reinforced to prevent concrete cracking and shrinkage.
- The foundation should bear a minimum of 2.0 feet bgs.
- A sliding friction factor of 0.30 can be utilized along the base of the proposed foundation.
- An Ultimate Passive Pressure Table is presented on the following page. An appropriate reduction should be considered in accordance with local building code frost penetration depth.
- Delta Oaks Group recommends an appropriate factor of safety be utilized for the design of the foundation.



## ULTIMATE PASSIVE PRESSURE VS. DEPTH – SUPPORT STRUCTURE FOUNDATION

Soil Layers (feet)		Moist Unit Weight	Phi Angle	Cohesion	PV	KP	Ph
Top	0.0	110	0	1250	0.00	1.00	1250.00
Bottom	1.5	110	0	1250	165.00	1.00	1332.50
Top	1.5	110	0	1250	165.00	1.00	1332.50
Bottom	2.5	110	0	1250	275.00	1.00	1387.50
Top	2.5	110	0	1500	275.00	1.00	3275.00
Bottom	4.0	110	0	1500	440.00	1.00	3440.00
Top	4.0	115	0	1750	440.00	1.00	3940.00
Bottom	6.5	115	0	1750	727.50	1.00	4227.50
Top	6.5	120	0	2750	727.50	1.00	6227.50
Bottom	9.0	120	0	2750	1027.50	1.00	6527.50
Top	9.0	130	0	6000	1027.50	1.00	13027.50
Bottom	10.0	130	0	6000	1157.50	1.00	13157.50





## CONSTRUCTION

### **SITE DEVELOPMENT**

The proposed access road and tower compound should be evaluated by a Geotechnical Engineer, or their representative, after the removal or "cutting" of the areas to design elevation but prior to the placement of any structural fill material to verify the presence of unsuitable or weak material. Unsuitable or weak materials should be undercut to a suitable base material as determined by a Geotechnical Engineer, or their representative. Backfill of any undercut area(s) should be conducted in accordance with the recommendations provided in the *STRUCTURAL FILL PLACEMENT* section of this report.

Excavations should be sloped or shored in accordance and compliance with OSHA 29 CFR Part 1926, Excavation Trench Safety Standards as well as any additional local, state and federal regulations.

### **STRUCTURAL FILL PLACEMENT**

Structural fill materials should be verified, prior to utilization, to have a minimum unit weight of 110 pcf (pounds per cubic foot) when compacted to a minimum of 95% of its maximum dry density and within plus or minus 3 percentage points of optimum moisture. Materials utilized should not contain more than 5 percent by weight of organic matter, waste, debris or any otherwise deleterious materials. The Liquid Limit should be no greater than 40 with a Plasticity Index no greater than 20. Structural fill material should contain a maximum particle size of 4 inches with 20 percent or less of the material having a particle size between 2 and 4 inches. Backfill should be placed in thin horizontal lifts not to exceed 8 inches (loose) in large grading areas and 4 inches (loose) where small handheld or walk-behind compaction equipment will be utilized. The potential suitability of on-site materials to be utilized as fill should be evaluated by a Geotechnical Engineer, or their representative just prior to construction.

During construction structural fill placement should be monitored and tested. This should include at minimum, visual observation as well as a sufficient amount of in-place field density tests by a Geotechnical Engineer, or their representative. Materials should be compacted to a minimum of 95% of the maximum dry density as determined by ASTM D 698 (standard Proctor method). Moisture contents should be maintained to within plus or minus 3 percentage points of the optimum moisture content.

### **SHALLOW FOUNDATIONS**

Foundation excavation(s) should be evaluated by a Geotechnical Engineer, or their representative, prior to reinforcing steel and concrete placement. This evaluation should include visual observation to verify a level bearing surface; vertical side-walls with no protrusions, sloughing or caving; and the exposed bearing surface is free of deleterious material, loose soil and standing water. Excavation dimensions should be verified and testing performed on the exposed bearing surface to verify compliance with design recommendations. Bearing testing should be conducted in accordance with ASTM STP399 (Dynamic Cone Penetrometer). A 6-inch layer of compacted crushed stone should be installed prior to reinforcing steel and concrete placement. If subsurface water is encountered during excavation dewatering methods such as sump pumps or well points may be required.



## **DRILLED SHAFT FOUNDATIONS**

Drilled shaft foundations (caissons) are typically installed utilizing an earth auger to reach the design depth of the foundation. Specialized roller bits or core bits can be utilized to penetrate boulders or rock. The equipment utilized should have cutting teeth to result in an excavation with little or no soil smeared or caked on the excavation sides with spiral-like corrugated walls. The drilled shaft design diameter should be maintained throughout the excavation with a plumbness tolerance of 2 percent of the length and an eccentricity tolerance of 3 inches from plan location. A removable steel casing can be installed in the shaft to prevent caving of the excavation sides due to soil relaxation. Upon completion of the drilling and casing placement, loose soils and subsurface water greater than 3-inches in depth should be removed from the bottom of the excavation for the "dry" installation method. The drilled shaft installation should be evaluated by a Geotechnical Engineer, or their representative, to verify suitable end bearing conditions, design diameter and bottom cleanliness. The evaluation should be conducted immediately prior to as well as during concrete placement operations.

The drilled shaft should be concreted as soon as reasonably practical after excavation to reduce the deterioration of the supporting soils to prevent potential caving and water intrusion. A concrete mix design with a slump of 6 to 8 inches employed in conjunction with the design concrete compressive strength should be utilized for placement. Super plasticizer may be required to obtain the recommended slump range. During placement, the concrete may fall freely through the open area in the reinforcing steel cage provided it does not strike the reinforcing steel and/or the casing prior to reaching the bottom of the excavation. The removable steel casing should be extracted as concrete is placed. During steel casing removal a head of concrete should be maintained above the bottom of the casing to prevent soil and water intrusion into the concrete below the bottom of the casing.

If subsurface water is anticipated and/or weak soil layers are encountered drilled shafts are typically installed utilizing the "wet" method by excavating beneath a drilling mud slurry. The drilling mud slurry is added to the drilled shaft excavation after groundwater has been encountered and/or the sides of the excavation are observed to be caving or sloughing. Additional inspection by a Geotechnical Engineer, or their representative, during the "wet" method should consist of verifying maintenance of sufficient slurry head, monitoring the specific gravity, pH and sand content of the drilling slurry, and monitoring any changes in the depth of the excavation between initial approval and just prior to concreting.

Concrete placement utilizing the "wet" method is conducted through a tremie pipe at the bottom of the excavation with the drilling mud slurry level maintained at a minimum of 5 feet or one shaft diameter, whichever is greater, above the ground water elevation. The bottom of the tremie should be set one tremie pipe diameter above the excavation. A closure flap at the bottom of the tremie or a sliding plug introduced into the tremie before the concrete is recommended to reduce the potential contamination of the concrete by the drilling mud slurry. The bottom of the tremie must be maintained in the concrete during placement. Additional concrete should be placed through the tremie causing the slurry to overflow from the excavation in order to reduce the potential for the development of "slurry pockets" remaining in the drilled shaft.





## QUALIFICATIONS

The design parameters and conclusions provided in this report have been determined in accordance with generally accepted geotechnical engineering practices and are considered applicable to a rational degree of engineering certainty based on the data available at the time of report preparation and our practice in this geographic region. All recommendations and supporting calculations were prepared based on the data available at the time of report preparation and knowledge of typical geotechnical parameters in the applicable geographic region.

The subsurface conditions used in the determination of the design recommendations contained in this report are based on interpretation of subsurface data obtained at specific boring locations. Irrespective of the thoroughness of the subsurface investigation, the potential exists that conditions between borings will differ from those at the specific boring locations, that conditions are not as anticipated during the original analysis, or that the construction process has altered the soil conditions. That potential is significantly increased in locations where existing fill materials are encountered. Additionally, the nature and extent of these variations may not be evident until the commencement of construction. Therefore, a geotechnical engineer, or their representative, should observe construction practices to confirm that the site conditions do not differ from those conditions anticipated in design. If such variations are encountered, Delta Oaks Group should be contacted immediately in order to provide revisions and/or additional site exploration as necessary.

Samples obtained during our subsurface field investigation will be retained by Delta Oaks Group for a period of 30 days unless otherwise instructed by B+T Group. No warranty, expressed or implied, is presented.

Delta Oaks Group appreciates the opportunity to be of service for this Geotechnical Investigation Report. Please do not hesitate to contact Delta Oaks Group with any questions or should you require additional service on this project.



**APPENDIX**



BORING PLAN



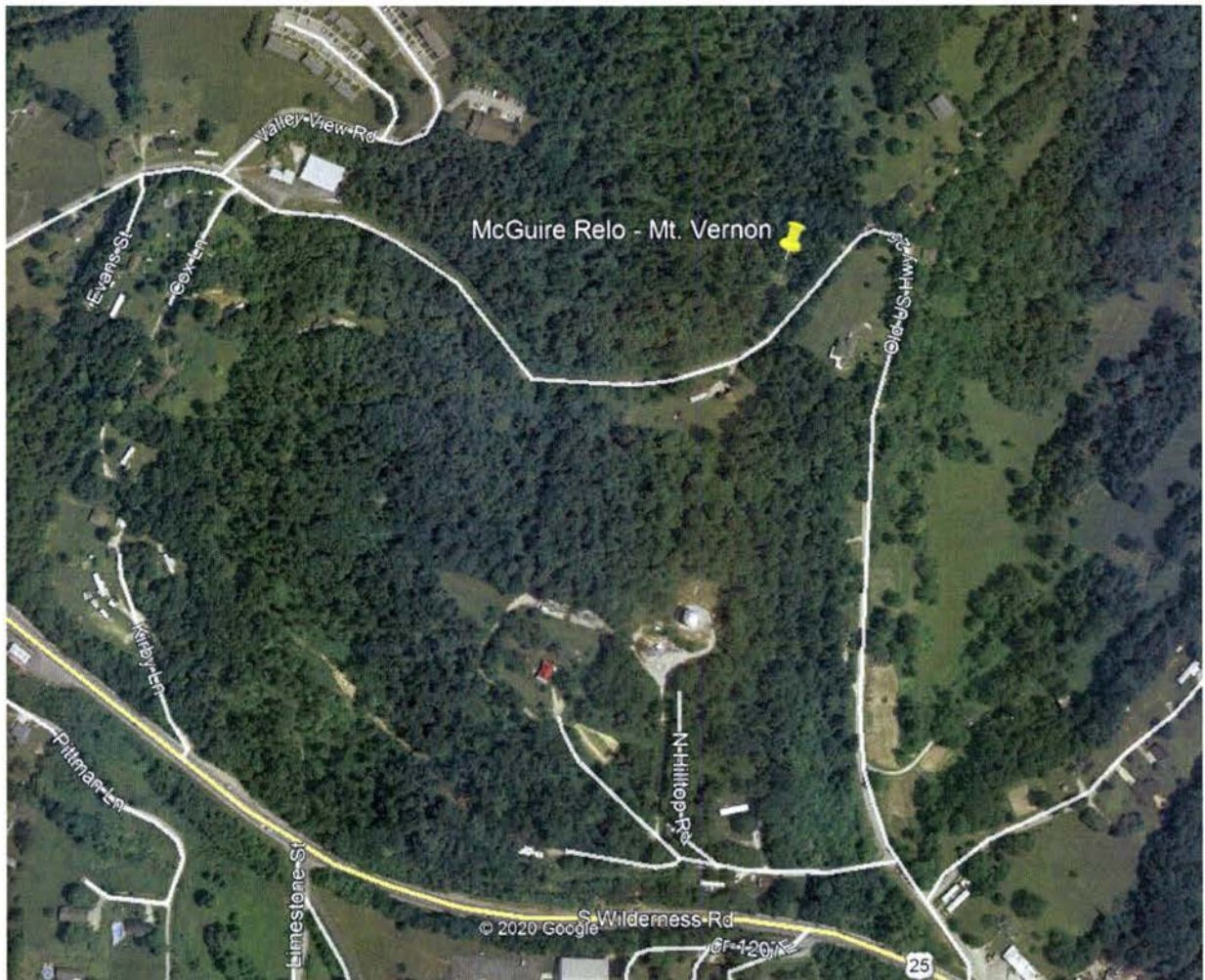


**EXHIBIT H**  
**DIRECTIONS TO WCF SITE**



## Driving Directions to Proposed Tower Site

1. Beginning at the Rockcastle County Judge Executive's Office, located at 205 East Main Street, Mount Vernon, KY 40456, turn right onto East Main Street and travel approximately 623 feet.
2. Turn left onto Old US Hwy 25 and travel approximately 0.6 miles.
3. The site is located on the left. The site address is Old U.S. Hwy 25, Mt. Vernon, KY 40456.
4. The site coordinates are:
  - a. North 37 deg 21 min 11.74 sec
  - b. West 84 deg 19 min 38.27 sec



Prepared by:  
Chris Shouse  
Pike Legal Group  
1578 Highway 44 East, Suite 6  
P.O. Box 396  
Shepherdsville, KY 40165-3069  
Telephone: 502-955-4400 or 800-516-4293



**EXHIBIT I**  
**COPY OF REAL ESTATE AGREEMENT**

## OPTION AND LEASE AGREEMENT

THIS OPTION AND LEASE AGREEMENT ("**Agreement**"), dated as of the latter of the signature dates below (the "**Effective Date**"), is entered into by VADD Co., having a mailing address of P.O Box 125 Mt. Vernon, KY 40456, ("**Landlord**"), and Uniti Towers LLC, a Delaware limited liability company having a mailing address of 10802 Executive Center Drive, Benton Building, Suite 300, Little Rock AR 72211 ("**Tenant**").

### BACKGROUND

Landlord owns or controls that certain plot, parcel or tract of land, as described on **Exhibit 1**, together with all rights and privileges arising in connection therewith, located at Old US Hwy 25, in the City/Town of Mount Vernon, County of Rockcastle, State of Kentucky (collectively, the "**Property**"). Landlord desires to grant to Tenant the right to use a portion of the Property in accordance with this Agreement.

The parties agree as follows:

#### 1. OPTION TO LEASE.

(a) Landlord grants to Tenant an exclusive option (the "**Option**") to lease a certain portion of the Property containing approximately 10,000 square feet including the air space above such ground space, as described on attached **Exhibit 1**, (the "**Premises**"), for the placement of a Communication Facility.

(b) During the Option Term, and during the Term, Tenant and its agents, engineers, surveyors and other representatives will have the right to enter upon the Property to inspect, examine, conduct soil borings, drainage testing, material sampling, radio frequency testing and other geological or engineering tests or studies of the Property (collectively, the "**Tests**"), to apply for and obtain licenses, permits, approvals, or other relief required of or deemed necessary or appropriate at Tenant's sole discretion for its use of the Premises and include, without limitation, applications for zoning variances, zoning ordinances, amendments, special use permits, and construction permits (collectively, the "**Government Approvals**"), initiate the ordering and/or scheduling of necessary utilities, and otherwise to do those things on or off the Property that, in the opinion of Tenant, are necessary in Tenant's sole discretion to determine the physical condition of the Property, the environmental history of the Property, Landlord's title to the Property and the feasibility or suitability of the Property for Tenant's Permitted Use, all at Tenant's expense. Tenant will not be liable to Landlord or any third party on account of any pre-existing defect or condition on or with respect to the Property, whether or not such defect or condition is disclosed by Tenant's inspection. Tenant will restore the Property to its condition as it existed at the commencement of the Option Term, reasonable wear and tear and loss by casualty or other causes beyond Tenant's control excepted.

(c) In consideration of Landlord granting Tenant the Option, Tenant agrees to pay Landlord the sum of [REDACTED] within thirty (30) business days after the Effective Date. The Option may be exercised during an initial term of one (1) year commencing on the Effective Date (the "**Initial Option Term**") which term may be renewed by Tenant for an additional one (1) year (the "**Renewal Option Term**") upon written notification to Landlord and the payment of an additional [REDACTED] no later than five (5) days prior to the expiration date of the Initial Option Term. The Initial Option Term and any Renewal Option Term are collectively referred to as the "**Option Term.**"

(d) The Option may be sold, assigned or transferred at any time by Tenant without the written consent of Landlord. Upon notification to Landlord of such sale, assignment, or transfer, Tenant shall immediately be released from any and all liability under this Agreement, including the payment of any rental or other sums due, without any further action.

(e) During the Option Term, Tenant may exercise the Option by notifying Landlord in writing. If Tenant exercises the Option, then Landlord leases the Premises to Tenant subject to the terms and conditions of this Agreement. If Tenant does not exercise the Option during the Initial Option Term or any extension thereof, this Agreement will terminate, and the parties will have no further liability to each other.



(f) If during the Option Term, or during the Term if the Option is exercised, Landlord decides to subdivide, sell, or change the status of the zoning of the Premises, Property or any of Landlord's contiguous, adjoining or surrounding property (the "**Surrounding Property**,") or in the event of a threatened foreclosure, Landlord shall immediately notify Tenant in writing. Landlord agrees that during the Option Term, or during the Term if the Option is exercised, Landlord shall not initiate or consent to any change in the zoning of the Premises, Property or Surrounding Property or impose or consent to any other use or restriction that would prevent or limit Tenant from using the Premises for the Permitted Use. Any and all terms and conditions of this Agreement that by their sense and context are intended to be applicable during the Option Term shall be so applicable.

2. **PERMITTED USE.** Tenant may use the Premises for the transmission and reception of communications signals and the installation, construction, maintenance, operation, repair, replacement and upgrade of communications fixtures and related equipment, cables, accessories and improvements, which may include a suitable support structure ("**Structure**"), associated antennas, equipment shelters or cabinets and fencing and any other items necessary to the successful and secure use of the Premises (collectively, the "**Communication Facility**"), as well as the right to test, survey and review title on the Property; Tenant further has the right but not the obligation to add, modify and/or replace equipment in order to be in compliance with any current or future federal, state or local mandated application, including, but not limited to, emergency 911 communication services, at no additional cost to Tenant or Landlord (collectively, the "**Permitted Use**"). Landlord and Tenant agree that any portion of the Communication Facility that may be conceptually described on **Exhibit 1** will not be deemed to limit Tenant's Permitted Use. If **Exhibit 1** includes drawings of the initial installation of the Communication Facility, Landlord's execution of this Agreement will signify Landlord's approval of **Exhibit 1**. For a period of ninety (90) days following the start of construction, Landlord grants Tenant, its subtenants, licensees and sublicensees, the right to use such portions of the **Surrounding Property** as may reasonably be required during construction and installation of the Communication Facility. Tenant has the right to install and operate transmission cables from the equipment shelter or cabinet to the antennas, electric lines from the main feed to the equipment shelter or cabinet and communication lines from the Property's main entry point to the equipment shelter or cabinet, install a generator and to make other improvements, alterations, upgrades or additions appropriate for Tenant's Permitted Use including the right to construct a fence around the Premises or equipment, install warning signs to make individuals aware of risks, install protective barriers, install any other control measures reasonably required by Tenant's safety procedures or applicable law, and undertake any other appropriate means to secure the Premises or equipment at Tenant's expense. Tenant has the right to modify, supplement, replace, upgrade, expand the Communication Facility (including, for example, increasing the number of antennas or adding microwave dishes) or relocate the Communication Facility within the Premises at any time during the Term. Tenant will be allowed to make such alterations to the Property in order to ensure that the Communication Facility complies with all applicable federal, state or local laws, rules or regulations. In the event Tenant desires to modify or upgrade the Communication Facility, in a manner that requires an additional portion of the Property (the "**Additional Premises**") for such modification or upgrade, Landlord agrees to lease to Tenant the Additional Premises, upon the same terms and conditions set forth herein, except that the Rent shall increase, in conjunction with the lease of the Additional Premises by the amount equivalent to the then-current per square foot rental rate charged by Landlord to Tenant times the square footage of the Additional Premises. Landlord agrees to take such actions and enter into and deliver to Tenant such documents as Tenant reasonably requests in order to effect and memorialize the lease of the Additional Premises to Tenant.

3. **TERM.**

(a) The initial lease term will be five (5) years (the "**Initial Term**"), commencing on the effective date of written notification by Tenant to Landlord of Tenant's exercise of the Option (the "**Term Commencement Date**"). The Initial Term will terminate on the fifth (5<sup>th</sup>) anniversary of the Term Commencement Date.

(b) This Agreement will automatically renew for seventeen (17) additional five (5) year term(s) (each additional five (5) year term shall be defined as an "**Extension Term**"), upon the same terms and



conditions set forth herein unless Tenant notifies Landlord in writing of Tenant's intention not to renew this Agreement at least sixty (60) days prior to the expiration of the Initial Term or then-existing Extension Term.

(c) Unless (i) Landlord or Tenant notifies the other in writing of its intention to terminate this Agreement at least six (6) months prior to the expiration of the final Extension Term, or (ii) the Agreement is terminated as otherwise permitted by this Agreement prior to the end of the final Extension Term, this Agreement shall continue in force upon the same covenants, terms and conditions for a further term of one (1) year, and for annual terms thereafter ("**Annual Term**") until terminated by either party by giving to the other party written notice of its intention to so terminate at least six (6) months prior to the end of any such Annual Term. Monthly rent during such Annual Terms shall be [REDACTED]

[REDACTED] If Tenant remains in possession of the Premises after the termination of this Agreement, then Tenant will be deemed to be occupying the Premises on a month-to-month basis (the "**Holdover Term**"), subject to the terms and conditions of this Agreement.

(d) The Initial Term, any Extension Terms, any Annual Terms and any Holdover Term are collectively referred to as the "**Term**".

#### 4. **RENT.**

(a) Commencing on the first day of the month following the date that Tenant commences construction (the "**Rent Commencement Date**"), Tenant will pay Landlord on or before the fifth (5<sup>th</sup>) day of each calendar month in advance, [REDACTED] (the "**Rent**"), at the address set forth above. In any partial month occurring after the Rent Commencement Date, Rent will be prorated. The initial Rent payment will be forwarded by Tenant to Landlord within forty-five (45) days after the Rent Commencement Date.

(b) In year two (2) of the Initial Term, and each year thereafter, including throughout any Extension Terms exercised, the monthly Rent will increase by [REDACTED] over the Rent paid during the previous year, effective the first day of the month in which the anniversary of the Term Commencement Date occurs..

(c) All charges payable under this Agreement such as utilities and taxes shall be billed by Landlord within one (1) year from the end of the calendar year in which the charges were incurred; any charges beyond such period shall not be billed by Landlord, and shall not be payable by Tenant. The foregoing shall not apply to monthly Rent which is due and payable without a requirement that it be billed by Landlord. The provisions of this subsection shall survive the termination or expiration of this Agreement.

#### 5. **APPROVALS.**

(a) Landlord agrees that Tenant's ability to use the Premises is contingent upon the suitability of the Premises and Property for the Permitted Use and Tenant's ability to obtain and maintain all Government Approvals. Landlord authorizes Tenant to prepare, execute and file all required applications to obtain Government Approvals for the Permitted Use and agrees to reasonably assist Tenant with such applications and with obtaining and maintaining the Government Approvals.

(b) Tenant has the right to obtain a title report or commitment for a leasehold title policy from a title insurance company of its choice and to have the Property surveyed by a surveyor of its choice.

(c) Tenant may also perform and obtain, at Tenant's sole cost and expense, soil borings, percolation tests, engineering procedures, environmental investigation or other tests or reports on, over, and under the Property, necessary to determine if Tenant's use of the Premises will be compatible with Tenant's engineering specifications, system, design, operations or Government Approvals.

#### 6. **TERMINATION.** This Agreement may be terminated, without penalty or further liability, as follows:

(a) by either party on thirty (30) days prior written notice, if the other party remains in default under Section 15 of this Agreement after the applicable cure periods;

(b) by Tenant upon written notice to Landlord, if Tenant is unable to obtain, or maintain, any required approval(s) or the issuance of a license or permit by any agency, board, court or other governmental authority necessary for the construction or operation of the Communication Facility as now or hereafter



intended by Tenant; or if Tenant determines, in its sole discretion that the cost of or delay in obtaining or retaining the same is commercially unreasonable;

(c) by Tenant, upon written notice to Landlord, if Tenant determines, in its sole discretion, due to the title report results or survey results, that the condition of the Premises is unsatisfactory for its intended uses;

(d) by Tenant upon written notice to Landlord for any reason or no reason, at any time prior to commencement of construction by Tenant; or

(e) by Tenant upon sixty (60) days' prior written notice to Landlord for any reason or no reason, so long as Tenant pays Landlord a termination fee [REDACTED] provided, however, that no such termination fee will be payable on account of the termination of this Agreement by Tenant under any termination provision contained in any other Section of this Agreement, including the following: Section 5 Approvals, Section 6(a) Termination, Section 6(b) Termination, Section 6(c) Termination, Section 6(d) Termination, Section 11(d) Environmental, Section 18 Condemnation or Section 19 Casualty.

7. **INSURANCE.** During the Option Term and throughout the Term, Tenant will purchase and maintain in full force and effect such general liability policy as Tenant may deem necessary. Said policy of general liability insurance will at a minimum provide a combined single limit of [REDACTED]

[REDACTED] Notwithstanding the foregoing, Tenant shall have the right to self-insure such general liability coverage.

8. **INTERFERENCE.**

(a) Prior to or concurrent with the execution of this Agreement, Landlord has provided or will provide Tenant with a list of radio frequency user(s) and frequencies used on the Property as of the Effective Date. Tenant warrants that its use of the Premises will not interfere with those existing radio frequency uses on the Property, as long as the existing radio frequency user(s) operate and continue to operate within their respective frequencies and in accordance with all applicable laws and regulations.

(b) Landlord will not grant, after the Effective Date, a lease, license or any other right to any third party, if the exercise of such grant may in any way adversely affect or interfere with the Communication Facility, the operations of Tenant or the rights of Tenant under this Agreement. Landlord will notify Tenant in writing prior to granting any third party the right to install and operate communications equipment on the Property.

(c) Landlord will not, nor will Landlord permit its employees, tenants, licensees, invitees, agents or independent contractors to interfere in any way with the Communication Facility, the operations of Tenant or the rights of Tenant under this Agreement. Landlord will cause such interference to cease within twenty-four (24) hours after receipt of notice of interference from Tenant. In the event any such interference does not cease within the aforementioned cure period, Landlord shall cease all operations which are suspected of causing interference (except for intermittent testing to determine the cause of such interference) until the interference has been corrected.

(d) For the purposes of this Agreement, "interference" may include, but is not limited to, any use on the Property or Surrounding Property that causes electronic or physical obstruction with, or degradation of, the communications signals from the Communication Facility.

9. **INDEMNIFICATION.**

(a) Tenant agrees to indemnify, defend and hold Landlord harmless from and against any and all injury, loss, damage or liability, costs or expenses in connection with a third party claim (including reasonable attorneys' fees and court costs) arising directly from the installation, use, maintenance, repair or removal of the Communication Facility or Tenant's breach of any provision of this Agreement, except to the extent attributable to the negligent or intentional act or omission of Landlord, its employees, invitees, agents or independent contractors.

(b) Landlord agrees to indemnify, defend and hold Tenant harmless from and against any and all injury, loss, damage or liability, costs or expenses in connection with a third party claim (including reasonable attorneys' fees and court costs) arising directly from the actions or failure to act of Landlord, its employees,



invites agents or independent contractors, or Landlord's breach of any provision of this Agreement, except to the extent attributable to the negligent or intentional act or omission of Tenant, its employees, agents or independent contractors.

(c) The indemnified party: (i) shall promptly provide the indemnifying party with written notice of any claim, demand, lawsuit, or the like for which it seeks indemnification pursuant to this Section and provide the indemnifying party with copies of any demands, notices, summonses, or legal papers received in connection with such claim, demand, lawsuit, or the like; (ii) shall not settle any such claim, demand, lawsuit, or the like without the prior written consent of the indemnifying party; and (iii) shall fully cooperate with the indemnifying party in the defense of the claim, demand, lawsuit, or the like. A delay in notice shall not relieve the indemnifying party of its indemnity obligation, except (1) to the extent the indemnifying party can show it was prejudiced by the delay; and (2) the indemnifying party shall not be liable for any settlement or litigation expenses incurred before the time when notice is given.

#### **10. WARRANTIES.**

(a) Each of Tenant and Landlord (to the extent not a natural person) acknowledge and represent that it is duly organized, validly existing and in good standing and has the right, power and authority or capacity, as applicable, to enter into this Agreement and bind itself hereto through the party or individual set forth as signatory for the party below.

(b) Landlord represents, warrants and agrees that: (i) Landlord solely owns the Property as a legal lot in fee simple, or controls the Property by lease or license; (ii) the Property is not and will not be encumbered by any liens, restrictions, mortgages, covenants, conditions, easements, leases, or any other agreements of record or not of record, which would adversely affect Tenant's Permitted Use and enjoyment of the Premises under this Agreement; (iii) as long as Tenant is not in default then Landlord grants to Tenant sole, actual, quiet and peaceful use, enjoyment and possession of the Premises without hindrance or ejection by any persons lawfully claiming under Landlord ; (iv) Landlord's execution and performance of this Agreement will not violate any laws, ordinances, covenants or the provisions of any mortgage, lease or other agreement binding on Landlord; and (v) if the Property is or becomes encumbered by a deed to secure a debt, mortgage or other security interest, Landlord will provide promptly to Tenant a mutually agreeable subordination, non-disturbance and attornment agreement executed by Landlord and the holder of such security interest in the form attached hereto as **Exhibit 10(b)**.

#### **11. ENVIRONMENTAL.**

(a) Landlord represents and warrants, except as may be identified in **Exhibit 11** attached to this Agreement, (i) the Property, as of the Effective Date, is free of hazardous substances, including asbestos-containing materials and lead paint, and (ii) the Property has never been subject to any contamination or hazardous conditions resulting in any environmental investigation, inquiry or remediation. Landlord and Tenant agree that each will be responsible for compliance with any and all applicable governmental laws, rules, statutes, regulations, codes, ordinances, or principles of common law regulating or imposing standards of liability or standards of conduct with regard to protection of the environment or worker health and safety, as may now or at any time hereafter be in effect, to the extent such apply to that party's activity conducted in or on the Property.

(b) Landlord and Tenant agree to hold harmless and indemnify the other from, and to assume all duties, responsibilities and liabilities at the sole cost and expense of the indemnifying party for, payment of penalties, sanctions, forfeitures, losses, costs or damages, and for responding to any action, notice, claim, order, summons, citation, directive, litigation, investigation or proceeding ("**Claims**"), to the extent arising from that party's breach of its obligations or representations under Section 11(a). Landlord agrees to hold harmless and indemnify Tenant from, and to assume all duties, responsibilities and liabilities at the sole cost and expense of Landlord for, payment of penalties, sanctions, forfeitures, losses, costs or damages, and for responding to any Claims, to the extent arising from subsurface or other contamination of the Property with hazardous substances prior to the Effective Date or from such contamination caused by the acts or omissions of Landlord during the Term. Tenant agrees to hold harmless and indemnify Landlord from, and to assume all duties, responsibilities and liabilities at the sole cost and expense of Tenant for, payment of penalties, sanctions, forfeitures, losses,



costs or damages, and for responding to any Claims, to the extent arising from hazardous substances brought onto the Property by Tenant.

(c) The indemnification provisions contained in this Section 11 specifically include reasonable costs, expenses and fees incurred in connection with any investigation of Property conditions or any clean-up, remediation, removal or restoration work required by any governmental authority. The provisions of this Section 11 will survive the expiration or termination of this Agreement.

(d) In the event Tenant becomes aware of any hazardous materials on the Property, or any environmental, health or safety condition or matter relating to the Property, that, in Tenant's sole determination, renders the condition of the Premises or Property unsuitable for Tenant's use, or if Tenant believes that the leasing or continued leasing of the Premises would expose Tenant to undue risks of liability to a government agency or other third party, Tenant will have the right, in addition to any other rights it may have at law or in equity, to terminate this Agreement upon written notice to Landlord.

**12. ACCESS.** At all times throughout the Term of this Agreement, and at no additional charge to Tenant, Tenant and its employees, agents, and subcontractors, will have twenty-four (24) hour per day, seven (7) day per week pedestrian and vehicular access ("Access") to and over the Property, from an open and improved public road to the Premises, for the installation, maintenance and operation of the Communication Facility and any utilities serving the Premises. As may be described more fully in **Exhibit I**, Landlord grants to Tenant an easement for such Access and Landlord agrees to provide to Tenant such codes, keys and other instruments necessary for such Access at no additional cost to Tenant. Upon Tenant's request, Landlord will execute a separate recordable easement evidencing this right. Landlord shall execute a letter granting Tenant Access to the Property substantially in the form attached as **Exhibit 12**; upon Tenant's request, Landlord shall execute additional letters during the Term. Landlord acknowledges that in the event Tenant cannot obtain Access to the Premises, Tenant shall incur significant damage. If Landlord fails to provide the Access granted by this Section 12, such failure shall be a default under this Agreement. In connection with such default, in addition to any other rights or remedies available to Tenant under this Agreement or at law or equity, Landlord shall pay Tenant, as liquidated damages and not as a penalty, [REDACTED] per day in consideration of Tenant's damages until Landlord cures such default. Landlord and Tenant agree that Tenant's damages in the event of a denial of Access are difficult, if not impossible, to ascertain, and the liquidated damages set forth above are a reasonable approximation of such damages.

**13. REMOVAL/RESTORATION.** All portions of the Communication Facility brought onto the Property by Tenant will be and remain Tenant's personal property and, at Tenant's option, may be removed by Tenant at any time during or after the Term. Landlord covenants and agrees that no part of the Communication Facility constructed, erected or placed on the Premises by Tenant will become, or be considered as being affixed to or a part of, the Property, it being the specific intention of Landlord that all improvements of every kind and nature constructed, erected or placed by Tenant on the Premises will be and remain the property of Tenant and may be removed by Tenant at any time during or after the Term. Tenant will repair any damage to the Property resulting from Tenant's removal activities. Any portions of the Communication Facility that Tenant does not remove within one hundred twenty (120) days after the later of the end of the Term and cessation of Tenant's operations at the Premises shall be deemed abandoned and owned by Landlord. Notwithstanding the foregoing, Tenant will not be responsible for the replacement of any trees, shrubs or other vegetation.

**14. MAINTENANCE/UTILITIES.**

(a) Tenant will keep and maintain the Premises in good condition, reasonable wear and tear and damage from the elements excepted. Landlord will maintain and repair the Property and access thereto and all areas of the Premises where Tenant does not have exclusive control, in good and tenantable condition, subject to reasonable wear and tear and damage from the elements. Landlord will be responsible for maintenance of landscaping on the Property, including any landscaping installed by Tenant as a condition of this Agreement or any required permit.



(b) Tenant will be responsible for paying on a monthly or quarterly basis all utilities charges for electricity, telephone service or any other utility used or consumed by Tenant on the Premises. In the event Tenant cannot secure its own metered electrical supply, Tenant will have the right, at its own cost and expense, to sub-meter from Landlord. When sub-metering is required under this Agreement, Landlord will read the meter and provide Tenant with an invoice and usage data on a monthly basis. Tenant shall reimburse Landlord for such utility usage at the same rate charged to Landlord by the utility service provider. Landlord further agrees to provide the usage data and invoice on forms provided by Tenant and to send such forms to such address and/or agent designated by Tenant. Tenant will remit payment within sixty (60) days of receipt of the usage data and required forms. Landlord shall maintain accurate and detailed records of all utility expenses, invoices and payments applicable to Tenant's reimbursement obligations hereunder. Within fifteen (15) days after a request from Tenant, Landlord shall provide copies of such utility billing records to the Tenant in the form of copies of invoices, contracts and cancelled checks. If the utility billing records reflect an overpayment by Tenant, Tenant shall have the right to deduct the amount of such overpayment from any monies due to Landlord from Tenant.

(c) As noted in Section 4(c) above, any utility fee recovery by Landlord is limited to a twelve (12) month period. If Tenant submeters electricity from Landlord, Landlord agrees to give Tenant at least twenty-four (24) hours advance notice of any planned interruptions of said electricity. Landlord acknowledges that Tenant provides a communication service which requires electrical power to operate and must operate twenty-four (24) hours per day, seven (7) days per week. If the interruption is for an extended period of time, in Tenant's reasonable determination, Landlord agrees to allow Tenant the right to bring in a temporary source of power for the duration of the interruption. Landlord will not be responsible for interference with, interruption of or failure, beyond the reasonable control of Landlord, of such services to be furnished or supplied by Landlord.

(d) Tenant will have the right to install utilities, at Tenant's expense, and to improve present utilities on the Property and the Premises. Landlord hereby grants to any service company providing utility or similar services, including electric power and telecommunications, to Tenant an easement over the Property, from an open and improved public road to the Premises, and upon the Premises, for the purpose of constructing, operating and maintaining such lines, wires, circuits, and conduits, associated equipment cabinets and such appurtenances thereto, as such service companies may from time to time require in order to provide such services to the Premises. Upon Tenant's or service company's request, Landlord will execute a separate recordable easement evidencing this grant, at no cost to Tenant or the service company.

#### **15. DEFAULT AND RIGHT TO CURE.**

(a) The following will be deemed a default by Tenant and a breach of this Agreement: (i) non-payment of Rent if such Rent remains unpaid for more than thirty (30) days after written notice from Landlord of such failure to pay; or (ii) Tenant's failure to perform any other term or condition under this Agreement within forty-five (45) days after written notice from Landlord specifying the failure. No such failure, however, will be deemed to exist if Tenant has commenced to cure such default within such period and provided that such efforts are prosecuted to completion with reasonable diligence. Delay in curing a default will be excused if due to causes beyond the reasonable control of Tenant. If Tenant remains in default beyond any applicable cure period, Landlord will have the right to exercise any and all rights and remedies available to it under law and equity.

(b) The following will be deemed a default by Landlord and a breach of this Agreement: (i) Landlord's failure to provide Access to the Premises as required by Section 12 within twenty-four (24) hours after written notice of such failure; (ii) Landlord's failure to cure an interference problem as required by Section 8 within twenty-four (24) hours after written notice of such failure; or (iii) Landlord's failure to perform any term, condition or breach of any warranty or covenant under this Agreement within forty-five (45) days after written notice from Tenant specifying the failure. No such failure, however, will be deemed to exist if Landlord has commenced to cure the default within such period and provided such efforts are prosecuted to completion with reasonable diligence. Delay in curing a default will be excused if due to causes beyond the reasonable control of Landlord. If Landlord remains in default beyond any applicable cure period, Tenant will



have: (i) the right to cure Landlord's default and to deduct the costs of such cure from any monies due to Landlord from Tenant, and (ii) any and all other rights available to it under law and equity.

**16. ASSIGNMENT/SUBLEASE.** Tenant will have the right to assign this Agreement or sublease the Premises and its rights herein, in whole or in part, without Landlord's consent. Upon notification to Landlord of such assignment, Tenant will be relieved of all future performance, liabilities and obligations under this Agreement to the extent of such assignment.

**17. NOTICES.** All notices, requests and demands hereunder will be given by first class certified or registered mail, return receipt requested, or by a nationally recognized overnight courier, postage prepaid, to be effective when properly sent and received, refused or returned undelivered. Notices will be addressed to the parties as follows:

If to Tenant:                   Uniti Towers LLC  
  Attn: Real Estate  
  10801 Executive Center Drive  
  Shannon Building, Suite 100  
  Little Rock AR 72211  
  501.458.4724

CC:                                 Uniti Towers LLC  
  ATTN: Keith Harvey, Deputy General Counsel  
  10802 Executive Center Drive  
  Benton Building, Suite 300  
  Little Rock AR 72211

For Emergencies:           NOC 1-844-398-9716

If to Landlord:                VADD Co.  
  C/O Jerry Cox  
  P.O Box 125  
  Mt. Vernon, KY 40456  
  Telephone: (606) 256-5111

Either party hereto may change the place for the giving of notice to it by thirty (30) days' prior written notice to the other party as provided herein.

**18. CONDEMNATION.** In the event Landlord receives notification of any condemnation proceedings affecting the Property, Landlord will provide notice of the proceeding to Tenant within twenty-four (24) hours. If a condemning authority takes all of the Property, or a portion sufficient, in Tenant's sole determination, to render the Premises unsuitable for Tenant, this Agreement will terminate as of the date the title vests in the condemning authority. The parties will each be entitled to pursue their own separate awards in the condemnation proceeds, which for Tenant will include, where applicable, the value of its Communication Facility, moving expenses, prepaid Rent, and business dislocation expenses. Tenant will be entitled to reimbursement for any prepaid Rent on a *pro rata* basis.

**19. CASUALTY.** Landlord will provide notice to Tenant of any casualty or other harm affecting the Property within twenty-four (24) hours of the casualty or other harm. If any part of the Communication Facility or Property is damaged by casualty or other harm as to render the Premises unsuitable, in Tenant's sole determination, then Tenant may terminate this Agreement by providing written notice to Landlord, which termination will be effective as of the date of such casualty or other harm. Upon such termination, Tenant will



be entitled to collect all insurance proceeds payable to Tenant on account thereof and to be reimbursed for any prepaid Rent on a *pro rata* basis. Landlord agrees to permit Tenant to place temporary transmission and reception facilities on the Property, but only until such time as Tenant is able to activate a replacement transmission facility at another location; notwithstanding the termination of this Agreement, such temporary facilities will be governed by all of the terms and conditions of this Agreement, including Rent. If Landlord or Tenant undertakes to rebuild or restore the Premises and/or the Communication Facility, as applicable, Landlord agrees to permit Tenant to place temporary transmission and reception facilities on the Property at no additional Rent until the reconstruction of the Premises and/or the Communication Facility is completed. If Landlord determines not to rebuild or restore the Property, Landlord will notify Tenant of such determination within thirty (30) days after the casualty or other harm. If Landlord does not so notify Tenant and Tenant decides not to terminate under this Section, then Landlord will promptly rebuild or restore any portion of the Property interfering with or required for Tenant's Permitted Use of the Premises to substantially the same condition as existed before the casualty or other harm. Landlord agrees that the Rent shall be abated until the Property and/or the Premises are rebuilt or restored, unless Tenant places temporary transmission and reception facilities on the Property.

**20. WAIVER OF LANDLORD'S LIENS.** Landlord waives any and all lien rights it may have, statutory or otherwise, concerning the Communication Facility or any portion thereof. The Communication Facility shall be deemed personal property for purposes of this Agreement, regardless of whether any portion is deemed real or personal property under applicable law; Landlord consents to Tenant's right to remove all or any portion of the Communication Facility from time to time in Tenant's sole discretion and without Landlord's consent.

**21. TAXES.** (a) Landlord shall be responsible for (i) all taxes and assessments levied upon the lands, improvements and other property of Landlord including any such taxes that may be calculated by a taxing authority using any method, including the income method (ii) all sales, use, license, value added, documentary, stamp, gross receipts, registration, real estate transfer, conveyance, excise, recording, and other similar taxes and fees imposed in connection with this Agreement and (iii) all sales, use, license, value added, documentary, stamp, gross receipts, registration, real estate transfer, conveyance, excise, recording, and other similar taxes and fees imposed in connection with a sale of the Property or assignment of Rent payments by Landlord. Tenant shall be responsible for (y) any taxes and assessments attributable to and levied upon Tenant's leasehold improvements on the Premises if and as set forth in this Section 21 and (z) all sales, use, license, value added, documentary, stamp, gross receipts, registration, real estate transfer, conveyance, excise, recording, and other similar taxes and fees imposed in connection with an assignment of this Agreement or sublease by Tenant. Nothing herein shall require Tenant to pay any inheritance, franchise, income, payroll, excise, privilege, rent, capital stock, stamp, documentary, estate or profit tax, or any tax of similar nature, that is or may be imposed upon Landlord.

(b) In the event Landlord receives a notice of assessment with respect to which taxes or assessments are imposed on Tenant's leasehold improvements on the Premises, Landlord shall provide Tenant with copies of each such notice immediately upon receipt, but in no event later than thirty (30) days after the date of such notice of assessment. If Landlord does not provide such notice or notices to Tenant in a timely manner and Tenant's rights with respect to such taxes are prejudiced by the delay, Landlord shall reimburse Tenant for any increased costs directly resulting from the delay and Landlord shall be responsible for payment of the tax or assessment set forth in the notice, and Landlord shall not have the right to reimbursement of such amount from Tenant. If Landlord provides a notice of assessment to Tenant within such time period and requests reimbursement from Tenant as set forth below, then Tenant shall reimburse Landlord for the tax or assessments identified on the notice of assessment on Tenant's leasehold improvements, which has been paid by Landlord. If Landlord seeks reimbursement from Tenant, Landlord shall, no later than thirty (30) days after Landlord's payment of the taxes or assessments for the assessed tax year, provide Tenant with written notice including evidence that Landlord has timely paid same, and Landlord shall provide to Tenant any other documentation reasonably requested by Tenant to allow Tenant to evaluate the payment and to reimburse Landlord.

(c) For any tax amount for which Tenant is responsible under this Agreement, Tenant shall have the right to contest, in good faith, the validity or the amount thereof using such administrative, appellate or other



proceedings as may be appropriate in the jurisdiction, and may defer payment of such obligations, pay same under protest, or take such other steps as permitted by law. This right shall include the ability to institute any legal, regulatory or informal action in the name of Landlord, Tenant, or both, with respect to the valuation of the Premises. Landlord shall cooperate with respect to the commencement and prosecution of any such proceedings and will execute any documents required therefor. The expense of any such proceedings shall be borne by Tenant and any refunds or rebates secured as a result of Tenant's action shall belong to Tenant, to the extent the amounts were originally paid by Tenant. In the event Tenant notifies Landlord by the due date for assessment of Tenant's intent to contest the assessment, Landlord shall not pay the assessment pending conclusion of the contest, unless required by applicable law.

(d) Landlord shall not split or cause the tax parcel on which the Premises are located to be split, bifurcated, separated or divided without the prior written consent of Tenant.

(e) Tenant shall have the right but not the obligation to pay any taxes due by Landlord hereunder if Landlord fails to timely do so, in addition to any other rights or remedies of Tenant. In the event that Tenant exercises its rights under this Section 21(e) due to such Landlord default, Tenant shall have the right to deduct such tax amounts paid from any monies due to Landlord from Tenant as provided in Section 15(b), provided that Tenant may exercise such right without having provided to Landlord notice and the opportunity to cure per Section 15(b).

(f) Any tax-related notices shall be sent to Tenant in the manner set forth in Section 17. Promptly after the Effective Date of this Agreement, Landlord shall provide the Notice address set forth in Section 17 to the taxing authority for the authority's use in the event the authority needs to communicate with Tenant. In the event that Tenant's tax address changes by notice to Landlord, Landlord shall be required to provide Tenant's new tax address to the taxing authority or authorities.

(g) Notwithstanding anything to the contrary contained in this Section 21, Tenant shall have no obligation to reimburse any tax or assessment for which the Landlord is reimbursed or rebated by a third party.

## **22. SALE OF PROPERTY.**

(a) Landlord may sell the Property or a portion thereof to a third party, provided: (i) the sale is made subject to the terms of this Agreement; and (ii) if the sale does not include the assignment of Landlord's full interest in this Agreement, the purchaser must agree to perform, without requiring compensation from Tenant or any subtenant, any obligation of Landlord under this Agreement, including Landlord's obligation to cooperate with Tenant as provided hereunder.

(b) If Landlord, at any time during the Term of this Agreement, decides to rezone or sell, subdivide or otherwise transfer all or any part of the Premises, or all or any part of the Property or Surrounding Property, to a purchaser other than Tenant, Landlord shall promptly notify Tenant in writing, and such rezoning, sale, subdivision or transfer shall be subject to this Agreement and Tenant's rights hereunder. In the event of a change in ownership, transfer or sale of the Property, within ten (10) days of such transfer, Landlord or its successor shall send the documents listed below in this Section 22(b) to Tenant. Until Tenant receives all such documents, Tenant's failure to make payments under this Agreement shall not be an event of default and Tenant reserves the right to hold payments due under this Agreement.

- i. Old deed to Property
- ii. New deed to Property
- iii. Bill of Sale or Transfer
- iv. Copy of current Tax Bill
- v. New IRS Form W-9
- vi. Completed and Signed Tenant Payment Direction Form
- vii. Full contact information for new Landlord including phone number(s)

(c) Landlord agrees not to sell, lease or use any areas of the Property or Surrounding Property for the installation, operation or maintenance of other wireless communication facilities if such installation, operation or maintenance would interfere with Tenant's Permitted Use or communications equipment as determined by radio propagation tests performed by Tenant in its sole discretion. Landlord or Landlord's



prospective purchaser shall reimburse Tenant for any costs and expenses of such testing. If the radio frequency propagation tests demonstrate levels of interference unacceptable to Tenant, Landlord shall be prohibited from selling, leasing or using any areas of the Property or the Surrounding Property for purposes of any installation, operation or maintenance of any other wireless communication facility or equipment.

(d) The provisions of this Section shall in no way limit or impair the obligations of Landlord under this Agreement, including interference and access obligations.

**23. RIGHT OF FIRST REFUSAL.** Notwithstanding the provisions contained in Section 22, if at any time after the Effective Date, Landlord receives a bona fide written offer from a third party seeking any sale, conveyance, assignment or transfer, whether in whole or in part, of any property interest in or related to the Premises, including without limitation any offer seeking an assignment or transfer of the Rent payments associated with this Agreement or an offer to purchase an easement with respect to the Premises ("**Offer**"), Landlord shall immediately furnish Tenant with a copy of the Offer. Tenant shall have the right within ninety (90) days after it receives such copy to match the financial terms of the Offer and agree in writing to match such terms of the Offer. Such writing shall be in the form of a contract substantially similar to the Offer, but Tenant may assign its rights to a third party. If Tenant chooses not to exercise this right or fails to provide written notice to Landlord within the ninety (90) day period, Landlord may sell, convey, assign or transfer such property interest in or related to the Premises pursuant to the Offer, subject to the terms of this Agreement. If Landlord attempts to sell, convey, assign or transfer such property interest in or related to the Premises without complying with this Section 23, the sale, conveyance, assignment or transfer shall be void. Tenant shall not be responsible for any failure to make payments under this Agreement and reserves the right to hold payments due under this Agreement until Landlord complies with this Section 23. Tenant's failure to exercise the right of first refusal shall not be deemed a waiver of the rights contained in this Section 23 with respect to any future proposed conveyances as described herein.

**24. MISCELLANEOUS.**

(a) **Amendment/Waiver.** This Agreement cannot be amended, modified or revised unless done in writing and signed by Landlord and Tenant. No provision may be waived except in a writing signed by both parties. The failure by a party to enforce any provision of this Agreement or to require performance by the other party will not be construed to be a waiver, or in any way affect the right of either party to enforce such provision thereafter.

(b) **Memorandum.** Contemporaneously with the execution of this Agreement, the parties will execute a recordable Memorandum of Lease substantially in the form attached as **Exhibit 24b**. Either party may record this Memorandum of Lease at any time during the Term, in its absolute discretion. Thereafter during the Term, either party will, at any time upon fifteen (15) business days' prior written notice from the other, execute, acknowledge and deliver to the other a recordable Memorandum of Lease.

(c) **Limitation of Liability.** Except for the indemnity obligations set forth in this Agreement, and otherwise notwithstanding anything to the contrary in this Agreement, Tenant and Landlord each waives any claims that each may have against the other with respect to consequential, incidental or special damages, however caused, based on any theory of liability.

(d) **Compliance with Law.** Tenant agrees to comply with all federal, state and local laws, orders, rules and regulations ("**Laws**") applicable to Tenant's use of the Communication Facility on the Property. Landlord agrees to comply with all Laws relating to Landlord's ownership and use of the Property and any improvements on the Property.

(e) **Bind and Benefit.** The terms and conditions contained in this Agreement will run with the Property and bind and inure to the benefit of the parties, their respective heirs, executors, administrators, successors and assigns.

(f) **Entire Agreement.** This Agreement and the exhibits attached hereto, all being a part hereof, constitute the entire agreement of the parties hereto and will supersede all prior offers, negotiations and agreements with respect to the subject matter of this Agreement. Exhibits are numbered to correspond to the Section wherein they are first referenced. Except as otherwise stated in this Agreement, each party shall bear its own fees and expenses (including the fees and expenses of its agents, brokers, representatives, attorneys,



and accountants) incurred in connection with the negotiation, drafting, execution and performance of this Agreement and the transactions it contemplates.

(g) **Governing Law.** This Agreement will be governed by the laws of the state in which the Premises are located, without regard to conflicts of law.

(h) **Interpretation.** Unless otherwise specified, the following rules of construction and interpretation apply: (i) captions are for convenience and reference only and in no way define or limit the construction of the terms and conditions hereof; (ii) use of the term "including" will be interpreted to mean "including but not limited to"; (iii) whenever a party's consent is required under this Agreement, except as otherwise stated in the Agreement or as same may be duplicative, such consent will not be unreasonably withheld, conditioned or delayed; (iv) exhibits are an integral part of this Agreement and are incorporated by reference into this Agreement; (v) use of the terms "termination" or "expiration" are interchangeable; (vi) reference to a default will take into consideration any applicable notice, grace and cure periods; (vii) to the extent there is any issue with respect to any alleged, perceived or actual ambiguity in this Agreement, the ambiguity shall not be resolved on the basis of who drafted the Agreement; (viii) the singular use of words includes the plural where appropriate and (ix) if any provision of this Agreement is held invalid, illegal or unenforceable, the remaining provisions of this Agreement shall remain in full force if the overall purpose of the Agreement is not rendered impossible and the original purpose, intent or consideration is not materially impaired.

(i) **Affiliates.** All references to "Tenant" shall be deemed to include any Affiliate of Uniti Towers LLC using the Premises for any Permitted Use or otherwise exercising the rights of Tenant pursuant to this Agreement. "Affiliate" means with respect to a party to this Agreement, any person or entity that (directly or indirectly) controls, is controlled by, or under common control with, that party. "Control" of a person or entity means the power (directly or indirectly) to direct the management or policies of that person or entity, whether through the ownership of voting securities, by contract, by agency or otherwise.

(j) **Survival.** Any provisions of this Agreement relating to indemnification shall survive the termination or expiration hereof. In addition, any terms and conditions contained in this Agreement that by their sense and context are intended to survive the termination or expiration of this Agreement shall so survive.

(k) **W-9.** As a condition precedent to payment, Landlord agrees to provide Tenant with a completed IRS Form W-9, or its equivalent, upon execution of this Agreement and at such other times as may be reasonably requested by Tenant, including any change in Landlord's name or address.

(l) **Execution/No Option.** The submission of this Agreement to any party for examination or consideration does not constitute an offer, reservation of or option for the Premises based on the terms set forth herein. This Agreement will become effective as a binding Agreement only upon the handwritten legal execution, acknowledgment and delivery hereof by Landlord and Tenant. This Agreement may be executed in two (2) or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties. All parties need not sign the same counterpart.

(m) **Attorneys' Fees.** In the event that any dispute between the parties related to this Agreement should result in litigation, the prevailing party in such litigation shall be entitled to recover from the other party all reasonable fees and expenses of enforcing any right of the prevailing party, including reasonable attorneys' fees and expenses. Prevailing party means the party determined by the court to have most nearly prevailed even if such party did not prevail in all matters. This provision will not be construed to entitle any party other than Landlord, Tenant and their respective Affiliates to recover their fees and expenses.

(n) **WAIVER OF JURY TRIAL.** EACH PARTY, TO THE EXTENT PERMITTED BY LAW, KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVES ITS RIGHT TO A TRIAL BY JURY IN ANY ACTION OR PROCEEDING UNDER ANY THEORY OF LIABILITY ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR THE TRANSACTIONS IT CONTEMPLATES.

(o) **Incidental Fees.** Unless specified in this Agreement, no unilateral fees or additional costs or expenses are to be applied by either party to the other party, including review of plans, structural analyses, consents, provision of documents or other communications between the parties.

(p) **Further Acts.** Upon request, Landlord will cause to be promptly and duly taken, executed, acknowledged and delivered all such further acts, documents, and assurances as Tenant may request from time

to time in order to effectuate, carry out and perform all of the terms, provisions and conditions of this Agreement and all transactions and permitted use contemplated by this Agreement.

(q) **Force Majeure.** No party shall be liable or responsible to the other party, nor be deemed to have defaulted under or breached this Agreement, for any failure or delay in fulfilling or performing any term of this Agreement, when and to the extent such failure or delay is caused by or results from acts beyond the affected party's reasonable control, including, without limitation: (a) acts of God; (b) flood, fire, earthquake, or explosion; (c) war, invasion, hostilities (whether war is declared or not), terrorist threats or acts, riot, or other civil unrest; (d) government order or law; (e) embargoes, or blockades in effect on or after the date of this Agreement; (f) action by any governmental authority; (g) national or regional emergency; and (h) strikes, labor stoppages or slowdowns, or other industrial disturbances. The party suffering a force majeure event shall give written notice to the other party, stating the period of time the occurrence is expected to continue and shall use diligent efforts to end the failure or delay and ensure the effects of such force majeure event are minimized.

[SIGNATURES APPEAR ON NEXT PAGE]

IN WITNESS WHEREOF, the parties have caused this Agreement to be effective as of the last date written below.

**"LANDLORD"**

VADD Co.

By: *Jerry J. Cox*

Name: Jerry J. Cox

Its: Sole officer and Director

Date: 2 April 2020

**"TENANT"**

Uniti Towers LLC

By: *Ginger Majors*

Print Name: Ginger Majors

Its: VP-Real Estate

Date: 4-24-2020

[ACKNOWLEDGMENTS APPEAR ON NEXT PAGE]



TENANT ACKNOWLEDGMENT

STATE OF ARKANSAS

COUNTY OF PULASKI

On the 24<sup>th</sup> day of April, 2020, before me personally appeared Ginger Majors, who acknowledged under oath that he/ (she) is the VP Deal Data of Uniti Towers LLC, the Tenant named in the attached instrument, and as such was authorized to execute this instrument on behalf of the Tenant.



Constance F. Helmich  
Notary Public: CONSTANCE F. HELMICH  
My Commission Expires: 7-2-2029

CORPORATE ACKNOWLEDGMENT

STATE OF Kentucky

COUNTY OF Rockcastle

I CERTIFY that on April 2, 2020, Jerry J Cox [name of representative] personally came before me and acknowledged under oath that he or she:

- (a) is the **Sole Officer and Director** [title] of **VADD Co.** [name of corporation], the corporation named in the attached instrument,
- (b) was authorized to execute this instrument on behalf of the corporation and
- (c) executed the instrument as the act of the corporation.

Shari M. Proctor  
Notary Public: State of Ky @ Large  
My Commission Expires: 12-16-22

## EXHIBIT 1

### DESCRIPTION OF PREMISES

Page 1 of 4

to the Option and Lease Agreement dated April 24, 2020 by and between VADD Co., as Landlord, and Uniti Towers LLC, a Delaware limited liability company, as Tenant.

The Property is legally described as follows:

Property located in Rockcastle County, Kentucky

The following described real property located in Rockcastle County, Kentucky, to wit:

Beginning on an iron pin in the North right-of-way line of Old U.S. Highway 25, corner to Shephard; thence with Shephard N 07 degrees 00' 00" W 156 feet to a point, corner to Shephard and Cox; thence with Cox S 83 degrees 04' 24" W, 229.88 feet to a point corner to Cox; thence with Cox the following calls along an existing roadway; S 02 degrees 00' 00" W, 266.00 feet and S 08 degrees 30' 00" W, 140.00 feet to a point in the right-of-way of Old U.S. Highway 25; thence with said Highway N 45 degrees 00' 00" E, 392 feet to the point of beginning and containing 1 1/2 acres, more or less.

AND BEING the same property conveyed to VADD Co. from Ashland Lodge 640 F&AM by Deed of Conveyance dated November 27, 2001 and recorded November 27, 2001 in Deed Book 187, Page 303.

Tax Parcel No. 046-00-001.05

The Premises are described and/or depicted as follows:

#### LEASE AREA

All that tract or parcel of land lying and being in Rockcastle County, Kentucky, and being a part of the lands of Vadd Co. as recorded in Deed Book 187, Page 303, Rockcastle County records, and being more particularly described as follows:

To find the point of beginning, COMMENCE at a point on the northerly right-of-way line of Old U.S. Highway 25, said point having a Kentucky Grid North, NAD 83, Single Zone Value of N: 3655172.8593 E: 5334701.6398 and from whence a 1/2-inch open top pipe found on the southerly right-of-way line of Old U.S. Highway 25 bears, South 30°34'56" East, 123.31 feet; thence leaving said right-of-way line and running, North 08°31'07" East, 138.48 feet to a point on the Lease Area, said point having a Kentucky Grid North, NAD 83, Single Zone Value of N: 3655309.8072 E: 5334722.1521; thence running along said Lease Area line, North 90°00'00" West, 15.17 feet to a point and the true POINT OF BEGINNING; Thence, North 00°00'00" East, 100.00 feet to a point; Thence, North 90°00'00" East, 100.00 feet to a point; Thence, South 00°00'00" West, 100.00 feet to a point; Thence, North 90°00'00" West, 100.00 feet to a point and the POINT OF BEGINNING.

Bearings based on Kentucky Grid North, NAD 83, Single Zone.

Said tract contains 0.2296 acres (10,000 square feet), more or less, as shown in a survey prepared for Uniti Towers, LLC by POINT TO POINT LAND SURVEYORS, INC. dated February 6, 2020.

**30' INGRESS-EGRESS & UTILITY EASEMENT**

Together with a 30-foot wide (15 feet each side of centerline) Ingress-Egress & Utility Easement lying and being in Rockcastle County, Kentucky, and being a part of the lands of Vadd Co. as recorded in Deed Book 187, Page 303, Rockcastle County records, and being described by the following centerline data:

BEGINNING at a point on the northerly right-of-way line of Old U.S. Highway 25, said point having a Kentucky Grid North, NAD 83, Single Zone Value of N: 3655172.8593 E: 5334701.6398 and from whence a 1/2-inch open top pipe found on the southerly right-of-way line of Old U.S. Highway 25 bears, South 30°34'56" East, 123.31 feet; Thence leaving said right-of-way line and running, North 08°31'07" East, 138.48 feet to the ENDING at a point on the Lease Area, said point having a Kentucky Grid North, NAD 83, Single Zone Value of N: 3655309.8072 E: 5334722.1521.

Bearings based on Kentucky Grid North, NAD 83, Single Zone.

As shown in a survey prepared for Uniti Towers, LLC by POINT TO POINT LAND SURVEYORS, INC. dated February 6, 2020.

**Notes:**

1. THIS EXHIBIT MAY BE REPLACED BY A LAND SURVEY AND/OR CONSTRUCTION DRAWINGS OF THE PREMISES ONCE RECEIVED BY TENANT.
2. ANY SETBACK OF THE PREMISES FROM THE PROPERTY'S BOUNDARIES SHALL BE THE DISTANCE REQUIRED BY THE APPLICABLE GOVERNMENT AUTHORITIES.
3. WIDTH OF ACCESS ROAD SHALL BE THE WIDTH REQUIRED BY THE APPLICABLE GOVERNMENT AUTHORITIES, INCLUDING POLICE AND FIRE DEPARTMENTS.
4. THE TYPE, NUMBER AND MOUNTING POSITIONS AND LOCATIONS OF ANTENNAS AND TRANSMISSION LINES ARE ILLUSTRATIVE ONLY. ACTUAL TYPES, NUMBERS AND MOUNTING POSITIONS MAY VARY FROM WHAT IS SHOWN ABOVE.





**PARENT PARCEL**

OWNER: VADD CO.  
 SITE ADDRESS: OLD U.S. HIGHWAY 25, MT. VERNON, KY 40456  
 PARCEL ID: 046-00-001.05  
 AREA: 1.5 ACRES (FOR TAX ASSESSOR)  
 ZONED: NO ZONING  
 ALL ZONING INFORMATION SHOULD BE VERIFIED WITH THE PROPER ZONING OFFICIALS  
 REFERENCE: BOOK 1 87 PAGE 303

**GPS NOTES**

THE FOLLOWING GPS STATISTICS UPON WHICH THIS SURVEY IS BASED HAVE BEEN PRODUCED AT THE 95% CONFIDENCE LEVEL:  
 POSITIONAL ACCURACY: 0.09 FEET (HORIZ) 0.26 FEET (VERT)  
 TYPE OF EQUIPMENT: GEORAIN ZENITHES PRO BASE AND ROVER, DUAL FREQUENCY  
 TYPE OF GPS FIELD PROCEDURE: ONLINE POSITION USER INTERFACE  
 DATE OF SURVEY: 01/26/20 & 02/02/2020  
 DATUM / EPOCH: NAD 83/01.11870000000000000000  
 PUBLISHED / FIXED CONTROL USE: N/A  
 REDUCED MODELS: 19  
 COMBINED GRID FACTORS: 0.99998866 CENTERED ON THE GPS BASE POINT AS SHOWN HEREON.  
 CONVERGENCE ANGLE: 00°52'24.4"



**VICINITY MAP**  
NOT TO SCALE

**GENERAL NOTES**

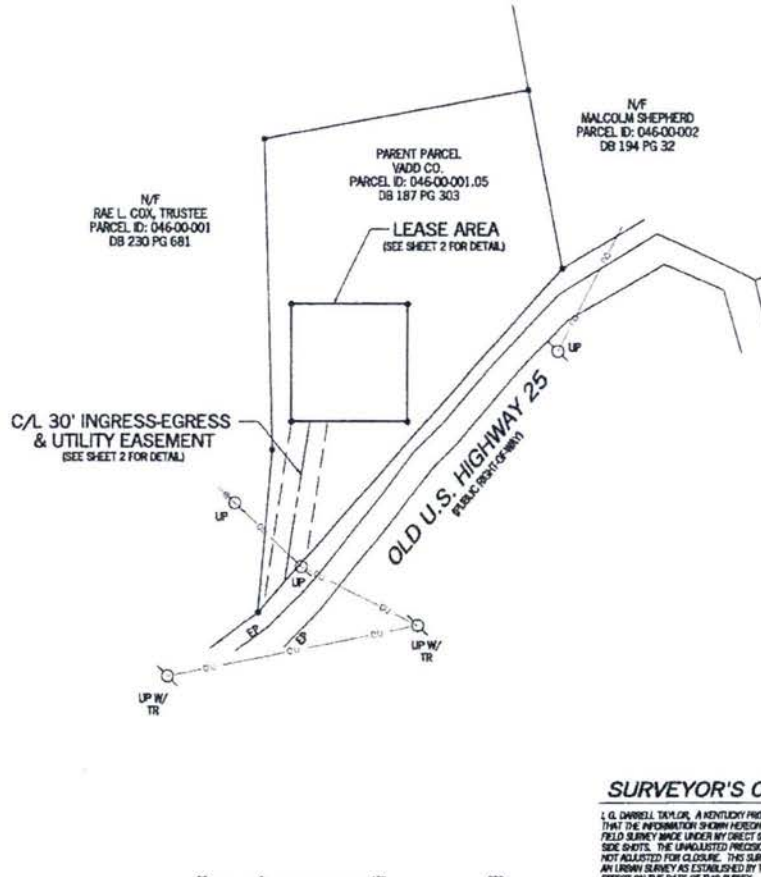
\* THIS SPECIFIC PURPOSE SURVEY IS FOR THE LEASED PREMISES AND EASEMENTS ONLY. THIS SPECIFIC PURPOSE SURVEY WAS PREPARED FOR THE EXCLUSIVE USE OF UNITI TOWERS, LLC AND EXCLUSIVELY FOR THE TRANSFERORAL OF THE PROPOSED LEASED PREMISES AND THE RIGHTS OF EASEMENT SHOWN HEREON AND SHALL NOT BE USED AS AN EVIDENCE OR EVIDENCE IN THE FEE SIMPLE TRANSFERORAL OF THE PARENT PARCEL NOR ANY PORTION OR PORTIONS THEREOF. BOUNDARY INFORMATION SHOWN HEREON HAS BEEN COMPILED FROM TAX MAPS AND DEED DESCRIPTIONS ONLY. NO BOUNDARY SURVEY OF THE PARENT PARCEL WAS PERFORMED.

THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY.  
 EQUIPMENT USED FOR ANGULAR & LINEAR MEASUREMENTS: LEICA TPS 1200 ROBOTIC & GEMAX ZENITH 35. DATE OF LAST FIELD VISIT: 02/02/2020

THE 1' CONTOURS AND SPOT ELEVATIONS SHOWN ON THIS SPECIFIC PURPOSE SURVEY ARE ADJUSTED TO NAVD 83 DATUM (COMPUTED USING GEOID) AND HAVE A VERTICAL ACCURACY OF ± .5'. CONTOURS OUTSIDE THE IMMEDIATE SITE AREA ARE APPROXIMATE.  
 BEARINGS SHOWN ON THIS SPECIFIC PURPOSE SURVEY ARE BASED ON GRID NORTH AND NOT BY SINGLE ZONE.

PER THE FEMA FLOODPLAIN MAPS, THE SITE IS LOCATED IN AN AREA DESIGNATED AS ZONE X. COMMUNITY PANEL NO. 1: 21203000000 DATED: 06/03/2009

NO WETLAND AREAS HAVE BEEN INVESTIGATED BY THIS SPECIFIC PURPOSE SURVEY.  
 ALL ZONING INFORMATION SHOULD BE VERIFIED WITH THE PROPER ZONING OFFICIALS.  
 ANY UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM ABOVE GROUND FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEE THAT ANY UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT ANY UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED ANY UNDERGROUND UTILITIES.



- LEGEND**
- POB POINT OF BEGINNING
  - POC POINT OF COMMENCEMENT
  - PS IRON PIN SET
  - RF IRON PIN FOUND
  - CBP CONCRETE BENCHMARK FOUND
  - UP UTILITY POLE
  - LP LIGHT POLE
  - TR TR
  - SSBH SANITARY SEWER BURNHOLE
  - SSBH STORM DRAIN BURNHOLE
  - SW SW
  - PH FIRE HYDRANT
  - CP CURB OF PAVEMENT
  - TC TOP OF CURB
  - BC BACK OF CURB
  - TR TOP OF BRILL
  - IB BOTTOM OF BRILL
  - OU OVERHEAD UTILITY
  - LU UNDERGROUND UTILITY
  - CBP CORRUGATED METAL PIPE
  - ACP REINFORCED CONCRETE PIPE
  - PVC POLYETHYLENE GLYCOL PIPE
  - GW GUY WIRE ANCHOR
  - TR TRANSFORMER
  - JR JUNCTION BOX
  - SWC SWALE & BIRD CATCH BASIN
  - CSB CURB & BIRD CATCH BASIN
  - CLF CURB LAW FENCE
  - SW SW
  - WB WIRE BENCH
  - CD CEMENT CLEANOUT
  - GW GAS VALVE
  - PLF PLUM OR PLUMBING
  - ST ST
  - SP SP
  - ICE ICE BRIDGE POLE

**SURVEYOR'S CERTIFICATE**

I, G. DARRELL TAYLOR, A KENTUCKY PROFESSIONAL LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION BY METHOD OF RANDOM TRANSVERSE WITH SIGHT SHOTS. THE UNADJUSTED PRECISION RATIO OF THE TRANSVERSE EXCEEDED 1:10,000 AND WAS NOT ADJUSTED FOR CLOSURE. THIS SURVEY MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR AN IRRRAW SURVEY AS ESTABLISHED BY THE STATE OF KENTUCKY, PER 201 KAR 18:150 AND IN EFFECT ON THE DATE OF THIS SURVEY.

*G. Darrell Taylor* 02/26/2020  
 G. DARRELL TAYLOR, PLS 4179 DATE



(SURVEY NOT VALID WITHOUT SHEET 2 OF 2)



NO.	DATE	REVISION
1	2/26/20	ADDED TITLE - JSO

POINT TO POINT LAND SURVEYORS  
 100 Governors Trace, Ste. 103  
 Peachtree City, GA 30269  
 (p) 678.565.4440 (f) 678.565.4497  
 (w) pointtopointsurvey.com



SPECIFIC PURPOSE SURVEY PREPARED FOR:



MT. VERNON  
 SITE NO.  
 KYLEX2044  
 ROCKCASTLE COUNTY, KENTUCKY

DRAWN BY: JSO	SHEET:
CHECKED BY: JAL	1
APPROVED: D. MILLER	DE 2
DATE: FEBRUARY 5, 2020	
POP JOB #: 200099K7	

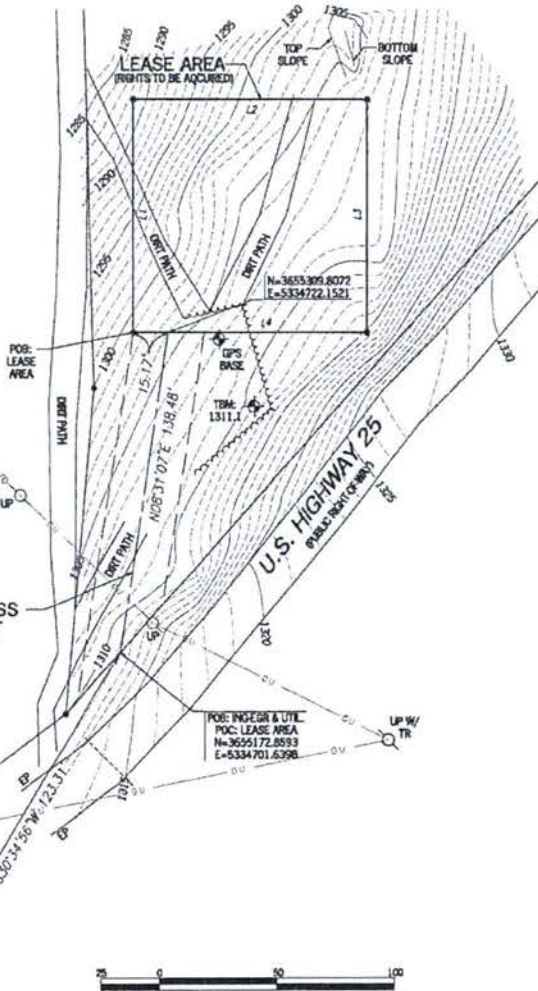
C:\Users\TNTaylor\Desktop\20200206\KYLEX2044\K. Vernon\20200206



**LINE TABLE**

LINE	BEARING	DISTANCE
L1	N00°00'00"E	100.00'
L2	N90°00'00"E	100.00'
L3	S00°00'00"W	100.00'
L4	N90°00'00"W	100.00'

C/L 30' INGRESS-EGRESS & UTILITY EASEMENT  
(RIGHTS TO BE ACQUIRED)



**SITE INFORMATION**

LEASE AREA = 10,000 SQUARE FEET (0.2296 ACRES)  
 LATITUDE = 37°21'11.74" (NAD 83) (37.353261°)  
 LONGITUDE = -84°19'38.27" (NAD 83) (-84.327297°)  
 AT CENTER LEASE AREA  
 ELEVATION AT CENTER OF LEASE AREA = 1305.6' A.M.S.L.

**30' INGRESS-EGRESS & UTILITY EASEMENT**

TOGETHER WITH A 30-FOOT WIDE (1.5 FEET EACH SIDE OF CENTERLINE) INGRESS-EGRESS & UTILITY EASEMENT LYING AND BEING IN ROCKCASTLE COUNTY, KENTUCKY, AND BEING A PART OF THE LANDS OF VADO CO. AS RECORDED IN DEED BOOK 187, PAGE 303, ROCKCASTLE COUNTY RECORDS, AND BEING DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

BEGINNING AT A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF OLD U.S. HIGHWAY 25, SAID POINT HAVING A KENTUCKY GRID NORTH, NAD 83, SINGLE ZONE VALUE OF N: 3655172.8593 E: 5334701.6398 AND FROM WHENCE A 1/2-INCH OPEN TOP PIPE FOUND ON THE SOUTHERLY RIGHT-OF-WAY LINE OF OLD U.S. HIGHWAY 25 BEARS, SOUTH 30°34'56" EAST, 123.31 FEET; THENCE LEARNING SAID RIGHT-OF-WAY LINE AND RUNNING, NORTH 08°31'07" EAST, 138.48 FEET TO THE ENDING AT A POINT ON THE LEASE AREA, SAID POINT HAVING A KENTUCKY GRID NORTH, NAD 83, SINGLE ZONE VALUE OF N: 3655309.8072 E: 5334722.1521.

BEARINGS BASED ON KENTUCKY GRID NORTH, NAD 83, SINGLE ZONE.

**LEASE AREA**

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN ROCKCASTLE COUNTY, KENTUCKY, AND BEING A PART OF THE LANDS OF VADO CO. AS RECORDED IN DEED BOOK 187, PAGE 303, ROCKCASTLE COUNTY RECORDS, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF OLD U.S. HIGHWAY 25, SAID POINT HAVING A KENTUCKY GRID NORTH, NAD 83, SINGLE ZONE VALUE OF N: 3655172.8593 E: 5334701.6398 AND FROM WHENCE A 1/2-INCH OPEN TOP PIPE FOUND ON THE SOUTHERLY RIGHT-OF-WAY LINE OF OLD U.S. HIGHWAY 25 BEARS, SOUTH 30°34'56" EAST, 123.31 FEET; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, NORTH 08°31'07" EAST, 138.48 FEET TO A POINT ON THE LEASE AREA, SAID POINT HAVING A KENTUCKY GRID NORTH, NAD 83, SINGLE ZONE VALUE OF N: 3655309.8072 E: 5334722.1521; THENCE RUNNING ALONG SAID LEASE AREA LINE, NORTH 90°00'00" WEST, 15.17 FEET TO A POINT AND THE TRUE POINT OF BEGINNING; THENCE, NORTH 00°00'00" EAST, 100.00 FEET TO A POINT; THENCE, NORTH 90°00'00" EAST, 100.00 FEET TO A POINT; THENCE, SOUTH 00°00'00" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 90°00'00" WEST, 100.00 FEET TO A POINT AND THE POINT OF BEGINNING.

BEARINGS BASED ON KENTUCKY GRID NORTH, NAD 83, SINGLE ZONE.

SAID TRACT CONTAINS 0.2296 ACRES (10,000 SQUARE FEET), MORE OR LESS

**TITLE EXCEPTIONS**

THIS SURVEY WAS COMPLETED WITH THE AID OF TITLE WORK PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, ISSUE DATE OF FEBRUARY 18, 2003, SCOPE OF SEARCH BEGINNING APRIL 1, 1978 AND EXTENDING THROUGH FEBRUARY 11, 2003, BEING ORDER NO. 30902325, FOR THE PARENT PARCEL, TO DETERMINE THE IMPACTS OF EXISTING TITLE EXCEPTIONS.

Z. DEED OF EASEMENT IN FAVOR OF THE CITY OF MT. VERNON SET FORTH IN INSTRUMENT RECORDED ON FEBRUARY 4, 2002 IN DEED BOOK 186, PAGE 131.

(THIS ITEM CANNOT BE DETERMINED IF IT IS APPLICABLE TO THE PARENT PARCEL BECAUSE THE DESCRIPTION OF THIS EASEMENT IS VAGUE AND THEREFORE WE ARE NOT ABLE TO ASCERTAIN THE EXACT LOCATION THEREOF.)

**PARENT PARCEL**

PER ORDER NO: 30902325

PROPERTY LOCATED IN ROCKCASTLE COUNTY, KENTUCKY

THE FOLLOWING DESCRIBED REAL PROPERTY LOCATED IN ROCKCASTLE COUNTY, KENTUCKY, TO WIT:

BEGINNING ON AN IRON PIN IN THE NORTH RIGHT-OF-WAY LINE OF OLD U.S. HIGHWAY 25, CORNER TO SHEPARD; THENCE WITH SHEPARD N 07 DEGREES 00' 00" W 136 FEET TO A POINT, CORNER TO SHEPARD AND COO; THENCE WITH COO S 83 DEGREES 04' 24" W 229.08 FEET TO A POINT CORNER TO COO; THENCE WITH COO THE FOLLOWING CALLS ALONG AN EXISTING HIGHWAY; S 02 DEGREES 00' 00" W 364.00 FEET AND S 08 DEGREES 30' 00" W 148.00 FEET TO A POINT IN THE RIGHT-OF-WAY OF OLD U.S. HIGHWAY 25; THENCE WITH SAID HIGHWAY N 48 DEGREES 00' 00" E, 362 FEET TO THE POINT OF BEGINNING AND CONTAINING 1 1/2 ACRES, MORE OR LESS.

AND BEING THE SAME PROPERTY CONVEYED TO VADO CO. FROM AG-LAND LOOSE 640 FROM BY DEED OF CONVEYANCE DATED NOVEMBER 27, 2001 AND RECORDED NOVEMBER 27, 2001 IN DEED BOOK 187, PAGE 303.

TAX PARCEL NO. 046-00003-05

STATE OF KENTUCKY  
 G. DARRELL TAYLOR  
 4179  
 LICENSED PROFESSIONAL LAND SURVEYOR

NO.	DATE	REVISION
1	2/26/20	ADDED TITLE - JSO

POINT TO POINT LAND SURVEYORS  
 100 Governors Trace, Ste. 103  
 Peachtree City, GA 30269  
 (p) 678.565.4440 (f) 678.565.4497  
 (w) pointtopointsurvey.com



SPECIFIC PURPOSE SURVEY PREPARED FOR

Uniti Towers

MT. VERNON  
 SITE NO.  
 KYLEX2044  
 ROCKCASTLE COUNTY, KENTUCKY

DESIGNED BY: JSO  
 CHECKED BY: JM  
 APPROVED BY: D. MILLER  
 DATE: FEBRUARY 6, 2020  
 P2P JOB #: 200099KY  
 SHEET: 2 OF 2

(SURVEY NOT VALID WITHOUT SHEET 1 OF 2)

**EXHIBIT 12**

**STANDARD ACCESS LETTER**

**[FOLLOWS ON NEXT PAGE]**



**VADD Co.**  
**C/O Jerry J Cox**  
**P.O Box ~~1350~~ 125**  
**Mt. Vernon, KY 40456**  
**Telephone: (606) 256-5111**

March 27, 2020

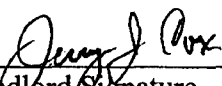
Re: Authorized Access granted to UNITY Towers LLC

Dear Building and Security Staff,

Please be advised that we have signed a lease with UNITY Towers LLC permitting UNITY Towers LLC to install, operate and maintain telecommunications equipment at the property. The terms of the lease grant UNITY Towers LLC and its representatives, employees, agents and subcontractors ("representatives") 24 hour per day, 7 day per week access to the leased area.

To avoid impact on telephone service during the day, UNITY Towers LLC representatives may be seeking access to the property outside of normal business hours. UNITY Towers LLC representatives have been instructed to keep noise levels at a minimum during their visit.

Please grant the bearer of a copy of this letter access to the property and to leased area. Thank you for your assistance.

  
\_\_\_\_\_  
Landlord Signature

**EXHIBIT J**  
**NOTIFICATION LISTING**

**McGuire Relo / Mt. Vernon – Notice List**

VADD COMPANY  
PO BOX 1350  
MT VERNON, KY 40456

COX RAE L TRUST  
C/O JERRY COX  
PO BOX 1350  
MT VERNON, KY 40456

SHEPHERD MALCOLM  
187 OLD DIXIE HWY  
MT VERNON, KY 40456

HOWARD WALTER M & VANESSA  
262 OLD DIXIE HIGHWAY  
MT VERNON, KY 40456

SHEPHERD MALCOM J  
187 OLD DIXIE HIGHWAY  
MT VERNON, KY 40456

GRAVES DALLAS  
220 OLD DIXIE HWY  
MT VERNON, KY 40456

SHEPHERD MATTHEW & BEULAH  
528 GENERAL CRUFT RD  
RICHMOND, KY 40475

STOKES J J -HEIRS-  
C/O EDITH STOKES  
509 DRYFORK RD  
ORLANDO, KY 40460

MINK PERRY T & AMY  
665 CARTER RIDGE RD  
MT VERNON, KY 40456

NEWTON RAYMOND MRS  
C/O MARGARET SMITH  
362 OLD DIXIE HIGHWAY  
MT VERNON, KY 40456



**EXHIBIT K**  
**COPY OF PROPERTY OWNER NOTIFICATION**



1578 Highway 44 East, Suite 6  
P.O. Box 369  
Shepherdsville, KY 40165-0369  
Phone (502) 955-4400 or (800) 516-4293  
Fax (502) 543-4410 or (800) 541-4410

**Notice of Proposed Construction of  
Wireless Communications Facility  
Site Name: McGuire Relo / Mt. Vernon**

Dear Landowner:

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility and Uniti Towers LLC, a Delaware limited liability company have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at Old U.S. Hwy 25, Mt. Vernon, KY 40456 (37° 21' 11.74" North latitude, 84° 19' 38.27" West longitude). The proposed facility will include a 330-foot tall tower, with an approximately 12-foot tall lightning arrestor attached at the top, for a total height of 342-feet, plus related ground facilities. This facility is needed to provide improved coverage for wireless communications in the area.

This notice is being sent to you because the County Property Valuation Administrator's records indicate that you may own property that is within a 500' radius of the proposed tower site or contiguous to the property on which the tower is to be constructed. You have a right to submit testimony to the Kentucky Public Service Commission ("PSC"), either in writing or to request intervention in the PSC's proceedings on the application. You may contact the PSC for additional information concerning this matter at: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2020-00365 in any correspondence sent in connection with this matter.

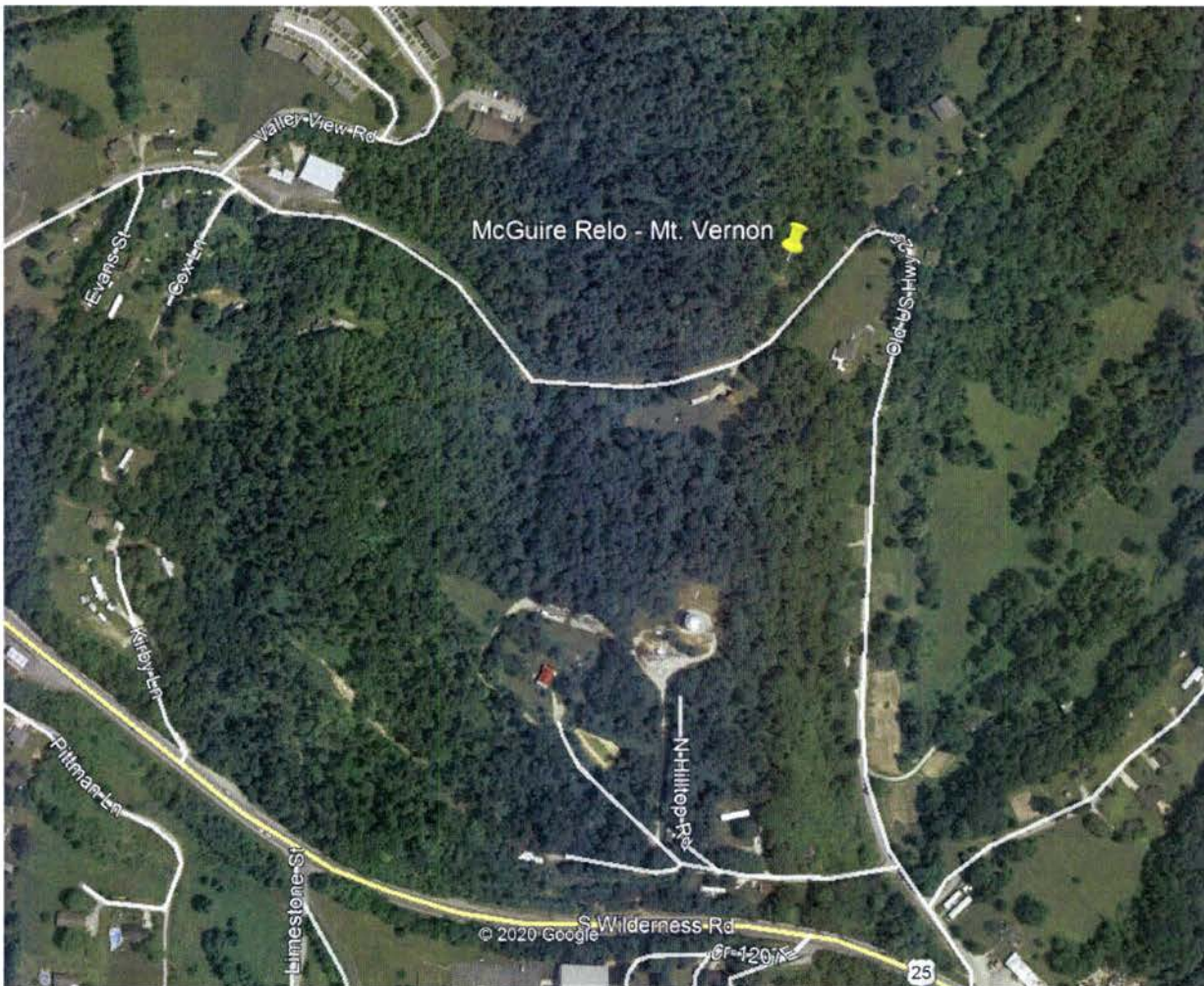
We have attached a map showing the site location for the proposed tower. AT&T Mobility's radio frequency engineers assisted in selecting the proposed site for the facility, and they have determined it is the proper location and elevation needed to provide quality service to wireless customers in the area. Please feel free to contact us toll free at (800) 516-4293 if you have any comments or questions about this proposal.

Sincerely,  
David A. Pike  
Attorney for Applicants

enclosures

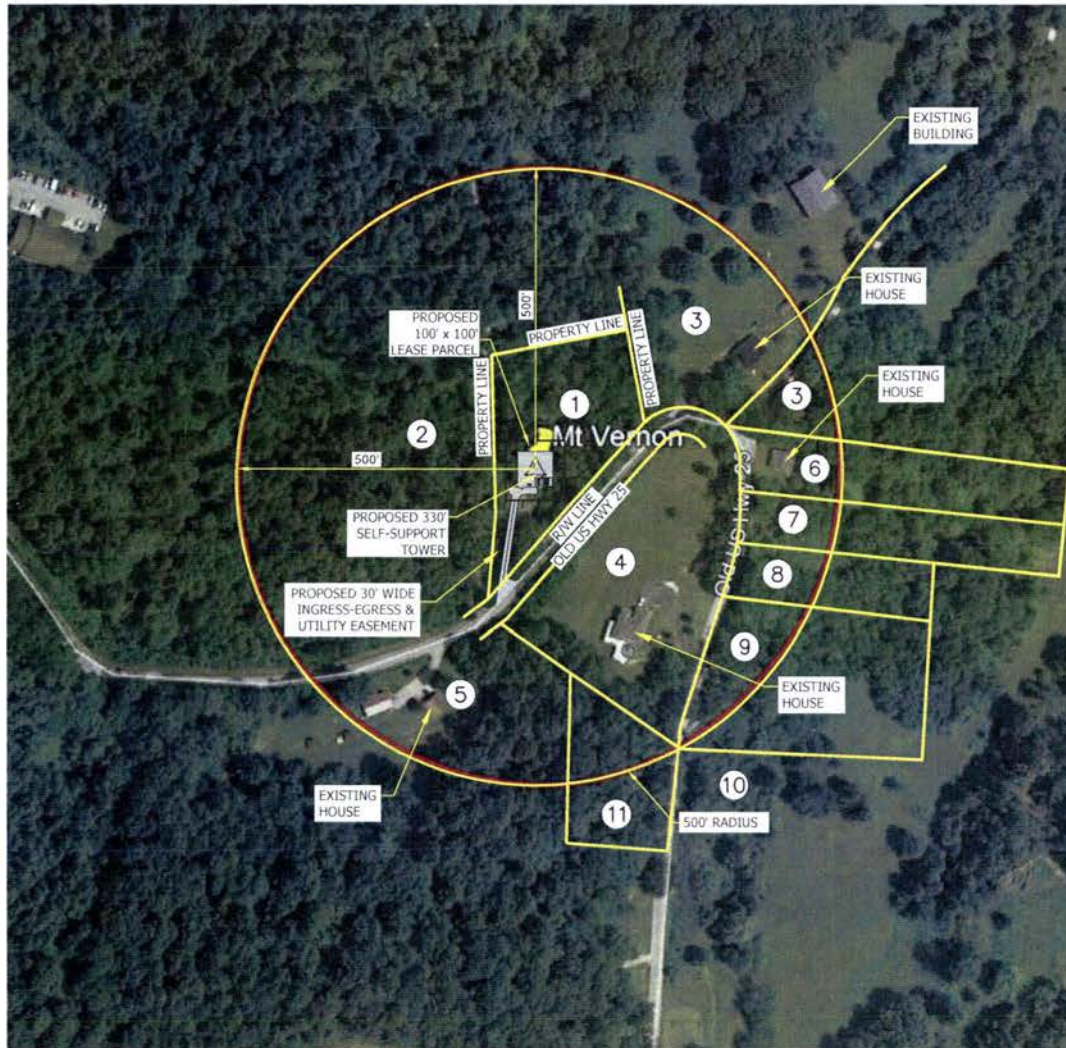
## Driving Directions to Proposed Tower Site

1. Beginning at the Rockcastle County Judge Executive's Office, located at 205 East Main Street, Mount Vernon, KY 40456, turn right onto East Main Street and travel approximately 623 feet.
2. Turn left onto Old US Hwy 25 and travel approximately 0.6 miles.
3. The site is located on the left. The site address is Old U.S. Hwy 25, Mt. Vernon, KY 40456.
4. The site coordinates are:
  - a. North 37 deg 21 min 11.74 sec
  - b. West 84 deg 19 min 38.27 sec



Prepared by:  
Chris Shouse  
Pike Legal Group  
1578 Highway 44 East, Suite 6  
P.O. Box 396  
Shepherdsville, KY 40165-3069  
Telephone: 502-955-4400 or 800-516-4293

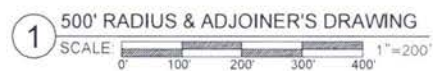




#	OWNER	ADDRESS	PID	REF
1	VADD COMPANY	P.O. BOX 1350 MT. VERNON, KY 40456	046-00-001.05	DB 187 PG 303
2	RAE L. COX, TRUST c/o JERRY COX	P.O. BOX 1350 MT VERNON, KY 40456	046-00-001	DB 230 PG 681
3	MALCOLM SHEPHERD	187 OLD DIXIE HWY MT VERNON, KY 40456	046-00-002	DB 194 PG 32
4	WALTER M. & VANESSA HOWARD	262 OLD DIXIE HWY MT VERNON, KY 40456	046W-09-009	DB 270 PG 62
5	MALCOLM J. SHEPHERD	187 OLD DIXIE HWY MT VERNON, KY 40456	046W-09-008	DB 199 PG 667
6	DALLAS GRAVES	220 OLD DIXIE HWY MT VERNON, KY 40456	046-00-005	DB 182 PG 201
7	MATTHEW & BEULAH SHEPHERD	528 GENERAL CRUFT RD MT VERNON, KY 40456	046-00-006	DB 225 PG 272
8	STOKES JJ -HEIRS- c/o EDITH STOKES	509 DRYFORK ROAD ORLANDO, KY 40460	046-00-008	-
9	PERRY T & AMY MINK	665 CARTER RIDGE RD MT VERNON, KY 40456	046-00-007	DB 261 PG 186
10	PERRY T & AMY MINK	665 CARTER RIDGE RD MT VERNON, KY 40456	046-00-009	DB 261 PG 182
11	NEWTON RAYMOND MRS. c/o MARGARET SMITH	362 OLD DIXIE HWY MT VERNON, KY 40456	046W-09-010	-

- NOTE:
1. PVA INFORMATION WAS OBTAINED ON 10/28/2020 FROM THE OFFICIAL RECORDS OF THE COUNTY'S PROPERTY VALUATION ADMINISTRATOR.
  2. THIS MAP IS FOR GENERAL INFORMATION PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY.
  3. NOT FOR RECORDING OR PROPERTY TRANSFER.

**BAT NOTE:**  
MUST DO TREE CLEARING BETWEEN  
OCTOBER 15th AND MARCH 31st, DUE TO BAT  
TREES ON PROPERTY



CALL KENTUCKY ONE CALL  
(800) 752-6007  
CALL 3 WORKING DAYS  
BEFORE YOU DIG!



HARMONI TOWERS  
MT. VERNON  
E-A# 15147586  
PAGE# MINTN047948  
PI# 1010570  
OLD U.S. HWY 25  
MT. VERNON, KY 40456  
ROCKCASTLE COUNTY  
PROJECTED TOWER SITE LOCATION

PROJECT NO: G1017348-00  
CHECKED BY: MAS

REV	DATE	DRWN	DESCRIPTION
A	06/19/20	DLS	ZONING DRAWINGS
0	08/31/20	DLS	ZONING DRAWINGS
1	10/30/20	DLS	ZONING DRAWINGS

B&T ENGINEERING, INC.  
E-1403  
Expires 12/31/20



IT IS A VIOLATION OF LAW FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

500' RADIUS & ADJOINER'S DRAWING

SHEET NUMBER:  
**C-1**

**EXHIBIT L**  
**COPY OF COUNTY JUDGE/EXECUTIVE NOTICE**



1578 Highway 44 East, Suite 6  
P.O. Box 369  
Shepherdsville, KY 40165-0369  
Phone (502) 955-4400 or (800) 516-4293  
Fax (502) 543-4410 or (800) 541-4410

**VIA CERTIFIED MAIL**

Howell Holbrook Jr.  
County Judge Executive  
P.O. Box 755  
205 East Main Street  
Mount Vernon, KY 40456

RE: Notice of Proposal to Construct Wireless Communications Facility  
Kentucky Public Service Commission Docket No. 2020-00365  
Site Name: McGuire Relo / Mt. Vernon

Dear Judge/Executive:

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility and Uniti Towers LLC, a Delaware limited liability company have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at Old U.S. Hwy 25, Mt. Vernon, KY 40456 (37° 21' 11.74" North latitude, 84° 19' 38.27" West longitude). The proposed facility will include a 330-foot tall tower, with an approximately 12-foot tall lightning arrestor attached at the top, for a total height of 342-feet, plus related ground facilities. This facility is needed to provide improved coverage for wireless communications in the area.

You have a right to submit comments to the PSC or to request intervention in the PSC's proceedings on the application. You may contact the PSC at: Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2020-00365 in any correspondence sent in connection with this matter.

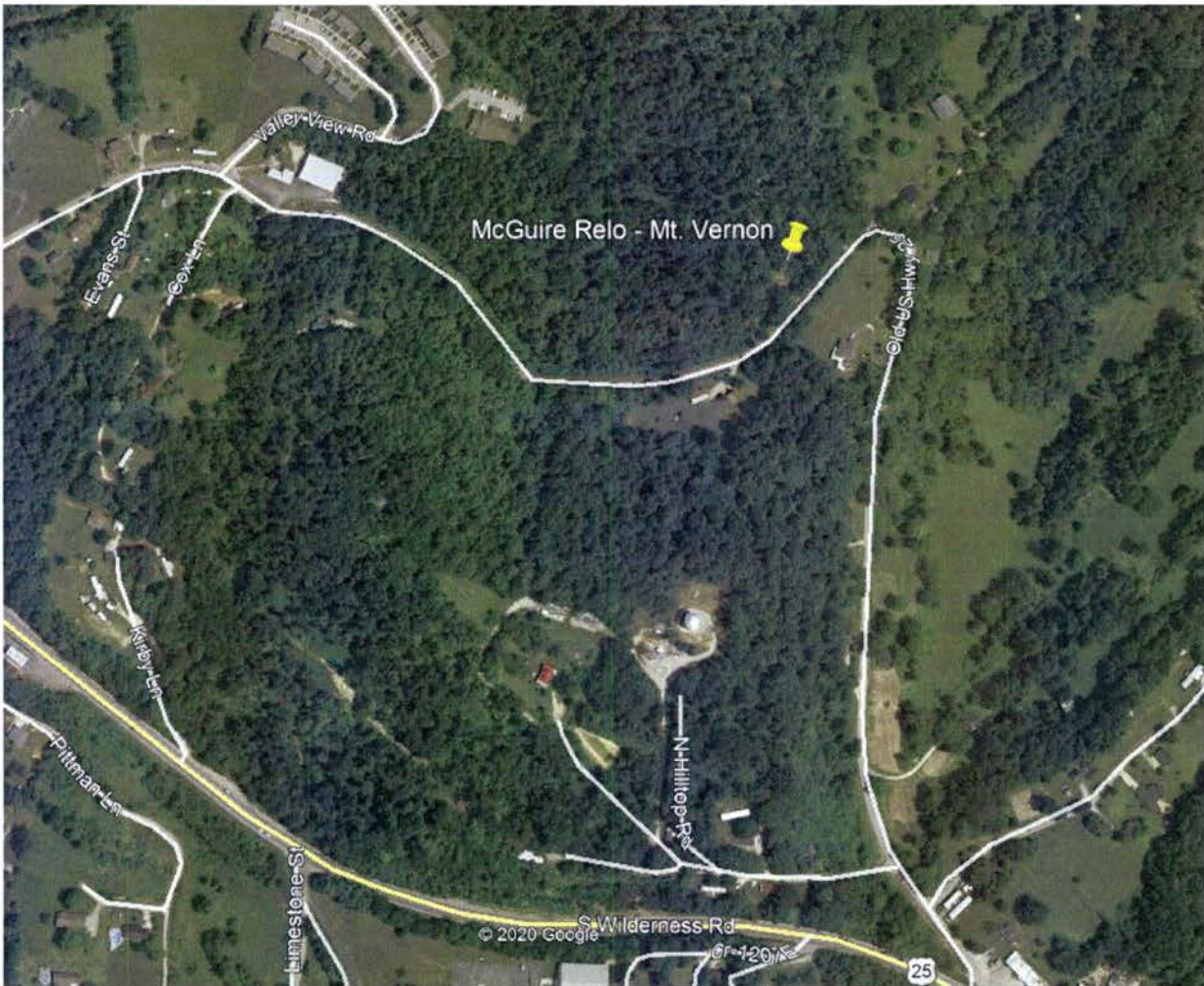
We have attached a map showing the site location for the proposed tower. AT&T Mobility's radio frequency engineers assisted in selecting the proposed site for the facility, and they have determined it is the proper location and elevation needed to provide quality service to wireless customers in the area. Please feel free to contact us with any comments or questions you may have.

Sincerely,  
David A. Pike  
Attorney for Applicants  
enclosures



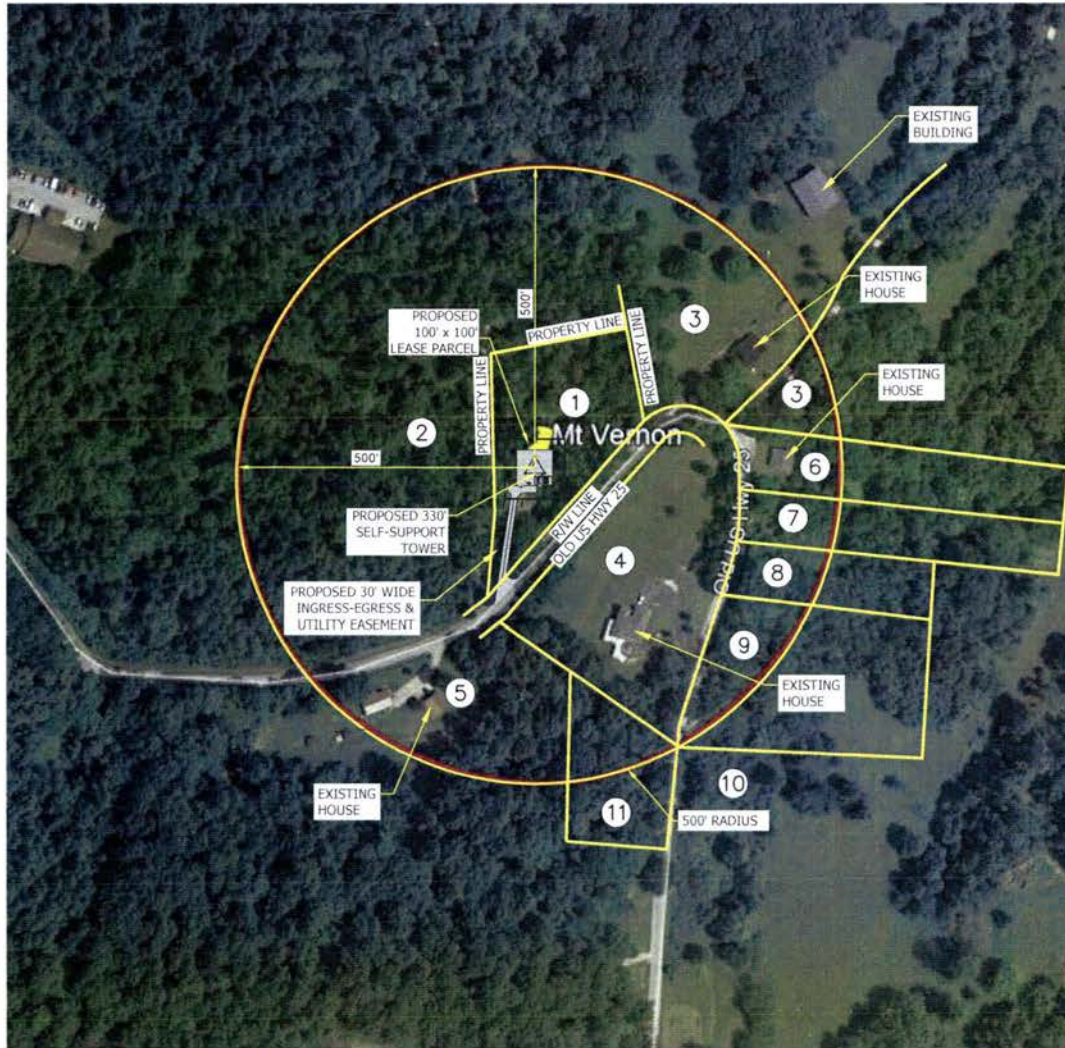
## Driving Directions to Proposed Tower Site

1. Beginning at the Rockcastle County Judge Executive's Office, located at 205 East Main Street, Mount Vernon, KY 40456, turn right onto East Main Street and travel approximately 623 feet.
2. Turn left onto Old US Hwy 25 and travel approximately 0.6 miles.
3. The site is located on the left. The site address is Old U.S. Hwy 25, Mt. Vernon, KY 40456.
4. The site coordinates are:
  - a. North 37 deg 21 min 11.74 sec
  - b. West 84 deg 19 min 38.27 sec



Prepared by:  
Chris Shouse  
Pike Legal Group  
1578 Highway 44 East, Suite 6  
P.O. Box 396  
Shepherdsville, KY 40165-3069  
Telephone: 502-955-4400 or 800-516-4293





#	OWNER	ADDRESS	PID	REF
1	VADD COMPANY	P.O. BOX 1350 MT. VERNON, KY 40456	046-00-001.05	DB 187 PG 303
2	RAE L. COX, TRUST c/o JERRY COX	P.O. BOX 1350 MT VERNON, KY 40456	046-00-001	DB 230 PG 681
3	MALCOLM SHEPHERD	187 OLD DIXIE HWY MT VERNON, KY 40456	046-00-002	DB 194 PG 32
4	WALTER M. & VANESSA HOWARD	262 OLD DIXIE HWY MT VERNON, KY 40456	046W-09-009	DB 270 PG 62
5	MALCOLM J. SHEPHERD	187 OLD DIXIE HWY MT VERNON, KY 40456	046W-09-008	DB 199 PG 667
6	DALLAS GRAVES	220 OLD DIXIE HWY MT VERNON, KY 40456	046-00-005	DB 182 PG 201
7	MATTHEW & BEULAH SHEPHERD	528 GENERAL CRUFT RD MT VERNON, KY 40456	046-00-006	DB 225 PG 272
8	STOKES JJ -HEIRS- c/o EDITH STOKES	509 DRYFORK ROAD ORLANDO, KY 40460	046-00-008	-
9	PERRY T & AMY MINK	665 CARTER RIDGE RD MT VERNON, KY 40456	046-00-007	DB 261 PG 186
10	PERRY T & AMY MINK	665 CARTER RIDGE RD MT VERNON, KY 40456	046-00-009	DB 261 PG 182
11	NEWTON RAYMOND MRS. c/o MARGARET SMITH	362 OLD DIXIE HWY MT VERNON, KY 40456	046W-09-010	-

NOTE:

- PVA INFORMATION WAS OBTAINED ON 10/28/2020 FROM THE OFFICIAL RECORDS OF THE COUNTY'S PROPERTY VALUATION ADMINISTRATOR.
- THIS MAP IS FOR GENERAL INFORMATION PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY.
- NOT FOR RECORDING OR PROPERTY TRANSFER.

**BAT NOTE:**  
MUST DO TREE CLEARING BETWEEN  
OCTOBER 15th AND MARCH 31st, DUE TO BAT  
TREES ON PROPERTY

1 500' RADIUS & ADJOINER'S DRAWING  
SCALE: 0 100' 200' 300' 400' 1"=200'



CALL KENTUCKY ONE CALL  
(800) 752-6007  
CALL 3 WORKING DAYS  
BEFORE YOU DIG!



HARMONI TOWERS  
MT. VERNON  
E-# 15147586  
PAGE# ARIIN/K047948  
PT# 1010530  
OLD U.S. HWY 25  
MT. VERNON, KY 40456  
ROCKCASTLE COUNTY  
PROPOSED 330' SELF-SUPPORT TOWER

PROJECT NO: C-013 1405-00  
CHECKED BY: MAS

REV	DATE	DRWN	DESCRIPTION
A	08/19/20	DLS	ZONING DRAWINGS
0	08/31/20	DLS	ZONING DRAWINGS
1	10/30/20	DLS	ZONING DRAWINGS

B&T ENGINEERING, INC.  
E-1405  
Expires 12/31/20



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

500' RADIUS & ADJOINER'S DRAWING

SHEET NUMBER:  
**C-1**

**EXHIBIT M  
COPY OF POSTED NOTICES  
AND NEWSPAPER NOTICE ADVERTISEMENT**



**SITE NAME: MCGUIRE RELO / MT. VERNON**  
**NOTICE SIGNS**

The signs are at least (2) feet by four (4) feet in size, of durable material, with the text printed in black letters at least one (1) inch in height against a white background, except for the word "**tower**," which is at least four (4) inches in height.

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility and Uniti Towers LLC, a Delaware limited liability company propose to construct a telecommunications **tower** on this site. If you have questions, please contact Pike Legal Group, PLLC, P.O. Box 369, Shepherdsville, KY 40165; telephone: (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2020-00365 in your correspondence.

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility and Uniti Towers LLC, a Delaware limited liability company propose to construct a telecommunications **tower** near this site. If you have questions, please contact Pike Legal Group, PLLC, P.O. Box 369, Shepherdsville, KY 40165; telephone: (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2020-00365 in your correspondence.



1578 Highway 44 East, Suite 6  
P.O. Box 369  
Shepherdsville, KY 40165-0369  
Phone (502) 955-4400 or (800) 516-4293  
Fax (502) 543-4410 or (800) 541-4410

VIA TELEPHONE: (606) 256-2244

The Mt. Vernon Signal  
115 W Main Street  
Mount Vernon, KY 40456

RE: Legal Notice Advertisement  
Site Name: McGuire Relo / Mt. Vernon

Dear Mt. Vernon Signal:

Please publish the following legal notice advertisement in the next edition of *The Mt. Vernon Signal*:

#### NOTICE

**New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility and Uniti Towers LLC, a Delaware limited liability company have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located on Old U.S. Hwy 25, Mt. Vernon, KY 40456 (37° 21' 11.74" North latitude, 84° 19' 38.27" West longitude). You may contact the PSC for additional information concerning this matter at: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2020-00365 in any correspondence sent in connection with this matter.**

After this advertisement has been published, please forward a tearsheet copy, affidavit of publication, and invoice to Pike Legal Group, PLLC, P. O. Box 369, Shepherdsville, KY 40165. Please call me at (800) 516-4293 if you have any questions. Thank you for your assistance.

Sincerely,  
Chris Shouse  
Pike Legal Group, PLLC

**EXHIBIT N**  
**COPY OF RADIO FREQUENCY DESIGN SEARCH AREA**



