

**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.: 2021-00065
CONVENIENCE AND NECESSITY TO CONSTRUCT)
A WIRELESS COMMUNICATIONS FACILITY)
IN THE COMMONWEALTH OF KENTUCKY)
IN THE COUNTY OF RUSSELL)

SITE NAME: WINDSOR RELO / PINE TOP ROAD

**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. 4th 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 1011 Pinetop Road, Russell Springs, KY 42642 (37° 05' 25.25" North latitude, 84° 54' 43.81" 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 Eunice A. Thomas, owning a one-half (1/2) undivided interest in fee simple, her heirs and assigns and Kerry Thomas and Janet Thomas, owning a one-half (1/2) undivided interest in fee simple pursuant to a deed recorded at Deed Book 202, Page 643 in the office of the County Clerk. The proposed WCF will consist of a 305-foot tall tower, with an approximately 10-foot tall lightning arrestor attached at the top, for a total height of 315-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") 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 in character.

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

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,

A handwritten signature in blue ink that reads "David A. Pike". The signature is written in a cursive style and is positioned above a horizontal line.

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
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 28th day of May, 2019, in the 227th 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 388 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):

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

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

I, C T Corporation System, consent to serve as the registered agent on behalf of the business entity.
Type/Print Name of Registered Agent
 Signature of Registered Agent: [Signature] Printed Name: Tristan Emrich Title: Assistant Secretary Date: 12/30/2016

Delaware

The First State

Page 1

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

A handwritten signature in black ink, appearing to read "JBULLOCK", 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: CECIL J MATHEW
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST., RM 1015
DALLAS, TX 75202

Call Sign KNKN666	File Number
Radio Service CL - Cellular	
Market Numer CMA447	Channel Block A
Sub-Market Designator 0	

FCC Registration Number (FRN): 0003291192

Market Name Kentucky 5 - Barren										
<table border="1"> <tr> <th>Grant Date</th> <th>Effective Date</th> <th>Expiration Date</th> <th>Five Yr Build-Out Date</th> <th>Print Date</th> </tr> <tr> <td>08-30-2011</td> <td>08-31-2018</td> <td>10-01-2021</td> <td></td> <td></td> </tr> </table>	Grant Date	Effective Date	Expiration Date	Five Yr Build-Out Date	Print Date	08-30-2011	08-31-2018	10-01-2021		
Grant Date	Effective Date	Expiration Date	Five Yr Build-Out Date	Print Date						
08-30-2011	08-31-2018	10-01-2021								

Site Information:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
7	37-10-00.0 N	085-18-37.0 W	282.5	291.4	1062332
Address: 1210 Cane Valley Road (94238)					
City: Columbia County: ADAIR 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)	180.300	151.200	132.800	140.500	155.800	172.800	186.200	183.500	
Transmitting ERP (watts)	250.037	98.154	10.266	2.559	0.527	0.738	12.510	102.333	
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)	180.300	151.200	132.800	140.500	155.800	172.800	186.200	183.500	
Transmitting ERP (watts)	1.408	30.262	153.476	217.337	49.025	5.207	1.772	0.660	
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)	180.300	151.200	132.800	140.500	155.800	172.800	186.200	183.500	
Transmitting ERP (watts)	2.948	0.454	0.942	4.366	59.310	210.546	155.347	22.706	

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: KNKN666

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
8	36-43-12.0 N	084-28-13.0 W	409.3	91.1	1042231

Address: 100 Manor Circle (94260)

City: Whitley City County: MCCREARY 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)	123.400	147.100	135.800	109.800	103.700	143.600	127.300	165.300
Transmitting ERP (watts)	244.175	220.925	36.790	4.400	1.072	1.113	3.637	56.485

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)	123.400	147.100	135.800	109.800	103.700	143.600	127.300	165.300
Transmitting ERP (watts)	2.526	8.109	37.053	64.172	73.466	23.019	4.143	0.935

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)	123.400	147.100	135.800	109.800	103.700	143.600	127.300	165.300
Transmitting ERP (watts)	13.438	3.125	0.649	0.912	15.291	122.113	297.793	117.856

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
17	36-56-36.9 N	086-00-52.2 W	218.8	91.1	1063506

Address: 638 GRAHAM ROAD (87368)

City: GLASGOW County: BARREN 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)	76.900	78.700	69.100	74.800	91.600	116.000	101.800	89.500
Transmitting ERP (watts)	138.618	59.574	7.477	1.200	0.283	0.661	10.185	66.521

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)	76.900	78.700	69.100	74.800	91.600	116.000	101.800	89.500
Transmitting ERP (watts)	2.142	19.146	94.547	124.562	33.322	3.559	0.817	0.257

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)	76.900	78.700	69.100	74.800	91.600	116.000	101.800	89.500
Transmitting ERP (watts)	2.434	0.360	0.244	4.119	40.205	121.384	90.927	17.264

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN666

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
18	36-48-31.1 N	084-50-43.5 W	466.6	61.0	1004214

Address: 6565 MORRIS HILL ROAD (87856)

City: MONTICELLO County: WAYNE 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)	216.900	160.100	180.400	174.000	158.000	164.800	204.700	214.300
Transmitting ERP (watts)	159.083	70.430	5.874	0.769	0.334	0.371	9.558	76.538

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)	216.900	160.100	180.400	174.000	158.000	164.800	204.700	214.300
Transmitting ERP (watts)	1.547	33.128	166.094	241.154	55.397	5.855	1.952	0.731

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)	216.900	160.100	180.400	174.000	158.000	164.800	204.700	214.300
Transmitting ERP (watts)	1.611	0.321	0.293	4.972	42.968	145.725	111.912	13.218

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
19	36-53-52.1 N	084-47-02.5 W	353.6	94.2	1238700

Address: ROUTE 5, BOX 9516 (87058)

City: Monticello County: WAYNE 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)	153.300	160.500	119.100	104.500	62.300	124.200	155.000	148.700
Transmitting ERP (watts)	151.264	65.591	5.815	0.740	0.328	0.344	9.075	72.988

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)	153.300	160.500	119.100	104.500	62.300	124.200	155.000	148.700
Transmitting ERP (watts)	2.029	20.018	108.704	142.806	33.266	2.825	0.395	0.478

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)	153.300	160.500	119.100	104.500	62.300	124.200	155.000	148.700
Transmitting ERP (watts)	1.536	0.299	0.287	4.752	41.633	135.419	106.546	12.709

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN666

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
20	37-05-19.7 N	084-54-47.3 W	331.6	106.4	1232264

Address: 1101 PINE TOP ROAD (86918)

City: RUSSELL SPRINGS County: RUSSELL 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)	118.700	77.600	105.400	136.900	148.600	127.700	120.400	134.300
Transmitting ERP (watts)	106.145	47.603	4.827	0.278	0.215	0.233	6.909	51.527

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)	118.700	77.600	105.400	136.900	148.600	127.700	120.400	134.300
Transmitting ERP (watts)	2.313	23.146	119.606	157.272	35.853	3.353	0.454	0.536

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)	118.700	77.600	105.400	136.900	148.600	127.700	120.400	134.300
Transmitting ERP (watts)	1.748	0.347	0.313	5.295	45.951	158.160	122.299	14.137

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
22	36-45-21.5 N	085-03-35.7 W	353.6	78.6	1258266

Address: RR BOX 200 STATE ROUTE 90 (97275)

City: Albany County: CLINTON 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)	159.200	140.400	108.000	36.100	88.900	81.600	132.000	170.300
Transmitting ERP (watts)	61.485	218.225	164.915	26.293	2.922	0.471	0.954	4.500

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)	159.200	140.400	108.000	36.100	88.900	81.600	132.000	170.300
Transmitting ERP (watts)	1.000	4.591	60.220	229.906	159.544	23.590	2.912	0.466

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)	159.200	140.400	108.000	36.100	88.900	81.600	132.000	170.300
Transmitting ERP (watts)	7.041	2.307	0.511	1.072	23.419	142.307	232.641	64.969

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN666

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
23	36-44-36.2 N	085-08-34.1 W	350.5	78.0	1258265

Address: 127 North Cross (Route 6 Box 991) (94257)

City: Albany County: CLINTON 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)	181.800	142.800	72.800	100.300	157.000	167.400	157.200	193.400
Transmitting ERP (watts)	31.597	145.107	168.768	30.884	3.418	1.072	0.669	1.670

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)	181.800	142.800	72.800	100.300	157.000	167.400	157.200	193.400
Transmitting ERP (watts)	1.105	1.668	14.838	36.641	44.724	30.421	5.045	2.474

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)	181.800	142.800	72.800	100.300	157.000	167.400	157.200	193.400
Transmitting ERP (watts)	40.424	4.384	1.518	0.529	1.123	24.617	125.244	176.237

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
26	37-18-17.2 N	085-55-38.3 W	285.3	99.1	1200030

Address: 824 I CHILDRESS ROAD (37618)

City: Munfordville County: HART 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)	137.000	120.900	185.100	176.500	166.200	156.000	134.000	170.100
Transmitting ERP (watts)	87.882	116.157	30.423	3.076	0.288	0.394	1.136	15.107

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)	137.000	120.900	185.100	176.500	166.200	156.000	134.000	170.100
Transmitting ERP (watts)	0.236	4.016	34.037	111.204	87.767	11.936	0.954	0.231

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)	137.000	120.900	185.100	176.500	166.200	156.000	134.000	170.100
Transmitting ERP (watts)	0.893	0.228	0.217	2.143	29.130	110.300	94.526	17.072

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN666

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
27	36-41-54.0 N	085-41-07.0 W	286.5	90.2	1065560

Address: 403 MARTIN SUBDIVISION (87881)

City: TOMPKINSVILLE County: MONROE 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)	69.700	75.300	146.800	80.100	75.200	103.200	86.800	75.200
Transmitting ERP (watts)	271.841	109.386	7.417	0.800	0.553	0.537	18.630	138.505

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)	69.700	75.300	146.800	80.100	75.200	103.200	86.800	75.200
Transmitting ERP (watts)	1.721	17.109	89.000	121.386	26.164	2.348	0.328	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)	69.700	75.300	146.800	80.100	75.200	103.200	86.800	75.200
Transmitting ERP (watts)	1.247	0.244	0.229	4.118	34.693	116.367	90.021	10.295

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
28	37-21-17.2 N	085-52-24.7 W	352.0	83.8	1220496

Address: 2830 Frenchman's Knob Road (94236)

City: Bonnieville County: HART 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	191.000	195.200	238.600	217.000	184.800	226.800	216.700
Transmitting ERP (watts)	184.924	99.849	11.423	0.450	0.602	0.510	8.026	87.512

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	191.000	195.200	238.600	217.000	184.800	226.800	216.700
Transmitting ERP (watts)	2.115	37.767	246.087	328.098	100.148	5.709	0.676	0.788

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	191.000	195.200	238.600	217.000	184.800	226.800	216.700
Transmitting ERP (watts)	1.310	0.350	0.339	3.061	46.385	170.557	144.024	26.849

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN666

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
32	37-04-19.5 N	084-59-59.4 W	317.0	78.0	1257488

Address: 227 Horn Rd (94247)

City: Russell Springs County: RUSSELL 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)	149.200	77.200	79.700	105.800	146.300	99.500	80.900	89.500
Transmitting ERP (watts)	221.223	212.121	177.242	71.356	77.801	28.148	33.937	155.008

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)	149.200	77.200	79.700	105.800	146.300	99.500	80.900	89.500
Transmitting ERP (watts)	18.208	41.435	173.839	236.936	272.788	110.954	36.898	14.156

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)	149.200	77.200	79.700	105.800	146.300	99.500	80.900	89.500
Transmitting ERP (watts)	68.660	39.848	0.532	12.732	74.296	228.506	206.369	227.920

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
33	36-50-28.6 N	086-02-47.1 W	225.9	60.7	

Address: Austin Tracy Rd (115120)

City: Lucas County: BARREN 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)	91.800	79.300	63.800	43.400	95.100	66.500	80.300	112.900
Transmitting ERP (watts)	79.481	128.527	48.267	34.537	0.275	16.613	58.629	118.330

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)	91.800	79.300	63.800	43.400	95.100	66.500	80.300	112.900
Transmitting ERP (watts)	16.424	105.957	212.448	227.867	141.232	41.336	29.497	11.208

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)	91.800	79.300	63.800	43.400	95.100	66.500	80.300	112.900
Transmitting ERP (watts)	3.736	0.847	2.276	7.728	35.347	59.316	65.492	20.964

Antenna: 4

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	91.800	79.300	63.700	43.400	95.100	66.500	80.300	112.900
Transmitting ERP (watts)	80.215	129.717	48.867	34.856	0.278	16.767	59.174	119.427

Antenna: 5

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	91.800	79.300	63.700	43.400	95.100	66.500	80.300	112.900
Transmitting ERP (watts)	16.576	106.934	215.086	229.984	142.541	41.717	29.770	11.312

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN666

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
33	36-50-28.6 N	086-02-47.1 W	225.9	60.7	

Address: Austin Tracy Rd (115120)
City: Lucas County: BARREN State: KY Construction Deadline:

Antenna: 6
Maximum Transmitting ERP in Watts: 140.820
Azimuth(from true north) 0 45 90 135 180 225 270 315
Antenna Height AAT (meters) 91.800 79.300 63.700 43.400 95.100 66.500 80.300 112.900
Transmitting ERP (watts) 3.770 0.854 2.304 7.800 35.674 59.863 66.098 21.158

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
34	36-46-44.5 N	084-56-33.7 W	396.2	78.0	1258267

Address: 9096 W. Hwy 90 (94262)
City: Monticello County: WAYNE 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) 194.500 173.000 138.200 103.300 102.200 140.500 166.900 201.300
Transmitting ERP (watts) 147.841 143.877 130.052 39.637 24.482 1.946 8.038 54.683

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) 194.500 173.000 138.200 103.300 102.200 140.500 166.900 201.300
Transmitting ERP (watts) 0.742 5.202 57.406 186.618 115.460 13.939 2.131 0.396

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) 194.500 173.000 138.200 103.300 102.200 140.500 166.900 201.300
Transmitting ERP (watts) 27.223 19.327 10.778 15.109 86.367 155.385 168.892 88.819

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
35	36-39-45.3 N	084-26-36.2 W	428.2	79.9	1275397

Address: 6135 Hwy 1651 (115765)
City: Pine Knot County: MCCREARY 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) 132.500 143.700 119.600 95.500 88.700 114.200 161.300 166.800
Transmitting ERP (watts) 69.450 261.545 232.470 44.008 2.017 0.559 0.530 4.304

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) 132.500 143.700 119.600 95.500 88.700 114.200 161.300 166.800
Transmitting ERP (watts) 0.210 0.184 2.662 25.143 50.189 30.009 3.791 0.206

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN666

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
35	36-39-45.3 N	084-26-36.2 W	428.2	79.9	1275397

Address: 6135 Hwy 1651 (115765)

City: Pine Knot County: MCCREARY State: KY Construction Deadline:

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)	132.500	143.700	119.600	95.500	88.700	114.200	161.300	166.800
Transmitting ERP (watts)	113.680	6.615	0.792	0.868	2.269	39.368	258.605	358.864

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
36	36-50-27.1 N	084-28-44.2 W	425.5	79.6	1233359

Address: 165 HWY 90 (114139)

City: Parkers Lake County: MCCREARY 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)	185.500	163.600	170.800	152.900	106.200	178.000	165.700	183.000
Transmitting ERP (watts)	23.185	14.817	1.670	0.153	0.104	0.150	1.655	13.513

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)	185.500	163.600	170.800	152.900	106.200	178.000	165.700	183.000
Transmitting ERP (watts)	2.683	26.605	140.903	189.301	44.170	3.813	0.542	0.629

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)	185.500	163.600	170.800	152.900	106.200	178.000	165.700	183.000
Transmitting ERP (watts)	2.063	0.405	0.373	6.243	54.676	179.706	144.196	16.857

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
37	36-41-51.7 N	085-07-19.1 W	303.9	78.0	1273817

Address: 399 Daylton Road (112920)

City: Albany County: CLINTON 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)	103.500	53.600	30.000	64.200	100.300	112.300	94.400	76.300
Transmitting ERP (watts)	255.895	112.531	6.303	1.065	0.524	0.886	15.778	134.111

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)	103.500	53.600	30.000	64.200	100.300	112.300	94.400	76.300
Transmitting ERP (watts)	1.151	13.278	68.092	80.326	20.259	1.984	0.205	0.284

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN666

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
37	36-41-51.7 N	085-07-19.1 W	303.9	78.0	1273817

Address: 399 Daylton Road (112920)

City: Albany County: CLINTON State: KY Construction Deadline:

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)	103.500	53.600	30.000	64.200	100.300	112.300	94.400	76.300
Transmitting ERP (watts)	0.327	0.106	0.101	1.174	12.741	41.443	34.130	5.644

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
38	36-44-13.0 N	085-42-10.0 W	309.7	91.1	1042225

Address: 3151 EDMONTON ROAD (94259)

City: TOMPKINSVILLE County: MONROE 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)	111.100	109.700	147.100	108.800	126.000	145.900	125.000	125.900
Transmitting ERP (watts)	189.524	72.806	7.444	1.950	0.393	0.557	9.583	77.626

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)	111.100	109.700	147.100	108.800	126.000	145.900	125.000	125.900
Transmitting ERP (watts)	1.067	23.007	114.837	166.790	36.523	3.864	1.339	0.493

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)	111.100	109.700	147.100	108.800	126.000	145.900	125.000	125.900
Transmitting ERP (watts)	2.199	0.335	0.702	3.359	45.136	159.373	117.688	16.866

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
39	36-38-51.6 N	085-17-33.1 W	317.0	60.7	

Address: 5163 State Park (117828)

City: Cumberland County: CUMBERLAND 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)	100.500	86.500	93.600	115.600	123.000	167.100	133.100	121.800
Transmitting ERP (watts)	24.683	224.514	184.090	16.413	0.520	0.462	0.466	0.469

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)	100.500	86.500	93.600	115.600	123.000	167.100	133.100	121.800
Transmitting ERP (watts)	46.321	0.611	0.527	0.529	0.541	7.711	140.237	265.546

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN666

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
40	37-11-42.5 N	085-57-13.0 W	267.6	99.1	1224165

Address: 1515 FISHER RIDGE ROAD (37620)

City: Horse Cave County: HART 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)	148.700	170.000	148.400	148.400	138.900	116.100	137.500	147.400
Transmitting ERP (watts)	96.574	101.465	19.855	1.861	0.214	0.322	2.056	21.126

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)	148.700	170.000	148.400	148.400	138.900	116.100	137.500	147.400
Transmitting ERP (watts)	8.514	101.153	307.468	229.726	25.253	1.925	0.630	0.630

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)	148.700	170.000	148.400	148.400	138.900	116.100	137.500	147.400
Transmitting ERP (watts)	0.226	0.222	3.795	33.295	109.116	83.424	11.320	0.928

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
41	37-01-03.9 N	085-54-42.3 W	254.8	68.6	1230168

Address: 170 Robert Bishop Lane (94244)

City: Glasgow County: BARREN 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)	93.000	83.300	56.400	66.300	91.100	106.300	92.700	90.500
Transmitting ERP (watts)	104.518	139.218	43.033	2.862	0.290	0.325	1.008	15.797

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)	93.000	83.300	56.400	66.300	91.100	106.300	92.700	90.500
Transmitting ERP (watts)	0.395	3.203	50.041	189.424	165.261	28.863	1.290	0.398

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)	93.000	83.300	56.400	66.300	91.100	106.300	92.700	90.500
Transmitting ERP (watts)	11.785	0.490	0.619	0.543	8.652	98.226	207.121	111.304

Control Points:

Control Pt. No. 1

Address: 124 South Keeneland Drive (Suite 103)

City: RICHMOND County: MADISON State: KY Telephone Number: (859)544-4804

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN666

File Number:

Print Date:

Waivers/Conditions:

NONE

UNCLASSIFIED

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

Call Sign WPOI255	File Number
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

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

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:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
---------------	--------------------	--------------------------	------------------------------	---------------

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

Call Sign WPOK659	File Number 0008716070
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

Grant Date 09-12-2019	Effective Date 09-12-2019	Expiration Date 09-29-2029	Print Date 09-13-2019
Market Number BTA423	Channel Block C	Sub-Market Designator 1	
Market Name Somerset, KY			
1st Build-out Date 09-29-2004	2nd Build-out Date 09-29-2009	3rd Build-out Date	4th Build-out Date

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: WPOK659

File Number: 0008716070

Print Date: 09-13-2019

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
---------------	--------------------	--------------------------	------------------------------	---------------

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

Call Sign WPXT205	File Number
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

Grant Date 06-02-2015	Effective Date 08-31-2018	Expiration Date 06-23-2025	Print Date
Market Number MTA026	Channel Block A	Sub-Market Designator 8	
Market Name Louisville-Lexington-Evansville			
1st Build-out Date 06-23-2000	2nd Build-out Date 06-23-2005	3rd Build-out Date	4th Build-out Date

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: WPXT205

File Number:

Print Date:

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).

Copyright © 2007

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WPXT205

File Number:

Print Date:

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
---------------	--------------------	--------------------------	------------------------------	---------------

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

Call Sign WQFA872	File Number
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

Grant Date 04-14-2017	Effective Date 08-31-2018	Expiration Date 04-28-2027	Print Date
Market Number BTA423	Channel Block E	Sub-Market Designator 7	
Market Name Somerset, KY			
1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

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: WQFA872

File Number:

Print Date:

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
---------------	--------------------	--------------------------	------------------------------	---------------

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

Call Sign WQGA818	File Number
Radio Service AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

FCC Registration Number (FRN): 0003291192

Grant Date 11-29-2006	Effective Date 08-31-2018	Expiration Date 11-29-2021	Print Date
Market Number CMA447	Channel Block A	Sub-Market Designator 0	
Market Name Kentucky 5 - Barren			
1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

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: WQGA818

File Number:

Print Date:

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
---------------	--------------------	--------------------------	------------------------------	---------------

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

Table with Call Sign (WQGD755), File Number, and Radio Service (AW - AWS (1710-1755 MHz and 2110-2155 MHz)).

FCC Registration Number (FRN): 0003291192

Table with columns: Grant Date, Effective Date, Expiration Date, Print Date, Market Number, Channel Block, Sub-Market Designator, Market Name, 1st Build-out Date, 2nd Build-out Date, 3rd Build-out Date, 4th Build-out Date.

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.

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.

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).

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WQGD755

File Number:

Print Date:

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status
--------	-------------	-------------------	-----------------------	--------

700 MHz Relicensed Area Information

EXHIBIT B

SITE DEVELOPMENT PLAN:

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

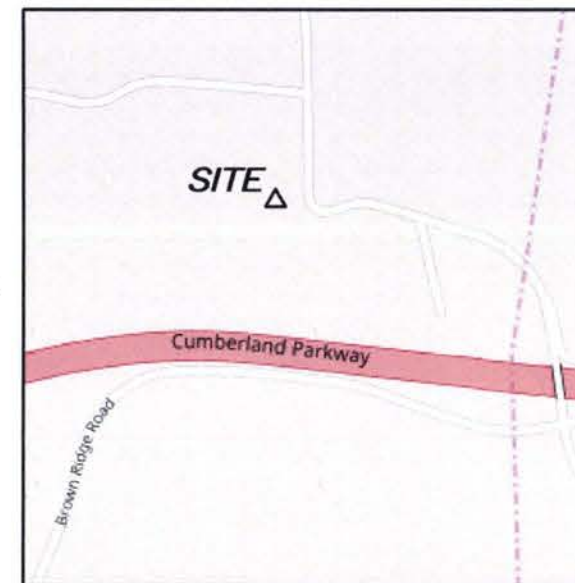


PARENT PARCEL

OWNER: EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST;
 KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST
 SITE ADDRESS: RUSSELL SPRINGS, KY 42642
 PARCEL ID: 074-00-00-001.32
 AREA: 26.68 ACRES (PER TAX ASSESSOR)
 ALL ZONING INFORMATION SHOULD BE VERIFIED WITH THE PROPER ZONING OFFICIALS
 REFERENCE: DEED BOOK 202 PAGE 643
 PLAT CABINET 2 SLIDE 490

GPS NOTES

THE FOLLOWING GPS STATISTICS UPON WHICH THIS SURVEY IS BASED HAVE BEEN PRODUCED AT THE 95% CONFIDENCE LEVEL:
 POSITIONAL ACCURACY: 0.01 FEET (HORZ) 0.13 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: 02-03-2020
 DATUM / EPOCH: NAD_83(2011)(EPOCH:2010.0000)
 PUBLISHED / FIXED CONTROL USE: N/A
 GEOID MODEL: 18
 COMBINED GRID FACTOR(S): 0.99995084 CENTERED ON THE GPS BASE POINT AS SHOWN HEREON.
 CONVERGENCE ANGLE: 00°30'52.28"



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.

THE FIELD DATA UPON WHICH THIS SPECIFIC PURPOSE SURVEY IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 10,000+ FEET AND AN ANGULAR ERROR OF 5.0" PER ANGLE POINT AND WAS NOT ADJUSTED FOR CLOSURE.

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 ± 0.5'. 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 (AREA OF MINIMAL FLOOD HAZARD). COMMUNITY PANEL NO. : 21207C0125C DATED: 08/19/2010.

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.

TITLE EXCEPTIONS

THIS SURVEY WAS COMPLETED WITH THE AID OF TITLE WORK PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, ISSUE DATE OF JANUARY 27, 2020, SCOPE OF SEARCH JUNE 7, 1939 THROUGH JANUARY 22, 2020, BEING ORDER NO. 30746822, FOR THE PARENT PARCEL, TO DETERMINE THE IMPACTS OF EXISTING TITLE EXCEPTIONS.

2. LEASE AGREEMENT DATED SEPTEMBER 16, 1975, BY AND BETWEEN LEWIS S. WILSON AND LURA WILSON AND HOY C. DAUSE AND VIVIAN DAUSE RECORDED ON OCTOBER 14, 1975 IN DEED BOOK 73, PAGE 403.

[THIS ITEM DESCRIBES THE WEST LINE OF THE PARENT PARCEL]

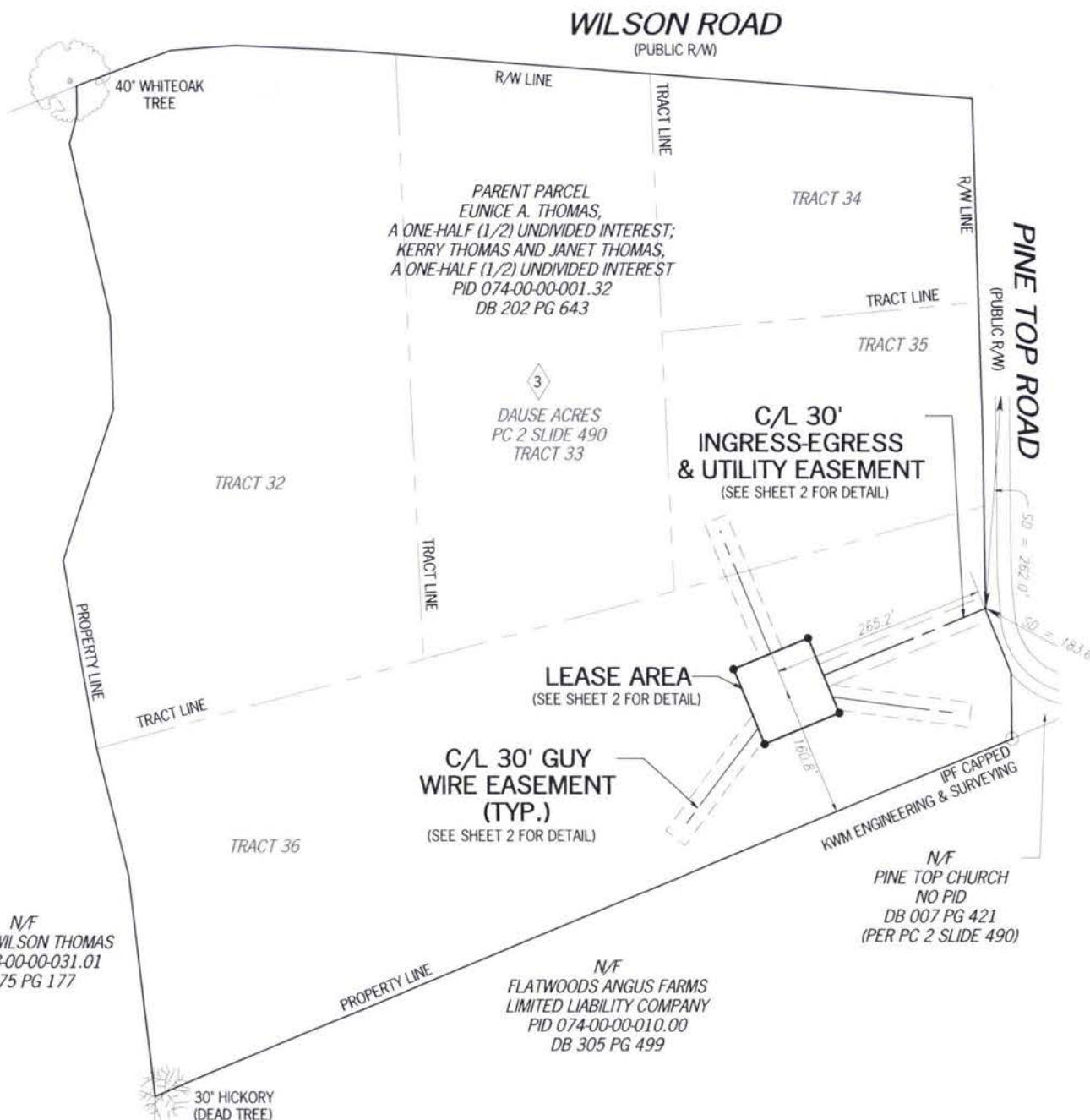
3. MATTERS AS SHOWN AND NOTED ON PLAT RECORDED IN PLAT BOOK 2, PAGE 490.

[PLOTTABLE ITEMS ARE SHOWN HEREON]

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 DATE 02/11/2020
 G. DARRELL TAYLOR, PLS 4179 DATE

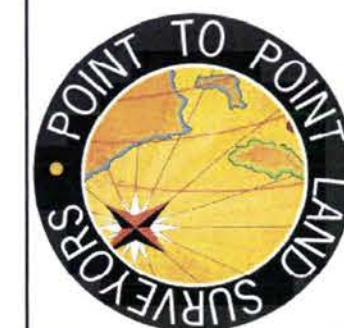


- LEGEND**
- POB POINT OF BEGINNING
 - POC POINT OF COMMENCEMENT
 - IPS IRON PIN SET
 - IPF IRON PIN FOUND
 - CMF CONCRETE MONUMENT FOUND
 - UP UTILITY POLE
 - N/F NOW OR FORMERLY
 - R/W RIGHT-OF-WAY
 - TBM TEMPORARY BENCH MARK
 - SD SIGHT DISTANCE
 - GW GUY WIRE
 - EP EDGE OF PAVEMENT
 - CLF CHAIN LINK FENCE

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

NO.	DATE	REVISION

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



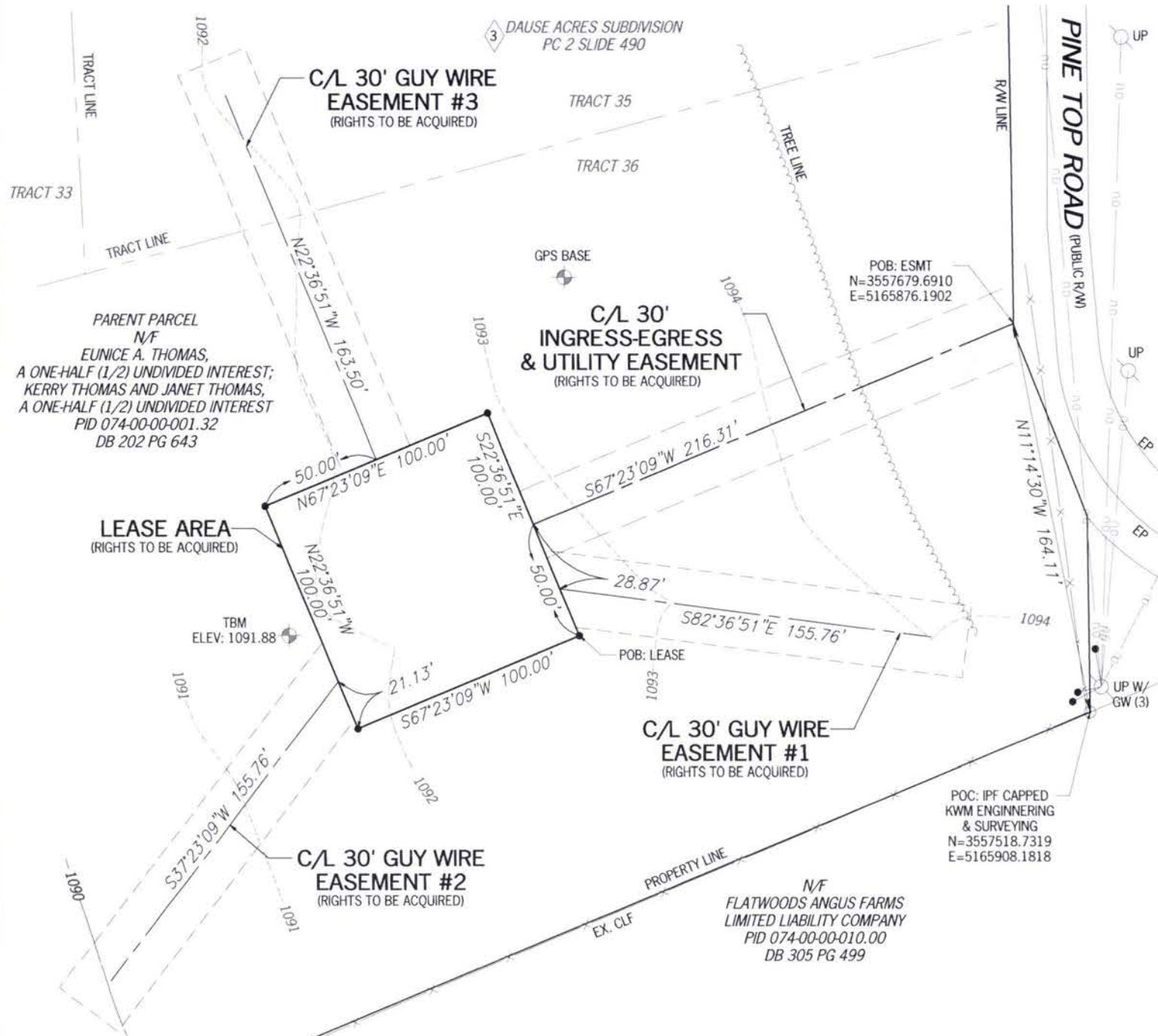
SPECIFIC PURPOSE SURVEY PREPARED FOR:



PINE TOP ROAD
 SITE NO. KYLEX2037
 RUSSELL COUNTY, KENTUCKY

DRAWN BY: AKG SHEET: 1 OF 3
 CHECKED BY: JKL
 APPROVED: D. MILLER
 DATE: FEBRUARY 11, 2020
 P2P JOB #: 2021136KY





SITE INFORMATION

LEASE AREA = 10,000 SQUARE FEET (0.2296 ACRES)
 LATITUDE = 37°05'25.25" (NAD 83) (37.090347°)
 LONGITUDE = -84°54'43.81" (NAD 83) (-84.912169°)
 AT CENTER OF LEASE AREA
 ELEVATION AT CENTER OF LEASE AREA = 1092.3' A.M.S.L.

30' INGRESS-EGRESS & UTILITY EASEMENT

TOGETHER WITH A 30-FOOT WIDE INGRESS-EGRESS AND UTILITY EASEMENT (LYING 15 FEET EACH SIDE OF CENTERLINE) LYING AND BEING IN RUSSELL COUNTY, KENTUCKY, AND BEING PART OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643, RUSSELL COUNTY RECORDS, RUSSELL COUNTY, KENTUCKY, AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A REBAR FOUND (CAPPED: KWM ENGINEERING AND SURVEYING) AT THE SOUTHEAST CORNER OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643 AND HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557518.7319, E: 5165908.1818; THENCE RUNNING A LONG A TIE LINE, NORTH 11°14'30" WEST, 164.11 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF PINE TOP ROAD HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557679.6910, E: 5165876.1902 AND THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, SOUTH 67°23'09" WEST, 216.31 FEET TO THE ENDING AT A POINT ON THE LEASE AREA.

BEARINGS ARE BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

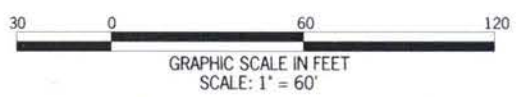
LEASE AREA

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN RUSSELL COUNTY, KENTUCKY, AND BEING PART OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643, RUSSELL COUNTY RECORDS, RUSSELL COUNTY, KENTUCKY, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A REBAR FOUND (CAPPED: KWM ENGINEERING AND SURVEYING) AT THE SOUTHEAST CORNER OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643 AND HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557518.7319, E: 5165908.1818; THENCE RUNNING A LONG A TIE LINE, NORTH 11°14'30" WEST, 164.11 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF PINE TOP ROAD HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557679.6910, E: 5165876.1902; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, SOUTH 67°23'09" WEST, 216.31 FEET TO A POINT ON THE LEASE AREA; THENCE RUNNING ALONG SAID LEASE AREA, SOUTH 22°36'51" EAST, 50.00 FEET TO A POINT AND THE TRUE POINT OF BEGINNING; THENCE, SOUTH 67°23'09" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 22°36'51" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 67°23'09" EAST, 100.00 FEET TO A POINT; THENCE, SOUTH 22°36'51" EAST, 100.00 FEET TO A POINT; AND THE POINT OF BEGINNING.

BEARINGS ARE BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

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



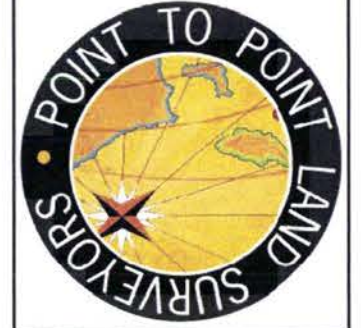
LEGEND

POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
IPS	IRON PIN SET
IPF	IRON PIN FOUND
CMF	CONCRETE MONUMENT FOUND
UP	UTILITY POLE
N/F	NOW OR FORMERLY
R/W	RIGHT-OF-WAY
TBM	TEMPORARY BENCH MARK
SD	SIGHT DISTANCE
GW	GUY WIRE
EP	EDGE OF PAVEMENT
CLF	CHAIN LINK FENCE

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

NO.	DATE	REVISION

* 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:

Uniti
 Towers

PINE TOP ROAD

SITE NO. KYLEX2037

RUSSELL COUNTY, KENTUCKY

DRAWN BY: AKG

CHECKED BY: JKL

APPROVED: D. MILLER

DATE: FEBRUARY 11, 2020

P2P JOB #: 200136KY

SHEET:

2

OF 3

PARENT PARCEL

(AS PROVIDED PER ORDER NO. 30746822)

PROPERTY LOCATED IN RUSSELL COUNTY, KENTUCKY

THE FOLLOWING DESCRIBED REAL PROPERTY, LYING AND BEING IN RUSSELL COUNTY, KENTUCKY, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS, TO-WIT:

BEING TRACTS NO. 32, 33, 34, 35, AND 36 OF DAUSE ACRES. FOR A MORE COMPLETE DESCRIPTION OF SAME, REFERENCE IS MADE TO PLAT OF DAUSE ACRES RECORDED IN PLAT CABINET 2, SLIDE 490, RUSSELL COUNTY CLERK'S OFFICE, JAMESTOWN. BY SURVEY OF TROY MILLER, RLS#3344, DATED 10/22/98.

AND BEING THE SAME PROPERTY CONVEYED TO EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST AND KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST FROM GARRY BANKS AND RICHELLE BANKS BY GENERAL WARRANTY DEED DATED MARCH 27, 2002 AND RECORDED MARCH 29, 2002 IN DEED BOOK 202, PAGE 643.

TAX PARCEL NO. 074-00-00-001.32

LEGAL DESCRIPTION SHEET

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

NO.	DATE	REVISION

30' GUY WIRE EASEMENT #1

TOGETHER WITH A 30-FOOT WIDE GUY WIRE EASEMENT (LYING 15 FEET EACH SIDE OF CENTERLINE AND 15 FEET PAST THE TERMINATION POINT) LYING AND BEING IN RUSSELL COUNTY, KENTUCKY, AND BEING PART OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643, RUSSELL COUNTY RECORDS, RUSSELL COUNTY, KENTUCKY, AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A REBAR FOUND (CAPPED: KWM ENGINEERING AND SURVEYING) AT THE SOUTHEAST CORNER OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643 AND HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557518.7319, E: 5165908.1818; THENCE RUNNING A LONG A TIE LINE, NORTH 11°14'30" WEST, 164.11 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF PINE TOP ROAD HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557679.6910, E: 5165876.1902; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, SOUTH 67°23'09" WEST, 216.31 FEET TO A POINT ON THE LEASE AREA; THENCE RUNNING ALONG SAID LEASE AREA, SOUTH 22°36'51" EAST, 28.87 FEET TO A POINT AND THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID LEASE AREA AND RUNNING, SOUTH 82°36'51" EAST, 155.76 FEET TO THE ENDING AT A POINT.

BEARINGS ARE BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

30' GUY WIRE EASEMENT #3

TOGETHER WITH A 30-FOOT WIDE GUY WIRE EASEMENT (LYING 15 FEET EACH SIDE OF CENTERLINE AND 15 FEET PAST THE TERMINATION POINT) LYING AND BEING IN RUSSELL COUNTY, KENTUCKY, AND BEING PART OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643, RUSSELL COUNTY RECORDS, RUSSELL COUNTY, KENTUCKY, AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A REBAR FOUND (CAPPED: KWM ENGINEERING AND SURVEYING) AT THE SOUTHEAST CORNER OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643 AND HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557518.7319, E: 5165908.1818; THENCE RUNNING A LONG A TIE LINE, NORTH 11°14'30" WEST, 164.11 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF PINE TOP ROAD HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557679.6910, E: 5165876.1902; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, SOUTH 67°23'09" WEST, 216.31 FEET TO A POINT ON THE LEASE AREA; THENCE RUNNING ALONG SAID LEASE AREA, SOUTH 22°36'51" EAST, 50.00 FEET TO A POINT; THENCE, SOUTH 67°23'09" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 22°36'51" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 67°23'09" EAST, 50.00 FEET TO THE POINT OF BEGINNING; THENCE LEAVING SAID LEASE AREA AND RUNNING, NORTH 22°36'51" WEST, 163.50 FEET TO THE ENDING AT A POINT.

BEARINGS ARE BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

30' GUY WIRE EASEMENT #2

TOGETHER WITH A 30-FOOT WIDE GUY WIRE EASEMENT (LYING 15 FEET EACH SIDE OF CENTERLINE AND 15 FEET PAST THE TERMINATION POINT) LYING AND BEING IN RUSSELL COUNTY, KENTUCKY, AND BEING PART OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643, RUSSELL COUNTY RECORDS, RUSSELL COUNTY, KENTUCKY, AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A REBAR FOUND (CAPPED: KWM ENGINEERING AND SURVEYING) AT THE SOUTHEAST CORNER OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643 AND HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557518.7319, E: 5165908.1818; THENCE RUNNING A LONG A TIE LINE, NORTH 11°14'30" WEST, 164.11 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF PINE TOP ROAD HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557679.6910, E: 5165876.1902; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, SOUTH 67°23'09" WEST, 216.31 FEET TO A POINT ON THE LEASE AREA; THENCE RUNNING ALONG SAID LEASE AREA, SOUTH 22°36'51" EAST, 50.00 FEET TO A POINT; THENCE, SOUTH 67°23'09" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 22°36'51" WEST, 21.13 FEET TO A POINT AND THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID LEASE AREA AND RUNNING, SOUTH 37°23'09" WEST, 155.76 FEET TO THE ENDING AT A POINT.

BEARINGS ARE BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

* 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) pointtopointsurvey.com



SPECIFIC PURPOSE SURVEY PREPARED FOR:



PINE TOP ROAD

**SITE NO.
KYLEX2037**

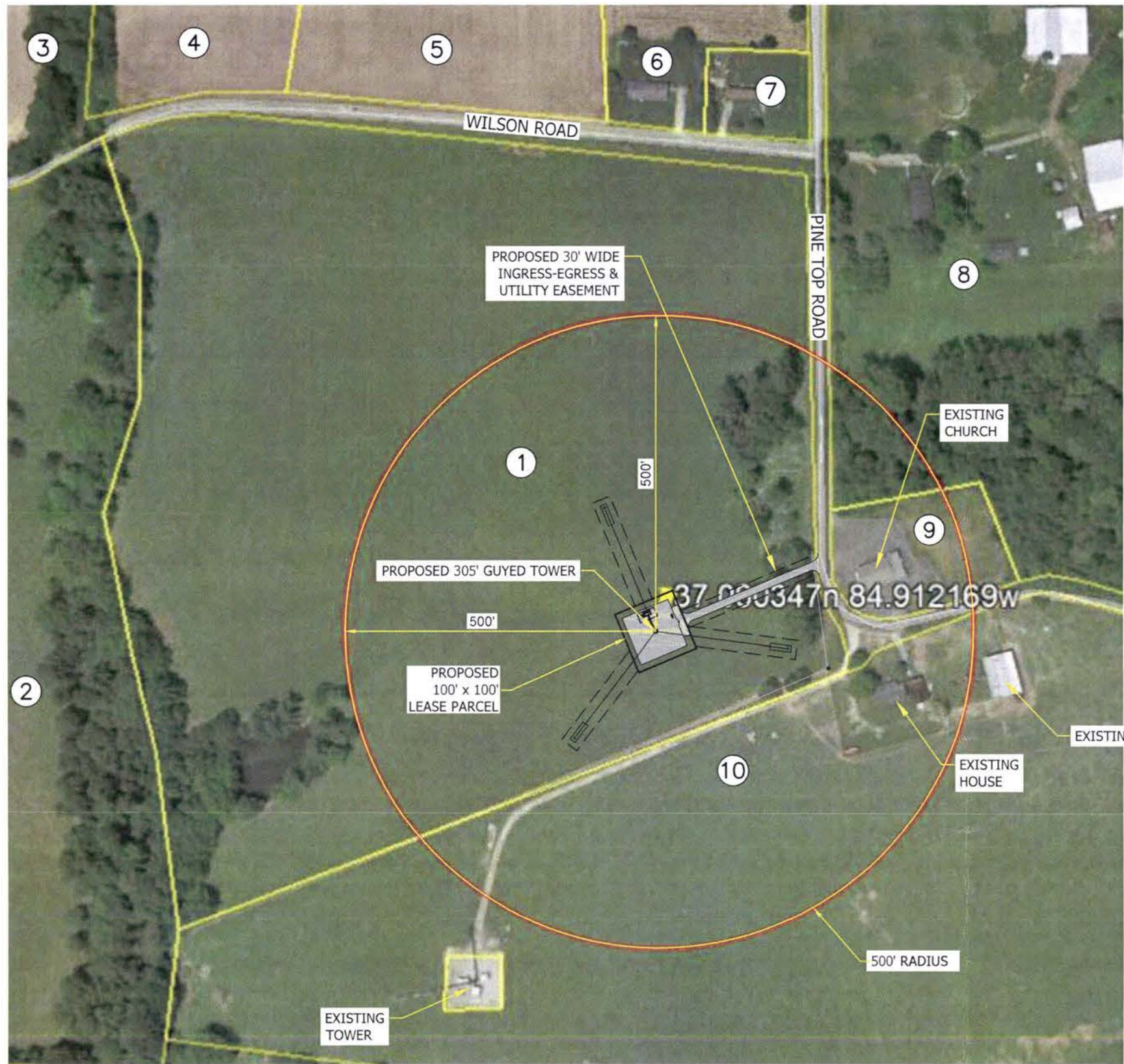
RUSSELL COUNTY,
KENTUCKY

DRAWN BY: AKG
 CHECKED BY: JKL
 APPROVED: D. MILLER

DATE: FEBRUARY 11, 2020

P2P JOB #: 200136KY

SHEET:
3
OF 3



#	OWNER	ADDRESS	PID	REF
1	EUNICE WILSON THOMAS	2895 HWY 910 RUSSELL SPRINGS, KY 42642	074-00-00-001.32	DB 202 PG 643
2	EUNICE WILSON THOMAS	2895 HWY 910 RUSSELL SPRINGS, KY 42642	068-00-00-031.01	DB 75 PG 77
3	HOWARD & TERRIE WILSON	216 ARMILOUS ROAD RUSSELL SPRINGS, KY 42642	068-00-00-031.00	DB 324 PG 159
4	BECKHAM & TERRIE WILSON	216 ARMILOUS ROAD RUSSELL SPRINGS, KY 42642	074-00-00-001.31	DB 173 PG 007
5	BECKHAM & TERRIE WILSON	216 ARMILOUS ROAD RUSSELL SPRINGS, KY 42642	074-00-00-001.29	DB 215 PG 095
6	DAVID & LESA McDONALD	P.O. BOX 1401 RUSSELL SPRINGS, KY 42642	074-00-00-001.25	DB 172 PG 679
7	AVERT ONEAL WADE	676 PINE TOP ROAD RUSSELL SPRINGS, KY 42642	074-00-00-001.27	DB 231 PG 369
8	AVERT ONEAL WADE	676 PINE TOP ROAD RUSSELL SPRINGS, KY 42642	074-00-00-007.00	DB 24 PG 21
9	CHURCH OF CHRIST PINETOP	PINETOP ROAD RUSSELL SPRINGS, KY 42642	074-00-00-009.00	DB 007 PG 421
10	FLATWOODS ANGUS FARMS LLC	487 KY 80 WINDSOR, KY 42565	074-00-00-010.00	DB 305 PG 499

- NOTE:
1. PVA INFORMATION WAS OBTAINED ON 7/24/2020 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.



UNITI TOWERS
 PINE TOP ROAD
 FA# 15147585
 PACE# MRTNK047962
 PT# 10115668
 1011 PINE TOP ROAD
 RUSSELL SPRINGS, KY 42642
 RUSSELL COUNTY
 PROPOSED 305' GUYED TOWER

PROJECT NO: G0137341.00
 CHECKED BY: MAS

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
A	08/24/20	DLS	ZONING DRAWINGS
0	08/28/20	DLS	ZONING DRAWINGS

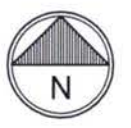
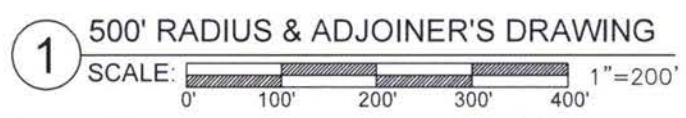
B&T ENGINEERING, INC.
 COA 4011
 Expires 12/31/20



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

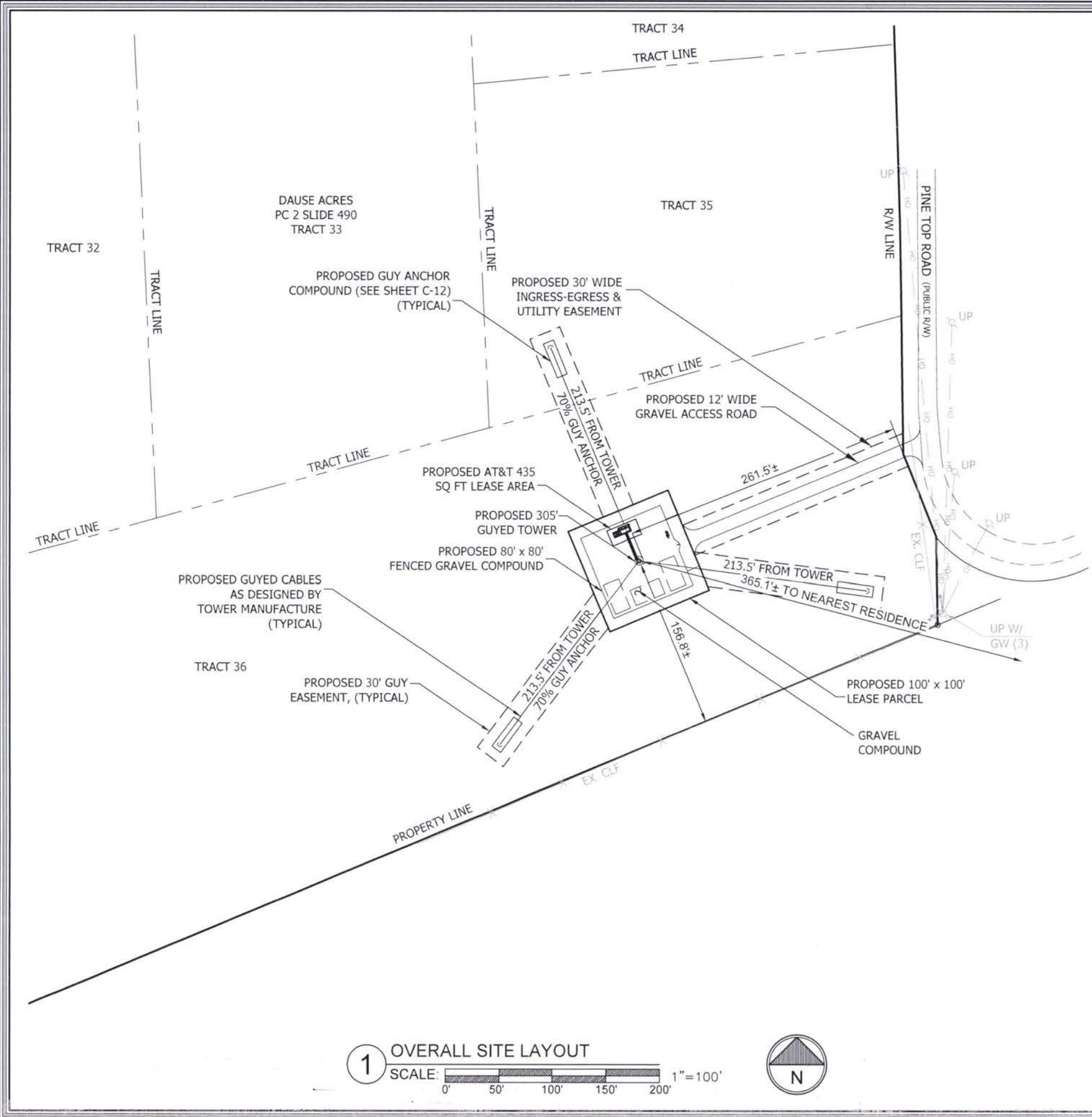
SHEET NUMBER:
C-1



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



137341_Pine Top Rd_ZD's (0).dwg - User: astoren - Aug 28, 2020 - 11:14am



NOTES:

1. TOWER LATITUDE, LONGITUDE & ELEVATION MEET FAA"1-A" ACCURACY REQUIREMENTS.
2. CENTER OF TOWER:

LATITUDE: NORTH 37°05'25.25" (37.090347) NAD 83
LONGITUDE: WEST -84°54'4.81" (-84.912169) NAD 83
GROUND ELEVATION @ 1092.3' A.M.S.L. NAVD 88
3. THE APPROXIMATE PERPENDICULAR DISTANCES FROM THE OUTER EDGE OF THE PROPOSED TOWER TO PARENT TRACT NEAREST PROPERTY LINE ARE AS FOLLOWS:

NORTHWEST:
SOUTHWEST: 160.8'±
SOUTHEAST: 265.2'±
NORTHEAST: 265.2'±



UNITI TOWERS
PINE TOP ROAD
 FA# 15147585
 PACE# MRINK047962
 PT# 10115668
 1011 PINE TOP ROAD
 RUSSELL SPRINGS, KY 42642
 RUSSELL COUNTY
 PROPOSED 305' GUYED TOWER

PROJECT NO: G0137341.00
 CHECKED BY: MAS

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
A	08/24/20	DLS	ZONING DRAWINGS
0	08/28/20	DLS	ZONING DRAWINGS

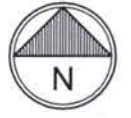
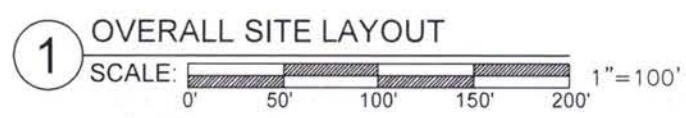
B&T ENGINEERING, INC.
 COA 4011
 Expires 12/31/20



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.

OVERALL SITE LAYOUT

SHEET NUMBER:
C-2



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



I:\37341_PINE TOP RD_ZIP\01.dwg - Sheet C-2 - User: btopham - Aug 26, 2020 - 11:15am



UNITI TOWERS
 PINE TOP ROAD
 FA# 15147585
 PACE# MRINK047962
 PT# 10115668
 1011 PINE TOP ROAD
 RUSSELL SPRINGS, KY 42642
 RUSSELL COUNTY
 PROPOSED 305' GUYED TOWER

PROJECT NO: G0137341.00
 CHECKED BY: MAS

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
A	08/24/20	DLS	ZONING DRAWINGS
0	08/28/20	DLS	ZONING DRAWINGS

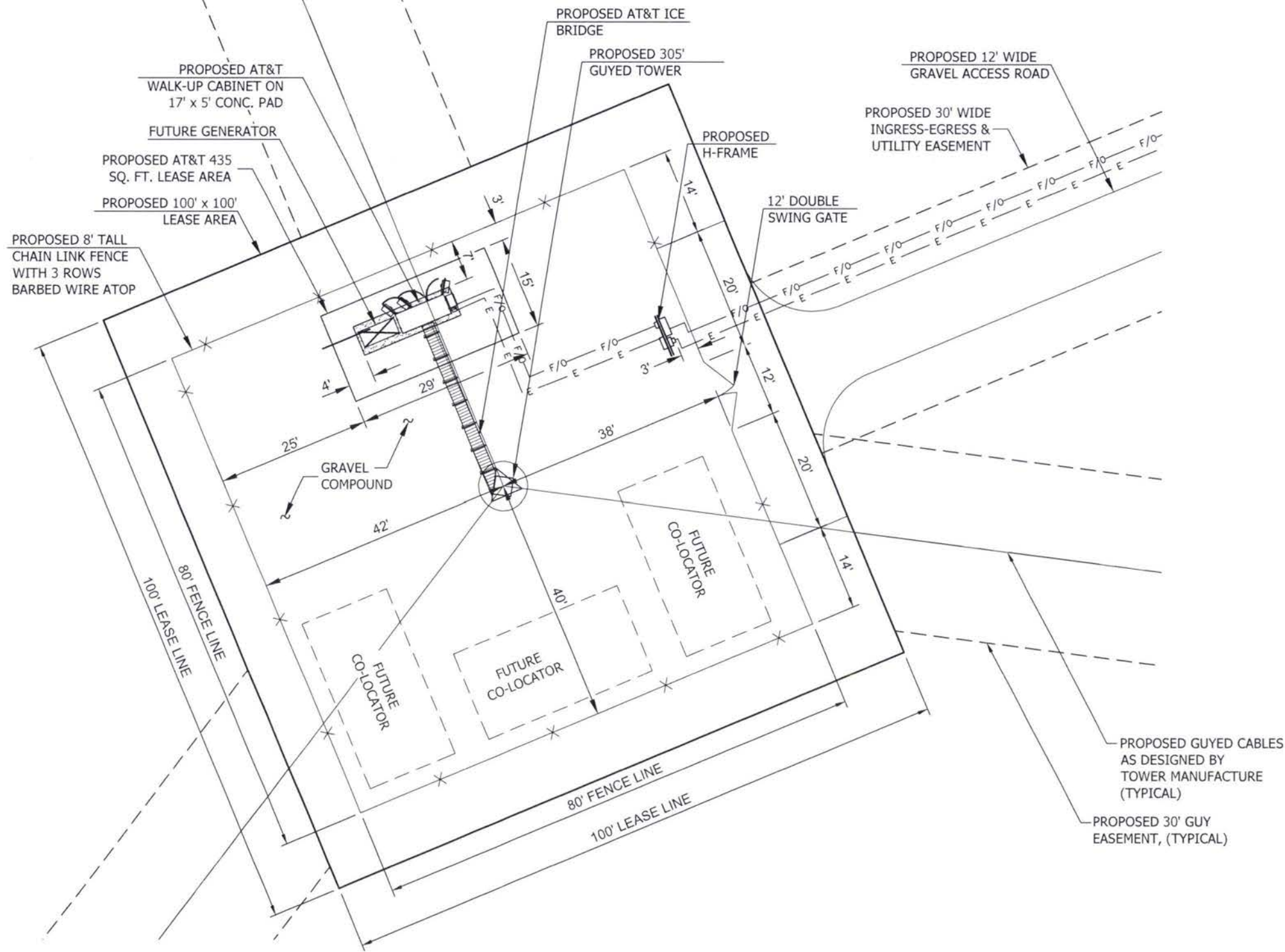
B&T ENGINEERING, INC.
 COA 4011
 Expires 12/31/20



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.

ENLARGED
 COMPOUND LAYOUT

SHEET NUMBER:
C-3



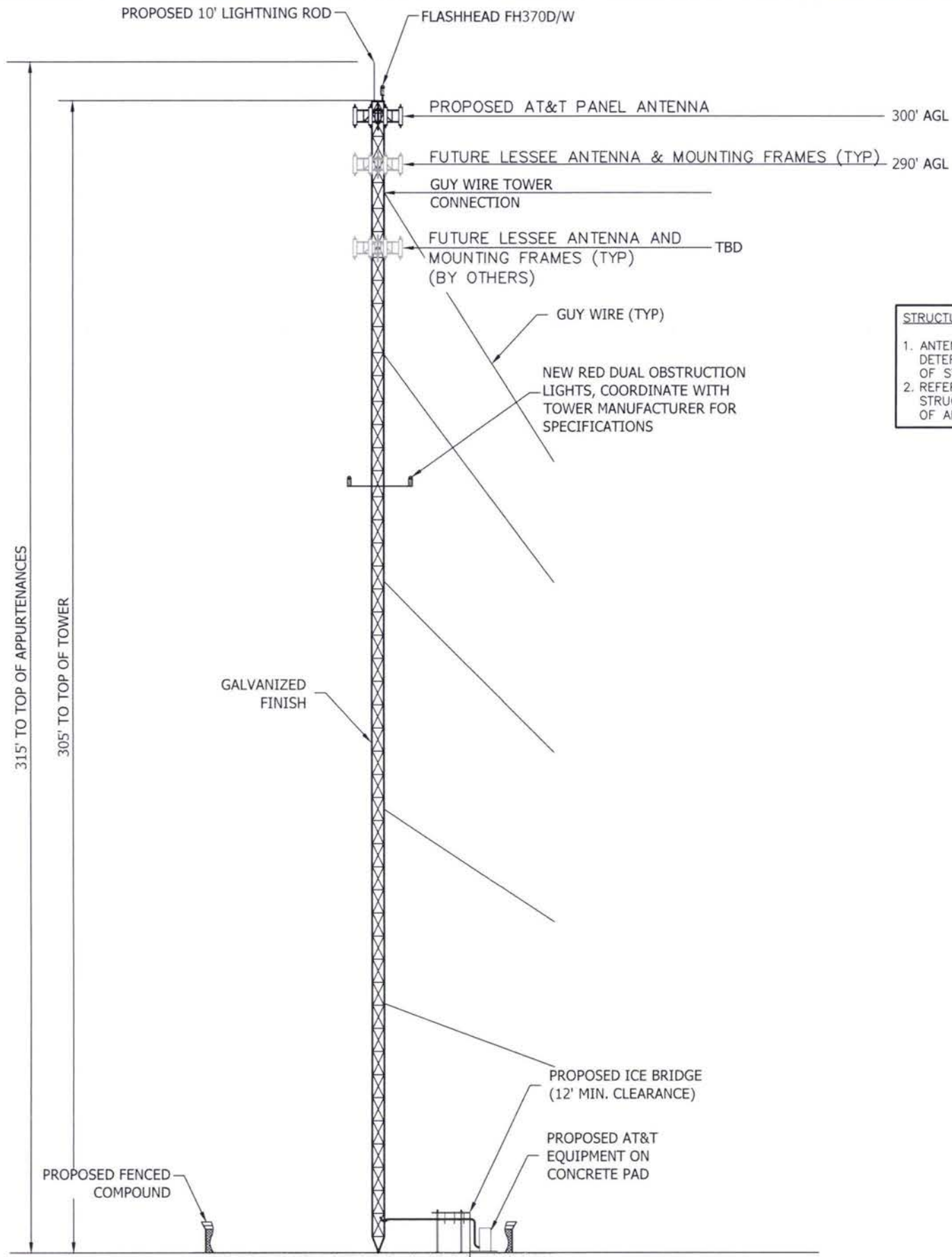
1 ENLARGED COMPOUND LAYOUT
 SCALE: 1" = 20'



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



I:\37541_01\EX2037_Pine Top Rd_20 a (10).dwg - user: abtoren - Aug 28, 2020 - 11:14am



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.

1 **GUYED TOWER PROFILE**
N.T.S.



UNITI TOWERS
PINE TOP ROAD
 FA# 15147585
 PACE# MRTNK047962
 PT# 10115668
 1011 PINE TOP ROAD
 RUSSELL SPRINGS, KY 42642
 RUSSELL COUNTY
 PROPOSED 305' GUYED TOWER

PROJECT NO: G0137341.00
 CHECKED BY: MAS

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
A	08/24/20	DLS	ZONING DRAWINGS
0	08/28/20	DLS	ZONING DRAWINGS

B&T ENGINEERING, INC.
 COA 4011
 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

137341_Pine Top Rd_20's (0).dwg - User: rblitem - Aug 26, 2020 - 11:14am

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 20, 2020

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

RE: Site Name – Windsor Relo
Proposed Cell Tower
37.0903470 North Latitude, 84.9121690 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. 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: 2020.07.20 10:51:22 -05'00'

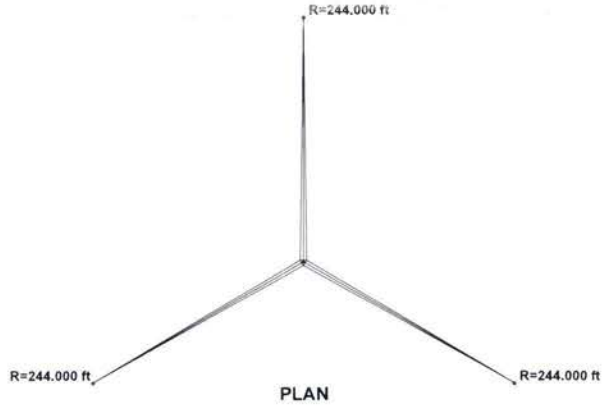
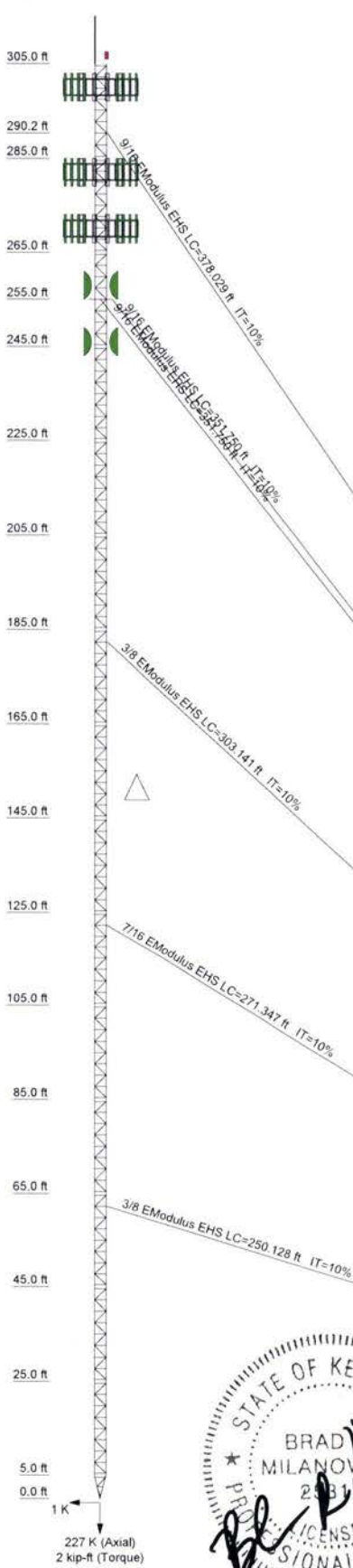
Jeremy Culpepper
Construction Manager – Tennessee/Kentucky Market
Uniti Towers LLC
(985) 707-6175

Uniti Fiber Division Headquarters
107 St. Francis Street, Ste. 1800
Mobile, AL 36602
251.662.1170 | unitifiber.com

New Orleans | Birmingham | Jackson | St. Petersburg | Dallas | Monroe

Uniti Towers Division Headquarters
10801 Executive Center Drive, Shannon Bldg., Ste. 100
Little Rock, AR 72211
501.850.0820 | unititowers.com
Domestic | International

	T1	SR 1 1/2	SR .875	4x5/8	0.7
	T2	SR 1 3/4	SR 1	N.A.	0.9
	T3	SR 2	SR .875	4x5/8	1.5
	T4	SR 1 3/4	SR .875	N.A.	0.8
	T5	SR 1 1/2	SR .75	N.A.	0.8
	T6	SR 1 1/2	SR .75	4x5/8	0.6
	T7	A529-50	SR .75	4x5/8	0.8
	T8	A529-50	SR 3/4	N.A.	0.8
	T9	SR 3/4	SR 3/4	N.A.	0.5
	T10	SR 1 3/4	SR .875	4x5/8	0.5
	T11	SR 1 3/4	SR .75	N.A.	0.8
	T12	SR 1 3/4	SR .75	4x5/8	0.8
	T13	SR 2	SR .75	N.A.	0.8
	T14	SR 2	SR .75	4x5/8	0.9
	T15	SR 2	SR .75	N.A.	0.9
Section	T16	A	B	C	
Legs					
Leg Grade					
Diagonals					
Diagonal Grade					
Top Girts					
Bottom Girts					
Horizontal					
Top Guy Pull-Offs					
Face Width (ft)					
# Panels @ (ft)	12.9	0.2			
Weight (K)					0.7



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod 1"x10'	305	Sector1(CaAa=10000 Sq.in)No Ice (Carrier 3)	270
Top Beacon	305	Sector2(CaAa=10000 Sq.in)No Ice (Carrier 3)	270
Sector1(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	300	Sector3(CaAa=10000 Sq.in)No Ice (Carrier 3)	270
Sector2(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	300	Pipe Mount (Carrier 4)	258
Sector3(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	300	Pipe Mount (Carrier 4)	258
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 2)	282	6' MW Dish (Carrier 4)	258
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 2)	282	6' MW Dish (Carrier 4)	258
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 2)	282	Pipe Mount (Carrier 5)	246
		Pipe Mount (Carrier 5)	246
		6' MW Dish (Carrier 5)	246
		6' MW Dish (Carrier 5)	246

SYMBOL LIST

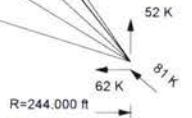
MARK	SIZE	MARK	SIZE
A	SR 1 3/4	C	2 @ 2.11458
B	SR 1		

MATERIAL STRENGTH

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

TOWER DESIGN NOTES

1. Tower is located in Russell 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.



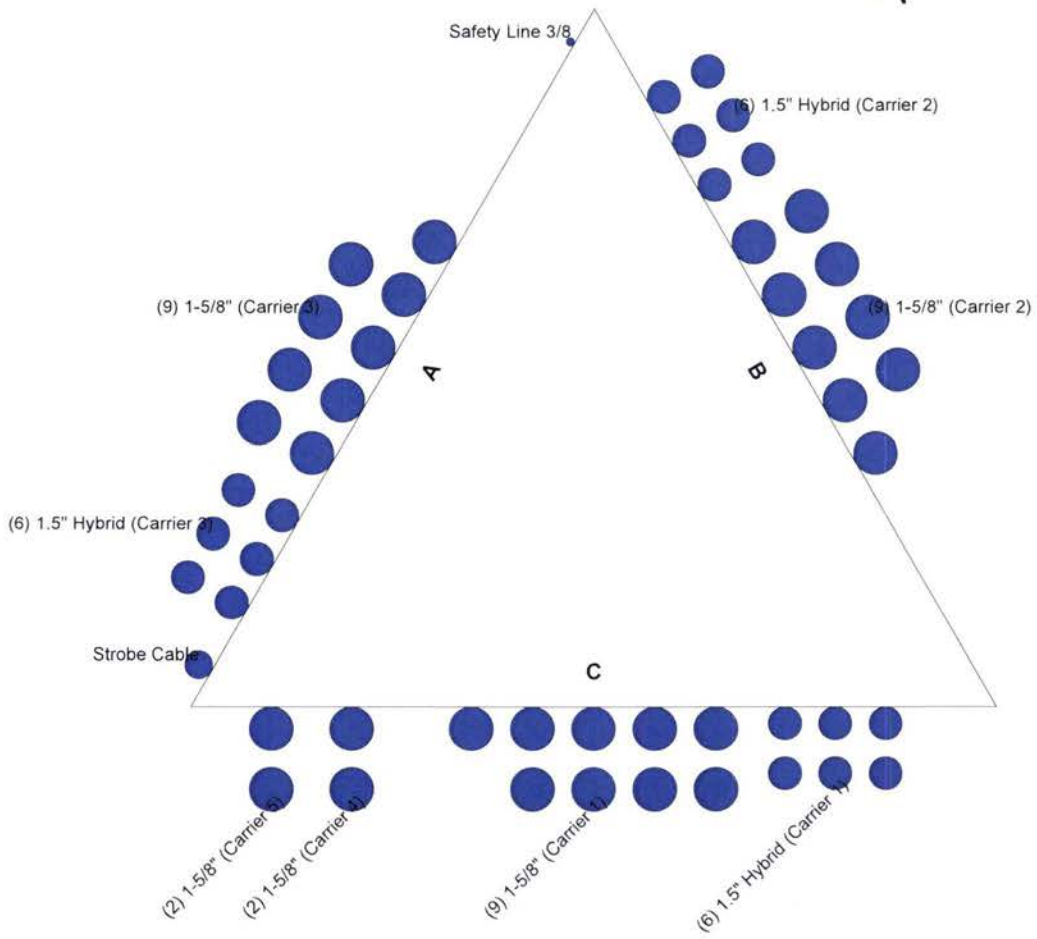
ALL REACTIONS ARE FACTORED



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

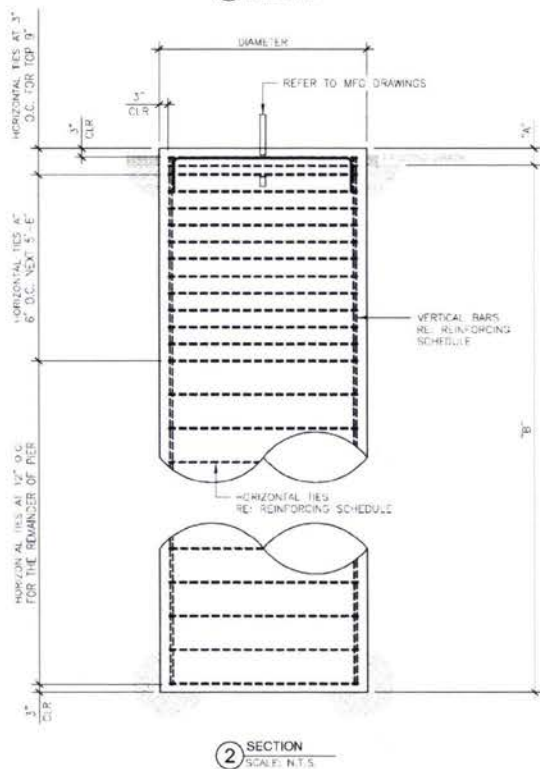
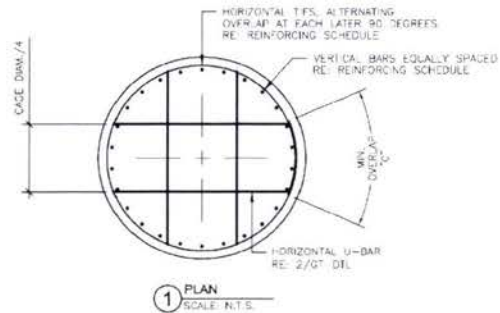
Job:	ATS # 8812 - Pine Top (Site# KYLEX2037)		
Project:	305' 36G/ 37.090347, -84.912169		
Client:	Harmoni (UNITI) Towers	Drawn by:	T. Cheriyian
Code:	TIA-222-H	Date:	02/04/21
Path:		Scale:	NTS
		Dwg No.:	E-1

Feed Line Plan



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

Job: ATS # 8812 - Pine Top (Site# KYLEX2037)	
Project: 305' 36G/ 37.090347, -84.912169	
Client: Harmoni (UNITI) Towers	Drawn by: T. Cheriyan
Code: TIA-222-H	Date: 02/04/21
Path:	Scale: NTS
	Dwg No. E-7



NOTES:

1. 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.
2. REINFORCEMENT STEEL SHALL BE DETAILED, FABRICATED, BENT, AND PLACED IN ACCORDANCE WITH THE CRSI MANUAL OF STANDARD PRACTICE AND THE ACI 315 (LATEST EDITION).
3. 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: GEO21-07977-08
 DATE: JANUARY 27, 2021
4. 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.
5. CONCRETE VOLUME IN CUBIC YARDS: 7.21
6. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
7. CONCRETE MIXTURES SHALL MEET DURABILITY REQUIREMENTS OF CHAPTER 19 OF THE ACI 318-14.
8. ALL CONCRETE TESTING SHALL BE IN ACCORDANCE WITH ACI 318-14. A MINIMUM OF (3) 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.
9. 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.
10. 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.
11. 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	0'-6"
B	15'-0"
MIN. OVERLAP 90°	3'-3"
DIAMETER	4'-0"

REINFORCING SCHEDULE	SIZE	TOTAL QTY
VERTICAL BARS	#7	16
HORIZONTAL TIES	#4	23
U-BAR HORIZONTAL	#4	4

BASE REACTIONS: (FACTORED LOADS)		
VERTICAL	227	KIPS
HORIZONTAL	1	KIPS



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



4020 TULL AVE, MUSKOGEE, OK 74403

ISSUED FOR:

REV	DATE	DESCRIPTION
0	07/05/21	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: 147641.001
 SITE NAME: PINE TOP ROAD
 SITE NO: 8812
 CLIENT NAME: ARCOSA TELECOM STRUCTURES

DRAWN BY: TTC
 CHECKED BY: XJ

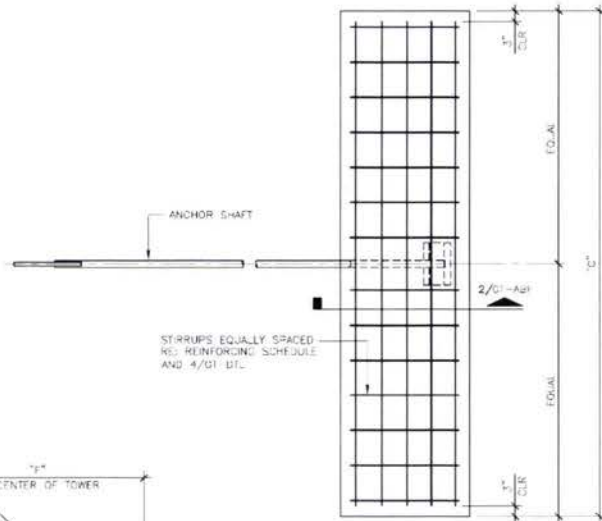
SHEET TITLE:

DRILLED PIER FOUNDATION

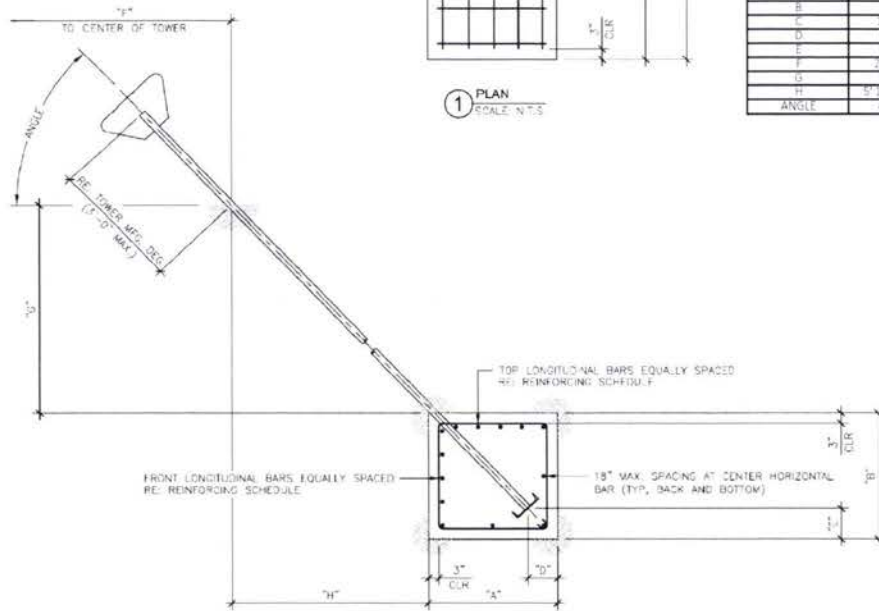
SHEET NUMBER: REVISION:

GT-DPF

0



1 PLAN
SCALE: N.T.S.



2 SECTION
SCALE: N.T.S.

NOTES:

1. 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.
2. REINFORCEMENT STEEL SHALL BE DETAILED, FABRICATED, BENT, AND PLACED IN ACCORDANCE WITH THE CRSI MANUAL OF STANDARD PRACTICE AND THE ACI 315 (LATEST EDITION).
3. 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: GEO21-07977-08
 DATE: JANUARY 27, 2021
4. 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.
5. CONCRETE VOLUME IN CUBIC YARDS: 3
6. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
7. CONCRETE MIXTURES SHALL MEET DURABILITY REQUIREMENTS OF CHAPTER 19 OF THE ACI 318-14.
8. ALL CONCRETE TESTING SHALL BE IN ACCORDANCE WITH ACI 318-14. A MINIMUM OF (3) 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.
9. 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.
10. 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.
11. VERIFY ALL DIMENSIONS AGAINST MANUFACTURER'S DRAWINGS.
12. ANCHOR SHAFT: BY TOWER MANUFACTURER.

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	2'-0"
B	2'-0"
C	13'-6"
D	0'-6"
E	0'-0"
F	144'-0"
G	3'-0"
H	0'-11-9/16"
ANGLE	40.0°

REINFORCING SCHEDULE		SIZE	TOTAL QTY 3 ANCHORS
STIRRUPS		#4	48
LONGITUDINAL BARS TOP		#7	9
LONGITUDINAL BARS FRONT		#7	9
LONGITUDINAL BARS BACK		#7	3
LONGITUDINAL BARS BOTTOM		#7	3

BASE REACTIONS: (FACTORED LOADS)	
VERTICAL	5.2 KIPS
HORIZONTAL	6.2 KIPS



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



4020 TULL AVE, MUSKOGEE, OK 74403

ISSUED FOR:

REV	DATE	DESCRIPTION
0	02/05/21	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: 147641.001
 SITE NAME: PINE TOP ROAD
 SITE NO: 8812
 CLIENT NAME: ARCOSA TELECOM STRUCTURES

DRAWN BY: TTC
 CHECKED BY: KJ

SHEET TITLE:

ANCHOR BLOCK FOUNDATION

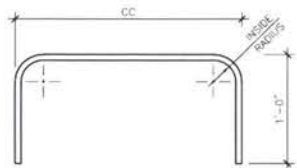
SHEET NUMBER: REVISION:

GT-ABF

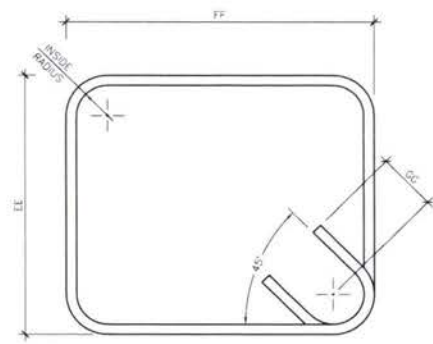
0

DIMENSIONING SCHEDULE	
CC*	VARIES
EE*	1'-6"
FF*	3'-0"
GG*	0'-3"

*NOTE: CONTRACTOR TO VERIFY DIMENSIONS PRIOR TO FABRICATION



② HORIZONTAL U-BAR
SCALE: N.T.S.



④ STIRRUP
SCALE: N.T.S.



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



TELECOM STRUCTURES

4020 TULL AVE. MUSKOGEE, OK 74403

ISSUED FOR:

REV	DATE	DESCRIPTION
0	02/04/21	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: 147641.001
SITE NAME: PINE TOP ROAD
SITE NO: 8812
CLIENT NAME: ARCOSA TELECOM STRUCTURES

DRAWN BY: TTC
CHECKED BY:

SHEET TITLE:

DIMENSIONING DETAIL

SHEET NUMBER:

DTL

REVISION:

0

Drilled Pier Foundation

Project # :	147641.001
Site Name:	Pine Top Road
Site Number:	8812

TIA-222 Revison:	H
Tower Type:	Guyed (Base)

Applied Loads		
	Comp.	Uplift
Moment (kip-ft)		
Axial Force (kips)	227	
Shear Force (kips)	1	

Material Properties	
Concrete Strength, f _c :	4 ksi
Rebar Strength, F _y :	60 ksi
Tie Yield Strength, F _y :	40 ksi

Pier Design Data	
Depth	15 ft
Ext. Above Grade	0.5 ft
Pier Section 1	
<i>From 0.5' above grade to 15' below grade</i>	
Pier Diameter	4 ft
Rebar Quantity	16
Rebar Size	7
Clear Cover to Ties	3 in
Tie Size	4
Tie Spacing	12 in

Analysis Results		
Soil Lateral Check	Compression	Uplift
D _{vc0} (ft from TOC)	7.88	-
Soil Safety Factor	91.39	-
Max Moment (kip-ft)	6.09	-
Rating	1.5%	-

Soil Vertical Check	Compression	Uplift
Skin Friction (kips)	56.64	-
End Bearing (kips)	247.97	-
Weight of Concrete (kips)	35.06	-
Total Capacity (kips)	304.61	-
Axial (kips)	262.06	-
Rating	86.0%	-

Reinforced Concrete Flexure	Compression	Uplift
Critical Depth (ft from TOC)	7.94	-
Critical Moment (kip-ft)	6.09	-
Critical Moment Capacity	1158.59	-
Rating	0.5%	-

Reinforced Concrete Shear	Compression	Uplift
Critical Depth (ft from TOC)	11.74	-
Critical Shear (kip)	1.49	-
Critical Shear Capacity	325.31	-
Rating	0.5%	-

Soil Interaction Rating	86.0%
Structural Foundation Rating	0.5%

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"/>
Override Critical Depth:	<input type="checkbox"/>

Soil Profile			
Groundwater Depth	N/A	# of Layers	8

Layer	Top (ft)	Bottom (ft)	Thickness (ft)	Y _{soil} (pcf)	Y _{concrete} (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	2.5	2.5	105	150	0		0.000	0.000	0.00	0.00			Cohesionless
2	2.5	3	0.5	105	150	0		0.000	0.000	0.00	0.00			Cohesionless
3	3	4	1	105	150	0.5		0.275	0.275	0.27	0.27			Cohesive
4	4	6.5	2.5	105	150	0.5		0.275	0.275	0.27	0.27			Cohesive
5	6.5	7	0.5	110	150	1.25		0.688	0.688	0.27	0.27			Cohesive
6	7	9	2	110	150	1.25		0.688	0.688	0.68	0.68			Cohesive
7	9	14	5	110	150	1		0.55	0.55	0.55	0.55			Cohesive
8	14	15	1	110	150	1.5		0.83	0.83	0.82	0.82	31.27		Cohesive

Guyed Anchor Block Foundation

Checks capacity of anchor blocks for a guyed tower.

Project #:	147641.001
Site Name:	Pine Top Road
Site #:	8812
Location:	

TIA-222 Revision: H

Design Reactions		
Shear, S:	62.00	kips
Uplift, Ua:	52.00	kips
Resultant Force, Rf:		kips
Tower Height, H:	305.00	ft
Guy Anchor Radius, R:	244.00	ft
Resultant Angle to Horizontal, θ:		deg

Guy Anchor Properties		
Depth to Bottom of Deadman, Da:	7	ft
Anchor Width, Wa:	2	ft
Anchor Thickness, Ta:	2	ft
Anchor Length, La:	13.5	ft
Concrete Volume, Vc:		yd ³
Toe Width, toe:		ft
Guyed Anchor Top Rebar Size, Sat:	7	
No. of Bars in Top of Block:	3	
Guyed Anchor Front Rebar Size, Saf:	7	
No. of Bars in Front of Block:	3	
Stirrup Size:	4	

Material Properties		
Rebar Grade, Fy:	60	ksi
Concrete Strength, F'c:	4	ksi
Wt. Avg. Concrete Density, δx:		kcf
Clear Cover, cc:	3	in

Design Checks				
	Capacity	Demand	Rating	Check
Lateral Capacity (kips):	72.19	62.00	85.9%	Pass
Uplift Capacity (kips):	53.77	52.00	96.7%	Pass
Lateral Flexural Capacity (ft*kips):	157.15	104.63	66.6%	Pass
Uplift Flexural Capacity (ft*kips):	157.15	87.75	55.8%	Pass

Soil Rating:	96.7%
Structural Rating:	66.6%
Anchor Shaft Rating:	N/A

Neglect Depth, Neg:	2.5	ft
Groundwater Level, gw:	None	ft

Soil Properties:	No. of Soil Layers?			5		
Layer	φ, deg	cu, ksf	δ, pcf	d, ft	Ultimate fs (ksf)	N (blows/ft)
1		0.300	105	1.50	0.000	
2		0.500	105	3.00	0.000	
3		0.500	105	4.00	0.270	
4		1.000	110	6.50	0.550	
5		1.500	110	7.00	0.550	

*key: φ = Internal Angle of Friction
 cu = Cohesion / Undrained Shear Strength
 δ = Buoyant Soil Unit Weight
 d = Depth to Bottom of Layer
 Ultimate fs = Geotechnical Report-provided skin friction / adhesion
 N = SPT Blow Count

<p>tnxTower</p> <p>B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265</p>	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 1 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Tower Input Data

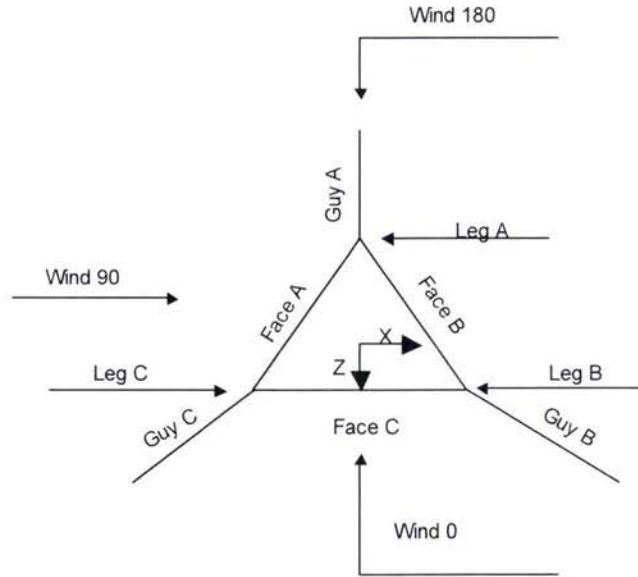
The main tower is a 3x guyed tower with an overall height of 305.000 ft above the ground line.
The base of the tower is set at an elevation of 0.000 ft above the ground line.
The face width of the tower is 3.000 ft at the top and tapered at the base.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

- Tower is located in Russell County, Kentucky.
- Tower base elevation above sea level: 1093.000 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..
- Pressures are calculated at each section.
- Safety factor used in guy design is 1.
- 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

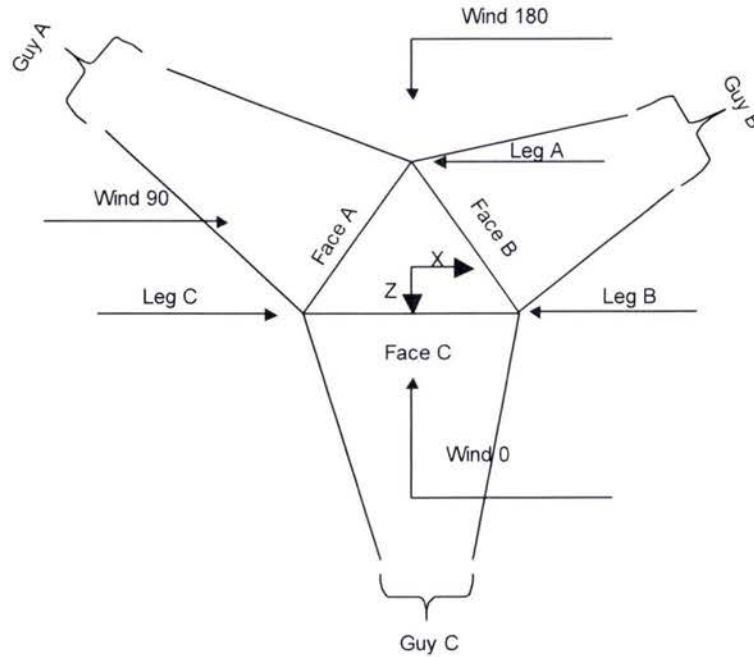
- | | | |
|--|--|---|
| <ul style="list-style-type: none"> Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification √ Use Code Stress Ratios √ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile √ Include Bolts In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

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 2 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan



Corner & Starmount Guyed Tower

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 3 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan



Face Guyed

Tower Section Geometry

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	305.000-285.000			3.000	1	20.000
T2	285.000-265.000			3.000	1	20.000
T3	265.000-245.000			3.000	1	20.000
T4	245.000-225.000			3.000	1	20.000
T5	225.000-205.000			3.000	1	20.000
T6	205.000-185.000			3.000	1	20.000
T7	185.000-165.000			3.000	1	20.000
T8	165.000-145.000			3.000	1	20.000
T9	145.000-125.000			3.000	1	20.000
T10	125.000-105.000			3.000	1	20.000
T11	105.000-85.000			3.000	1	20.000
T12	85.000-65.000			3.000	1	20.000
T13	65.000-45.000			3.000	1	20.000
T14	45.000-25.000			3.000	1	20.000
T15	25.000-5.000			3.000	1	20.000
T16	5.000-0.000			3.000	1	5.000

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 4 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Tower Section Geometry (cont'd)

Tower Section	Tower Elevation <i>ft</i>	Diagonal Spacing <i>ft</i>	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset <i>in</i>	Bottom Girt Offset <i>in</i>
T1	305.000-285.000	2.404	K Brace Right	No	Yes	4.625	4.625
T2	285.000-265.000	2.404	K Brace Right	No	Yes	4.625	4.625
T3	265.000-245.000	2.404	K Brace Right	No	Yes	4.625	4.625
T4	245.000-225.000	2.404	K Brace Right	No	Yes	4.625	4.625
T5	225.000-205.000	2.404	K Brace Right	No	Yes	4.625	4.625
T6	205.000-185.000	2.404	K Brace Right	No	Yes	4.625	4.625
T7	185.000-165.000	2.404	K Brace Right	No	Yes	4.625	4.625
T8	165.000-145.000	2.404	K Brace Right	No	Yes	4.625	4.625
T9	145.000-125.000	2.404	K Brace Right	No	Yes	4.625	4.625
T10	125.000-105.000	2.404	K Brace Right	No	Yes	4.625	4.625
T11	105.000-85.000	2.404	K Brace Right	No	Yes	4.625	4.625
T12	85.000-65.000	2.404	K Brace Right	No	Yes	4.625	4.625
T13	65.000-45.000	2.404	K Brace Right	No	Yes	4.625	4.625
T14	45.000-25.000	2.404	K Brace Right	No	Yes	4.625	4.625
T15	25.000-5.000	2.404	K Brace Right	No	Yes	4.625	4.625
T16	5.000-0.000	2.115	K Brace Right	No	Yes	4.625	4.625

Tower Section Geometry (cont'd)

Tower Elevation <i>ft</i>	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
305.000-285.000	Solid Round	1 1/2	A529-50 (50 ksi)	Solid Round	.875	A529-50 (50 ksi)
285.000-265.000	Solid Round	1 3/4	A529-50 (50 ksi)	Solid Round	1	A529-50 (50 ksi)
265.000-245.000	Solid Round	2	A529-50 (50 ksi)	Solid Round	1	A529-50 (50 ksi)
245.000-225.000	Solid Round	1 3/4	A529-50 (50 ksi)	Solid Round	.875	A529-50 (50 ksi)
225.000-205.000	Solid Round	1 3/4	A529-50 (50 ksi)	Solid Round	.875	A529-50 (50 ksi)
205.000-185.000	Solid Round	1 1/2	A529-50 (50 ksi)	Solid Round	.75	A529-50 (50 ksi)
185.000-165.000	Solid Round	1 3/4	A529-50 (50 ksi)	Solid Round	.75	A529-50 (50 ksi)
165.000-145.000	Solid Round	1 3/4	A529-50 (50 ksi)	Solid Round	.75	A529-50 (50 ksi)
145.000-125.000	Solid Round	1 3/4	A529-50 (50 ksi)	Solid Round	.875	A529-50 (50 ksi)
125.000-105.000	Solid Round	1 3/4	A529-50 (50 ksi)	Solid Round	.875	A529-50 (50 ksi)
105.000-85.000	Solid Round	1 3/4	A529-50 (50 ksi)	Solid Round	.75	A529-50 (50 ksi)
85.000-65.000	Solid Round	1 3/4	A529-50 (50 ksi)	Solid Round	.75	A529-50 (50 ksi)
65.000-45.000	Solid Round	1 3/4	A529-50 (50 ksi)	Solid Round	.75	A529-50 (50 ksi)
45.000-25.000	Solid Round	2	A529-50 (50 ksi)	Solid Round	.75	A529-50 (50 ksi)

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	5 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T15 25 000-5 000	Solid Round	2	A529-50 (50 ksi)	Solid Round	75	A529-50 (50 ksi)
T16 5 000-0 000	Solid Round	1 3/4	A529-50 (50 ksi)	Solid Round	1	A529-50 (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	
T1	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)	
305 000-285 000	T2	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
285 000-265 000	T3	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
265 000-245 000	T4	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
245 000-225 000	T5	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
225 000-205 000	T6	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
205 000-185 000	T7	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
185 000-165 000	T8	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
165 000-145 000	T9	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
145 000-125 000	T10	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
125 000-105 000	T11	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
105 000-85 000	T12	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
85 000-65 000	T13	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
65 000-45 000	T14	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
45 000-25 000	T15	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	A529-50 (50 ksi)
T15 25 000-5 000							
T16 5 000-0 000	Solid Round	3/4	A529-50 (50 ksi)	Solid Round	3/4	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
305 000-285 000	T1	None	Flat Bar	A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)

<p>tnxTower</p> <p>B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265</p>	<p>Job</p> <p>ATS # 8812 - Pine Top (Site# KYLEX2037)</p>	<p>Page</p> <p>6 of 52</p>
	<p>Project</p> <p>305' 36G/ 37.090347, -84.912169</p>	<p>Date</p> <p>09:43:08 02/04/21</p>
	<p>Client</p> <p>Harmoni (UNITI) Towers</p>	<p>Designed by</p> <p>T. Cheriyan</p>

Tower Elevation	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
ft							
285 000-265 000	T2 None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
265 000-245 000	T3 None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
245 000-225 000	T4 None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
225 000-205 000	T5 None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
205 000-185 000	T6 None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
185 000-165 000	T7 None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
165 000-145 000	T8 None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
145 000-125 000	T9 None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
125 000-105 000	T10 None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
105 000-85 000	T11 None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
85 000-65 000	T12 None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
65 000-45 000	T13 None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
45 000-25 000	T14 None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
T15 25.000-5.000	None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)
T16 5.000-0.000	None	Flat Bar		A36 (36 ksi)	Solid Round	3/4	A529-50 (50 ksi)

Tower Section Geometry (cont'd)

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A_j	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft ²	in					in	in	in
305 000-285 000	T1 0.000	0.000	A36 (36 ksi)	1	1	1	36.000	36.000	36.000
285 000-265 000	T2 0.000	0.000	A36 (36 ksi)	1	1	1	36.000	36.000	36.000
265 000-245 000	T3 0.000	0.000	A36 (36 ksi)	1	1	1	36.000	36.000	36.000
245 000-225 000	T4 0.000	0.000	A36 (36 ksi)	1	1	1	36.000	36.000	36.000
225 000-205 000	T5 0.000	0.000	A36 (36 ksi)	1	1	1	36.000	36.000	36.000
205 000-185 000	T6 0.000	0.000	A36 (36 ksi)	1	1	1	36.000	36.000	36.000

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 9 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

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
T7 185.000-165.000	0.000	1	0.000	1	0.000	1	0.000	1	0.000	0.75	0.000	1	0.000	0.75
T8 165.000-145.000	0.000	1	0.000	1	0.000	1	0.000	1	0.000	0.75	0.000	1	0.000	0.75
T9 145.000-125.000	0.000	1	0.000	1	0.000	1	0.000	1	0.000	0.75	0.000	1	0.000	0.75
T10 125.000-105.000	0.000	1	0.000	1	0.000	1	0.000	1	0.000	0.75	0.000	1	0.000	0.75
T11 105.000-85.000	0.000	1	0.000	1	0.000	1	0.000	1	0.000	0.75	0.000	1	0.000	0.75
T12 85.000-65.000	0.000	1	0.000	1	0.000	1	0.000	1	0.000	0.75	0.000	1	0.000	0.75
T13 65.000-45.000	0.000	1	0.000	1	0.000	1	0.000	1	0.000	0.75	0.000	1	0.000	0.75
T14 45.000-25.000	0.000	1	0.000	1	0.000	1	0.000	1	0.000	0.75	0.000	1	0.000	0.75
T15 25.000-5.000	0.000	1	0.000	1	0.000	1	0.000	1	0.000	0.75	0.000	1	0.000	0.75
T16 5.000-0.000	0.000	1	0.000	1	0.000	1	0.000	1	0.000	0.75	0.000	1	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 305.000-285.000	Flange	0.750 A325N	0	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.625 A325N	0
T2 285.000-265.000	Flange	0.750 A325N	3	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.625 A325N	0
T3 265.000-245.000	Flange	0.750 A325N	3	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.625 A325N	0
T4 245.000-225.000	Flange	0.750 A325N	3	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.625 A325N	0
T5 225.000-205.000	Flange	0.750 A325N	3	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.625 A325N	0
T6 205.000-185.000	Flange	0.750 A325N	3	0.000 A325N	0	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325N	0	0.625 A325N	0

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	11 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

255	EHS	A	9/16	3.500	10%	21000.000	0.671	351.471	244.000	0.000	0.000	100%
		B	EModulus	3.500	10%	21000.000	0.671	351.471	244.000	0.000	0.000	100%
		C	9/16	3.500	10%	21000.000	0.671	351.471	244.000	0.000	0.000	100%
			EModulus									
			9/16									
			EModulus									
290.193	EHS	A	9/16	3.500	10%	21000.000	0.671	377.728	244.000	0.000	0.000	100%
		B	EModulus	3.500	10%	21000.000	0.671	377.728	244.000	0.000	0.000	100%
		C	9/16	3.500	10%	21000.000	0.671	377.728	244.000	0.000	0.000	100%
			EModulus									
			9/16									
			EModulus									

Guy Data(cont'd)

Guy Elevation ft	Mount Type	Torque-Arm Spread ft	Torque-Arm Leg Angle °	Torque-Arm Style	Torque-Arm Grade	Torque-Arm Type	Torque-Arm Size
62.2109	Corner						
122.211	Corner						
182.211	Corner						
255	Torque Arm	6.000	0.000	Channel	A529-50 (50 ksi)	Channel	C12x20.7
290.193	Corner						

Guy Data (cont'd)

Guy Elevation ft	Diagonal Grade	Diagonal Type	Upper Diagonal Size	Lower Diagonal Size	Is Strap	Pull-Off Grade	Pull-Off Type	Pull-Off Size
62.211	A572-50 (50 ksi)	Solid Round			Yes	A529-50 (50 ksi)	Flat Bar	4x5/8
122.211	A572-50 (50 ksi)	Solid Round			Yes	A529-50 (50 ksi)	Flat Bar	4x5/8
182.211	A572-50 (50 ksi)	Solid Round			Yes	A529-50 (50 ksi)	Flat Bar	4x5/8
255.000	A572-50 (50 ksi)	Solid Round			Yes	A529-50 (50 ksi)	Flat Bar	4x5/8
290.193	A572-50 (50 ksi)	Solid Round			Yes	A529-50 (50 ksi)	Flat Bar	4x5/8

Guy Data (cont'd)

Guy Elevation ft	Cable Weight A	Cable Weight B	Cable Weight C	Cable Weight D	Tower Intercept A	Tower Intercept B	Tower Intercept C	Tower Intercept D
	K	K	K	K	ft	ft	ft	ft
62.2109	0.068	0.068	0.068		5.512	5.512	5.512	
					4.1 sec/pulse	4.1 sec/pulse	4.1 sec/pulse	

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	12 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Guy Elevation	Cable Weight	Cable Weight	Cable Weight	Cable Weight	Tower Intercept	Tower Intercept	Tower Intercept	Tower Intercept
ft	A	B	C	D	A	B	C	D
	K	K	K	K	ft	ft	ft	ft
122.211	0.108	0.108	0.108		6.977	6.977	6.977	
					4.6 sec/pulse	4.6 sec/pulse	4.6 sec/pulse	
182.211	0.083	0.083	0.083		8.011	8.011	8.011	
					4.9 sec/pulse	4.9 sec/pulse	4.9 sec/pulse	
255	0.236	0.236	0.236		11.571	11.571	11.571	
					5.9 sec/pulse	5.9 sec/pulse	5.9 sec/pulse	
290.193	0.253	0.253	0.253		13.321	13.321	13.321	
					6.3 sec/pulse	6.3 sec/pulse	6.3 sec/pulse	

Guy Data (cont'd)

Guy Elevation	Calc K	Calc K	Torque Arm		Pull Off		Diagonal	
			K _x	K _y	K _x	K _y	K _x	K _y
62.2109	No	No			0.8	0.8	1	1
122.211	No	No			0.8	0.8	1	1
182.211	No	No			0.8	0.8	1	1
255	No	No	1	1	0.8	0.8	1	1
290.193	No	No			0.8	0.8	1	1

Guy Data (cont'd)

Guy Elevation	Torque-Arm				Pull Off				Diagonal			
	Bolt Size	Number	Net Width	U	Bolt Size	Number	Net Width	U	Bolt Size	Number	Net Width	U
ft	in		Deduct		in		Deduct		in		Deduct	in
62.2109	0.625	0	0.000	0.75	0.625	0	0.000	1	0.625	0	0.000	1
	A325N				A325N				A325N			
122.211	0.625	0	0.000	0.75	0.625	0	0.000	1	0.625	0	0.000	1
	A325N				A325N				A325N			
182.211	0.000	0	0.000	0.75	0.625	0	0.000	1	0.625	0	0.000	1
	A325N				A325N				A325N			
255	0.000	0	0.000	0.75	0.625	0	0.000	1	0.625	0	0.000	1
	A325N				A325N				A325N			
290.193	0.625	0	0.000	0.75	0.625	0	0.000	1	0.625	0	0.000	1
	A325N				A325N				A325N			

Guy Pressures

Guy Elevation	Guy Location	z	q _z	q _z	Ice Thickness
ft		ft	ksf	Ice ksf	in
62.2109	A	31.105	0.023	0.002	1.491
	B	31.105	0.023	0.002	1.491
	C	31.105	0.023	0.002	1.491
122.211	A	61.105	0.026	0.002	1.595
	B	61.105	0.026	0.002	1.595

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 13 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Guy Elevation ft	Guy Location	z ft	q _z ksf	q _z Ice ksf	Ice Thickness in
182.211	C	61.105	0.026	0.002	1.595
	A	91.105	0.029	0.002	1.660
	B	91.105	0.029	0.002	1.660
255	C	91.105	0.029	0.002	1.660
	A	127.500	0.031	0.003	1.717
	B	127.500	0.031	0.003	1.717
290.193	C	127.500	0.031	0.003	1.717
	A	145.096	0.032	0.003	1.739
	B	145.096	0.032	0.003	1.739
	C	145.096	0.032	0.003	1.739
	C	145.096	0.032	0.003	1.739

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)	300.000 - 10.000	0.000	0	9	5	0.750	1.980		0.001
1.5" Hybrid (Carrier 1)	C	No	No	Ar (CaAa)	300.000 - 10.000	0.000	-0.3	6	3	0.750	1.500		0.001
**													
1-5/8" (Carrier 2)	B	No	No	Ar (CaAa)	282.000 - 10.000	0.000	0	9	5	0.750	1.980		0.001
1.5" Hybrid (Carrier 2)	B	No	No	Ar (CaAa)	282.000 - 10.000	0.000	-0.3	6	3	0.750	1.500		0.001
**													
1-5/8" (Carrier 3)	A	No	No	Ar (CaAa)	270.000 - 10.000	0.000	0	9	5	0.750	1.980		0.001
1.5" Hybrid (Carrier 3)	A	No	No	Ar (CaAa)	270.000 - 10.000	0.000	-0.3	6	3	0.750	1.500		0.001
**													
1-5/8" (Carrier 4)	C	No	No	Ar (CaAa)	258.000 - 10.000	0.000	0.3	2	1	0.750	1.980		0.001
**													
1-5/8" (Carrier 5)	C	No	No	Ar (CaAa)	246.000 - 10.000	0.000	0.4	2	1	0.750	1.980		0.001
**													
Safety Line 3/8	A	No	No	Ar (CaAa)	305.000 - 10.000	0.000	0.45	1	1	0.375	0.375		0.000
Strobe Cable	A	No	No	Ar (CaAa)	305.000 - 10.000	0.000	-0.45	1	1	1.250	1.250		0.001

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _A A _I In Face ft ²	C _A A _I Out Face ft ²	Weight K
T1	305.000-285.000	A	0.000	0.000	3.250	0.000	0.018
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	40.230	0.000	0.182
T2	285.000-265.000	A	0.000	0.000	16.660	0.000	0.079
		B	0.000	0.000	45.594	0.000	0.206
		C	0.000	0.000	53.640	0.000	0.242

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	14 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Tower Section	Tower Elevation ft	Face	A_R ft ²	A_F ft ²	$C_A A_A$ In Face ft ²	$C_A A_A$ Out Face ft ²	Weight K
T3	265.000-245.000	A	0.000	0.000	56.890	0.000	0.261
		B	0.000	0.000	53.640	0.000	0.242
		C	0.000	0.000	59.184	0.000	0.263
T4	245.000-225.000	A	0.000	0.000	56.890	0.000	0.261
		B	0.000	0.000	53.640	0.000	0.242
		C	0.000	0.000	69.480	0.000	0.300
T5	225.000-205.000	A	0.000	0.000	56.890	0.000	0.261
		B	0.000	0.000	53.640	0.000	0.242
		C	0.000	0.000	69.480	0.000	0.300
T6	205.000-185.000	A	0.000	0.000	56.890	0.000	0.261
		B	0.000	0.000	53.640	0.000	0.242
		C	0.000	0.000	69.480	0.000	0.300
T7	185.000-165.000	A	0.000	0.000	56.890	0.000	0.261
		B	0.000	0.000	53.640	0.000	0.242
		C	0.000	0.000	69.480	0.000	0.300
T8	165.000-145.000	A	0.000	0.000	56.890	0.000	0.261
		B	0.000	0.000	53.640	0.000	0.242
		C	0.000	0.000	69.480	0.000	0.300
T9	145.000-125.000	A	0.000	0.000	56.890	0.000	0.261
		B	0.000	0.000	53.640	0.000	0.242
		C	0.000	0.000	69.480	0.000	0.300
T10	125.000-105.000	A	0.000	0.000	56.890	0.000	0.261
		B	0.000	0.000	53.640	0.000	0.242
		C	0.000	0.000	69.480	0.000	0.300
T11	105.000-85.000	A	0.000	0.000	56.890	0.000	0.261
		B	0.000	0.000	53.640	0.000	0.242
		C	0.000	0.000	69.480	0.000	0.300
T12	85.000-65.000	A	0.000	0.000	56.890	0.000	0.261
		B	0.000	0.000	53.640	0.000	0.242
		C	0.000	0.000	69.480	0.000	0.300
T13	65.000-45.000	A	0.000	0.000	56.890	0.000	0.261
		B	0.000	0.000	53.640	0.000	0.242
		C	0.000	0.000	69.480	0.000	0.300
T14	45.000-25.000	A	0.000	0.000	56.890	0.000	0.261
		B	0.000	0.000	53.640	0.000	0.242
		C	0.000	0.000	69.480	0.000	0.300
T15	25.000-5.000	A	0.000	0.000	42.667	0.000	0.196
		B	0.000	0.000	40.230	0.000	0.182
		C	0.000	0.000	52.110	0.000	0.225
T16	5.000-0.000	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	0.000	0.000	0.000

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft ²	A_F ft ²	$C_A A_A$ In Face ft ²	$C_A A_A$ Out Face ft ²	Weight K
T1	305.000-285.000	A	1.867	0.000	0.000	18.189	0.000	0.263
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	58.003	0.000	1.074
T2	285.000-265.000	A	1.854	0.000	0.000	37.374	0.000	0.616
		B		0.000	0.000	65.584	0.000	1.211
		C		0.000	0.000	77.158	0.000	1.424
T3	265.000-245.000	A	1.840	0.000	0.000	94.939	0.000	1.673
		B		0.000	0.000	76.966	0.000	1.416
		C		0.000	0.000	94.679	0.000	1.677
T4	245.000-225.000	A	1.825	0.000	0.000	94.613	0.000	1.661

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 15 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
T5	225.000-205.000	B	1.809	0.000	0.000	76.761	0.000	1.408
		C		0.000	0.000	127.161	0.000	2.144
		A		0.000	0.000	94.262	0.000	1.649
T6	205.000-185.000	B	1.792	0.000	0.000	76.539	0.000	1.399
		C		0.000	0.000	126.714	0.000	2.126
		A		0.000	0.000	93.880	0.000	1.635
T7	185.000-165.000	B	1.772	0.000	0.000	76.298	0.000	1.389
		C		0.000	0.000	126.229	0.000	2.107
		A		0.000	0.000	93.462	0.000	1.620
T8	165.000-145.000	B	1.751	0.000	0.000	76.033	0.000	1.378
		C		0.000	0.000	125.697	0.000	2.085
		A		0.000	0.000	92.997	0.000	1.603
T9	145.000-125.000	B	1.727	0.000	0.000	75.740	0.000	1.366
		C		0.000	0.000	125.107	0.000	2.062
		A		0.000	0.000	92.476	0.000	1.585
T10	125.000-105.000	B	1.699	0.000	0.000	75.410	0.000	1.352
		C		0.000	0.000	124.445	0.000	2.035
		A		0.000	0.000	91.879	0.000	1.564
T11	105.000-85.000	B	1.667	0.000	0.000	75.033	0.000	1.337
		C		0.000	0.000	123.687	0.000	2.005
		A		0.000	0.000	91.181	0.000	1.539
T12	85.000-65.000	B	1.628	0.000	0.000	74.593	0.000	1.319
		C		0.000	0.000	122.801	0.000	1.971
		A		0.000	0.000	90.336	0.000	1.510
T13	65.000-45.000	B	1.579	0.000	0.000	74.059	0.000	1.297
		C		0.000	0.000	121.727	0.000	1.929
		A		0.000	0.000	89.257	0.000	1.473
T14	45.000-25.000	B	1.509	0.000	0.000	73.378	0.000	1.270
		C		0.000	0.000	120.358	0.000	1.876
		A		0.000	0.000	87.744	0.000	1.421
T15	25.000-5.000	B	1.386	0.000	0.000	72.423	0.000	1.232
		C		0.000	0.000	118.438	0.000	1.804
		A		0.000	0.000	63.815	0.000	1.000
T16	5.000-0.000	B	1.159	0.000	0.000	53.060	0.000	0.874
		C		0.000	0.000	86.301	0.000	1.260
		A		0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	0.000	0.000	0.000

Feed Line Center of Pressure

Section	Elevation ft	CP _X in	CP _Z in	CP _X Ice in	CP _Z Ice in
T1	305.000-285.000	1.162	4.502	0.063	1.683
T2	285.000-265.000	2.191	-0.910	1.023	-0.470
T3	265.000-245.000	-0.268	-1.198	-0.759	-0.404
T4	245.000-225.000	-0.881	-0.264	-1.544	0.644
T5	225.000-205.000	-0.881	-0.264	-1.545	0.644
T6	205.000-185.000	-0.897	-0.269	-1.577	0.657
T7	185.000-165.000	-0.861	-0.260	-1.492	0.624
T8	165.000-145.000	-0.886	-0.265	-1.562	0.651
T9	145.000-125.000	-0.881	-0.264	-1.553	0.647
T10	125.000-105.000	-0.858	-0.259	-1.490	0.623
T11	105.000-85.000	-0.886	-0.265	-1.567	0.653
T12	85.000-65.000	-0.886	-0.265	-1.568	0.653
T13	65.000-45.000	-0.861	-0.260	-1.510	0.631

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 16 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section	Elevation	CP _x	CP _z	CP _x	CP _z
	ft	in	in	Ice in	Ice in
T14	45.000-25.000	-0.874	-0.262	-1.551	0.646
T15	25.000-5.000	-0.824	-0.248	-1.404	0.587
T16	5.000-0.000	0.000	0.000	0.000	0.000

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T1	1	1-5/8"	285.00 - 300.00	0.6000	0.4137
T1	2	1.5" Hybrid	285.00 - 300.00	0.6000	0.4137
T1	14	Safety Line 3/8	285.00 - 305.00	0.6000	0.4137
T1	15	Strobe Cable	285.00 - 305.00	0.6000	0.4137
T2	1	1-5/8"	265.00 - 285.00	0.6000	0.4324
T2	2	1.5" Hybrid	265.00 - 285.00	0.6000	0.4324
T2	4	1-5/8"	265.00 - 282.00	0.6000	0.4324
T2	5	1.5" Hybrid	265.00 - 282.00	0.6000	0.4324
T2	7	1-5/8"	265.00 - 270.00	0.6000	0.4324
T2	8	1.5" Hybrid	265.00 - 270.00	0.6000	0.4324
T2	14	Safety Line 3/8	265.00 - 285.00	0.6000	0.4324
T2	15	Strobe Cable	265.00 - 285.00	0.6000	0.4324
T3	1	1-5/8"	245.00 - 265.00	0.6000	0.4027
T3	2	1.5" Hybrid	245.00 - 265.00	0.6000	0.4027
T3	4	1-5/8"	245.00 - 265.00	0.6000	0.4027
T3	5	1.5" Hybrid	245.00 - 265.00	0.6000	0.4027
T3	7	1-5/8"	245.00 - 265.00	0.6000	0.4027
T3	8	1.5" Hybrid	245.00 - 265.00	0.6000	0.4027
T3	10	1-5/8"	245.00 - 258.00	0.6000	0.4027
T3	12	1-5/8"	245.00 - 246.00	0.6000	0.4027
T3	14	Safety Line 3/8	245.00 - 265.00	0.6000	0.4027
T3	15	Strobe Cable	245.00 - 265.00	0.6000	0.4027
T4	1	1-5/8"	225.00 - 245.00	0.6000	0.4427
T4	2	1.5" Hybrid	225.00 -	0.6000	0.4427

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 17 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T4	4	1-5/8"	245.00 - 225.00	0.6000	0.4427
T4	5	1.5" Hybrid	245.00 - 225.00	0.6000	0.4427
T4	7	1-5/8"	245.00 - 225.00	0.6000	0.4427
T4	8	1.5" Hybrid	245.00 - 225.00	0.6000	0.4427
T4	10	1-5/8"	245.00 - 225.00	0.6000	0.4427
T4	12	1-5/8"	245.00 - 225.00	0.6000	0.4427
T4	14	Safety Line 3/8	245.00 - 225.00	0.6000	0.4427
T4	15	Strobe Cable	245.00 - 225.00	0.6000	0.4427
T5	1	1-5/8"	225.00 - 205.00	0.6000	0.4459
T5	2	1.5" Hybrid	225.00 - 205.00	0.6000	0.4459
T5	4	1-5/8"	225.00 - 205.00	0.6000	0.4459
T5	5	1.5" Hybrid	225.00 - 205.00	0.6000	0.4459
T5	7	1-5/8"	225.00 - 205.00	0.6000	0.4459
T5	8	1.5" Hybrid	225.00 - 205.00	0.6000	0.4459
T5	10	1-5/8"	225.00 - 205.00	0.6000	0.4459
T5	12	1-5/8"	225.00 - 205.00	0.6000	0.4459
T5	14	Safety Line 3/8	225.00 - 205.00	0.6000	0.4459
T5	15	Strobe Cable	225.00 - 205.00	0.6000	0.4459
T6	1	1-5/8"	205.00 - 185.00	0.6000	0.4607
T6	2	1.5" Hybrid	205.00 - 185.00	0.6000	0.4607
T6	4	1-5/8"	205.00 - 185.00	0.6000	0.4607
T6	5	1.5" Hybrid	205.00 - 185.00	0.6000	0.4607
T6	7	1-5/8"	205.00 - 185.00	0.6000	0.4607
T6	8	1.5" Hybrid	205.00 - 185.00	0.6000	0.4607
T6	10	1-5/8"	205.00 - 185.00	0.6000	0.4607
T6	12	1-5/8"	205.00 - 185.00	0.6000	0.4607
T6	14	Safety Line 3/8	205.00 - 185.00	0.6000	0.4607
T6	15	Strobe Cable	205.00 - 185.00	0.6000	0.4607
T7	1	1-5/8"	185.00 - 165.00	0.6000	0.4318
T7	2	1.5" Hybrid	185.00 - 165.00	0.6000	0.4318
T7	4	1-5/8"	185.00 - 165.00	0.6000	0.4318

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	18 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
T7	5	1.5" Hybrid	185.00 165.00 - 185.00	0.6000	0.4318
T7	7	1-5/8"	165.00 - 185.00	0.6000	0.4318
T7	8	1.5" Hybrid	165.00 - 185.00	0.6000	0.4318
T7	10	1-5/8"	165.00 - 185.00	0.6000	0.4318
T7	12	1-5/8"	165.00 - 185.00	0.6000	0.4318
T7	14	Safety Line 3/8	165.00 - 185.00	0.6000	0.4318
T7	15	Strobe Cable	165.00 - 185.00	0.6000	0.4318
T8	1	1-5/8"	145.00 - 165.00	0.6000	0.4622
T8	2	1.5" Hybrid	145.00 - 165.00	0.6000	0.4622
T8	4	1-5/8"	145.00 - 165.00	0.6000	0.4622
T8	5	1.5" Hybrid	145.00 - 165.00	0.6000	0.4622
T8	7	1-5/8"	145.00 - 165.00	0.6000	0.4622
T8	8	1.5" Hybrid	145.00 - 165.00	0.6000	0.4622
T8	10	1-5/8"	145.00 - 165.00	0.6000	0.4622
T8	12	1-5/8"	145.00 - 165.00	0.6000	0.4622
T8	14	Safety Line 3/8	145.00 - 165.00	0.6000	0.4622
T8	15	Strobe Cable	145.00 - 165.00	0.6000	0.4622
T9	1	1-5/8"	125.00 - 145.00	0.6000	0.4627
T9	2	1.5" Hybrid	125.00 - 145.00	0.6000	0.4627
T9	4	1-5/8"	125.00 - 145.00	0.6000	0.4627
T9	5	1.5" Hybrid	125.00 - 145.00	0.6000	0.4627
T9	7	1-5/8"	125.00 - 145.00	0.6000	0.4627
T9	8	1.5" Hybrid	125.00 - 145.00	0.6000	0.4627
T9	10	1-5/8"	125.00 - 145.00	0.6000	0.4627
T9	12	1-5/8"	125.00 - 145.00	0.6000	0.4627
T9	14	Safety Line 3/8	125.00 - 145.00	0.6000	0.4627
T9	15	Strobe Cable	125.00 - 145.00	0.6000	0.4627
T10	1	1-5/8"	105.00 - 125.00	0.6000	0.4426
T10	2	1.5" Hybrid	105.00 - 125.00	0.6000	0.4426
T10	4	1-5/8"	105.00 - 125.00	0.6000	0.4426
T10	5	1.5" Hybrid	105.00 -	0.6000	0.4426

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	19 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T10	7	1-5/8"	125.00 - 105.00	0.6000	0.4426
T10	8	1.5" Hybrid	125.00 - 105.00	0.6000	0.4426
T10	10	1-5/8"	125.00 - 105.00	0.6000	0.4426
T10	12	1-5/8"	125.00 - 105.00	0.6000	0.4426
T10	14	Safety Line 3/8	125.00 - 105.00	0.6000	0.4426
T10	15	Strobe Cable	125.00 - 105.00	0.6000	0.4426
T11	1	1-5/8"	85.00 - 105.00	0.6000	0.4793
T11	2	1.5" Hybrid	85.00 - 105.00	0.6000	0.4793
T11	4	1-5/8"	85.00 - 105.00	0.6000	0.4793
T11	5	1.5" Hybrid	85.00 - 105.00	0.6000	0.4793
T11	7	1-5/8"	85.00 - 105.00	0.6000	0.4793
T11	8	1.5" Hybrid	85.00 - 105.00	0.6000	0.4793
T11	10	1-5/8"	85.00 - 105.00	0.6000	0.4793
T11	12	1-5/8"	85.00 - 105.00	0.6000	0.4793
T11	14	Safety Line 3/8	85.00 - 105.00	0.6000	0.4793
T11	15	Strobe Cable	85.00 - 105.00	0.6000	0.4793
T12	1	1-5/8"	65.00 - 85.00	0.6000	0.4874
T12	2	1.5" Hybrid	65.00 - 85.00	0.6000	0.4874
T12	4	1-5/8"	65.00 - 85.00	0.6000	0.4874
T12	5	1.5" Hybrid	65.00 - 85.00	0.6000	0.4874
T12	7	1-5/8"	65.00 - 85.00	0.6000	0.4874
T12	8	1.5" Hybrid	65.00 - 85.00	0.6000	0.4874
T12	10	1-5/8"	65.00 - 85.00	0.6000	0.4874
T12	12	1-5/8"	65.00 - 85.00	0.6000	0.4874
T12	14	Safety Line 3/8	65.00 - 85.00	0.6000	0.4874
T12	15	Strobe Cable	65.00 - 85.00	0.6000	0.4874
T13	1	1-5/8"	45.00 - 65.00	0.6000	0.4727
T13	2	1.5" Hybrid	45.00 - 65.00	0.6000	0.4727
T13	4	1-5/8"	45.00 - 65.00	0.6000	0.4727
T13	5	1.5" Hybrid	45.00 - 65.00	0.6000	0.4727
T13	7	1-5/8"	45.00 - 65.00	0.6000	0.4727
T13	8	1.5" Hybrid	45.00 - 65.00	0.6000	0.4727
T13	10	1-5/8"	45.00 - 65.00	0.6000	0.4727
T13	12	1-5/8"	45.00 - 65.00	0.6000	0.4727
T13	14	Safety Line 3/8	45.00 - 65.00	0.6000	0.4727
T13	15	Strobe Cable	45.00 - 65.00	0.6000	0.4727
T14	1	1-5/8"	25.00 - 45.00	0.6000	0.5048
T14	2	1.5" Hybrid	25.00 - 45.00	0.6000	0.5048
T14	4	1-5/8"	25.00 - 45.00	0.6000	0.5048
T14	5	1.5" Hybrid	25.00 - 45.00	0.6000	0.5048
T14	7	1-5/8"	25.00 - 45.00	0.6000	0.5048
T14	8	1.5" Hybrid	25.00 - 45.00	0.6000	0.5048
T14	10	1-5/8"	25.00 - 45.00	0.6000	0.5048
T14	12	1-5/8"	25.00 - 45.00	0.6000	0.5048
T14	14	Safety Line 3/8	25.00 - 45.00	0.6000	0.5048
T14	15	Strobe Cable	25.00 - 45.00	0.6000	0.5048
T15	1	1-5/8"	10.00 - 25.00	0.6000	0.5303
T15	2	1.5" Hybrid	10.00 - 25.00	0.6000	0.5303
T15	4	1-5/8"	10.00 - 25.00	0.6000	0.5303
T15	5	1.5" Hybrid	10.00 - 25.00	0.6000	0.5303
T15	7	1-5/8"	10.00 - 25.00	0.6000	0.5303
T15	8	1.5" Hybrid	10.00 - 25.00	0.6000	0.5303
T15	10	1-5/8"	10.00 - 25.00	0.6000	0.5303
T15	12	1-5/8"	10.00 - 25.00	0.6000	0.5303
T15	14	Safety Line 3/8	10.00 - 25.00	0.6000	0.5303

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 20 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T15	15	Strobe Cable	10.00 - 25.00	0.6000	0.5303

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C_dA_1 Front ft ²	C_dA_1 Side ft ²	Weight K	
Lightning Rod 1"x10'	C	From Leg	0.000	0.000	305.000	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	305.000	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	300.000	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	300.000	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	300.000	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	282.000	No Ice	69.444	46.527	0.700
			0.000			1/2" Ice	86.805	58.159	1.400
			0.000			1" Ice	104.166	69.791	2.100
						2" Ice	138.888	93.055	3.500
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 2)	B	From Leg	4.000	0.000	282.000	No Ice	69.444	46.527	0.700
			0.000			1/2" Ice	86.805	58.159	1.400
			0.000			1" Ice	104.166	69.791	2.100
						2" Ice	138.888	93.055	3.500
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 2)	C	From Leg	4.000	0.000	282.000	No Ice	69.444	46.527	0.700
			0.000			1/2" Ice	86.805	58.159	1.400
			0.000			1" Ice	104.166	69.791	2.100
						2" Ice	138.888	93.055	3.500
**									
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 3)	A	From Leg	4.000	0.000	270.000	No Ice	69.444	46.527	0.700
			0.000			1/2" Ice	86.805	58.159	1.400
			0.000			1" Ice	104.166	69.791	2.100
						2" Ice	138.888	93.055	3.500
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 3)	B	From Leg	4.000	0.000	270.000	No Ice	69.444	46.527	0.700
			0.000			1/2" Ice	86.805	58.159	1.400
			0.000			1" Ice	104.166	69.791	2.100
						2" Ice	138.888	93.055	3.500
Sector3(CaAa=10000	C	From Leg	4.000	0.000	270.000	No Ice	69.444	46.527	0.700
						2" Ice	138.888	93.055	3.500

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 22 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Load Combinations

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

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	305 - 285	Leg	Max Tension	8	21.185	-0.014	0.005
			Max. Compression	2	-25.883	0.040	-0.051
			Max. Mx	11	1.143	0.259	0.031
			Max. My	2	-3.230	-0.016	0.246
			Max. Vy	11	-1.837	0.148	0.001
			Max. Vx	2	-1.835	0.005	0.140
			Max Tension	11	5.679	0.000	0.000
		Diagonal	Max. Compression	5	-5.701	0.000	0.000
			Max. Mx	20	0.892	0.013	0.000
			Max. My	12	0.081	0.000	0.000
			Max. Vy	20	-0.013	0.000	0.000
			Max. Vx	12	-0.000	0.000	0.000

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	23 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Horizontal	Max Tension	8	2.231	0.000	0.000
			Max. Compression	2	-2.227	0.000	0.000
		Top Girt	Max. Mx	15	0.190	0.009	0.000
			Max. My	13	0.385	0.000	-0.000
			Max. Vy	15	-0.012	0.000	0.000
			Max. Vx	13	0.000	0.000	0.000
			Max Tension	9	0.078	0.000	0.000
		Bottom Girt	Max. Compression	3	-0.076	0.000	0.000
			Max. Mx	15	0.007	0.009	0.000
			Max. My	13	-0.043	0.000	-0.000
			Max. Vy	15	-0.012	0.000	0.000
			Max. Vx	13	0.000	0.000	0.000
		Guy A	Max Tension	12	1.037	0.000	0.000
			Max. Compression	10	-0.954	0.000	0.000
			Max. Mx	15	0.069	0.009	0.000
			Max. My	13	-0.496	0.000	-0.000
			Max. Vy	15	-0.012	0.000	0.000
		Guy B	Max. Vx	13	0.000	0.000	0.000
			Bottom Tension	9	18.508		
			Top Tension	9	18.699		
			Top Cable Vert	9	14.450		
			Top Cable Norm	9	11.867		
		Guy C	Top Cable Tan	9	0.008		
			Bot Cable Vert	9	-13.995		
			Bot Cable Norm	9	12.109		
			Bot Cable Tan	9	0.229		
			Bottom Tension	13	18.494		
		Top Guy Pull-Off	Top Tension	13	18.685		
			Top Cable Vert	13	14.440		
			Top Cable Norm	13	11.858		
			Top Cable Tan	13	0.013		
			Bot Cable Vert	13	-13.984		
		Leg	Bot Cable Norm	13	12.100		
			Bot Cable Tan	13	0.224		
			Bottom Tension	3	18.649		
			Top Tension	3	18.840		
			Top Cable Vert	3	14.558		
		Diagonal	Top Cable Norm	3	11.959		
			Top Cable Tan	3	0.010		
			Bot Cable Vert	3	-14.102		
			Bot Cable Norm	3	12.201		
			Bot Cable Tan	3	0.227		
		Horizontal	Max Tension	3	6.086	0.000	0.000
			Max. Compression	1	0.000	0.000	0.000
			Max. Mx	15	2.888	0.027	0.000
			Max. My	13	5.210	0.000	-0.000
			Max. Vy	15	-0.036	0.000	0.000
		Horizontal	Max. Vx	13	0.000	0.000	0.000
			Max Tension	8	30.499	0.149	0.919
			Max. Compression	2	-53.231	-0.025	0.300
			Max. Mx	5	-45.642	1.012	-0.032
			Max. My	2	-48.373	-0.257	-0.976
		Horizontal	Max. Vy	5	3.352	-0.280	-0.078
			Max. Vx	2	-3.311	-0.025	0.300
			Max Tension	7	8.442	0.000	0.000
			Max. Compression	13	-8.718	0.000	0.000
			Max. Mx	20	0.276	0.014	0.000
		Horizontal	Max. My	12	0.071	0.000	0.000
			Max. Vy	20	-0.015	0.000	0.000
			Max. Vx	12	0.000	0.000	0.000
T2	285 - 265	Horizontal	Max Tension	4	2.017	0.000	0.000

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	24 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T3	265 - 245	Top Girt	Max. Compression	2	-1.858	0.000	0.000
			Max. Mx	15	0.320	0.009	0.000
			Max. My	13	1.746	0.000	-0.000
			Max. Vy	15	-0.012	0.000	0.000
			Max. Vx	13	0.000	0.000	0.000
			Max Tension	10	1.069	0.000	0.000
			Max. Compression	12	-1.080	0.000	0.000
			Max. Mx	15	-0.016	0.009	0.000
			Max. My	13	0.559	0.000	-0.000
			Max. Vy	15	-0.012	0.000	0.000
			Max. Vx	13	0.000	0.000	0.000
			Max Tension	2	3.461	0.000	0.000
		Bottom Girt	Max. Compression	8	-3.010	0.000	0.000
			Max. Mx	15	-0.203	0.009	0.000
			Max. My	13	3.092	0.000	-0.000
			Max. Vy	15	-0.012	0.000	0.000
			Max. Vx	13	0.000	0.000	0.000
			Max Tension	2	3.461	0.000	0.000
			Max. Compression	8	-3.010	0.000	0.000
			Max. Mx	15	-0.203	0.009	0.000
			Max. My	13	3.092	0.000	-0.000
			Max. Vy	15	-0.012	0.000	0.000
			Max. Vx	13	0.000	0.000	0.000
			Max Tension	8	61.128	-0.024	-0.073
		Leg	Max. Compression	2	-88.348	0.247	0.009
			Max. Mx	5	-45.654	-1.562	-0.121
			Max. My	2	-58.447	0.211	1.564
			Max. Vy	5	3.328	-1.562	-0.121
			Max. Vx	2	-3.281	0.211	1.564
			Max Tension	11	9.619	0.000	0.000
			Max. Compression	5	-9.884	0.000	0.000
			Max. Mx	20	0.952	0.014	0.000
			Max. My	12	0.226	0.000	0.000
			Max. Vy	20	-0.014	0.000	0.000
			Max. Vx	12	0.000	0.000	0.000
			Max Tension	3	2.068	0.000	0.000
		Horizontal	Max. Compression	13	-2.075	0.000	0.000
			Max. Mx	18	0.618	0.009	0.000
			Max. My	13	1.366	0.000	-0.000
			Max. Vy	18	-0.011	0.000	0.000
			Max. Vx	13	0.000	0.000	0.000
			Max Tension	8	3.331	0.000	0.000
Max. Compression	2		-3.692	0.000	0.000		
Max. Mx	15		0.337	0.009	0.000		
Max. My	13		-3.313	0.000	-0.000		
Max. Vy	15		-0.011	0.000	0.000		
Max. Vx	13		0.000	0.000	0.000		
Max Tension	13		3.274	0.000	0.000		
Bottom Girt	Max. Compression	6	-3.177	0.000	0.000		
	Max. Mx	16	-0.100	0.009	0.000		
	Max. My	13	-1.213	0.000	-0.000		
	Max. Vy	16	-0.011	0.000	0.000		
	Max. Vx	13	0.000	0.000	0.000		
	Bottom Tension	7	17.643				
	Top Tension	7	17.811				
	Top Cable Vert	7	13.008				
	Top Cable Norm	7	12.166				
	Top Cable Tan	7	0.011				
	Bot Cable Vert	7	-12.594				
	Bot Cable Norm	7	12.354				
Bot Cable Tan	7	0.202					
Guy B	Bottom Tension	11	18.432				
	Top Tension	11	18.600				
	Top Cable Vert	11	13.574				
	Top Cable Norm	11	12.716				
	Top Cable Tan	11	0.001				
	Bot Cable Vert	11	-13.159				

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 25 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft	
T4	245 - 225	Guy C	Bot Cable Norm	11	12 905			
			Bot Cable Tan	11	0 201			
			Bottom Tension	5	18 403			
			Top Tension	5	18 571			
			Top Cable Vert	5	13 554			
			Top Cable Norm	5	12 696			
			Top Cable Tan	5	0 001			
			Bot Cable Vert	5	-13 138			
			Bot Cable Norm	5	12 885			
			Bot Cable Tan	5	0 201			
			Top Guy Pull-Off	Max Tension	3	11 703	0 000	0 000
				Max Compression	13	-11 743	0 000	0 000
				Max Mx	24	-0 615	0 026	0 000
				Max My	13	3 423	0 000	-0 000
		Max Vy		24	-0 035	0 000	0 000	
		Max Vx		13	0 000	0 000	0 000	
		Torque Arm Top	Max Tension	11	14 256	0 000	0 000	
			Max Compression	11	-6 858	0 000	0 000	
			Max Mx	5	-0 141	-40 132	-0 000	
			Max My	13	-3 111	-20 676	-0 000	
			Max Vy	5	13 415	-40 132	-0 000	
			Max Vx	13	-0 000	-20 676	-0 000	
		Leg	Max Tension	8	15 080	-0 047	-0 227	
			Max Compression	2	-63 697	-0 154	-0 526	
			Max Mx	6	-56 682	0 679	0 032	
			Max My	7	-24 099	0 326	0 689	
			Max Vy	6	-2 322	-0 216	-0 166	
			Max Vx	7	-2 309	-0 041	-0 200	
			Diagonal	Max Tension	12	5 241	0 000	0 000
				Max Compression	6	-5 792	0 000	0 000
				Max Mx	22	-0 818	0 012	0 000
				Max My	13	-3 101	0 000	0 000
			Horizontal	Max Vy	22	0 013	0 000	0 000
				Max Vx	13	-0 000	0 000	0 000
				Max Tension	2	1 062	0 000	0 000
		Max Compression		2	-1 062	0 000	0 000	
		Top Girt	Max Mx	16	0 750	0 008	0 000	
			Max My	13	0 980	0 000	-0 000	
			Max Vy	16	0 011	0 000	0 000	
			Max Vx	13	0 000	0 000	0 000	
			Max Tension	7	2 474	0 000	0 000	
			Max Compression	13	-2 130	0 000	0 000	
		Bottom Girt	Max Mx	16	0 236	0 008	0 000	
			Max My	13	1 176	0 000	-0 000	
			Max Vy	16	0 011	0 000	0 000	
			Max Vx	13	0 000	0 000	0 000	
			Max Tension	13	1 672	0 000	0 000	
Max Compression	7		-1 693	0 000	0 000			
Leg	Max Mx	17	0 314	0 008	0 000			
	Max My	13	-0 526	0 000	-0 000			
	Max Vy	17	0 011	0 000	0 000			
	Max Vx	13	0 000	0 000	0 000			
	Max Tension	1	0 000	0 000	0 000			
	Max Compression	20	-45 942	0 058	-0 113			
	Max Mx	6	-26 008	0 523	0 043			
	Max My	7	-25 003	0 309	0 631			
	Max Vy	6	-1 232	0 049	-0 078			
	Max Vx	7	-1 484	0 043	0 060			
Diagonal	Max Tension	13	2 985	0 000	0 000			
	Max Compression	6	-3 518	0 000	0 000			
	Max Mx	22	-0 606	0 012	0 000			
T5	225 - 205							

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	26 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft	
T6	205 - 185	Horizontal	Max. My	13	-1.230	0.000	0.000	
			Max. Vy	22	-0.013	0.000	0.000	
			Max. Vx	13	-0.000	0.000	0.000	
			Max Tension	20	0.791	0.000	0.000	
			Max. Compression	20	-0.791	0.000	0.000	
			Max. Mx	19	0.753	0.008	0.000	
			Max. My	13	0.623	0.000	-0.000	
			Max. Vy	19	0.011	0.000	0.000	
			Max. Vx	13	0.000	0.000	0.000	
			Top Girt	Max Tension	7	1.697	0.000	0.000
				Max. Compression	13	-1.417	0.000	0.000
				Max. Mx	17	-0.121	0.008	0.000
				Max. My	13	0.579	0.000	-0.000
				Max. Vy	17	0.011	0.000	0.000
				Max. Vx	13	0.000	0.000	0.000
		Bottom Girt	Max Tension	13	0.620	0.000	0.000	
			Max. Compression	7	-0.682	0.000	0.000	
			Max. Mx	25	0.158	0.008	0.000	
			Max. My	13	0.205	0.000	-0.000	
			Max. Vy	25	0.011	0.000	0.000	
			Max. Vx	13	0.000	0.000	0.000	
		Leg	Max Tension	1	0.000	0.000	0.000	
			Max. Compression	19	-48.228	0.051	-0.106	
			Max. Mx	5	-20.885	0.387	-0.131	
			Max. My	2	-30.544	0.053	-0.333	
			Max. Vy	5	1.182	-0.068	-0.034	
			Max. Vx	2	-0.933	-0.062	0.082	
			Diagonal	Max Tension	11	2.622	0.000	0.000
				Max. Compression	5	-2.991	0.000	0.000
				Max. Mx	19	-0.128	0.011	0.000
				Max. My	13	0.761	0.000	0.000
				Max. Vy	19	-0.011	0.000	0.000
				Max. Vx	13	-0.000	0.000	0.000
			Horizontal	Max Tension	19	0.828	0.000	0.000
				Max. Compression	19	-0.828	0.000	0.000
				Max. Mx	16	0.794	0.008	0.000
		Max. My		13	0.639	0.000	-0.000	
		Max. Vy		16	-0.011	0.000	0.000	
		Max. Vx		13	0.000	0.000	0.000	
		Top Girt	Max Tension	7	0.590	0.000	0.000	
			Max. Compression	13	-0.458	0.000	0.000	
			Max. Mx	17	-0.017	0.008	0.000	
			Max. My	13	-0.180	0.000	-0.000	
			Max. Vy	17	-0.011	0.000	0.000	
			Max. Vx	13	0.000	0.000	0.000	
Bottom Girt	Max Tension	2	1.017	0.000	0.000			
	Max. Compression	11	-1.019	0.000	0.000			
	Max. Mx	20	0.034	0.008	0.000			
	Max. My	13	0.904	0.000	-0.000			
	Max. Vy	20	-0.011	0.000	0.000			
	Max. Vx	13	0.000	0.000	0.000			
Leg	Max Tension	1	0.000	0.000	0.000			
	Max. Compression	25	-53.624	0.083	-0.144			
	Max. Mx	11	-28.630	0.575	-0.029			
	Max. My	7	-25.059	-0.086	-0.467			
	Max. Vy	5	1.181	-0.523	0.065			
	Max. Vx	2	-0.927	0.011	0.439			
	Diagonal	Max Tension	5	3.210	0.000	0.000		
		Max. Compression	11	-3.371	0.000	0.000		
		Max. Mx	19	0.007	0.010	0.000		
		Max. My	13	-1.173	0.000	0.000		
		Max. Vy	19	-0.011	0.000	0.000		
		Max. Vx	13	0.000	0.000	0.000		

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 27 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T8	165 - 145	Horizontal	Max Vy	19	0.011	0.000	0.000
			Max Vx	13	-0.000	0.000	0.000
			Max Tension	25	0.919	0.000	0.000
			Max Compression	25	-0.919	0.000	0.000
			Max Mx	25	0.887	0.008	0.000
			Max My	13	0.730	0.000	-0.000
		Top Girt	Max Vy	25	-0.011	0.000	0.000
			Max Vx	13	0.000	0.000	0.000
			Max Tension	11	1.309	0.000	0.000
			Max Compression	2	-1.085	0.000	0.000
			Max Mx	20	0.107	0.008	0.000
			Max My	13	-0.943	0.000	-0.000
		Bottom Girt	Max Vy	20	-0.011	0.000	0.000
			Max Vx	13	0.000	0.000	0.000
			Max Tension	13	0.604	0.000	0.000
			Max Compression	7	-0.511	0.000	0.000
			Max Mx	16	0.221	0.008	0.000
			Max My	13	-0.041	0.000	-0.000
		Guy A	Max Vy	16	-0.011	0.000	0.000
			Max Vx	13	0.000	0.000	0.000
			Bottom Tension	9	8.424		
			Top Tension	9	8.473		
			Top Cable Vert	9	5.137		
			Top Cable Norm	9	6.738		
		Guy B	Top Cable Tan	9	0.004		
			Bot Cable Vert	9	-4.972		
			Bot Cable Norm	9	6.800		
			Bot Cable Tan	9	0.095		
			Bottom Tension	11	9.018		
			Top Tension	11	9.066		
		Guy C	Top Cable Vert	11	5.490		
			Top Cable Norm	11	7.215		
			Top Cable Tan	11	0.002		
			Bot Cable Vert	11	-5.325		
			Bot Cable Norm	11	7.277		
			Bot Cable Tan	11	0.102		
		Top Guy Pull-Off	Bottom Tension	5	9.011		
			Top Tension	5	9.059		
			Top Cable Vert	5	5.486		
			Top Cable Norm	5	7.209		
			Top Cable Tan	5	0.002		
			Bot Cable Vert	5	-5.321		
Leg	Bot Cable Norm	5	7.272				
	Bot Cable Tan	5	0.101				
	Max Tension	11	3.837	0.000	0.000		
	Max Compression	1	0.000	0.000	0.000		
	Max Mx	25	1.887	0.026	0.000		
	Max My	13	0.069	0.000	-0.000		
	Max Vy	25	-0.034	0.000	0.000		
	Max Vx	13	0.000	0.000	0.000		
	Max Tension	1	0.000	0.000	0.000		
	Max Compression	25	-55.570	0.088	-0.151		
	Max Mx	5	-18.531	0.405	-0.108		
	Max My	9	-19.338	-0.102	0.354		
	Max Vy	5	0.929	0.047	-0.070		
	Max Vx	8	0.739	-0.087	0.003		
	Max Tension	11	1.929	0.000	0.000		
	Max Compression	5	-2.492	0.000	0.000		
	Max Mx	24	-0.095	0.010	0.000		
	Max My	13	0.714	0.000	0.000		
Max Vy	24	0.011	0.000	0.000			
Diagonal	Max Vy	24	0.011	0.000	0.000		

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	28 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft		
T9	145 - 125	Horizontal	Max. Vx	13	-0.000	0.000	0.000		
			Max Tension	25	0.959	0.000	0.000		
			Max Compression	25	-0.959	0.000	0.000		
			Max. Mx	20	0.953	0.008	0.000		
			Max. My	13	0.757	0.000	-0.000		
			Max. Vy	20	0.011	0.000	0.000		
		Top Girt	Max. Vx	13	0.000	0.000	0.000		
			Max Tension	7	0.506	0.000	0.000		
			Max Compression	13	-0.309	0.000	0.000		
			Max. Mx	16	-0.001	0.008	0.000		
			Max. My	13	0.082	0.000	-0.000		
			Max. Vy	16	0.011	0.000	0.000		
		Bottom Girt	Max. Vx	13	0.000	0.000	0.000		
			Max Tension	10	0.821	0.000	0.000		
			Max Compression	12	-0.749	0.000	0.000		
			Max. Mx	20	0.142	0.008	0.000		
			Max. My	13	0.688	0.000	-0.000		
			Max. Vy	20	0.011	0.000	0.000		
		Leg	Leg	Diagonal	Max. Vx	13	0.000	0.000	0.000
					Max Tension	1	0.000	0.000	0.000
					Max Compression	15	-58.495	-0.186	0.000
					Max. Mx	5	-39.221	0.793	-0.116
					Max. My	8	-32.329	-0.013	0.694
					Max. Vy	5	1.947	0.043	-0.095
				Horizontal	Max. Vx	2	-1.675	-0.121	0.001
					Max Tension	11	4.414	0.000	0.000
					Max Compression	5	-4.990	0.000	0.000
					Max. Mx	24	-0.037	0.011	0.000
					Max. My	13	2.449	0.000	0.000
					Max. Vy	24	-0.012	0.000	0.000
Top Girt	Max. Vx			13	-0.000	0.000	0.000		
	Max Tension			15	1.001	0.000	0.000		
	Max Compression			15	-1.001	0.000	0.000		
	Max. Mx			20	0.983	0.008	0.000		
	Max. My			13	0.663	0.000	-0.000		
	Max. Vy			20	-0.011	0.000	0.000		
Bottom Girt	Max. Vx	13	0.000	0.000	0.000				
	Max Tension	12	1.022	0.000	0.000				
	Max Compression	6	-0.806	0.000	0.000				
	Max. Mx	20	0.064	0.008	0.000				
	Max. My	13	-0.634	0.000	-0.000				
	Max. Vy	20	-0.011	0.000	0.000				
T10	125 - 105	Leg	Max. Vx	13	0.000	0.000	0.000		
			Max Tension	1	0.000	0.000	0.000		
			Max Compression	21	-66.049	-0.207	0.002		
			Max. Mx	11	-17.471	0.767	-0.068		
			Max. My	2	-29.066	-0.029	0.711		
			Max. Vy	5	1.956	-0.711	-0.067		
		Diagonal	Max. Vx	2	-1.677	-0.037	0.647		
			Max Tension	5	4.750	0.000	0.000		
			Max Compression	11	-4.931	0.000	0.000		
			Max. Mx	24	0.249	0.011	0.000		
			Max. My	13	-1.877	0.000	0.000		
			Max. Vy	24	-0.012	0.000	0.000		
			Max. Vx	13	-0.000	0.000	0.000		

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 29 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft	
T11	105 - 85	Horizontal	Max Tension	22	1.131	0.000	0.000	
			Max Compression	22	-1.131	0.000	0.000	
			Max Mx	26	1.091	0.008	0.000	
			Max My	13	0.751	0.000	-0.000	
			Max Vy	26	0.010	0.000	0.000	
			Max Vx	13	0.000	0.000	0.000	
		Top Girt	Max Tension	12	1.948	0.000	0.000	0.000
			Max Compression	6	-1.906	0.000	0.000	0.000
			Max Mx	20	0.058	0.008	0.000	0.000
			Max My	13	-1.338	0.000	-0.000	0.000
			Max Vy	20	0.010	0.000	0.000	0.000
			Max Vx	13	0.000	0.000	0.000	0.000
		Bottom Girt	Max Tension	4	1.287	0.000	0.000	0.000
			Max Compression	6	-1.057	0.000	0.000	0.000
			Max Mx	23	-0.074	0.008	0.000	0.000
			Max My	13	-0.773	0.000	-0.000	0.000
			Max Vy	23	0.010	0.000	0.000	0.000
			Max Vx	13	0.000	0.000	0.000	0.000
		Guy A	Bottom Tension	7	11.940			
			Top Tension	7	11.988			
			Top Cable Vert	7	5.447			
			Top Cable Norm	7	10.679			
			Top Cable Tan	7	0.013			
			Bot Cable Vert	7	-5.280			
			Bot Cable Norm	7	10.708			
			Bot Cable Tan	7	0.098			
		Guy B	Bottom Tension	11	12.319			
			Top Tension	11	12.367			
			Top Cable Vert	11	5.616			
			Top Cable Norm	11	11.018			
			Top Cable Tan	11	0.021			
			Bot Cable Vert	11	-5.449			
			Bot Cable Norm	11	11.048			
			Bot Cable Tan	11	0.105			
		Guy C	Bottom Tension	5	12.316			
			Top Tension	5	12.364			
			Top Cable Vert	5	5.615			
			Top Cable Norm	5	11.016			
			Top Cable Tan	5	0.020			
			Bot Cable Vert	5	-5.448			
			Bot Cable Norm	5	11.045			
			Bot Cable Tan	5	0.105			
		Top Guy Pull-Off	Max Tension	13	5.890	0.000	0.000	0.000
			Max Compression	5	-0.056	0.000	0.000	0.000
			Max Mx	26	2.760	0.025	0.000	0.000
Max My	13		0.000	0.000	-0.000	0.000		
Max Vy	26		-0.033	0.000	0.000	0.000		
Max Vx	13		0.000	0.000	0.000	0.000		
Leg	Max Tension	1	0.000	0.000	0.000	0.000		
	Max Compression	21	-71.053	-0.216	0.005	0.000		
	Max Mx	11	-40.671	-0.464	-0.043	0.000		
	Max My	9	-24.135	-0.180	0.427	0.000		
	Max Vy	11	1.131	0.053	-0.100	0.000		
	Max Vx	2	1.167	0.069	0.107	0.000		
	Max Tension	3	2.648	0.000	0.000	0.000		
	Max Compression	13	-2.631	0.000	0.000	0.000		
	Max Mx	24	-0.743	0.010	0.000	0.000		
	Max My	13	-0.167	0.000	0.000	0.000		
Diagonal	Max Vy	24	-0.010	0.000	0.000	0.000		
	Max Vx	13	-0.000	0.000	0.000	0.000		
	Max Tension	3	2.648	0.000	0.000	0.000		
	Max Compression	13	-2.631	0.000	0.000	0.000		
	Max Mx	24	-0.743	0.010	0.000	0.000		
Horizontal	Max Vy	24	-0.010	0.000	0.000	0.000		
	Max Tension	21	1.221	0.000	0.000	0.000		

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 30 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T12	85 - 65	Top Girt	Max Compression	21	-1.221	0.000	0.000
			Max Mx	22	1.215	0.008	0.000
			Max My	13	0.878	0.000	-0.000
			Max Vy	22	0.010	0.000	0.000
			Max Vx	13	0.000	0.000	0.000
			Max Tension	6	1.081	0.000	0.000
			Max Compression	4	-1.028	0.000	0.000
			Max Mx	21	-0.234	0.008	0.000
			Max My	13	0.845	0.000	-0.000
			Max Vy	21	0.010	0.000	0.000
		Bottom Girt	Max Vx	13	0.000	0.000	0.000
			Max Tension	3	0.345	0.000	0.000
			Max Compression	12	-0.129	0.000	0.000
			Max Mx	14	0.194	0.008	0.000
			Max My	13	-0.083	0.000	-0.000
			Max Vy	14	-0.010	0.000	0.000
			Max Vx	13	0.000	0.000	0.000
			Max Tension	1	0.000	0.000	0.000
			Max Compression	21	-72.270	-0.222	0.006
			Max Mx	5	-25.306	0.462	-0.077
		Diagonal	Max My	7	-39.274	0.250	0.510
			Max Vy	5	1.022	0.069	-0.086
			Max Vx	7	1.033	0.063	0.113
			Max Tension	12	2.227	0.000	0.000
			Max Compression	6	-2.805	0.000	0.000
			Max Mx	16	-0.159	0.009	0.000
			Max My	13	1.515	0.000	0.000
			Max Vy	16	0.010	0.000	0.000
			Max Vx	13	-0.000	0.000	0.000
			Max Tension	21	1.252	0.000	0.000
		Horizontal	Max Compression	21	-1.252	0.000	0.000
			Max Mx	23	1.228	0.007	0.000
			Max My	13	0.879	0.000	-0.000
			Max Vy	23	0.010	0.000	0.000
			Max Vx	13	0.000	0.000	0.000
			Max Tension	13	0.234	0.000	0.000
			Max Compression	7	-0.139	0.000	0.000
			Max Mx	14	0.025	0.007	0.000
			Max My	13	0.137	0.000	-0.000
			Max Vy	14	-0.010	0.000	0.000
Top Girt	Max Vx	13	0.000	0.000	0.000		
	Max Tension	6	1.202	0.000	0.000		
	Max Compression	12	-0.965	0.000	0.000		
	Max Mx	23	0.132	0.007	0.000		
	Max My	13	0.606	0.000	-0.000		
	Max Vy	23	0.010	0.000	0.000		
	Max Vx	13	0.000	0.000	0.000		
	Max Tension	1	0.000	0.000	0.000		
	Max Compression	21	-77.656	-0.238	0.011		
	Max Mx	11	-43.914	0.408	-0.109		
Diagonal	Max My	13	-39.543	0.202	0.473		
	Max Vy	5	1.031	-0.329	-0.091		
	Max Vx	7	1.054	-0.129	-0.293		
	Max Tension	6	2.565	0.000	0.000		
	Max Compression	7	-3.119	0.000	0.000		
	Max Mx	20	-0.886	0.009	0.000		
	Max My	13	-0.380	0.000	0.000		
	Max Vy	20	0.009	0.000	0.000		
	Max Vx	13	-0.000	0.000	0.000		
	Max Tension	21	1.334	0.000	0.000		
Horizontal	Max Compression	21	-1.334	0.000	0.000		

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 31 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft	
T14	45 - 25	Top Girt	Max. Mx	25	1.180	0.007	0.000	
			Max. My	13	0.964	0.000	-0.000	
			Max. Vy	25	-0.009	0.000	0.000	
			Max. Vx	13	0.000	0.000	0.000	
			Max. Tension	12	1.200	0.000	0.000	
			Max. Compression	6	-1.138	0.000	0.000	
			Max. Mx	23	0.101	0.007	0.000	
			Max. My	13	-0.508	0.000	-0.000	
			Max. Vy	23	-0.009	0.000	0.000	
			Max. Vx	13	0.000	0.000	0.000	
			Max. Tension	7	0.764	0.000	0.000	
			Max. Compression	13	-0.399	0.000	0.000	
		Bottom Girt	Max. Mx	25	0.209	0.007	0.000	
			Max. My	13	-0.399	0.000	-0.000	
			Max. Vy	25	-0.009	0.000	0.000	
			Max. Vx	13	0.000	0.000	0.000	
			Guy A	Bottom Tension	7	6.795		
				Top Tension	7	6.812		
				Top Cable Vert	7	1.731		
				Top Cable Norm	7	6.589		
				Top Cable Tan	7	0.004		
				Bot Cable Vert	7	-1.642		
				Bot Cable Norm	7	6.594		
				Bot Cable Tan	7	0.046		
		Guy B		Bottom Tension	11	6.859		
				Top Tension	11	6.875		
				Top Cable Vert	11	1.746		
				Top Cable Norm	11	6.650		
			Top Cable Tan	11	0.001			
			Bot Cable Vert	11	-1.657			
			Bot Cable Norm	11	6.655			
			Bot Cable Tan	11	0.048			
			Guy C	Bottom Tension	5	6.861		
				Top Tension	5	6.877		
				Top Cable Vert	5	1.747		
				Top Cable Norm	5	6.652		
		Top Cable Tan		5	0.002			
		Bot Cable Vert		5	-1.658			
		Bot Cable Norm		5	6.657			
		Bot Cable Tan		5	0.048			
		Top Guy Pull-Off		Max. Tension	13	3.699	0.000	0.000
				Max. Compression	1	0.000	0.000	0.000
Max. Mx	23			2.632	0.024	0.000		
Max. My	13			0.227	0.000	-0.000		
Max. Vy	23		0.032	0.000	0.000			
Max. Vx	13		0.000	0.000	0.000			
Leg	Max. Tension		1	0.000	0.000	0.000		
	Max. Compression		17	-78.688	0.145	0.243		
	Max. Mx		20	-77.615	0.397	0.003		
	Max. My		7	-39.841	0.185	0.439		
	Max. Vy		6	0.711	0.082	-0.100		
	Max. Vx		7	0.760	0.067	0.147		
	Diagonal	Max. Tension	7	1.493	0.000	0.000		
		Max. Compression	6	-2.239	0.000	0.000		
		Max. Mx	20	-0.624	0.009	0.000		
		Max. My	26	-0.643	0.000	0.000		
		Max. Vy	20	0.009	0.000	0.000		
		Max. Vx	26	-0.000	0.000	0.000		
Horizontal		Max. Tension	17	1.361	0.000	0.000		
		Max. Compression	17	-1.361	0.000	0.000		
		Max. Mx	17	1.220	0.007	0.000		

tnxTower B+T Group 1717 S. Boulder Ave. Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	32 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft	
T15	25 - 5	Top Girt	Max. My	13	1.002	0.000	-0.000	
			Max. Vy	17	-0.009	0.000	0.000	
			Max. Vx	13	0.000	0.000	0.000	
			Max Tension	13	0.528	0.000	0.000	
			Max. Compression	7	-0.537	0.000	0.000	
			Max. Mx	25	0.061	0.007	0.000	
			Max. My	13	0.528	0.000	-0.000	
			Max. Vy	25	-0.009	0.000	0.000	
			Max. Vx	13	0.000	0.000	0.000	
			Max Tension	7	0.864	0.000	0.000	
			Max. Compression	13	-0.502	0.000	0.000	
			Bottom Girt	Max. Mx	14	0.315	0.007	0.000
		Max. My		13	0.182	0.000	-0.000	
		Max. Vy		14	-0.009	0.000	0.000	
		Max. Vx		13	0.000	0.000	0.000	
		Max Tension		1	0.000	0.000	0.000	
		Max. Compression		17	-78.700	0.065	0.210	
		Max. Mx		24	-76.331	3.747	2.149	
		Max. My		22	-76.453	-0.011	-4.329	
		Max. Vy		18	12.239	-3.744	2.185	
		Max. Vx		21	13.936	-0.034	-4.325	
		Diagonal		Max Tension	12	3.035	0.000	0.000
				Max. Compression	6	-3.686	0.000	0.000
			Max. Mx	20	-0.208	0.008	0.000	
			Max. My	26	-0.194	0.000	0.000	
			Max. Vy	20	0.008	0.000	0.000	
			Max. Vx	26	-0.000	0.000	0.000	
			Horizontal	Max Tension	17	1.362	0.000	0.000
				Max. Compression	17	-1.362	0.000	0.000
				Max. Mx	14	1.297	0.006	0.000
				Max. My	13	0.951	0.000	-0.000
				Max. Vy	14	0.008	0.000	0.000
				Max. Vx	13	0.000	0.000	0.000
		Top Girt	Max Tension	13	0.846	0.000	0.000	
			Max. Compression	7	-0.751	0.000	0.000	
			Max. Mx	14	0.056	0.006	0.000	
			Max. My	13	-0.026	0.000	-0.000	
			Max. Vy	14	0.008	0.000	0.000	
			Max. Vx	13	0.000	0.000	0.000	
			Bottom Girt	Max Tension	19	8.539	0.000	0.000
				Max. Compression	1	0.000	0.000	0.000
				Max. Mx	14	8.207	0.006	0.000
Max. My	13			4.539	0.000	-0.000		
Max. Vy	14			0.008	0.000	0.000		
Max. Vx	13			0.000	0.000	0.000		
Leg	Max Tension	1		0.000	0.000	0.000		
	Max. Compression	20		-81.538	0.167	0.441		
	Max. Mx	18		-76.776	4.334	-0.019		
	Max. My	7		-45.707	-0.202	1.978		
	Max. Vy	19		12.577	-0.806	0.123		
	Max. Vx	7		-4.352	-0.134	1.959		
	Diagonal	Max Tension	7	1.703	0.000	0.000		
		Max. Compression	20	-13.747	0.000	0.000		
		Max. Mx	19	0.490	0.005	0.000		
		Max. My	13	-1.751	0.000	0.000		
		Max. Vy	19	-0.007	0.000	0.000		
		Max. Vx	13	-0.000	0.000	0.000		
	Horizontal	Max Tension	20	1.473	0.000	0.000		
		Max. Compression	20	-1.473	0.000	0.000		
		Max. Mx	19	1.470	0.001	0.000		
		Max. My	13	0.830	0.000	-0.000		

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	33 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Top Girt	Max. Vy	19	-0.003	0.000	0.000
			Max. Vx	13	0.000	0.000	0.000
			Max Tension	15	7.807	0.000	0.000
			Max. Compression	1	0.000	0.000	0.000
			Max. Mx	14	7.624	0.004	0.000
			Max. My	13	4.453	0.000	-0.000
			Max. Vy	14	-0.006	0.000	0.000
		Bottom Girt	Max. Vx	13	0.000	0.000	0.000
			Max Tension	20	4.108	0.000	0.000
			Max. Compression	13	-0.122	0.000	0.000
			Max. Mx	14	3.807	0.000	0.000
			Max. Vy	14	-0.001	0.000	0.000
			Max. Vx	7	0.000	0.000	0.000

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K	
Mast	Max Vert	23	227.144	-0.323	0.189	
	Max. H _x	12	101.476	0.768	0.432	
	Max. H _z	11	120.110	0.084	0.491	
	Max. M _x	1	0.000	-0.004	0.002	
	Max. M _z	1	0.000	-0.004	0.002	
	Max. Torsion	13	1.722	0.473	-0.082	
	Min. Vert	1	63.157	-0.004	0.002	
	Min. H _x	4	101.632	-0.772	0.440	
	Min. H _z	8	100.139	-0.002	-0.896	
	Min. M _x	1	0.000	-0.004	0.002	
	Min. M _z	1	0.000	-0.004	0.002	
	Min. Torsion	7	-2.241	0.310	-0.371	
	Guy C @ 244 ft Elev 0 ft Azimuth 240 deg	Max. Vert	10	-0.808	-0.586	0.339
		Max. H _x	10	-0.808	-0.586	0.339
	Max. H _z	3	-51.656	-52.830	31.490	
	Min. Vert	5	-52.289	-54.544	30.460	
	Min. H _x	5	-52.289	-54.544	30.460	
	Min. H _z	10	-0.808	-0.586	0.339	
Guy B @ 244 ft Elev 0 ft Azimuth 120 deg	Max. Vert	6	-0.813	0.589	0.341	
	Max. H _x	11	-52.297	54.554	30.464	
	Max. H _z	13	-51.386	52.632	31.357	
	Min. Vert	11	-52.297	54.554	30.464	
	Min. H _x	6	-0.813	0.589	0.341	
	Min. H _z	6	-0.813	0.589	0.341	
Guy A @ 244 ft Elev 0 ft Azimuth 0 deg	Max. Vert	2	-0.809	-0.000	-0.686	
	Max. H _x	10	-43.417	1.469	-52.220	
	Max. H _z	2	-0.809	-0.000	-0.686	
	Min. Vert	9	-50.728	0.863	-60.577	
	Min. H _x	5	-25.829	-1.461	-30.916	
	Min. H _z	9	-50.728	0.863	-60.577	

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 34 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Tower Mast Reaction Summary

Load Combination	Vertical K	Shear _y K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
Dead Only	63.157	0.004	-0.002	0.000	0.000	0.146
1.2 Dead+1.0 Wind 0 deg - No Ice+1.0 Guy	130.110	0.003	0.370	0.000	0.000	-0.036
1.2 Dead+1.0 Wind 30 deg - No Ice+1.0 Guy	119.057	0.476	0.087	0.000	0.000	1.134
1.2 Dead+1.0 Wind 60 deg - No Ice+1.0 Guy	101.632	0.772	-0.440	0.000	0.000	0.614
1.2 Dead+1.0 Wind 90 deg - No Ice+1.0 Guy	120.097	0.094	-0.487	0.000	0.000	0.250
1.2 Dead+1.0 Wind 120 deg - No Ice+1.0 Guy	130.219	-0.410	-0.229	0.000	0.000	1.556
1.2 Dead+1.0 Wind 150 deg - No Ice+1.0 Guy	118.753	-0.310	0.371	0.000	0.000	2.241
1.2 Dead+1.0 Wind 180 deg - No Ice+1.0 Guy	100.139	0.002	0.896	0.000	0.000	0.713
1.2 Dead+1.0 Wind 210 deg - No Ice+1.0 Guy	119.161	0.315	0.361	0.000	0.000	-0.330
1.2 Dead+1.0 Wind 240 deg - No Ice+1.0 Guy	130.711	0.419	-0.242	0.000	0.000	0.276
1.2 Dead+1.0 Wind 270 deg - No Ice+1.0 Guy	120.110	-0.084	-0.491	0.000	0.000	0.409
1.2 Dead+1.0 Wind 300 deg - No Ice+1.0 Guy	101.476	-0.768	-0.432	0.000	0.000	-1.387
1.2 Dead+1.0 Wind 330 deg - No Ice+1.0 Guy	118.661	-0.473	0.082	0.000	0.000	-1.722
1.2 Dead+1.0 Ice+1.0 Temp+Guy	225.742	0.028	-0.012	0.000	0.000	0.638
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp+1.0 Guy	227.100	0.028	0.322	0.000	0.000	0.543
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp+1.0 Guy	226.573	-0.100	0.260	0.000	0.000	0.694
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp+1.0 Guy	226.110	-0.211	0.132	0.000	0.000	0.660
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp+1.0 Guy	226.601	-0.274	-0.035	0.000	0.000	0.656
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp+1.0 Guy	227.123	-0.270	-0.189	0.000	0.000	0.807
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp+1.0 Guy	226.582	-0.139	-0.263	0.000	0.000	0.887
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp+1.0 Guy	226.102	0.026	-0.287	0.000	0.000	0.741
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp+1.0 Guy	226.594	0.191	-0.263	0.000	0.000	0.606
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp+1.0 Guy	227.144	0.323	-0.189	0.000	0.000	0.640
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp+1.0 Guy	226.619	0.329	-0.034	0.000	0.000	0.628
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp+1.0 Guy	226.122	0.268	0.132	0.000	0.000	0.461
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp+1.0 Guy	226.580	0.157	0.262	0.000	0.000	0.381
Dead+Wind 0 deg - Service+Guy	67.390	0.004	-0.395	0.000	0.000	-0.004
Dead+Wind 30 deg - Service+Guy	66.569	0.232	-0.367	0.000	0.000	0.516

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	35 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
Dead+Wind 60 deg - Service+Guy	66.339	0.395	-0.228	0.000	0.000	0.277
Dead+Wind 90 deg - Service+Guy	66.709	0.431	-0.020	0.000	0.000	0.134
Dead+Wind 120 deg - Service+Guy	67.438	0.345	0.201	0.000	0.000	0.676
Dead+Wind 150 deg - Service+Guy	66.493	0.204	0.381	0.000	0.000	0.945
Dead+Wind 180 deg - Service+Guy	66.139	0.003	0.442	0.000	0.000	0.321
Dead+Wind 210 deg - Service+Guy	66.539	-0.197	0.381	0.000	0.000	-0.121
Dead+Wind 240 deg - Service+Guy	67.532	-0.338	0.200	0.000	0.000	0.115
Dead+Wind 270 deg - Service+Guy	66.715	-0.423	-0.021	0.000	0.000	0.181
Dead+Wind 300 deg - Service+Guy	66.327	-0.387	-0.229	0.000	0.000	-0.439
Dead+Wind 330 deg - Service+Guy	66.533	-0.224	-0.367	0.000	0.000	-0.706

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	-33.940	0.000	0.000	33.940	-0.000	0.000%
2	-0.000	-40.415	-54.121	0.000	40.414	54.115	0.009%
3	28.192	-40.137	-46.049	-28.192	40.137	46.043	0.009%
4	47.773	-39.860	-27.253	-47.775	39.860	27.251	0.004%
5	54.785	-40.137	-1.288	-54.779	40.137	1.292	0.010%
6	48.490	-40.415	25.425	-48.484	40.414	-25.422	0.010%
7	26.537	-40.137	45.839	-26.532	40.137	-45.836	0.009%
8	0.000	-39.860	52.655	0.001	39.860	-52.655	0.002%
9	-26.645	-40.137	46.026	26.640	40.137	-46.023	0.009%
10	-48.677	-40.415	25.534	48.672	40.414	-25.530	0.010%
11	-54.785	-40.137	-1.288	54.779	40.137	1.292	0.010%
12	-47.586	-39.860	-27.145	47.588	39.860	27.141	0.007%
13	-28.084	-40.137	-45.862	28.084	40.137	45.856	0.009%
14	0.000	-168.651	0.000	0.000	168.651	-0.001	0.001%
15	-0.000	-168.831	-9.679	0.000	168.831	9.677	0.001%
16	4.930	-168.651	-8.289	-4.930	168.651	8.287	0.001%
17	8.476	-168.472	-4.864	-8.476	168.472	4.864	0.000%
18	9.763	-168.651	-0.116	-9.762	168.651	0.116	0.001%
19	8.544	-168.831	4.702	-8.543	168.831	-4.701	0.001%
20	4.785	-168.651	8.276	-4.784	168.651	-8.275	0.001%
21	0.000	-168.472	9.549	0.000	168.472	-9.549	0.000%
22	-4.791	-168.651	8.287	4.790	168.651	-8.286	0.001%
23	-8.555	-168.831	4.708	8.554	168.831	-4.708	0.001%
24	-9.763	-168.651	-0.116	9.762	168.651	0.116	0.001%
25	-8.465	-168.472	-4.858	8.465	168.472	4.857	0.001%
26	-4.924	-168.651	-8.278	4.924	168.651	8.276	0.001%
27	-0.000	-34.030	-17.672	0.000	34.030	17.670	0.005%
28	9.206	-33.940	-15.036	-9.206	33.940	15.034	0.005%
29	15.599	-33.849	-8.899	-15.597	33.849	8.898	0.008%
30	17.889	-33.940	-0.421	-17.888	33.940	0.422	0.004%
31	15.834	-34.030	8.302	-15.832	34.030	-8.301	0.004%
32	8.665	-33.940	14.968	-8.663	33.940	-14.967	0.005%

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 36 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Load Comb.	Sum of Applied Forces				Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K		
33	0.000	-33.849	17.193	-0.000	33.849	-17.191	0.005%	
34	-8.701	-33.940	15.029	8.699	33.940	-15.028	0.005%	
35	-15.895	-34.030	8.338	15.893	34.030	-8.337	0.004%	
36	-17.889	-33.940	-0.421	17.888	33.940	0.422	0.004%	
37	-15.538	-33.849	-8.864	15.537	33.849	8.863	0.004%	
38	-9.170	-33.940	-14.975	9.170	33.940	14.973	0.005%	

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	8	0.00000001	0.00008697
2	Yes	33	0.00008692	0.00012311
3	Yes	32	0.00009729	0.00012160
4	Yes	24	0.00014490	0.00012223
5	Yes	32	0.00010028	0.00012905
6	Yes	33	0.00008953	0.00012720
7	Yes	32	0.00009494	0.00011683
8	Yes	17	0.00004349	0.00011145
9	Yes	32	0.00009543	0.00011794
10	Yes	33	0.00009010	0.00012868
11	Yes	32	0.00010039	0.00012929
12	Yes	28	0.00014328	0.00010568
13	Yes	32	0.00009669	0.00012012
14	Yes	19	0.00015000	0.00011356
15	Yes	29	0.00012773	0.00001797
16	Yes	28	0.00012816	0.00001867
17	Yes	26	0.00013406	0.00003892
18	Yes	29	0.00011877	0.00003918
19	Yes	29	0.00014720	0.00004427
20	Yes	29	0.00012253	0.00003914
21	Yes	26	0.00013517	0.00004615
22	Yes	28	0.00012563	0.00003628
23	Yes	29	0.00012547	0.00003321
24	Yes	28	0.00012158	0.00003722
25	Yes	25	0.00012671	0.00003133
26	Yes	28	0.00012540	0.00001841
27	Yes	24	0.00013076	0.00007661
28	Yes	22	0.00014121	0.00007873
29	Yes	13	0.00014870	0.00009083
30	Yes	23	0.00010953	0.00006246
31	Yes	25	0.00010621	0.00006213
32	Yes	22	0.00013836	0.00007562
33	Yes	13	0.00000001	0.00004367
34	Yes	22	0.00013948	0.00007669
35	Yes	25	0.00010699	0.00006306
36	Yes	23	0.00011014	0.00006282
37	Yes	14	0.00000001	0.00006044
38	Yes	22	0.00014085	0.00007827

Maximum Tower Deflections - Service Wind

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 37 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	305 - 285	8.188	27	0.289	0.673
T2	285 - 265	7.244	27	0.245	0.675
T3	265 - 245	6.493	27	0.187	0.679
T4	245 - 225	6.308	35	0.068	0.745
T5	225 - 205	6.490	35	0.045	0.868
T6	205 - 185	6.614	35	0.030	0.971
T7	185 - 165	6.509	35	0.068	1.071
T8	165 - 145	6.302	35	0.090	1.148
T9	145 - 125	5.887	35	0.125	1.195
T10	125 - 105	5.304	31	0.128	1.208
T11	105 - 85	4.830	31	0.119	1.212
T12	85 - 65	4.270	31	0.161	1.198
T13	65 - 45	3.488	31	0.198	1.156
T14	45 - 25	2.614	31	0.231	1.104
T15	25 - 5	1.557	31	0.274	1.037
T16	5 - 0	0.320	31	0.301	0.948

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
305.000	Lightning Rod 1"x10'	27	8.188	0.289	0.673	97243
300.000	Sector1(CaAa=13333.33 Sq in)No Ice	27	7.945	0.277	0.674	97243
290.193	Guy	27	7.479	0.256	0.675	32836
282.000	Sector1(CaAa=10000 Sq in)No Ice	27	7.113	0.239	0.674	20212
270.000	Sector1(CaAa=10000 Sq in)No Ice	27	6.649	0.208	0.674	12099
258.000	6' MW Dish	35	6.376	0.147	0.693	9583
255.000	Guy	35	6.343	0.128	0.702	9284
246.000	6' MW Dish	35	6.306	0.073	0.740	8672
182.211	Guy	35	6.487	0.071	1.084	88940
122.211	Guy	31	5.232	0.126	1.208	16973
62.211	Guy	31	3.371	0.203	1.158	123431

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	305 - 285	49.338	2	1.217	1.758
T2	285 - 265	44.364	2	1.085	1.760
T3	265 - 245	40.039	2	0.888	1.793
T4	245 - 225	37.760	10	0.497	1.917
T5	225 - 205	36.968	10	0.323	2.076
T6	205 - 185	36.132	10	0.358	2.299
T7	185 - 165	34.632	10	0.438	2.495
T8	165 - 145	32.793	10	0.515	2.660
T9	145 - 125	30.287	6	0.673	2.746
T10	125 - 105	27.244	6	0.688	2.734
T11	105 - 85	24.567	6	0.663	2.753
T12	85 - 65	21.540	6	0.835	2.734

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	38 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T13	65 - 45	17.578	6	1.018	2.624
T14	45 - 25	13.031	6	1.190	2.517
T15	25 - 5	7.655	6	1.370	2.365
T16	5 - 0	1.564	6	1.478	2.142

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
305.000	Lightning Rod 1"x10'	2	49.338	1.217	1.758	31597
300.000	Sector1(CaAa=13333.33 Sq in)No Ice	2	48.072	1.184	1.758	31597
290.193	Guy	2	45.622	1.120	1.759	10669
282.000	Sector1(CaAa=10000 Sq in)No Ice	2	43.654	1.065	1.762	6431
270.000	Sector1(CaAa=10000 Sq in)No Ice	2	41.013	0.958	1.778	3699
258.000	6' MW Dish	10	38.958	0.756	1.827	2928
255.000	Guy	10	38.621	0.693	1.845	2839
246.000	6' MW Dish	10	37.828	0.514	1.909	2667
182.211	Guy	10	34.397	0.446	2.520	23206
122.211	Guy	6	26.849	0.680	2.734	5281
62.211	Guy	6	16.978	1.054	2.629	11253

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	
T2	285	Leg	A325N	0.750	3	2.524	30.101	0.084	✓	1	Bolt Tension
T3	265	Leg	A325N	0.750	3	10.165	30.101	0.338	✓	1	Bolt Tension
T4	245	Leg	A325N	0.750	3	7.077	30.101	0.235	✓	1	Bolt Tension
T5	225	Leg	A325N	0.750	3	5.047	30.101	0.168	✓	1	Bolt Tension
T6	205	Leg	A325N	0.750	3	5.105	30.101	0.170	✓	1	Bolt Tension
T7	185	Leg	A325N	0.750	3	5.359	30.101	0.178	✓	1	Bolt Tension
T8	165	Leg	A325N	0.750	3	5.959	30.101	0.198	✓	1	Bolt Tension
T9	145	Leg	A325N	0.750	3	6.175	30.101	0.205	✓	1	Bolt Tension
T10	125	Leg	A325N	0.750	3	6.500	30.101	0.216	✓	1	Bolt Tension
T11	105	Leg	A325N	0.750	3	7.339	30.101	0.244	✓	1	Bolt Tension
T12	85	Leg	A325N	0.750	3	7.895	30.101	0.262	✓	1	Bolt Tension
T13	65	Leg	A325N	0.750	3	8.030	30.101	0.267	✓	1	Bolt Tension
T14	45	Leg	A325N	0.750	3	8.629	30.101	0.287	✓	1	Bolt Tension
T15	25	Leg	A325N	0.750	3	8.744	30.101	0.290	✓	1	Bolt Tension
T16	5	Leg	A325N	0.750	3	8.531	30.101	0.283	✓	1	Bolt Tension

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 39 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Guy Design Data

Section No.	Elevation <i>ft</i>	Size	Initial Tension <i>K</i>	Breaking Load <i>K</i>	Actual T_n <i>K</i>	Allowable ϕT_n <i>K</i>	Required S.F.	Actual S.F.
T1	290 193 (A) (867)	9/16 EModulus EHS	3 500	35 000	18 699	21 000	1 000	1 123 ✓
	290 193 (B) (866)	9/16 EModulus EHS	3 500	35 000	18 685	21 000	1 000	1 124 ✓
	290 193 (C) (862)	9/16 EModulus EHS	3 500	35 000	18 840	21 000	1 000	1 115 ✓
T3	255 000 (A) (858)	9/16 EModulus EHS	3 500	35 000	17 774	21 000	1 000	1 182 ✓
	255 000 (A) (859)	9/16 EModulus EHS	3 500	35 000	17 811	21 000	1 000	1 179 ✓
	255 000 (B) (854)	9/16 EModulus EHS	3 500	35 000	18 600	21 000	1 000	1 129 ✓
	255 000 (B) (855)	9/16 EModulus EHS	3 500	35 000	18 148	21 000	1 000	1 157 ✓
	255 000 (C) (847)	9/16 EModulus EHS	3 500	35 000	18 158	21 000	1 000	1 157 ✓
	255 000 (C) (848)	9/16 EModulus EHS	3 500	35 000	18 572	21 000	1 000	1 131 ✓
T7	182 211 (A) (846)	3/8 EModulus EHS	1 540	15 400	8 473	9 240	1 000	1 091 ✓
	182 211 (B) (845)	3/8 EModulus EHS	1 540	15 400	9 066	9 240	1 000	1 019 ✓
	182 211 (C) (841)	3/8 EModulus EHS	1 540	15 400	9 059	9 240	1 000	1 020 ✓
T10	122 211 (A) (840)	7/16 EModulus EHS	2 080	20 800	11 988	12 480	1 000	1 041 ✓
	122 211 (B) (839)	7/16 EModulus EHS	2 080	20 800	12 367	12 480	1 000	1 009 ✓
	122 211 (C) (835)	7/16 EModulus EHS	2 080	20 800	12 364	12 480	1 000	1 009 ✓
T13	62 211 (A) (834)	3/8 EModulus EHS	1 540	15 400	6 812	9 240	1 000	1 356 ✓
	62 211 (B) (833)	3/8 EModulus EHS	1 540	15 400	6 875	9 240	1 000	1 344 ✓
	62 211 (C) (829)	3/8 EModulus EHS	1 540	15 400	6 877	9 240	1 000	1 344 ✓

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 40 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Size	Initial Tension K	Breaking Load K	Actual T_u K	Allowable ϕT_n K	Required S.F.	Actual S.F.
-------------	-----------------	------	----------------------	--------------------	-------------------	---------------------------	---------------	-------------

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in ²	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
T1	305 - 285	1 1/2	20.000	2.404	76.9 K=1.00	1.767	-25.883	51.596	0.502 ¹
T2	285 - 265	1 3/4	20.000	2.404	65.9 K=1.00	2.405	-48.373	78.769	0.614 ¹
T3	265 - 245	2	20.000	2.404	57.7 K=1.00	3.142	-88.348	110.838	0.797 ¹
T4	245 - 225	1 3/4	20.000	2.404	65.9 K=1.00	2.405	-61.324	78.769	0.779 ¹
T5	225 - 205	1 3/4	20.000	2.404	65.9 K=1.00	2.405	-45.695	78.769	0.580 ¹
T6	205 - 185	1 1/2	20.000	2.404	76.9 K=1.00	1.767	-47.813	51.596	0.927 ¹
T7	185 - 165	1 3/4	20.000	2.404	65.9 K=1.00	2.405	-53.057	78.769	0.674 ¹
T8	165 - 145	1 3/4	20.000	2.404	65.9 K=1.00	2.405	-55.342	78.769	0.703 ¹
T9	145 - 125	1 3/4	20.000	2.404	65.9 K=1.00	2.405	-57.769	78.769	0.733 ¹
T10	125 - 105	1 3/4	20.000	2.404	65.9 K=1.00	2.405	-65.284	78.769	0.829 ¹
T11	105 - 85	1 3/4	20.000	2.404	65.9 K=1.00	2.405	-70.466	78.769	0.895 ¹
T12	85 - 65	1 3/4	20.000	2.404	65.9 K=1.00	2.405	-72.260	78.769	0.917 ¹
T13	65 - 45	1 3/4	20.000	2.404	65.9 K=1.00	2.405	-77.013	78.769	0.978 ¹
T14	45 - 25	2	20.000	2.404	57.7 K=1.00	3.142	-78.598	110.838	0.709 ¹
T15	25 - 5	2	20.000	2.404	57.7 K=1.00	3.142	-78.619	110.838	0.709 ¹
T16	5 - 0	1 3/4	5.292	2.238	61.4 K=1.00	2.405	-81.538	82.175	0.992 ¹

¹ $P_u / \phi P_n$ controls

Diagonal Design Data (Compression)

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 41 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	305 - 285	875	3.844	3.684	141.5 K=0.70	0.601	-5.701	6.788	0.840 ¹
T2	285 - 265	1	3.844	3.657	122.9 K=0.70	0.785	-8.718	11.750	0.742 ¹
T3	265 - 245	1	3.844	3.631	122.0 K=0.70	0.785	-9.884	11.923	0.829 ¹
T4	245 - 225	875	3.844	3.657	140.4 K=0.70	0.601	-5.792	6.888	0.841 ¹
T5	225 - 205	875	3.844	3.657	140.4 K=0.70	0.601	-3.518	6.888	0.511 ¹
T6	205 - 185	.75	3.844	3.684	165.0 K=0.70	0.442	-2.991	3.664	0.816 ¹
T7	185 - 165	.75	3.844	3.657	163.8 K=0.70	0.442	-3.371	3.718	0.907 ¹
T8	165 - 145	.75	3.844	3.657	163.8 K=0.70	0.442	-2.492	3.718	0.670 ¹
T9	145 - 125	875	3.844	3.657	140.4 K=0.70	0.601	-4.990	6.888	0.724 ¹
T10	125 - 105	875	3.844	3.657	140.4 K=0.70	0.601	-4.931	6.888	0.716 ¹
T11	105 - 85	.75	3.844	3.657	163.8 K=0.70	0.442	-2.631	3.718	0.708 ¹
T12	85 - 65	.75	3.844	3.657	163.8 K=0.70	0.442	-2.805	3.718	0.754 ¹
T13	65 - 45	.75	3.844	3.657	163.8 K=0.70	0.442	-3.119	3.718	0.839 ¹
T14	45 - 25	.75	3.844	3.631	162.6 K=0.70	0.442	-2.239	3.773	0.593 ¹
T15	25 - 5	.75	3.844	3.631	162.6 K=0.70	0.442	-3.686	3.773	0.977 ¹
T16	5 - 0	1	2.314	1.955	90.2 K=0.96	0.785	-13.747	19.487	0.705 ¹

¹ P_u / φP_n controls

Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	305 - 285	3/4	3.000	2.875	128.8 K=0.70	0.442	-2.227	6.016	0.370 ¹
T2	285 - 265	3/4	3.000	2.854	127.9 K=0.70	0.442	-1.858	6.104	0.304 ¹
T3	265 - 245	3/4	3.000	2.833	126.9 K=0.70	0.442	-2.075	6.194	0.335 ¹
T4	245 - 225	3/4	3.000	2.854	127.9 K=0.70	0.442	-1.062	6.104	0.174 ¹
T5	225 - 205	3/4	3.000	2.854	127.9	0.442	-0.791	6.104	0.130 ¹

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	42 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T6	205 - 185	3/4	3 000	2 875	K=0.70 128.8	0.442	-0.828	6.016	0.138 ¹
T7	185 - 165	3/4	3 000	2 854	K=0.70 127.9	0.442	-0.919	6.104	0.151 ¹
T8	165 - 145	3/4	3 000	2 854	K=0.70 127.9	0.442	-0.959	6.104	0.157 ¹
T9	145 - 125	3/4	3 000	2 854	K=0.70 127.9	0.442	-1.001	6.104	0.164 ¹
T10	125 - 105	3/4	3 000	2 854	K=0.70 127.9	0.442	-1.131	6.104	0.185 ¹
T11	105 - 85	3/4	3 000	2 854	K=0.70 127.9	0.442	-1.221	6.104	0.200 ¹
T12	85 - 65	3/4	3 000	2 854	K=0.70 127.9	0.442	-1.252	6.104	0.205 ¹
T13	65 - 45	3/4	3 000	2 854	K=0.70 127.9	0.442	-1.334	6.104	0.219 ¹
T14	45 - 25	3/4	3 000	2 833	K=0.70 126.9	0.442	-1.361	6.194	0.220 ¹
T15	25 - 5	3/4	3 000	2 833	K=0.70 126.9	0.442	-1.362	6.194	0.220 ¹
T16	5 - 0	3/4	1 500	1 354	K=1.03 89.6	0.442	-1.473	11.060	0.133 ¹

¹ P_u / φP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	305 - 285	3/4	3 000	2 875	K=0.70 128.8	0.442	-0.076	6.016	0.013 ¹
T2	285 - 265	3/4	3 000	2 854	K=0.70 127.9	0.442	-1.080	6.104	0.177 ¹
T3	265 - 245	3/4	3 000	2 833	K=0.70 126.9	0.442	-3.692	6.194	0.596 ¹
T4	245 - 225	3/4	3 000	2 854	K=0.70 127.9	0.442	-2.130	6.104	0.349 ¹
T5	225 - 205	3/4	3 000	2 854	K=0.70 127.9	0.442	-1.417	6.104	0.232 ¹
T6	205 - 185	3/4	3 000	2 875	K=0.70 128.8	0.442	-0.458	6.016	0.076 ¹
T7	185 - 165	3/4	3 000	2 854	K=0.70 127.9	0.442	-1.085	6.104	0.178 ¹
T8	165 - 145	3/4	3 000	2 854	K=0.70 127.9	0.442	-0.309	6.104	0.051 ¹
T9	145 - 125	3/4	3 000	2 854	K=0.70 127.9	0.442	-0.806	6.104	0.132 ¹

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 43 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T10	125 - 105	3/4	3.000	2.854	127.9 K=0.70	0.442	-1.906	6.104	0.312 ¹ ✓
T11	105 - 85	3/4	3.000	2.854	127.9 K=0.70	0.442	-1.028	6.104	0.168 ¹ ✓
T12	85 - 65	3/4	3.000	2.854	127.9 K=0.70	0.442	-0.139	6.104	0.023 ¹ ✓
T13	65 - 45	3/4	3.000	2.854	127.9 K=0.70	0.442	-1.138	6.104	0.186 ¹ ✓
T14	45 - 25	3/4	3.000	2.833	126.9 K=0.70	0.442	-0.537	6.194	0.087 ¹ ✓
T15	25 - 5	3/4	3.000	2.833	126.9 K=0.70	0.442	-0.751	6.194	0.121 ¹ ✓

¹ P_u / φP_n controls

Bottom Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	305 - 285	3/4	3.000	2.875	128.8 K=0.70	0.442	-0.954	6.016	0.159 ¹ ✓
T2	285 - 265	3/4	3.000	2.854	127.9 K=0.70	0.442	-3.010	6.104	0.493 ¹ ✓
T3	265 - 245	3/4	3.000	2.833	126.9 K=0.70	0.442	-3.177	6.194	0.513 ¹ ✓
T4	245 - 225	3/4	3.000	2.854	127.9 K=0.70	0.442	-1.693	6.104	0.277 ¹ ✓
T5	225 - 205	3/4	3.000	2.854	127.9 K=0.70	0.442	-0.682	6.104	0.112 ¹ ✓
T6	205 - 185	3/4	3.000	2.875	128.8 K=0.70	0.442	-1.019	6.016	0.169 ¹ ✓
T7	185 - 165	3/4	3.000	2.854	127.9 K=0.70	0.442	-0.511	6.104	0.084 ¹ ✓
T8	165 - 145	3/4	3.000	2.854	127.9 K=0.70	0.442	-0.749	6.104	0.123 ¹ ✓
T9	145 - 125	3/4	3.000	2.854	127.9 K=0.70	0.442	-1.752	6.104	0.287 ¹ ✓
T10	125 - 105	3/4	3.000	2.854	127.9 K=0.70	0.442	-1.057	6.104	0.173 ¹ ✓
T11	105 - 85	3/4	3.000	2.854	127.9 K=0.70	0.442	-0.129	6.104	0.021 ¹ ✓
T12	85 - 65	3/4	3.000	2.854	127.9 K=0.70	0.442	-0.965	6.104	0.158 ¹ ✓
T13	65 - 45	3/4	3.000	2.854	127.9 K=0.70	0.442	-0.399	6.104	0.065 ¹ ✓
T14	45 - 25	3/4	3.000	2.833	126.9 K=0.70	0.442	-0.502	6.194	0.081 ¹ ✓
T16	5 - 0	3/4	0.231	0.085	6.0 K=1.10	0.442	-0.122	19.828	0.006 ¹ ✓

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 44 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
									✓

¹ P_u / φP_n controls

Top Guy Pull-Off Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T3	265 - 245	4x5/8	3.000	2.833	150.8 K=0.80	2.500	-11.743	24.850	0.473 ¹
T10	125 - 105	4x5/8	3.000	2.854	151.9 K=0.80	2.500	-0.056	24.488	0.002 ¹

¹ P_u / φP_n controls

Torque-Arm Top Design Data

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T3	265 - 245 (849)	C12x20.7	3.000	2.917	43.8 K=1.00	6.090	-6.128	238.176	0.026
T3	265 - 245 (850)	C12x20.7	3.000	2.917	43.8 K=1.00	6.090	-0.141	238.176	0.001
T3	265 - 245 (856)	C12x20.7	3.000	2.917	43.8 K=1.00	6.090	-6.858	238.176	0.029
T3	265 - 245 (857)	C12x20.7	3.000	2.917	43.8 K=1.00	6.090	-6.834	238.176	0.029
T3	265 - 245 (860)	C12x20.7	3.000	2.917	43.8 K=1.00	6.090	-0.114	238.176	0.000
T3	265 - 245 (861)	C12x20.7	3.000	2.917	43.8 K=1.00	6.090	-5.945	238.176	0.025

Torque-Arm Top Bending Design Data

Section No.	Elevation ft	Size	M _{ux} kip-ft	φM _{ux} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{ux}}$	M _{uy} kip-ft	φM _{uy} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{uy}}$
T3	265 - 245 (849)	C12x20.7	-37.623	94.764	0.397	-0.000	9.731	0.000
T3	265 - 245 (850)	C12x20.7	-40.132	94.764	0.423	-0.000	9.731	0.000
T3	265 - 245 (856)	C12x20.7	-39.870	94.764	0.421	-0.000	9.731	0.000
T3	265 - 245 (857)	C12x20.7	-39.746	94.764	0.419	0.000	9.731	0.000
T3	265 - 245 (860)	C12x20.7	-40.090	94.764	0.423	0.000	9.731	0.000
T3	265 - 245 (861)	C12x20.7	-37.101	94.764	0.392	0.000	9.731	0.000

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 45 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Torque-Arm Top Interaction Design Data

Section No.	Elevation ft	Size	Ratio	Ratio	Ratio	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
			$\frac{P_u}{\phi P_n}$	$\frac{M_{ux}}{\phi M_{nx}}$	$\frac{M_{uy}}{\phi M_{ny}}$			
T3	265 - 245 (849)	C12x20.7	0.026	0.397	0.000	0.410	1.000	4.8.1 ✓
T3	265 - 245 (850)	C12x20.7	0.001	0.423	0.000	0.424	1.000	4.8.1 ✓
T3	265 - 245 (856)	C12x20.7	0.029	0.421	0.000	0.435	1.000	4.8.1 ✓
T3	265 - 245 (857)	C12x20.7	0.029	0.419	0.000	0.434	1.000	4.8.1 ✓
T3	265 - 245 (860)	C12x20.7	0.000	0.423	0.000	0.423	1.000	4.8.1 ✓
T3	265 - 245 (861)	C12x20.7	0.025	0.392	0.000	0.404	1.000	4.8.1 ✓

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L	L _u	Kl/r	A	P _u	φP _n	Ratio
			ft	ft		in ²	K	K	$\frac{P_u}{\phi P_n}$
T1	305 - 285	1 1/2	20.000	2.404	76.9	1.767	21.185	79.522	0.266 ¹
T2	285 - 265	1 3/4	20.000	0.385	10.6	2.405	30.499	108.238	0.282 ¹
T3	265 - 245	2	20.000	2.404	57.7	3.142	61.128	141.372	0.432 ¹
T4	245 - 225	1 3/4	20.000	0.385	10.6	2.405	15.080	108.238	0.139 ¹

¹ P_u / φP_n controls

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L	L _u	Kl/r	A	P _u	φP _n	Ratio
			ft	ft		in ²	K	K	$\frac{P_u}{\phi P_n}$
T1	305 - 285	875	3.844	3.684	202.1	0.601	5.679	27.059	0.210 ¹
T2	285 - 265	1	3.844	3.657	175.6	0.785	8.442	35.343	0.239 ¹

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 46 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T3	265 - 245	1	3.844	3.631	174.3	0.785	9.619	35.343	0.272 ¹
T4	245 - 225	.875	3.844	3.657	200.6	0.601	5.241	27.059	0.194 ¹
T5	225 - 205	.875	3.844	3.657	200.6	0.601	2.985	27.059	0.110 ¹
T6	205 - 185	.75	3.844	3.684	235.8	0.442	2.622	19.880	0.132 ¹
T7	185 - 165	.75	3.844	3.657	234.1	0.442	3.210	19.880	0.161 ¹
T8	165 - 145	.75	3.844	3.657	234.1	0.442	1.929	19.880	0.097 ¹
T9	145 - 125	.875	3.844	3.657	200.6	0.601	4.414	27.059	0.163 ¹
T10	125 - 105	.875	3.844	3.657	200.6	0.601	4.750	27.059	0.176 ¹
T11	105 - 85	.75	3.844	3.657	234.1	0.442	2.648	19.880	0.133 ¹
T12	85 - 65	.75	3.844	3.657	234.1	0.442	2.227	19.880	0.112 ¹
T13	65 - 45	.75	3.844	3.657	234.1	0.442	2.565	19.880	0.129 ¹
T14	45 - 25	.75	3.844	3.631	232.4	0.442	1.493	19.880	0.075 ¹
T15	25 - 5	.75	3.844	3.631	232.4	0.442	3.035	19.880	0.153 ¹
T16	5 - 0	1	3.027	2.668	128.1	0.785	1.703	35.343	0.048 ¹

¹ P_u / φP_n controls

Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	305 - 285	3/4	3.000	2.875	184.0	0.442	2.231	19.880	0.112 ¹
T2	285 - 265	3/4	3.000	2.854	182.7	0.442	2.017	19.880	0.101 ¹
T3	265 - 245	3/4	3.000	2.833	181.3	0.442	2.068	19.880	0.104 ¹
T4	245 - 225	3/4	3.000	2.854	182.7	0.442	1.062	19.880	0.053 ¹
T5	225 - 205	3/4	3.000	2.854	182.7	0.442	0.791	19.880	0.040 ¹
T6	205 - 185	3/4	3.000	2.875	184.0	0.442	0.828	19.880	0.042 ¹
T7	185 - 165	3/4	3.000	2.854	182.7	0.442	0.919	19.880	0.046 ¹

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 47 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T8	165 - 145	3/4	3.000	2.854	182.7	0.442	0.959	19.880	0.048 ¹
T9	145 - 125	3/4	3.000	2.854	182.7	0.442	1.001	19.880	0.050 ¹
T10	125 - 105	3/4	3.000	2.854	182.7	0.442	1.131	19.880	0.057 ¹
T11	105 - 85	3/4	3.000	2.854	182.7	0.442	1.221	19.880	0.061 ¹
T12	85 - 65	3/4	3.000	2.854	182.7	0.442	1.252	19.880	0.063 ¹
T13	65 - 45	3/4	3.000	2.854	182.7	0.442	1.334	19.880	0.067 ¹
T14	45 - 25	3/4	3.000	2.833	181.3	0.442	1.361	19.880	0.068 ¹
T15	25 - 5	3/4	3.000	2.833	181.3	0.442	1.362	19.880	0.068 ¹
T16	5 - 0	3/4	1.500	1.354	86.7	0.442	1.473	19.880	0.074 ¹

¹ P_u / φP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	305 - 285	3/4	3.000	2.875	184.0	0.442	0.078	19.880	0.004 ¹
T2	285 - 265	3/4	3.000	2.854	182.7	0.442	1.069	19.880	0.054 ¹
T3	265 - 245	3/4	3.000	2.833	181.3	0.442	3.331	19.880	0.168 ¹
T4	245 - 225	3/4	3.000	2.854	182.7	0.442	2.474	19.880	0.124 ¹
T5	225 - 205	3/4	3.000	2.854	182.7	0.442	1.697	19.880	0.085 ¹
T6	205 - 185	3/4	3.000	2.875	184.0	0.442	0.590	19.880	0.030 ¹
T7	185 - 165	3/4	3.000	2.854	182.7	0.442	1.309	19.880	0.066 ¹
T8	165 - 145	3/4	3.000	2.854	182.7	0.442	0.506	19.880	0.025 ¹
T9	145 - 125	3/4	3.000	2.854	182.7	0.442	1.022	19.880	0.051 ¹
T10	125 - 105	3/4	3.000	2.854	182.7	0.442	1.948	19.880	0.098 ¹
T11	105 - 85	3/4	3.000	2.854	182.7	0.442	1.081	19.880	0.054 ¹

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 48 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Size	L ft	L _n ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T12	85 - 65	3/4	3 000	2 854	182.7	0.442	0.234	19 880	0.012 ¹
T13	65 - 45	3/4	3 000	2 854	182.7	0.442	1 200	19 880	0.060 ¹
T14	45 - 25	3/4	3 000	2 833	181.3	0.442	0.528	19 880	0.027 ¹
T15	25 - 5	3/4	3 000	2 833	181.3	0.442	0.846	19 880	0.043 ¹
T16	5 - 0	3/4	2 769	2 623	167.9	0.442	7 807	19 880	0.393 ¹

¹ P_u / φP_n controls

Bottom Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _n ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	305 - 285	3/4	3 000	2 875	184.0	0.442	1 037	19 880	0.052 ¹
T2	285 - 265	3/4	3 000	2 854	182.7	0.442	3 461	19 880	0.174 ¹
T3	265 - 245	3/4	3 000	2 833	181.3	0.442	3 274	19 880	0.165 ¹
T4	245 - 225	3/4	3 000	2 854	182.7	0.442	1 672	19 880	0.084 ¹
T5	225 - 205	3/4	3 000	2 854	182.7	0.442	0 620	19 880	0.031 ¹
T6	205 - 185	3/4	3 000	2 875	184.0	0.442	1 017	19 880	0.051 ¹
T7	185 - 165	3/4	3 000	2 854	182.7	0.442	0 604	19 880	0.030 ¹
T8	165 - 145	3/4	3 000	2 854	182.7	0.442	0 821	19 880	0.041 ¹
T9	145 - 125	3/4	3 000	2 854	182.7	0.442	2 000	19 880	0.101 ¹
T10	125 - 105	3/4	3 000	2 854	182.7	0.442	1 287	19 880	0.065 ¹
T11	105 - 85	3/4	3 000	2 854	182.7	0.442	0 345	19 880	0.017 ¹
T12	85 - 65	3/4	3 000	2 854	182.7	0.442	1 202	19 880	0.060 ¹
T13	65 - 45	3/4	3 000	2 854	182.7	0.442	0 764	19 880	0.038 ¹
T14	45 - 25	3/4	3 000	2 833	181.3	0.442	0 864	19 880	0.043 ¹
T15	25 - 5	3/4	3 000	2 833	181.3	0.442	8 539	19 880	0.430 ¹
T16	5 - 0	3/4	0 231	0 085	5.5	0.442	4 108	19 880	0.207 ¹

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 49 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
									✓

¹ P_u / φP_n controls

Top Guy Pull-Off Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T1	305 - 285	4x5/8	3.000	2.875	191.2	2.500	6.086	112.500	0.054 ¹
T3	265 - 245	4x5/8	3.000	2.833	188.4	2.500	11.703	112.500	0.104 ¹
T7	185 - 165	4x5/8	3.000	2.854	189.8	2.500	3.837	112.500	0.034 ¹
T10	125 - 105	4x5/8	3.000	2.854	189.8	2.500	5.890	112.500	0.052 ¹
T13	65 - 45	4x5/8	3.000	2.854	189.8	2.500	3.699	112.500	0.033 ¹

¹ P_u / φP_n controls

Torque-Arm Top Design Data

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _n K	Ratio $\frac{P_u}{\phi P_n}$
T3	265 - 245 (849)	C12x20.7	3.000	2.917	43.8	4.568	6.278	222.666	0.028
T3	265 - 245 (850)	C12x20.7	3.000	2.917	43.8	4.568	5.402	222.666	0.024
T3	265 - 245 (856)	C12x20.7	3.000	2.917	43.8	4.568	5.789	222.666	0.026
T3	265 - 245 (857)	C12x20.7	3.000	2.917	43.8	4.568	5.934	222.666	0.027
T3	265 - 245 (860)	C12x20.7	3.000	2.917	43.8	4.568	5.184	222.666	0.023
T3	265 - 245 (861)	C12x20.7	3.000	2.917	43.8	4.568	6.575	222.666	0.030

Torque-Arm Top Bending Design Data

Section No.	Elevation ft	Size	M _{ux} kip-ft	φM _{ux} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{ux}}$	M _{uy} kip-ft	φM _{uy} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{uy}}$
T3	265 - 245 (849)	C12x20.7	-32.147	94.764	0.339	-0.000	9.731	0.000
T3	265 - 245 (850)	C12x20.7	-36.084	94.764	0.381	-0.000	9.731	0.000
T3	265 - 245 (856)	C12x20.7	-34.469	94.764	0.364	0.000	9.731	0.000
T3	265 - 245 (857)	C12x20.7	-34.534	94.764	0.364	0.000	9.731	0.000
T3	265 - 245 (860)	C12x20.7	-35.926	94.764	0.379	0.000	9.731	0.000
T3	265 - 245 (861)	C12x20.7	-32.798	94.764	0.346	0.000	9.731	0.000

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 50 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{ux} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{ux}}$	M_{uy} kip-ft	ϕM_{uy} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{uy}}$
-------------	-----------------	------	--------------------	-------------------------	---------------------------------------	--------------------	-------------------------	---------------------------------------

Torque-Arm Top Interaction Design Data

Section No.	Elevation ft	Size	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{ux}}$	Ratio $\frac{M_{uy}}{\phi M_{uy}}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
T3	265 - 245 (849)	C12x20.7	0.028	0.339	0.000	0.353	1.000	4.8.1 ✓
T3	265 - 245 (850)	C12x20.7	0.024	0.381	0.000	0.393	1.000	4.8.1 ✓
T3	265 - 245 (856)	C12x20.7	0.026	0.364	0.000	0.377	1.000	4.8.1 ✓
T3	265 - 245 (857)	C12x20.7	0.027	0.364	0.000	0.378	1.000	4.8.1 ✓
T3	265 - 245 (860)	C12x20.7	0.023	0.379	0.000	0.391	1.000	4.8.1 ✓
T3	265 - 245 (861)	C12x20.7	0.030	0.346	0.000	0.361	1.000	4.8.1 ✓

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	305 - 285	Leg	1 1/2	3	-25 883	51 596	50.2	Pass
T2	285 - 265	Leg	1 3/4	57	-48 373	78 769	61.4	Pass
T3	265 - 245	Leg	2	111	-88 348	110 838	79.7	Pass
T4	245 - 225	Leg	1 3/4	165	-61 324	78 769	77.9	Pass
T5	225 - 205	Leg	1 3/4	218	-45 695	78 769	58.0	Pass
T6	205 - 185	Leg	1 1/2	272	-47 813	51 596	92.7	Pass
T7	185 - 165	Leg	1 3/4	326	-53 057	78 769	67.4	Pass
T8	165 - 145	Leg	1 3/4	380	-55 342	78 769	70.3	Pass
T9	145 - 125	Leg	1 3/4	435	-57 769	78 769	73.3	Pass
T10	125 - 105	Leg	1 3/4	489	-65 284	78 769	82.9	Pass
T11	105 - 85	Leg	1 3/4	543	-70 466	78 769	89.5	Pass
T12	85 - 65	Leg	1 3/4	597	-72 260	78 769	91.7	Pass
T13	65 - 45	Leg	1 3/4	651	-77 013	78 769	97.8	Pass
T14	45 - 25	Leg	2	703	-78 598	110 838	70.9	Pass
T15	25 - 5	Leg	2	757	-78 619	110 838	70.9	Pass
T16	5 - 0	Leg	1 3/4	813	-81 538	82 175	99.2	Pass
T1	305 - 285	Diagonal	875	22	-5 701	6 788	84.0	Pass
T2	285 - 265	Diagonal	1	65	-8 718	11 750	74.2	Pass
T3	265 - 245	Diagonal	1	142	-9 884	11 923	82.9	Pass
T4	245 - 225	Diagonal	875	214	-5 792	6 888	84.1	Pass
T5	225 - 205	Diagonal	875	268	-3 518	6 888	51.1	Pass
T6	205 - 185	Diagonal	.75	280	-2 991	3 664	81.6	Pass
T7	185 - 165	Diagonal	.75	376	-3 371	3 718	90.7	Pass
T8	165 - 145	Diagonal	.75	388	-2 492	3 718	67.0	Pass
T9	145 - 125	Diagonal	875	442	-4 990	6 888	72.4	Pass
T10	125 - 105	Diagonal	875	538	-4 931	6 888	71.6	Pass
T11	105 - 85	Diagonal	.75	593	-2 631	3 718	70.8	Pass

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job ATS # 8812 - Pine Top (Site# KYLEX2037)	Page 51 of 52
	Project 305' 36G/ 37.090347, -84.912169	Date 09:43:08 02/04/21
	Client Harmoni (UNITI) Towers	Designed by T. Cheriyan

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T12	85 - 65	Diagonal	75	604	-2.805	3.718	75.4	Pass
T13	65 - 45	Diagonal	75	695	-3.119	3.718	83.9	Pass
T14	45 - 25	Diagonal	75	712	-2.239	3.773	59.3	Pass
T15	25 - 5	Diagonal	75	766	-3.686	3.773	97.7	Pass
T16	5 - 0	Diagonal	1	822	-13.747	19.487	70.5	Pass
T1	305 - 285	Horizontal	3/4	44	-2.227	6.016	37.0	Pass
T2	285 - 265	Horizontal	3/4	105	-1.858	6.104	30.4	Pass
T3	265 - 245	Horizontal	3/4	139	-2.075	6.194	33.5	Pass
T4	245 - 225	Horizontal	3/4	182	-1.062	6.104	17.4	Pass
T5	225 - 205	Horizontal	3/4	229	-0.791	6.104	13.0	Pass
T6	205 - 185	Horizontal	3/4	283	-0.828	6.016	13.8	Pass
T7	185 - 165	Horizontal	3/4	337	-0.919	6.104	15.1	Pass
T8	165 - 145	Horizontal	3/4	391	-0.959	6.104	15.7	Pass
T9	145 - 125	Horizontal	3/4	452	-1.001	6.104	16.4	Pass
T10	125 - 105	Horizontal	3/4	500	-1.131	6.104	18.5	Pass
T11	105 - 85	Horizontal	3/4	560	-1.221	6.104	20.0	Pass
T12	85 - 65	Horizontal	3/4	608	-1.252	6.104	20.5	Pass
T13	65 - 45	Horizontal	3/4	663	-1.334	6.104	21.9	Pass
T14	45 - 25	Horizontal	3/4	715	-1.361	6.194	22.0	Pass
T15	25 - 5	Horizontal	3/4	769	-1.362	6.194	22.0	Pass
T16	5 - 0	Horizontal	3/4	824	-1.473	11.060	13.3	Pass
T1	305 - 285	Top Girt	3/4	5	-0.076	6.016	1.3	Pass
T2	285 - 265	Top Girt	3/4	58	-1.080	6.104	17.7	Pass
T3	265 - 245	Top Girt	3/4	113	-3.692	6.194	59.6	Pass
T4	245 - 225	Top Girt	3/4	166	-2.130	6.104	34.9	Pass
T5	225 - 205	Top Girt	3/4	220	-1.417	6.104	23.2	Pass
T6	205 - 185	Top Girt	3/4	276	-0.458	6.016	7.6	Pass
T7	185 - 165	Top Girt	3/4	329	-1.085	6.104	17.8	Pass
T8	165 - 145	Top Girt	3/4	382	-0.309	6.104	5.1	Pass
T9	145 - 125	Top Girt	3/4	436	-0.806	6.104	13.2	Pass
T10	125 - 105	Top Girt	3/4	490	-1.906	6.104	31.2	Pass
T11	105 - 85	Top Girt	3/4	546	-1.028	6.104	16.8	Pass
T12	85 - 65	Top Girt	3/4	598	-0.139	6.104	2.3	Pass
T13	65 - 45	Top Girt	3/4	652	-1.138	6.104	18.6	Pass
T14	45 - 25	Top Girt	3/4	707	-0.537	6.194	8.7	Pass
T15	25 - 5	Top Girt	3/4	760	-0.751	6.194	12.1	Pass
T16	5 - 0	Top Girt	3/4	814	7.807	19.880	39.3	Pass
T1	305 - 285	Bottom Girt	3/4	9	-0.954	6.016	15.9	Pass
T2	285 - 265	Bottom Girt	3/4	62	-3.010	6.104	49.3	Pass
T3	265 - 245	Bottom Girt	3/4	115	-3.177	6.194	51.3	Pass
T4	245 - 225	Bottom Girt	3/4	169	-1.693	6.104	27.7	Pass
T5	225 - 205	Bottom Girt	3/4	223	-0.682	6.104	11.2	Pass
T6	205 - 185	Bottom Girt	3/4	277	-1.019	6.016	16.9	Pass
T7	185 - 165	Bottom Girt	3/4	331	-0.511	6.104	8.4	Pass
T8	165 - 145	Bottom Girt	3/4	385	-0.749	6.104	12.3	Pass
T9	145 - 125	Bottom Girt	3/4	439	-1.752	6.104	28.7	Pass
T10	125 - 105	Bottom Girt	3/4	493	-1.057	6.104	17.3	Pass
T11	105 - 85	Bottom Girt	3/4	549	-0.129	6.104	2.1	Pass
T12	85 - 65	Bottom Girt	3/4	601	-0.965	6.104	15.8	Pass
T13	65 - 45	Bottom Girt	3/4	656	-0.399	6.104	6.5	Pass
T14	45 - 25	Bottom Girt	3/4	709	-0.502	6.194	8.1	Pass
T15	25 - 5	Bottom Girt	3/4	763	8.539	19.880	43.0	Pass
T16	5 - 0	Bottom Girt	3/4	817	4.108	19.880	20.7	Pass
T1	305 - 285	Guy A@290.193	9/16 EModulus	867	18.699	21.000	89.0	Pass
T3	265 - 245	Guy A@255	9/16 EModulus	859	17.811	21.000	84.8	Pass
T7	185 - 165	Guy A@182.211	3/8 EModulus	846	8.473	9.240	91.7	Pass
T10	125 - 105	Guy A@122.211	7/16 EModulus	840	11.988	12.480	96.1	Pass
T13	65 - 45	Guy A@62.2109	3/8 EModulus	834	6.812	9.240	73.7	Pass
T1	305 - 285	Guy B@290.193	9/16 EModulus	866	18.685	21.000	89.0	Pass
T3	265 - 245	Guy B@255	9/16 EModulus	854	18.600	21.000	88.6	Pass
T7	185 - 165	Guy B@182.211	3/8 EModulus	845	9.066	9.240	98.1	Pass

tnxTower B+T Group 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job	ATS # 8812 - Pine Top (Site# KYLEX2037)	Page	52 of 52
	Project	305' 36G/ 37.090347, -84.912169	Date	09:43:08 02/04/21
	Client	Harmoni (UNITI) Towers	Designed by	T. Cheriyan

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	σP_{allow} K	% Capacity	Pass Fail	
T10	125 - 105	Guy B@122.211	7/16 EModulus	839	12.367	12.480	99.1	Pass	
T13	65 - 45	Guy B@62.2109	3/8 EModulus	833	6.875	9.240	74.4	Pass	
T1	305 - 285	Guy C@290.193	9/16 EModulus	862	18.840	21.000	89.7	Pass	
T3	265 - 245	Guy C@255	9/16 EModulus	848	18.572	21.000	88.4	Pass	
T7	185 - 165	Guy C@182.211	3/8 EModulus	841	9.059	9.240	98.0	Pass	
T10	125 - 105	Guy C@122.211	7/16 EModulus	835	12.364	12.480	99.1	Pass	
T13	65 - 45	Guy C@62.2109	3/8 EModulus	829	6.877	9.240	74.4	Pass	
T1	305 - 285	Top Guy	4x5/8	863	6.086	112.500	5.4	Pass	
T3	265 - 245	Pull-Off@290.193							
		Top Guy	4x5/8	851	-11.743	24.850	47.3	Pass	
T7	185 - 165	Pull-Off@255							
		Top Guy	4x5/8	842	3.837	112.500	3.4	Pass	
T10	125 - 105	Pull-Off@182.211							
		Top Guy	4x5/8	836	5.890	112.500	5.2	Pass	
T13	65 - 45	Pull-Off@122.211							
		Top Guy	4x5/8	830	3.699	112.500	3.3	Pass	
T3	265 - 245	Pull-Off@62.2109							
		Torque Arm	C12x20.7	856	-6.858	238.176	43.5	Pass	
		Top@255							
							Summary		
							Leg (T16)	99.2	Pass
							Diagonal (T15)	97.7	Pass
							Horizontal (T1)	37.0	Pass
							Top Girt (T3)	59.6	Pass
							Bottom Girt (T3)	51.3	Pass
							Guy A (T10)	96.1	Pass
							Guy B (T10)	99.1	Pass
							Guy C (T10)	99.1	Pass
							Top Guy Pull-Off (T3)	47.3	Pass
							Torque Arm Top (T3)	43.5	Pass
							Bolt Checks	33.8	Pass
							RATING =	99.2	Pass

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

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

View	10681	Kentucky RSA #4 Ceilular General	Cellular	A	Elizabethtown	KY
View	4109550	Kynect Communications, LLC	Cellular	D	Dallas	TX
View	4112200	Lexvor Inc.	Cellular	C	Irvine	CA
View	4111250	Liberty Mobile Wireless, LLC	Cellular	D	Sunny Isles Beach	FL
View	4111400	Locus Telecommunications, LLC	Cellular	A	Fort Lee	NJ
View	4107300	Lycamobile USA, Inc.	Cellular	D	Newark	NJ
View	4108800	MetroPCS Michigan, LLC	Cellular	A	Bellevue	WA
View	4111700	Mint Mobile, LLC	Cellular	D	Costa Mesa	CA
View	4109650	Mitel Cloud Services, Inc.	Cellular	D	Mesa	AZ
View	4111850	Mobi, Inc.	Cellular	C	Honolulu	HI
View	4202400	New Cingular Wireless PCS, LLC dba AT&T Mobility, PCS	Cellular	A	San Antonio	TX
View	4000800	Nextel West Corporation	Cellular	D	Overland Park	KS
View	4001300	NPCR, Inc. dba Nextel Partners	Cellular	D	Overland Park	KS
View	4001800	OnStar, LLC	Cellular	A	Detroit	MI
View	4110750	Onvoy Spectrum, LLC	Cellular	D	Chicago	IL
View	4109050	Patriot Mobile LLC	Cellular	D	Irving	TX
View	4110250	Plintron Technologies USA LLC	Cellular	D	Bellevue	WA
View	33351182	PNG Telecommunications, Inc. dba PowerNet Global Communications	Cellular	D	Cincinnati	OH
View	4107700	Puretalk Holdings, LLC	Cellular	A	Covington	GA
View	4106700	Q Link Wireless, LLC	Cellular	A	Dania	FL
View	4108700	Ready Wireless, LLC	Cellular	C	Hiawatha	IA
View	4110500	Republic Wireless, Inc.	Cellular	A	Raleigh	NC
View	4106200	Rural Cellular Corporation	Cellular	A	Basking Ridge	NJ
View	4108550	Sage Telecom Communications, LLC dba TruConnect	Cellular	D	Los Angeles	CA
View	4109150	SelecTel, Inc. d/b/a SelecTel Wireless	Cellular	D	Fremont	NE
View	4110150	Spectrotel of the South LLC dba Touch Base Communications	Cellular	D	Neptune	NJ
View	4111450	Spectrum Mobile, LLC	Cellular	A	St. Louis	MO
View	4200100	Sprint Spectrum, L.P.	Cellular	A	Atlanta	GA
View	4200500	SprintCom, Inc.	Cellular	A	Atlanta	GA
View	4111600	STX Group LLC dba Twigby	Cellular	D	Murfreesboro	TN
View	4110200	T C Telephone LLC d/b/a Horizon Cellular	Cellular	D	Red Bluff	CA
View	4202200	T-Mobile Central, LLC dba T-Mobile	Cellular	A	Bellevue	WA
View	4002500	TAG Mobile, LLC	Cellular	D	Plano	TX
View	4109700	Telecom Management, Inc. dba Pioneer Telephone	Cellular	D	Portland	ME

View	4107200	Telefonica USA, Inc.	Cellular	D	Miami	FL
View	4112100	Tello LLC	Cellular	C	Atlanta	GA
View	4108900	Telrite Corporation	Cellular	D	Covington	GA
View	4108450	Tempo Telecom, LLC	Cellular	B	Atlanta	GA
View	4109000	Ting, Inc.	Cellular	A	Toronto	ON
View	4110400	Torch Wireless Corp.	Cellular	D	Jacksonville	FL
View	4103300	Touchtone Communications, Inc.	Cellular	D	Whippany	NJ
View	4104200	TracFone Wireless, Inc.	Cellular	D	Miami	FL
View	4002000	Truphone, Inc.	Cellular	D	Durham	NC
View	4110300	UVNV, Inc. d/b/a Mint Mobile	Cellular	D	Costa Mesa	CA
View	4110800	Visible Service LLC	Cellular	D	Basking Ridge	NJ
View	4106500	WiMacTel, Inc.	Cellular	D	Palo Alto	CA
View	4110950	Wing Tel Inc.	Cellular	D	New York	NY
View	4112150	Zefcom, LLC	Cellular	C	Wichita Falls	TX

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-13882-OE

Issued Date: 05/26/2020

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 KYLEX2037 (Pine Top Rd)
 Location: Russell Springs, KY
 Latitude: 37-05-25.25N NAD 83
 Longitude: 84-54-43.81W
 Heights: 1092 feet site elevation (SE)
 317 feet above ground level (AGL)
 1409 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 11/26/2021 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. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2020-ASO-13882-OE.

Signature Control No: 439690117-441081480

(DNE)

Stephanie Kimmel
Specialist

Attachment(s)
Case Description
Frequency Data
Map(s)

cc: FCC

317-foot overall height guyed-type telecommunications structure

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
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



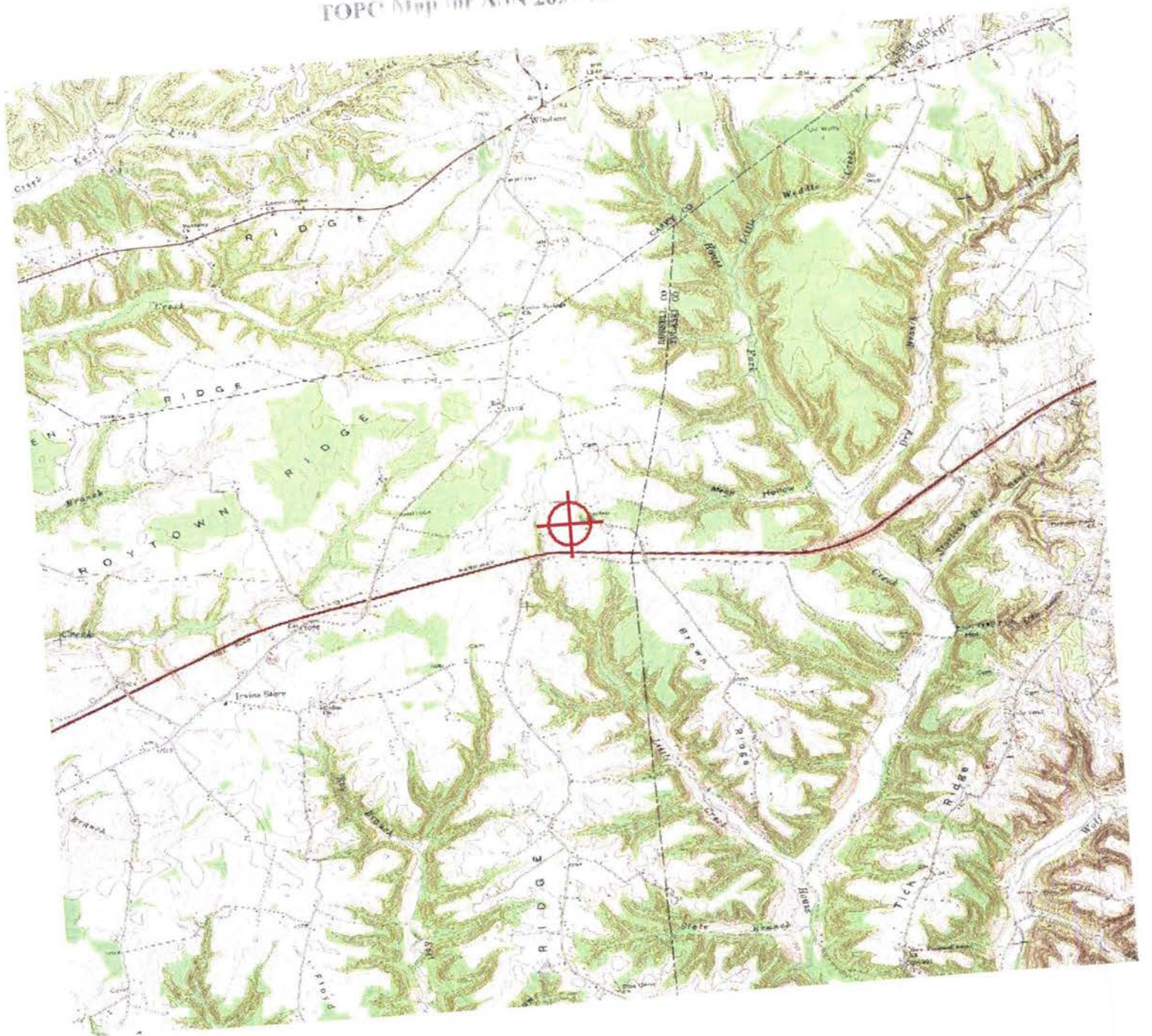


EXHIBIT F
KENTUCKY AIRPORT ZONING COMMISSION



KENTUCKY AIRPORT ZONING COMMISSION

ANDY BESHEAR
Governor

Office of Audits, 200 Mero Street, 4th floor
Frankfort, KY 40622
www.transportation.ky.gov
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-RUSSELL-K24-2020-107

STRUCTURE: Antenna Tower
LOCATION: Russell Springs, KY
COORDINATES: 37° 5' 25.25" N / 84° 54' 43.81" W
HEIGHT: 317' AGL/1409' AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 317' AGL/1409' AMSL Antenna Tower near Russell Springs, KY 37° 5' 25.25" N / 84° 54' 43.81" 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
Jason.Salazar-Munoz@ky.gov



An Equal Opportunity Employer M/F/D

EXHIBIT G
GEOTECHNICAL REPORT



GEOTECHNICAL INVESTIGATION REPORT

January 27, 2021

Prepared For:

B+T Group



**Pine Top Road
KYLEX2037**

Proposed 305-Foot Guyed Tower

1011 Pine Top Road, Russell Springs (Russell County), Kentucky 42642

Latitude N 37° 05' 25.3" Longitude W 84° 54' 43.8"

Delta Oaks Group Project GEO21-07977-08

Revision 0

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 305-foot, single ring, guyed tower located at 1011 Pine Top Road in Russell Springs (Russell 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 grassy field exhibiting a generally flat topography across the tower compound and subject property.

REFERENCES

- Survey Drawings, prepared by Point to Point Land Surveyors, dated February 11, 2020
- TIA Standard (TIA-222-G), dated August 2005

SUBSURFACE FIELD INVESTIGATION SUMMARY

The subsurface field investigation was conducted through the advancement of four mechanical soil test borings to the auger refusal depths ranging from 20.1 to 20.4 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 mast and guy anchors. Soil 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 logs presented in the Appendix of this report.

A boring plan portraying the spatial location of the borings in relation to the proposed tower, guy anchors, 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

Topsoil was encountered during the subsurface field investigation from the existing ground surface to depths of 0.5, 0.4, 0.6, and 0.5 feet bgs in borings B-1 through B-4, respectively.

SOIL

The residual soil encountered in the subsurface field investigation began at depths of 0.5, 0.4, 0.6, and 0.5 feet bgs in borings B-1 through B-4, respectively, and consisted of silty clay and clayey silt. The materials ranged from a soft to very hard cohesion.

Auger advancement refusal was encountered during the subsurface field investigation at a depth of 20.3, 20.1, 20.4, and 20.4 feet bgs in borings B-1 through B-4, respectively.

ROCK

Rock was not encountered during the subsurface field investigation.

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 Russell County, Kentucky is 30 inches (2.5 feet).

CORROSIVITY

Soil resistivity was performed in accordance with ASTM G187 with a test result of 4,220 ohms-cm for the tower base.



FOUNDATION DESIGN SUMMARY

In consideration of the provided tower parameters and the determined soil characteristics, Delta Oaks Group recommends utilizing a drilled shaft foundation for the proposed tower mast structure and concrete blocks or drilled shaft foundations for the guy anchors. Delta Oaks Group does not recommend utilizing a shallow foundation for the proposed tower mast 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 – 0.5	TOPSOIL	105	0	0
	0.5 – 1.5	CL – ML	105	0	300
	1.5 – 6.5	CL – ML	105	0	500
	6.5 – 9.0	CL – ML	110	0	1,250
	9.0 – 14.0	CL – ML	110	0	1,000
	14.0 – 19.0	CL – ML	110	0	1,500
	19.0 – 20.0	CL – ML	130	0	6,000

Boring	Depth (bgs)	USCS	Moist/Buoyant Unit Weight (pcf)	Phi Angle (degrees)	Cohesion (psf)
B-2	0.0 – 0.5	TOPSOIL	105	0	0
	0.5 – 1.5	CL – ML	105	0	400
	1.5 – 4.0	CL – ML	105	0	500
	4.0 – 6.5	CL – ML	110	0	1,000
	6.5 – 19.0	CL – ML	110	0	1,500
	19.0 – 20.0	CL – ML	130	0	6,000

DELTA OAKS GROUP



Boring	Depth (bgs)	USCS	Moist/Buoyant Unit Weight (pcf)	Phi Angle (degrees)	Cohesion (psf)
B-3	0.0 – 0.5	TOPSOIL	105	0	0
	0.5 – 1.5	CL – ML	105	0	300
	1.5 – 4.0	CL – ML	105	0	500
	4.0 – 6.5	CL – ML	110	0	1,250
	6.5 – 9.0	CL – ML	110	0	1,000
	9.0 – 14.0	CL – ML	115	0	1,750
	14.0 – 19.0	CL – ML	110	0	1,500
	19.0 – 20.0	CL – ML	130	0	6,000

Boring	Depth (bgs)	USCS	Moist/Buoyant Unit Weight (pcf)	Phi Angle (degrees)	Cohesion (psf)
B-4	0.0 – 0.5	TOPSOIL	105	0	0
	0.5 – 1.5	CL – ML	105	0	300
	1.5 – 4.0	CL – ML	105	0	500
	4.0 – 6.5	CL – ML	110	0	1,000
	6.5 – 14.0	CL – ML	110	0	1,500
	14.0 – 19.0	CL – ML	115	0	1,750
	19.0 – 20.0	CL – ML	130	0	6,000

- 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.



ULTIMATE PASSIVE PRESSURE VS. DEPTH – NORTHWESTERN GUY ANCHOR

Soil Layers (feet)		Moist Unit Weight	Phi Angle	Cohesion	PV	KP	Ph
Top	0.0	105	0	0	0.00	1.00	0.00
Bottom	0.4	105	0	0	42.00	1.00	21.00
Top	0.4	105	0	400	42.00	1.00	421.00
Bottom	1.5	105	0	400	157.50	1.00	478.75
Top	1.5	105	0	500	157.50	1.00	578.75
Bottom	2.5	105	0	500	262.50	1.00	631.25
Top	2.5	105	0	500	262.50	1.00	1262.50
Bottom	4.0	105	0	500	420.00	1.00	1420.00
Top	4.0	110	0	1000	420.00	1.00	2420.00
Bottom	6.5	110	0	1000	695.00	1.00	2695.00
Top	6.5	110	0	1500	695.00	1.00	3695.00
Bottom	10.0	110	0	1500	1080.00	1.00	4080.00



ULTIMATE PASSIVE PRESSURE VS. DEPTH – SOUTHWESTERN GUY ANCHOR

Soil Layers (feet)		Moist Unit Weight	Phi Angle	Cohesion	PV	KP	Ph
Top	0.0	105	0	0	0.00	1.00	0.00
Bottom	0.6	105	0	0	63.00	1.00	31.50
Top	0.6	105	0	300	63.00	1.00	331.50
Bottom	1.5	105	0	300	157.50	1.00	378.75
Top	1.5	105	0	500	157.50	1.00	578.75
Bottom	2.5	105	0	500	262.50	1.00	631.25
Top	2.5	105	0	500	262.50	1.00	1262.50
Bottom	4.0	105	0	500	420.00	1.00	1420.00
Top	4.0	110	0	1250	420.00	1.00	2920.00
Bottom	6.5	110	0	1250	695.00	1.00	3195.00
Top	6.5	110	0	1000	695.00	1.00	2695.00
Bottom	9.0	110	0	1000	970.00	1.00	2970.00
Top	9.0	115	0	1750	970.00	1.00	4470.00
Bottom	10.0	115	0	1750	1085.00	1.00	4585.00



ULTIMATE PASSIVE PRESSURE VS. DEPTH – SOUTHEASTERN GUY ANCHOR

Soil Layers (feet)		Moist Unit Weight	Phi Angle	Cohesion	PV	KP	Ph
Top	0.0	105	0	0	0.00	1.00	0.00
Bottom	0.5	105	0	0	52.50	1.00	26.25
Top	0.5	105	0	300	52.50	1.00	326.25
Bottom	1.5	105	0	300	157.50	1.00	378.75
Top	1.5	105	0	500	157.50	1.00	578.75
Bottom	2.5	105	0	500	262.50	1.00	631.25
Top	2.5	105	0	500	262.50	1.00	1262.50
Bottom	4.0	105	0	500	420.00	1.00	1420.00
Top	4.0	110	0	1000	420.00	1.00	2420.00
Bottom	6.5	110	0	1000	695.00	1.00	2695.00
Top	6.5	110	0	1500	695.00	1.00	3695.00
Bottom	10.0	110	0	1500	1080.00	1.00	4080.00



SUBSURFACE STRENGTH PARAMETERS - DRILLED SHAFT FOUNDATION

Boring	Depth (bgs)	Net Ultimate Bearing Capacity (psf)	Ultimate Skin Friction - Compression (psf)
B-1	0.0 - 3.0	-	-
	3.0 - 4.0	8,700	270
	4.0 - 7.0	8,890	270
	7.0 - 9.0	8,640	680
	9.0 - 14.0	10,610	550
	14.0 - 19.0	31,270	820
	19.0 - 20.0	53,190	2,400

- 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
NORTHWESTERN GUY ANCHOR DRILLED SHAFT FOUNDATION

Boring	Depth (bgs)	Ultimate Skin Friction – Uplift (psf)
B-2	0.0 – 3.0	–
	3.0 – 4.0	270
	4.0 – 7.0	550
	7.0 – 9.0	820
	9.0 – 14.0	820
	14.0 – 19.0	820
	19.0 – 20.0	2,400



**SUBSURFACE STRENGTH PARAMETERS
SOUTHWESTERN GUY ANCHOR DRILLED SHAFT FOUNDATION**

Boring	Depth (bgs)	Ultimate Skin Friction - Uplift (psf)
B-3	0.0 - 3.0	-
	3.0 - 4.0	270
	4.0 - 7.0	680
	7.0 - 9.0	550
	9.0 - 14.0	960
	14.0 - 19.0	820
	19.0 - 20.0	2,400



**SUBSURFACE STRENGTH PARAMETERS
SOUTHEASTERN GUY ANCHOR DRILLED SHAFT FOUNDATION**

Boring	Depth (bgs)	Ultimate Skin Friction – Uplift (psf)
B-4	0.0 – 3.0	–
	3.0 – 4.0	270
	4.0 – 7.0	550
	7.0 – 9.0	820
	9.0 – 14.0	820
	14.0 – 19.0	960
	19.0 – 20.0	2,400

- The top 3.0 feet of soil should be ignored due to the frost penetration and the potential soil disturbance during construction.
- 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	3,110	2.0	100
	3.0	3,370		
	4.0	7,260		200
	5.0	7,780		

- 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	105	0	0	0.00	1.00	0.00
Bottom	0.5	105	0	0	52.50	1.00	26.25
Top	0.5	105	0	300	52.50	1.00	326.25
Bottom	1.5	105	0	300	157.50	1.00	378.75
Top	1.5	105	0	500	157.50	1.00	578.75
Bottom	2.5	105	0	500	262.50	1.00	631.25
Top	2.5	105	0	500	262.50	1.00	1262.50
Bottom	6.5	105	0	500	682.50	1.00	1682.50
Top	6.5	110	0	1250	682.50	1.00	3182.50
Bottom	9.0	110	0	1250	957.50	1.00	3457.50
Top	9.0	110	0	1000	957.50	1.00	2957.50
Bottom	10.0	110	0	1000	1067.50	1.00	3067.50



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.

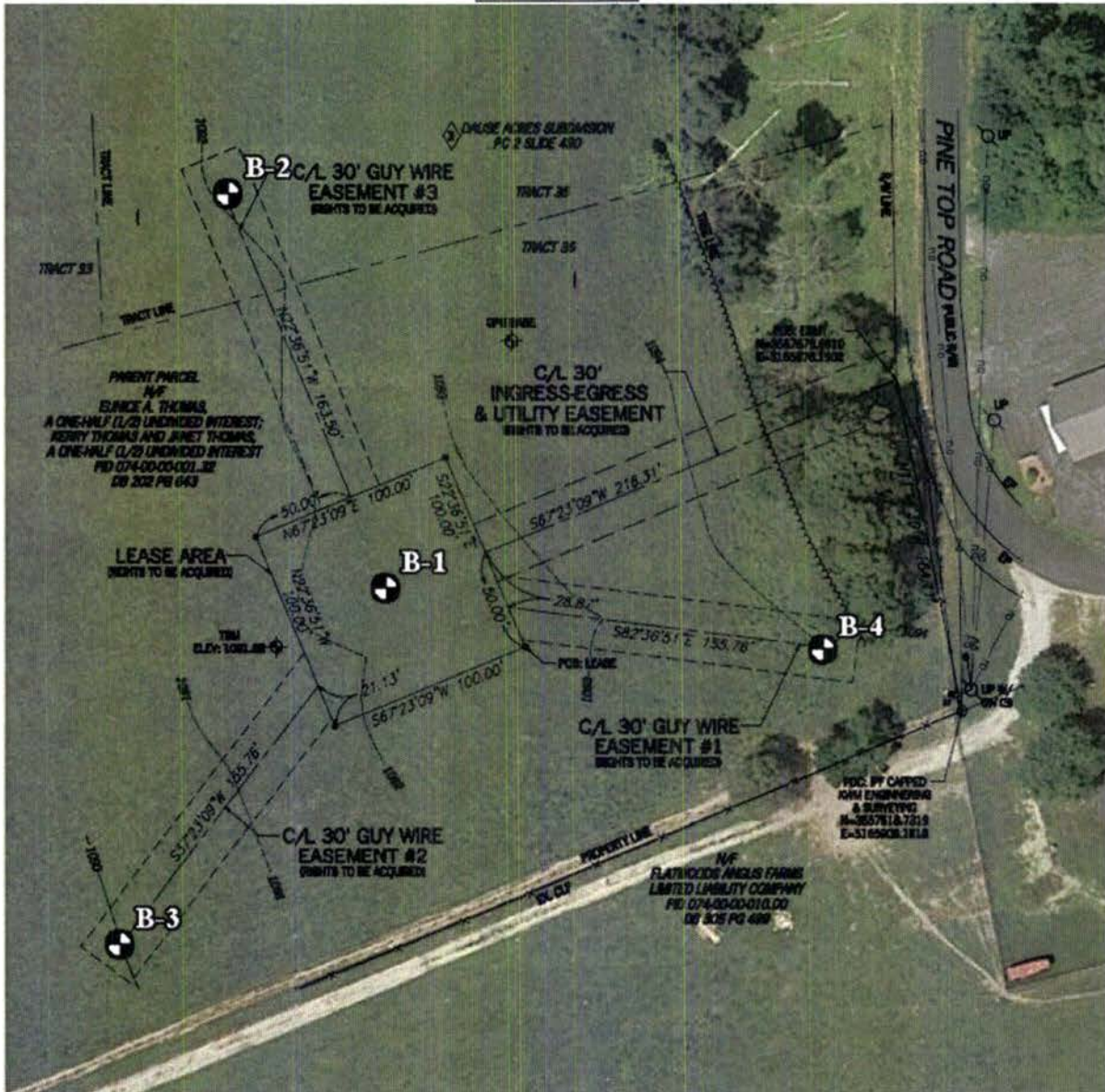
Delta Oaks Group appreciates the opportunity to be of service for this Geotechnical Investigation Report. Please do not hesitate to contact Delta Oaks Group with any questions or should you require additional service on this project.



APPENDIX



BORING PLAN



**EXHIBIT H
DIRECTIONS TO WCF SITE**

Driving Directions to Proposed Tower Site

1. Beginning at the at 410 Monument Sq., Jamestown, KY 42629 head northeast on W Cumberland Ave and travel approximately 46 feet.
2. At the traffic circle, take the 3rd exit onto US-127 Business N and travel approximately 1.1 miles.
3. Continue onto US-127 N / N Main Street and travel approximately 3.6 miles.
4. Take the ramp to Somerset and travel approximately 0.5 miles.
5. Merge onto Cumberland Pkwy and travel approximately 7.5 miles.
6. Take the exit toward KY-910 N and travel approximately 0.4 miles.
7. Turn left onto KY-910 N and travel approximately 0.6 miles.
8. Turn right onto F Wilson Road and travel approximately 1.0 miles.
9. Turn Right onto Pinetop Road and travel approximately 0.1 miles. The Site is located on the right. The site address is: 1011 Pinetop Road, Russell Springs, KY 42642.
10. The site coordinates are:
 - a. North 37 deg 05 min 25.25 sec
 - b. West 84 deg 54 min 43.81 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 Eunice A. Thomas, a one-half (1/2) undivided interest in fee simple, her heirs and assigns ; and Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest for and during their joint lives, with the remainder in fee simple to the survivor of them, their heirs and assigns, ("**Landlord**") having a mailing address of 6510 Hwy 910 Russell Springs, KY 42642, 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 Pinetop Rd., 700' south of F Wilson Rd., in the City/Town of Russell Springs, County of Russell, 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 (5th) 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]. 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 (5th) 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 the first year of an Extension Term, the monthly Rent will increase by [REDACTED] over the Rent paid during the previous five (5) year term, 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]

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, invitees 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 1**, 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:
Eunice A. Thomas, a one-half (1/2) undivided interest;
Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest
6510 Hwy 910
Russell Springs, KY 42642
Telephone: (270) 866-4540

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"

Eunice A. Thomas,
a one-half (1/2) undivided interest

By: Eunice Thomas
Print Name: Eunice A. Thoms
Its: Landlord
Date: April 10, 2020

"LANDLORD"

Kerry Thomas and Janet Thomas,
a one-half (1/2) undivided interest

By: Kerry Thomas
Print Name: Kerry Thomas
Its: Landlord
Date: April 13, 2020

By: Janet Thomas
Print Name: Janet Thomas
Its: Landlord
Date: April 13, 2020

"TENANT"

Uniti Towers LLC

By: Ginger Mayas
Print Name: Ginger Mayas
Its: VP-Real Estor.
Date: 5-6-2020

[ACKNOWLEDGMENTS APPEAR ON NEXT PAGE]


TENANT ACKNOWLEDGMENT

STATE OF ARKANSAS

COUNTY OF PULASKI

On the 6th day of May, 2020, before me personally appeared **GINGER MAJORS**, who acknowledged under oath that she is the **Vice President of Real Estate** 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.




Notary Public: CONSTANCE F. HELMICH
My Commission Expires: 07-02-2029

LANDLORD ACKNOWLEDGMENT

STATE OF Kentucky
COUNTY OF Russell

BE IT REMEMBERED, that on this 14 day of April, 2020 before me, the subscriber, a person authorized to take oaths in the State of Kentucky, personally appeared **Eunice A. Thomas** who, being duly sworn on his/her/their oath, deposed and made proof to my satisfaction that he/she/they is/are the person(s) named in the within instrument; and I, having first made known to him/her/them the contents thereof, he/she/they did acknowledge that he/she/they signed, sealed and delivered the same as his/her/their voluntary act and deed for the purposes therein contained.

H.K. Cooper
Notary Public
My Commission Expires 8/12/2024
HOWARD KENT COOPER
NOTARY PUBLIC
STATE AT LARGE
KENTUCKY
NOTARY ID# KYNP2712
MY COMMISSION EXPIRES MARCH 8, 2024

LANDLORD ACKNOWLEDGMENT

STATE OF Kentucky
COUNTY OF Russell

BE IT REMEMBERED, that on this 14 day of April, 2020 before me, the subscriber, a person authorized to take oaths in the State of Kentucky, personally appeared **Kerry Thomas** who, being duly sworn on his/her/their oath, deposed and made proof to my satisfaction that he/she/they is/are the person(s) named in the within instrument; and I, having first made known to him/her/them the contents thereof, he/she/they did acknowledge that he/she/they signed, sealed and delivered the same as his/her/their voluntary act and deed for the purposes therein contained.

H.K. Cooper
Notary Public
My Commission Expires: 3/8/2024
HOWARD KENT COOPER
NOTARY PUBLIC
STATE AT LARGE
KENTUCKY
NOTARY ID# KYNP2712
MY COMMISSION EXPIRES MARCH 8, 2024

LANDLORD ACKNOWLEDGMENT

STATE OF Kentucky
COUNTY OF Bourne

BE IT REMEMBERED, that on this 14 day of April, 2020 before me, the subscriber, a person authorized to take oaths in the State of Kentucky, personally appeared **Janet Thomas** who, being duly sworn on his/her/their oath, deposed and made proof to my satisfaction that he/she/they is/are the person(s) named in the within instrument; and I, having first made known to him/her/they the contents thereof, he/she/they did acknowledge that he/she/they signed, sealed and delivered the same as his/her/their voluntary act and deed for the purposes therein contained.

Howard Kent Cooper
Notary Public: State at Large
My Commission Expires: 3/8/2024



EXHIBIT 1

DESCRIPTION OF PREMISES

Page 1 of 6

to the Option and Lease Agreement dated May 6, 2020, by and between Eunice A. Thomas, a one-half (1/2) undivided interest in fee simple, her heirs and assigns ; and Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest for and during their joint lives, with the remainder in fee simple to the survivor of them, their heirs and assigns, as Landlord, and Uniti Towers LLC, a Delaware limited liability company, as Tenant.

The Property is legally described as follows:

Property located in Russell County, Kentucky

The following described real property, lying and being in Russell County, Kentucky, and more particularly described as follows, to-wit:

Being Tracts No. 32, 33, 34, 35, and 36 of Dause Acres. For a more complete description of same, reference is made to plat of Dause Acres recorded in Plat Cabinet 2, Slide 490, Russell County Clerk's Office, Jamestown.

By

survey of Troy Miller, RLS#3344, dated 10/22/98.

AND BEING the same property conveyed to Eunice A. Thomas, a one-half (1/2) undivided interest and Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest from Garry Banks and Richelle Banks by General Warranty Deed dated March 27, 2002 and recorded March 29, 2002 in Deed Book 202, Page 643.

Tax Parcel No. 074-00-00-001.32

The Premises are described and/or depicted as follows:

LEASE AREA

All that tract or parcel of land lying and being in Russell County, Kentucky, and being part of the lands of Eunice A. Thomas, a one-half (1/2) undivided interest; Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest, as recorded in Deed Book 202 Page 643, Russell County Records, Russell County, Kentucky, and being more particularly described as follows:

To find the point of beginning, COMMENCE at a rebar found (Capped: KWM Engineering and Surveying) at the southeast corner of the lands of Eunice A. Thomas, a one-half (1/2) undivided interest; Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest, as recorded in Deed Book 202 Page 643 and having a Kentucky Grid North, NAD83, Single Zone Value of N: 3557518.7319, E: 5165908.1818; thence running a long a tie line, North 11°14'30" West, 164.11 feet to a point on the westerly right-of-way line of Pine Top Road having a Kentucky Grid North, NAD83, Single Zone Value of N: 3557679.6910, E: 5165876.1902; thence leaving said right-of-way line and running, South 67°23'09" West, 216.31 feet to a point on the Lease Area; thence running along said Lease Area, South 22°36'51" East, 50.00 feet to a point and the true POINT OF BEGINNING; Thence, South 67°23'09" West, 100.00 feet to a point; Thence, North 22°36'51" West, 100.00 feet to a point; Thence, North 67°23'09" East, 100.00 feet to a point; Thence, South 22°36'51" East, 100.00 feet to a point; and the POINT OF BEGINNING.

Bearings are based on Kentucky Grid North, NAD83, 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 11, 2020.

30' INGRESS-EGRESS & UTILITY EASEMENT

Together with a 30-foot wide Ingress-Egress and Utility Easement (lying 15 feet each side of centerline) lying and being in Russell County, Kentucky, and being part of the lands of Eunice A. Thomas, a one-half (1/2) undivided interest; Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest, as recorded in Deed Book 202 Page 643, Russell County Records, Russell County, Kentucky, and being more particularly described by the following centerline data:

To find the point of beginning, COMMENCE at a rebar found (Capped: KWM Engineering and Surveying) at the southeast corner of the lands of Eunice A. Thomas, a one-half (1/2) undivided interest; Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest, as recorded in Deed Book 202 Page 643 and having a Kentucky Grid North, NAD83, Single Zone Value of N: 3557518.7319, E: 5165908.1818; thence running a long a tie line, North 11°14'30" West, 164.11 feet to a point on the westerly right-of-way line of Pine Top Road having a Kentucky Grid North, NAD83, Single Zone Value of N: 3557679.6910, E: 5165876.1902 and the true POINT OF BEGINNING; Thence leaving said right-of-way line and running, South 67°23'09" West, 216.31 feet to the ENDING at a point on the Lease Area.

Bearings are based on Kentucky Grid North, NAD83, Single Zone.

As shown in a survey prepared for Uniti Towers, LLC by POINT TO POINT LAND SURVEYORS, INC. dated February 11, 2020.

30' GUY WIRE EASEMENT #1

Together with a 30-foot wide Guy Wire Easement (lying 15 feet each side of centerline and 15 feet past the termination point) lying and being in Russell County, Kentucky, and being part of the lands of Eunice A. Thomas, a one-half (1/2) undivided interest; Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest, as recorded in Deed Book 202 Page 643, Russell County Records, Russell County, Kentucky, and being more particularly described by the following centerline data:

To find the point of beginning, COMMENCE at a rebar found (Capped: KWM Engineering and Surveying) at the southeast corner of the lands of Eunice A. Thomas, a one-half (1/2) undivided interest; Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest, as recorded in Deed Book 202 Page 643 and having a Kentucky Grid North, NAD83, Single Zone Value of N: 3557518.7319, E: 5165908.1818; thence running a long a tie line, North 11°14'30" West, 164.11 feet to a point on the westerly right-of-way line of Pine Top Road having a Kentucky Grid North, NAD83, Single Zone Value of N: 3557679.6910, E: 5165876.1902; thence leaving said right-of-way line and running, South 67°23'09" West, 216.31 feet to a point on the Lease Area; thence running along said Lease Area, South 22°36'51" East, 28.87 feet to a point and the true POINT OF BEGINNING; Thence leaving said Lease Area and running, South 82°36'51" East, 155.76 feet to the ENDING at a point.

Bearings are based on Kentucky Grid North, NAD83, Single Zone.

As shown in a survey prepared for Uniti Towers, LLC by POINT TO POINT LAND SURVEYORS, INC. dated February 11, 2020.

30' GUY WIRE EASEMENT #2

Together with a 30-foot wide Guy Wire Easement (lying 15 feet each side of centerline and 15 feet past the termination point) lying and being in Russell County, Kentucky, and being part of the lands of Eunice A. Thomas, a one-half (1/2) undivided interest; Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest, as recorded in Deed Book 202 Page 643, Russell County Records, Russell County, Kentucky, and being more particularly described by the following centerline data:

To find the point of beginning, COMMENCE at a rebar found (Capped: KWM Engineering and Surveying) at the southeast corner of the lands of Eunice A. Thomas, a one-half (1/2) undivided interest; Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest, as recorded in Deed Book 202 Page 643 and having a Kentucky Grid North, NAD83, Single Zone Value of N: 3557518.7319, E: 5165908.1818; thence running a long a tie line, North 11°14'30" West, 164.11 feet to a point on the westerly right-of-way line of Pine Top Road having a Kentucky Grid North, NAD83, Single Zone Value of N: 3557679.6910, E: 5165876.1902; thence leaving said right-of-way line and running, South 67°23'09" West, 216.31 feet to a point on the Lease Area; thence running along said Lease Area, South 22°36'51" East, 50.00 feet to a point; thence, South

67°23'09" West, 100.00 feet to a point; thence, North 22°36'51" West, 21.13 feet to a point and the true POINT OF BEGINNING; Thence leaving said Lease Area and running, South 37°23'09" West, 155.76 feet to the ENDING at a point.

Bearings are based on Kentucky Grid North, NAD83, Single Zone.

As shown in a survey prepared for Uniti Towers, LLC by POINT TO POINT LAND SURVEYORS, INC. dated February 11, 2020.

30' GUY WIRE EASEMENT #3

Together with a 30-foot wide Guy Wire Easement (lying 15 feet each side of centerline and 15 feet past the termination point) lying and being in Russell County, Kentucky, and being part of the lands of Eunice A. Thomas, a one-half (1/2) undivided interest; Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest, as recorded in Deed Book 202 Page 643, Russell County Records, Russell County, Kentucky, and being more particularly described by the following centerline data:

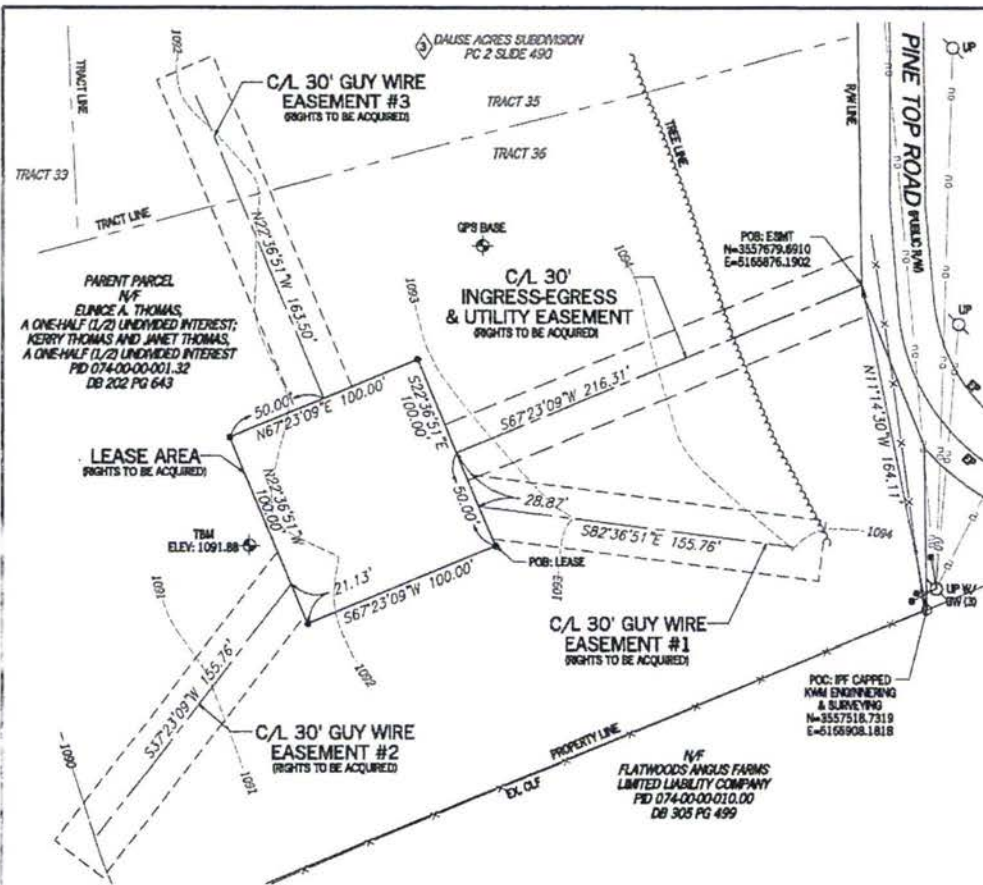
To find the point of beginning, COMMENCE at a rebar found (Capped: KWM Engineering and Surveying) at the southeast corner of the lands of Eunice A. Thomas, a one-half (1/2) undivided interest; Kerry Thomas and Janet Thomas, a one-half (1/2) undivided interest, as recorded in Deed Book 202 Page 643 and having a Kentucky Grid North, NAD83, Single Zone Value of N: 3557518.7319, E: 5165908.1818; thence running a long a tie line, North 11°14'30" West, 164.11 feet to a point on the westerly right-of-way line of Pine Top Road having a Kentucky Grid North, NAD83, Single Zone Value of N: 3557679.6910, E: 5165876.1902; thence leaving said right-of-way line and running, South 67°23'09" West, 216.31 feet to a point on the Lease Area; thence running along said Lease Area, South 22°36'51" East, 50.00 feet to a point; thence, South 67°23'09" West, 100.00 feet to a point; thence, North 22°36'51" West, 100.00 feet to a point; thence, North 67°23'09" East, 50.00 feet to the POINT OF BEGINNING; Thence leaving said Lease Area and running, North 22°36'51" West, 163.50 feet to the ENDING at a point.

Bearings are based on Kentucky Grid North, NAD83, Single Zone.

As shown in a survey prepared for Uniti Towers, LLC by POINT TO POINT LAND SURVEYORS, INC. dated February 11, 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.



SITE INFORMATION
 LEASE AREA = 10.000 SQUARE FEET (0.2296 ACRES)
 LATITUDE = 37°05'25.25" NAD 83 (37.090347°)
 LONGITUDE = -84°54'43.61" WAD 83 (84.912169°)
 AT CENTER OF LEASE AREA
 ELEVATION AT CENTER OF LEASE AREA = 1092.3' A.M.S.L.

30' INGRESS-EGRESS & UTILITY EASEMENT

TOGETHER WITH A 30-FOOT WIDE INGRESS-EGRESS AND UTILITY EASEMENT (LYING 1.5 FEET EACH SIDE OF CENTERLINE) LYING AND BEING IN RUSSELL COUNTY, KENTUCKY, AND BEING PART OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643, RUSSELL COUNTY RECORDS, RUSSELL COUNTY, KENTUCKY, AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A REBAR FOUND (CAPPED: KWM ENGINEERING AND SURVEYING) AT THE SOUTHEAST CORNER OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643 AND HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557518.7319, E: 5165908.1818; THENCE RUNNING A LONG A TIE LINE, NORTH 11°14'30" WEST, 164.11 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF PINE TOP ROAD HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557679.6910, E: 5165876.1902 AND THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, SOUTH 67°23'09" WEST, 216.31 FEET TO THE ENDING AT A POINT ON THE LEASE AREA.

BEARINGS ARE BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

LEASE AREA

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN RUSSELL COUNTY, KENTUCKY, AND BEING PART OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643, RUSSELL COUNTY RECORDS, RUSSELL COUNTY, KENTUCKY, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A REBAR FOUND (CAPPED: KWM ENGINEERING AND SURVEYING) AT THE SOUTHEAST CORNER OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643 AND HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557518.7319, E: 5165908.1818; THENCE RUNNING A LONG A TIE LINE, NORTH 11°14'30" WEST, 164.11 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF PINE TOP ROAD HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557679.6910, E: 5165876.1902; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, SOUTH 67°23'09" WEST, 216.31 FEET TO A POINT ON THE LEASE AREA; THENCE RUNNING ALONG SAID LEASE AREA, SOUTH 22°36'51" EAST, 50.00 FEET TO A POINT AND THE TRUE POINT OF BEGINNING; THENCE, SOUTH 67°23'09" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 22°36'51" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 67°23'09" EAST, 100.00 FEET TO A POINT; THENCE, SOUTH 22°36'51" EAST, 100.00 FEET TO A POINT; AND THE POINT OF BEGINNING.

BEARINGS ARE BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

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



LEGEND
 POB POINT OF BEGINNING
 POC POINT OF COMMENCEMENT
 PFI IRON PIN SET
 PFF IRON PIN FOUND
 CUP CONCRETE CEMENTUM FOUND
 UP UTILITY POLE
 UPN UNKNOWN PROPERTY
 LAF LAND ACROSS FRONT
 TMB TOWER BEACH MARK
 SD SHORT DISTANCE
 CIP CROWN LINE POCKET
 CLF CROWN LINE POCKET

SURVEY NOT VALID WITHOUT SHEETS 1 & 3 OF 3

PARENT PARCEL
 (AS PROVIDED PER ORDER NO. 30746822)
 PROPERTY LOCATED IN RUSSELL COUNTY, KENTUCKY

THE FOLLOWING DESCRIBED REAL PROPERTY, LYING AND BEING IN RUSSELL COUNTY, KENTUCKY, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS, TO-WIT:

BEING TRACTS NO. 32, 33, 34, 35, AND 36 OF DAISE ACRES. FOR A MORE COMPLETE DESCRIPTION OF SAME, REFERENCE IS MADE TO PLAT OF DAISE ACRES RECORDED IN PLAT CABINET 2, SLIDE 490, RUSSELL COUNTY CLERK'S OFFICE, JAMESTOWN, BY SURVEY OF TROY MILLER, RLS#83344, DATED 10/22/58.

AND BEING THE SAME PROPERTY CONVEYED TO EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST AND KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST FROM GARRY BANKS AND RICHELLE BANKS BY GENERAL WARRANTY DEED DATED MARCH 27, 2002 AND RECORDED MARCH 29, 2002 IN DEED BOOK 202, PAGE 643.

TAX PARCEL NO. 074-00-001.32

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

NO.	DATE	REVISION

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

PINE TOP ROAD
 SITE NO.
 KYLEX2037
 RUSSELL COUNTY,
 KENTUCKY

DRAWN BY: AMG
 CHECKED BY: JPL
 APPROVED: D. MILLER
 DATE: FEBRUARY 11, 2020
 P2P JOB #: 2021369Y

SHEET:
2
 OF 3

LEGAL DESCRIPTION SHEET

30' GUY WIRE EASEMENT #1

TOGETHER WITH A 30-FOOT WIDE GUY WIRE EASEMENT (LYING 15 FEET EACH SIDE OF CENTERLINE AND 15 FEET PAST THE TERMINATION POINT) LYING AND BEING IN RUSSELL COUNTY, KENTUCKY, AND BEING PART OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643, RUSSELL COUNTY RECORDS, RUSSELL COUNTY, KENTUCKY, AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A REBAR FOUND (CAPPED: KWM ENGINEERING AND SURVEYING) AT THE SOUTHEAST CORNER OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643 AND HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557518.7319, E: 5165908.1818; THENCE RUNNING A LONG A TIE LINE, NORTH 11°14'30" WEST, 164.11 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF PINE TOP ROAD HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557679.6910, E: 5165876.1902; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, SOUTH 67°23'09" WEST, 216.31 FEET TO A POINT ON THE LEASE AREA; THENCE RUNNING ALONG SAID LEASE AREA, SOUTH 22°36'51" EAST, 28.87 FEET TO A POINT AND THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID LEASE AREA AND RUNNING, SOUTH 82°36'51" EAST, 155.76 FEET TO THE ENDING AT A POINT.

BEARINGS ARE BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

30' GUY WIRE EASEMENT #2

TOGETHER WITH A 30-FOOT WIDE GUY WIRE EASEMENT (LYING 15 FEET EACH SIDE OF CENTERLINE AND 15 FEET PAST THE TERMINATION POINT) LYING AND BEING IN RUSSELL COUNTY, KENTUCKY, AND BEING PART OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643, RUSSELL COUNTY RECORDS, RUSSELL COUNTY, KENTUCKY, AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A REBAR FOUND (CAPPED: KWM ENGINEERING AND SURVEYING) AT THE SOUTHEAST CORNER OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643 AND HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557518.7319, E: 5165908.1818; THENCE RUNNING A LONG A TIE LINE, NORTH 11°14'30" WEST, 164.11 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF PINE TOP ROAD HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557679.6910, E: 5165876.1902; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, SOUTH 67°23'09" WEST, 216.31 FEET TO A POINT ON THE LEASE AREA; THENCE RUNNING ALONG SAID LEASE AREA, SOUTH 22°36'51" EAST, 50.00 FEET TO A POINT; THENCE, SOUTH 67°23'09" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 22°36'51" WEST, 21.13 FEET TO A POINT AND THE TRUE POINT OF BEGINNING; THENCE LEAVING SAID LEASE AREA AND RUNNING, SOUTH 37°23'09" WEST, 155.76 FEET TO THE ENDING AT A POINT.

BEARINGS ARE BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

30' GUY WIRE EASEMENT #3

TOGETHER WITH A 30-FOOT WIDE GUY WIRE EASEMENT (LYING 15 FEET EACH SIDE OF CENTERLINE AND 15 FEET PAST THE TERMINATION POINT) LYING AND BEING IN RUSSELL COUNTY, KENTUCKY, AND BEING PART OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643, RUSSELL COUNTY RECORDS, RUSSELL COUNTY, KENTUCKY, AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A REBAR FOUND (CAPPED: KWM ENGINEERING AND SURVEYING) AT THE SOUTHEAST CORNER OF THE LANDS OF EUNICE A. THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST; KERRY THOMAS AND JANET THOMAS, A ONE-HALF (1/2) UNDIVIDED INTEREST, AS RECORDED IN DEED BOOK 202 PAGE 643 AND HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557518.7319, E: 5165908.1818; THENCE RUNNING A LONG A TIE LINE, NORTH 11°14'30" WEST, 164.11 FEET TO A POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF PINE TOP ROAD HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3557679.6910, E: 5165876.1902; THENCE LEAVING SAID RIGHT-OF-WAY LINE AND RUNNING, SOUTH 67°23'09" WEST, 216.31 FEET TO A POINT ON THE LEASE AREA; THENCE RUNNING ALONG SAID LEASE AREA, SOUTH 22°36'51" EAST, 50.00 FEET TO A POINT; THENCE, SOUTH 67°23'09" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 22°36'51" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 67°23'09" EAST, 50.00 FEET TO THE POINT OF BEGINNING; THENCE LEAVING SAID LEASE AREA AND RUNNING, NORTH 22°36'51" WEST, 163.50 FEET TO THE ENDING AT A POINT.

BEARINGS ARE BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

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

NO.	DATE	REVISION

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

PINE TOP ROAD
SITE NO.
KYLEX2037
RUSSELL COUNTY,
KENTUCKY

DRAWN BY: ANG
CHECKED BY: JAL
APPROVED: D. MILLER
DATE: FEBRUARY 11, 2020
P2P JOB #: 20013600

SHEET:
3
OF 3

EXHIBIT J
NOTIFICATION LISTING

Windsor Relo / Pine Top Road – Notice List

THOMAS EUNICE WILSON
2895 HWY. 910
RUSSELL SPRINGS, KY 42642

WILSON BECKHAM HOWARD & TERRIE LYNN
216 ARMILOUS RD
RUSSELL SPRINGS KY 42642

WILSON BECKHAM H. & TERRIE
216 ARMILOUS RD
RUSSELL SPRINGS, KY 42642

MCDONALD DAVID K. & LESA L.
PO BOX 1401
RUSSELL SPRINGS, KY 42642

WADE AVERT ONEAL
676 PINE TOP RD.
RUSSELL SPRINGS, KY 42642

PINETOP CHURCH OF CHRIST
PINETOP RD.
RUSSELL SPRINGS, KY 42642

FLATWOODS ANGUS FARMS LLC
487 KY 80
WINDSOR, KY 42565

OWENS JESSE ISAIAH & HOPE CATHERINE
1101 PINETOP RD.
RUSSELL SPRINGS KY 42642

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: Windsor Relo / Pine Top Road**

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 1011 Pinetop Road, Russell Springs, KY 42642 (37° 05' 25.25" North latitude, 84° 54' 43.81" West longitude). The proposed facility will include a 305-foot tall tower, with an approximately 10-foot tall lightning arrestor attached at the top, for a total height of 315-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 2021-00065 in any correspondence sent in connection with this matter.

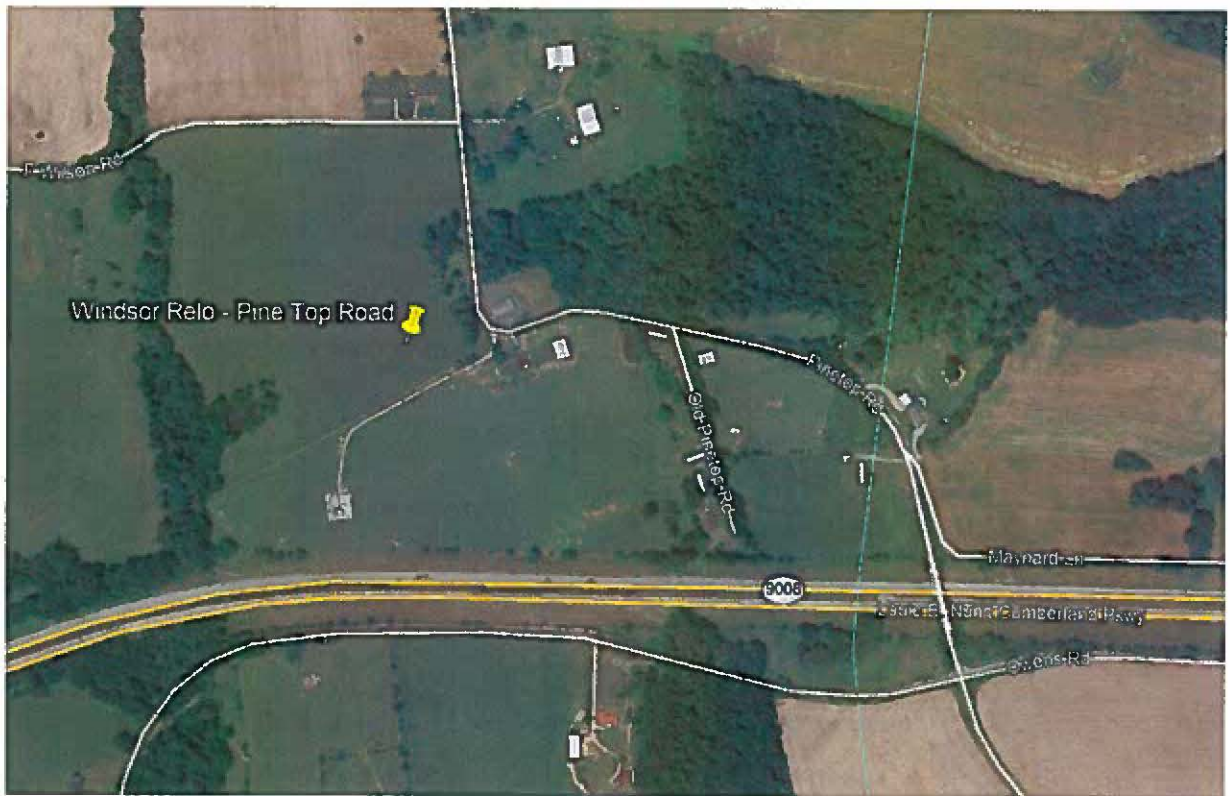
We have attached a map showing the site location for the proposed tower. AT&T Mobility's radio frequency engineers assisted in selecting the proposed site for the facility, and they have determined it is the proper location and elevation needed to provide quality service to wireless customers in the 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

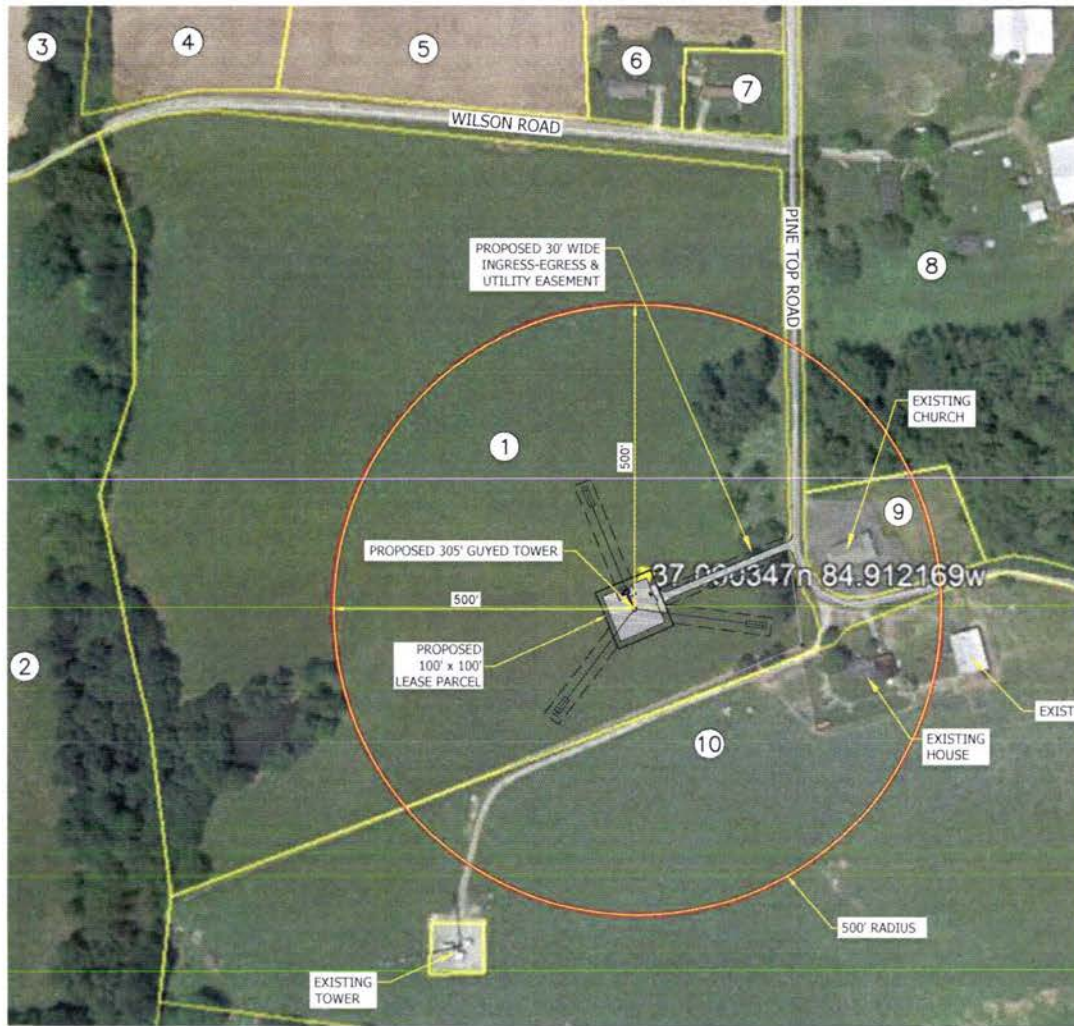
enclosures

Driving Directions to Proposed Tower Site

1. Beginning at the at 410 Monument Sq., Jamestown, KY 42629 head northeast on W Cumberland Ave and travel approximately 46 feet.
2. At the traffic circle, take the 3rd exit onto US-127 Business N and travel approximately 1.1 miles.
3. Continue onto US-127 N / N Main Street and travel approximately 3.6 miles.
4. Take the ramp to Somerset and travel approximately 0.5 miles.
5. Merge onto Cumberland Pkwy and travel approximately 7.5 miles.
6. Take the exit toward KY-910 N and travel approximately 0.4 miles.
7. Turn left onto KY-910 N and travel approximately 0.6 miles.
8. Turn right onto F Wilson Road and travel approximately 1.0 miles.
9. Turn Right onto Pinetop Road and travel approximately 0.1 miles. The Site is located on the right. The site address is: 1011 Pinetop Road, Russell Springs, KY 42642.
10. The site coordinates are:
 - a. North 37 deg 05 min 25.25 sec
 - b. West 84 deg 54 min 43.81 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	EUNICE WILSON THOMAS	2895 HWY 910 RUSSELL SPRINGS, KY 42642	074-00-00-001.32	DB 202 PG 643
2	EUNICE WILSON THOMAS	2895 HWY 910 RUSSELL SPRINGS, KY 42642	068-00-00-031.01	DB 75 PG 77
3	HOWARD & TERRIE WILSON	216 ARMILIOUS ROAD RUSSELL SPRINGS, KY 42642	068-00-00-031.00	DB 324 PG 159
4	BECKHAM & TERRIE WILSON	216 ARMILIOUS ROAD RUSSELL SPRINGS, KY 42642	074-00-00-001.31	DB 173 PG 007
5	BECKHAM & TERRIE WILSON	216 ARMILIOUS ROAD RUSSELL SPRINGS, KY 42642	074-00-00-001.29	DB 215 PG 095
6	DAVID & LESA McDONALD	P.O. BOX 1401 RUSSELL SPRINGS, KY 42642	074-00-00-001.25	DB 172 PG 679
7	AVERT ONEAL WADE	676 PINE TOP ROAD RUSSELL SPRINGS, KY 42642	074-00-00-001.27	DB 231 PG 369
8	AVERT ONEAL WADE	676 PINE TOP ROAD RUSSELL SPRINGS, KY 42642	074-00-00-007.00	DB 24 PG 21
9	CHURCH OF CHRIST PINETOP	PINETOP ROAD RUSSELL SPRINGS, KY 42642	074-00-00-009.00	DB 007 PG 421
10	FLATWOODS ANGUS FARMS LLC	487 KY 80 WINDSOR, KY 42565	074-00-00-010.00	DB 305 PG 499

- NOTE:
1. PVA INFORMATION WAS OBTAINED ON 7/24/2020 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.



UNITI TOWERS
 PINE TOP ROAD
 P.O. # 15147585
 PACHE# AIRTNS047962
 PT# 10115668
 101 PINE TOP ROAD
 RUSSELL SPRINGS, KY 42642
 RUSSELL COUNTY
 PROPOSED 305' GUYED TOWER

PROJECT NO. G01374100
 CHECKED BY: MAS

ISSUED FOR			
REV	DATE	DRWN	DESCRIPTION
A	08/24/20	DLS	ZONING DRAWINGS
0	08/28/20	DLS	ZONING DRAWINGS

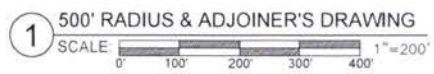
B&T ENGINEERING, INC.
 COA 4011
 Expires 12/31/20



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



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



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

Gary D. Robertson
County Judge Executive
P. O. Box 397
410 Monument Square, Suite 205
Jamestown, KY 42629

RE: Notice of Proposal to Construct Wireless Communications Facility
Kentucky Public Service Commission Docket No. 2021-00065
Site Name: Windsor Relo / Pine Top Road

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 1011 Pinetop Road, Russell Springs, KY 42642 (37° 05' 25.25" North latitude, 84° 54' 43.81" West longitude). The proposed facility will include a 305-foot tall tower, with an approximately 10-foot tall lightning arrestor attached at the top, for a total height of 315-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 2021-00065 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.

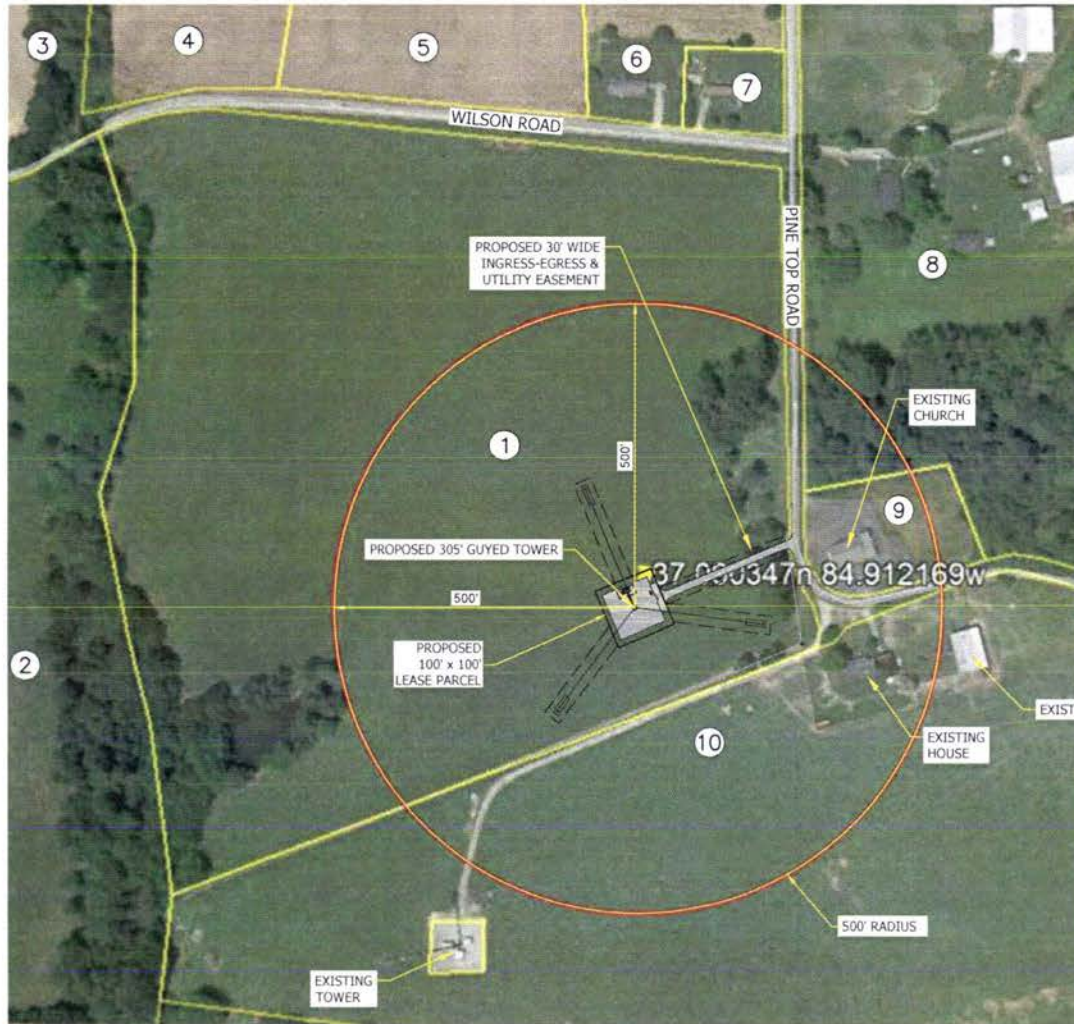
Sincerely,
David A. Pike
Attorney for Applicants
enclosures

Driving Directions to Proposed Tower Site

1. Beginning at the at 410 Monument Sq., Jamestown, KY 42629 head northeast on W Cumberland Ave and travel approximately 46 feet.
2. At the traffic circle, take the 3rd exit onto US-127 Business N and travel approximately 1.1 miles.
3. Continue onto US-127 N / N Main Street and travel approximately 3.6 miles.
4. Take the ramp to Somerset and travel approximately 0.5 miles.
5. Merge onto Cumberland Pkwy and travel approximately 7.5 miles.
6. Take the exit toward KY-910 N and travel approximately 0.4 miles.
7. Turn left onto KY-910 N and travel approximately 0.6 miles.
8. Turn right onto F Wilson Road and travel approximately 1.0 miles.
9. Turn Right onto Pinetop Road and travel approximately 0.1 miles. The Site is located on the right. The site address is: 1011 Pinetop Road, Russell Springs, KY 42642.
10. The site coordinates are:
 - a. North 37 deg 05 min 25.25 sec
 - b. West 84 deg 54 min 43.81 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	EUNICE WILSON THOMAS	2895 HWY 910 RUSSELL SPRINGS, KY 42642	074-00-00-001.32	DB 202 PG 643
2	EUNICE WILSON THOMAS	2895 HWY 910 RUSSELL SPRINGS, KY 42642	068-00-00-031.01	DB 75 PG 77
3	HOWARD & TERRIE WILSON	216 ARMILOUS ROAD RUSSELL SPRINGS, KY 42642	068-00-00-031.00	DB 324 PG 159
4	BECKHAM & TERRIE WILSON	216 ARMILOUS ROAD RUSSELL SPRINGS, KY 42642	074-00-00-001.31	DB 173 PG 007
5	BECKHAM & TERRIE WILSON	216 ARMILOUS ROAD RUSSELL SPRINGS, KY 42642	074-00-00-001.29	DB 215 PG 095
6	DAVID & LESA McDONALD	P.O. BOX 1401 RUSSELL SPRINGS, KY 42642	074-00-00-001.25	DB 172 PG 679
7	AVERT ONEAL WADE	676 PINE TOP ROAD RUSSELL SPRINGS, KY 42642	074-00-00-001.27	DB 231 PG 369
8	AVERT ONEAL WADE	676 PINE TOP ROAD RUSSELL SPRINGS, KY 42642	074-00-00-007.00	DB 24 PG 21
9	CHURCH OF CHRIST PINETOP	PINETOP ROAD RUSSELL SPRINGS, KY 42642	074-00-00-009.00	DB 007 PG 421
10	FLATWOODS ANGUS FARMS LLC	487 KY 80 WINDSOR, KY 42565	074-00-00-010.00	DB 305 PG 499

NOTE:

1. PVA INFORMATION WAS OBTAINED ON 7/24/2020 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.



UNITI TOWERS
 PINE TOP ROAD
 E: # 15147585
 PACE# AR1NS017962
 PI# 10115668
 101 PINE TOP ROAD
 RUSSELL SPRINGS, KY 42642
 RUSSELL COUNTY
 PROPOSED 305' GUYED TOWER

PROJECT NO.: G013744.00
 CHECKED BY: MAS

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
A	08/24/20	DLS	ZONING DRAWINGS
0	08/28/20	DLS	ZONING DRAWINGS

B&T ENGINEERING, INC.
 COA 4011
 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

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!



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

SITE NAME: WINDSOR RELO / PINE TOP ROAD
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 2021-00065 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 2021-00065 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: (270) 866-3191

VIA EMAIL: advertising@russellcountynewspapers.com

The Russell County News-Register
120 Wilson St.
Russell Springs, KY 42642

RE: Legal Notice Advertisement
Site Name: Windsor Relo / Pine Top Road

Dear Russell County News-Register:

Please publish the following legal notice advertisement in the next edition of *The Russell County News-Register*:

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 at 1011 Pinetop Road, Russell Springs, KY 42642 (37° 05' 25.25" North latitude, 84° 54' 43.81" 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 2021-00065 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

