COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF	)	
CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS	)	
AND HARMONI TOWERS, LLC FOR ISSUANCE	)	
OF A CERTIFICATE OF PUBLIC	)	CASE NO. 2023-00043
CONVENIENCE AND NECESSITY TO CONSTRUCT	)	
A WIRELESS COMMUNICATIONS FACILITY	)	
IN THE COMMONWEALTH OF KENTUCKY	)	
IN THE COUNTY OF LOGAN	)	

SITE NAME: RUSSELLVILLE CAPACITY

* * * * * * *

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

Cellco Partnership, d/b/a Verizon Wireless and Harmoni Towers, LLC ("Co-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 submits 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 Co-Applicants with wireless communications services.

In support of this Application, Co-Applicants respectfully provides and states the following information:

1. The complete name and address of the Co-Applicants:

    a. Cellco Partnership, d/b/a Verizon Wireless, having a local address of 2902 Ring Road, Elizabethtown, KY 42701.

b. Harmoni Towers, LLC, having an address of 11101 Anderson Drive, Ste. 200, Little Roack, AR 72212

2. Co-Applicants;

a. Cellco Partnership, d/b/a Verizon Wireless is a Delaware general partnership and a copy of the Amended Certificate of Assumed Name is on file with the Secretary of State of Commonwealth of Kentucky is included as part of **Exhibit A**.

b. b. Harmoni Towers, LLC is a Delaware limited liability company and a copy of the Certificate of Amendment to Certificate of Formation is on file with the Secretary of State of Commonwealth of Kentucky is included as part of **Exhibit A**.

3. Co-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 Co-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.

4. The Co-Applicant, Cellco Partnership, d/b/a Verizon Wireless operates on frequencies licensed by the Federal Communications Commission ("FCC") pursuant to applicable FCC requirements. A copy of the CoApplicant's FCC licenses to provide wireless services are attached to this Application or described as part of **Exhibit B**, and the facility will be constructed and operated in accordance with applicable FCC regulations.

5. The public convenience and necessity require the construction of the proposed WCF. The construction of the WCF will bring or improve the Co-Applicants' services to an area

currently not served or not adequately served by the Co-Applicants by increasing coverage or capacity and thereby enhancing the public's access to innovative and competitive wireless communications services. A statement from Co-Applicant, Cellco Partnership, d/b/a Verizon Wireless's RF Design Engineer outlining said need is attached as **Exhibit Q** along with Propagation Maps attached as **Exhibit Qa**. The WCF is an integral link in the Co-Applicant's network design that must be in place to provide adequate coverage to the service area.

6. To address the above-described service needs, Co-Applicants propose to construct a WCF on Creekwood Dr., Russellville, KY 42276 (36° 51' 50.30" North latitude, 86° 53' 09.85" 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 John and Elizabeth Tabor pursuant to a Deed recorded at Deed Book 365, Page 673 in the office of the County Clerk. The proposed WCF will consist of a 190-foot tall tower, with an approximately 4-foot tall lightning arrestor attached at the top, for a total height of 199-feet. The WCF will also include concrete foundations and a shelter or cabinets to accommodate the placement of the Co-Applicant's radio electronics equipment and appurtenant equipment. The Co-Applicant's 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 C** and **Exhibit D**.

7. A list of utilities, corporations, or persons with whom the proposed WCF is likely to compete along with a map showing the proposed location as well as the identified like facilities is attached as **Exhibit E**.

8. 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 the antennas of the Co-Applicant, Cellco Partnership, d/b/a Verizon Wireless has also been included as part of **Exhibit C**.

9. 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 D**.

10. Co-Applicants have considered the likely effects of the installation of the proposed WCF on nearby land uses and values and has 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 Co-Applicant's antennas on an existing structure. When suitable towers or structures exist, Co-Applicant's attempts to co-locate on existing structures such as communications towers or other structures capable of supporting Co-Applicant's facilities; however, no other suitable or available co-location site was found to be located in the vicinity of the site.

11. A copy of the Federal Aviation Administration's ("FAA") Notice Criteria Tool indicates filing for a Determination of No Hazard to Air Navigation due to the height and location of the tower is not required is attached as **Exhibit F**.

12. A copy of communication from the Kentucky Airport Zoning Commission ("KAZC") indicating that the proposed site and height does not fall within the Commission's jurisdiction is attached as **Exhibit G**.

13. A geotechnical engineering report was performed by Power of Design Group, LLC, Louisville, KY, dated November 11, 2022, and is attached as **Exhibit H**. The name and address

of the geotechnical engineering firm and the professional engineer registered in Kentucky who prepared the report are included as part of **Exhibit R**.

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

15. Co-Applicants, pursuant to a written agreement, have acquired the right to use the WCF site and associated property rights. A copy of the agreement is attached as **Exhibit J**.

16. 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 D** 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.

17. The Construction Manager for the proposed facility is Billy Waldridge, Jr. and the identity and qualifications of each person directly responsible for design and construction of the proposed tower are contained in **Exhibit R**.

18. As noted on the Survey attached as part of **Exhibit C**, the surveyor has determined that the tower site and access easement are not within any flood hazard area per Flood Hazard Boundary Map, Community Panel Number 21141C0257D, Dated October 2, 2012. A letter from the surveyor regarding the site coordinates is attached as **Exhibit Ca**.

19. **Exhibit C** 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 C**.

20. Co-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 will be 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 to be sent by certified mail to each landowner are attached as **Exhibit K** and **Exhibit L**, respectively.

21. Co-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 M**.

22. 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 N**. 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 **Exhibit O**.

23. The general area where the proposed facility is to be located is undeveloped and removed a significant distance from any residential structures. The nearest residential structure is 230 feet from the proposed tower site.

24. The process that was used by the Co-Applicant, Cellco Partnership, d/b/a Verizon Wireless 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. Co-Applicant'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 Co-Applicant when searching for sites for its antennas that would provide the coverage deemed necessary by the Co-Applicant. 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 P**.

25. The tower must be located at the proposed location and proposed height to provide necessary service to wireless communications users in the subject area, as set out and documented in the RF Design Engineers' Statement of Need and Propagation Maps attached as **Exhibit Q and Qa.** The proposed tower will expand and improve voice and data service for Verizon Wireless customers.

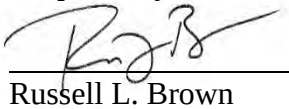
26. All Exhibits to this Application are hereby incorporated by reference as if fully set out as part of the Application.

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

Russell L. Brown
Clark, Quinn, Moses, Scott & Grahn, LLP
320 North Meridian Street, Suite 1100
Indianapolis, IN 46204
Phone: (317) 637-1321
FAX: (317) 687-2344
Email: rbrown@clarkquinnlaw.com
Attorney for Cellco Partnership d/b/a Verizon Wireless

WHEREFORE, Co-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,



Russell L. Brown
Clark, Quinn, Moses, Scott & Grahn, LLP
320 North Meridian Street, Suite 1100
Indianapolis, IN 46204
Phone: (317) 637-1321 / FAX: (317) 687-2344
Email: rbrown@clarkquinnlaw.com
Attorney for Cellco Partnership d/b/a Verizon Wireless

LIST OF EXHIBITS

A	Applicant Entity
B	FCC License Documentation
C	Site Development Plan: 500' Vicinity Map Legal Descriptions Flood Plain Certification Site Plan Vertical Tower Profile
Ca	Letter from Surveyor regarding Site Coordinates
D	Tower and Foundation Design
E	Competing Utilities, Corporations, or Persons List And Map of Like Facilities in Vicinity
F	FAA Criteria Tool
G	KAZC Communication
H	Geotechnical Report
I	Directions to WCF Site
J	Copy of Real Estate Agreement
K	Notification Listing
L	Copy of Property Owner Notification
M	Copy of County Judge/Executive notice
N	Copy of Posted Notices
O	Copy of Newspaper Legal Notice Advertisement
P	Copy of Radio Frequency Design Search Area
Q	Copy of RF Design Engineer State of Need
Qa	Propagation Maps
R	List of Qualified Professionals

A

COMMONWEALTH OF KENTUCKY
TREY GRAYSON
SECRETARY OF STATE

Secretary of State
Received and Filed
08/21/2006 12:06:00 PM
Fee Receipt: $20.00

CERTIFICATE OF ASSUMED NAME

This certifies that the assumed name of

Verizon Wireless

(Name under which the business will be conducted)

has been adopted by See Addendum

(Full name of entity)

which is the "real name" of (YOU MUST CHECK ONE)

- [ ] a Domestic General Partnership
- [ ] a Domestic Registered Limited Liability Partnership
- [ ] a Domestic Limited Partnership
- [ ] a Domestic Business Trust
- [ ] a Domestic Corporation
- [ ] a Domestic Limited Liability Company
- [ ] a Joint Venture
- [x] a Foreign General Partnership
- [ ] a Foreign Registered Limited Liability Partnership
- [ ] a Foreign Limited Partnership
- [ ] a Foreign Business Trust
- [ ] a Foreign Corporation
- [ ] a Foreign Limited Liability Company

organized and existing in the state or country of Delaware, and whose address is

One Verizon Way	Basking Ridge	NJ	07920
(Street address)	(City)	(State)	(Zip Code)

The certificate of assumed name is executed by

NYNEX PCS Inc.

Jane A. Schapker-Assistant Secretary

June 15, 2006

(Date)

(Signature)

(Printed name and title)

(Date)

(See attached sheet for instructions)

0641227.07 dcornish AMD

Alison Lundergan Grimes
Kentucky Secretary of State
Received and Filed:
1/22/2013 1:43 PM
Fee Receipt: $20.00

COMMONWEALTH OF KENTUCKY
ELAINE N. WALKER, SECRETARY OF STATE

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

Amended Certificate of Assumed Name
(Domestic or Foreign Business Entity)

AAN

Pursuant to the provisions of KRS 365, the undersigned applies to amend the certificate of assumed name and, for that purpose, submits the following statement:

1. The assumed name is Verizon Wireless
(The name must be identical to the name on record with the Secretary of State.)

2. The certificate of assumed name was filed with the Secretary of State on: 6/21/2006

3 The current principal office address (if any) is:

Street Address or Post Office Box Numbers	City	State	Zip
One Verizon Way	Basking Ridge	NJ	07920

4. The principal office address is hereby changed to:

Street Address or Post Office Box Numbers	City	State	Zip

5. 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)

6. The changes in the identity of the partners are as follows: See Addendum for current partners

I declare under penalty of perjury under the laws of Kentucky that the forgoing is true and correct.
GTE Wireless Incorporated

Signature of Applicant	Printed Name	Title	Date
Jana A. Schanker	Jana A. Schanker	Assistant Secretary	1/21/2012

(04/11)

Addendum

The full name of the Partnership is Cellco Partnership, a Delaware general partnership composed of the following partners:

General Partners of Cellco Partnership	***Address***
Bell Atlantic Mobile Systems LLC	One Verizon Way Basking Ridge, NJ 07920
GTE Wireless Incorporated	One Verizon Way Basking Ridge, NJ 07920
PCS Nucleus, L.P.	Denver Place South Tower 999-18th Street, Suite 1750 Denver, CO 80202
JV PartnerCo, LLC	Denver Place South Tower 999-18th Street, Suite 1750 Denver, CO 80202

FRANKLIN COUNTY
A120 PG445

ASI 2

0972004.06 mstratton ADD

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

COMMONWEALTH OF KENTUCKY
ALISON LUNDERGAN GRIMES, SECRETARY OF STATE

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 386 the undersigned hereby applies for authority to transact business in Kentucky on behalf of the entity named below and, for that purpose, submits the following statements:

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

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

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

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

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

6. The mailing address of the entity's principal office is

10802 Executive Center Drive, Benton Building, Suite 300	Little Rock	AR	72211
Street Address	City	State	Zip Code

7. The street address of the entity's registered office in Kentucky is

306 West Main Street - Suite 512	Frankfort	KY	40601
Street Address (No P.O. Box Numbers)	City	State	Zip Code

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

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

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

9. If a professional service corporation, all the individual shareholders, not less than one half (1/2) of the directors, and all of the officers other than the secretary and treasurer are licensed in one or more states or territories of the United States or District of Columbia to render a professional service described in the statement of purposes of 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]	Keith Harvey, VP - Deputy General Counsel	12/30/2016
Signature of Authorized Representative	Printed Name & Title	Date

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

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

(09/15)

Delaware

The First State

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

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

Jeffrey W. Bullock, Secretary of State

5896640 8300

SR# 20167345793

You may verify this certificate online at corp.delaware.gov/authver.shtml

Authentication: 203613650

Date: 12-30-16

State of Delaware
Secretary of State
Division of Corporations
Delivered 05:13 PM 09/18/2020
FILED 05:13 PM 09/18/2020
SR 20207362106 - File Number 5896640

CERTIFICATE OF AMENDMENT
TO
CERTIFICATE OF FORMATION
OF
UNITI TOWERS LLC

The undersigned, being duly authorized to execute and file this Certificate of Amendment to Certificate of Formation for the purpose of amending the Certificate of Formation pursuant to the Section 18-202 of the Limited Liability Company Act of the State of Delaware, does hereby certify as follows:

FIRST

The name of the limited liability company is Uniti Towers LLC (the "Company").

SECOND

Paragraph 1 of the Certificate of Formation of the Company is hereby deleted in its entirety and amended to read in full as follows:

FIRST: The name of the limited liability company is Harmoni Towers LLC (the "Company").

IN WITNESS WHEREOF, the undersigned has duly executed this Certificate of Amendment to Certificate of Formation as of the 18th day of September, 2020.

HARMONI TOWERS HOLDINGS LLC
Its: Sole Member

By: */s/ Chester Dawes*
Name: Chester Dawes
Its: Chief Financial Officer

Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
KNKN867	0009262184
Radio Service CL - Cellular	
Market Numer CMA445	**Channel Block** B
Sub-Market Designator 0	

FCC Registration Number (FRN): 0003290673

Market Name
Kentucky 3 - Meade

Grant Date	Effective Date	Expiration Date	Five Yr Build-Out Date	Print Date
09-01-2020	01-13-2021	10-01-2030		

Site Information:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
1	36-50-41.0 N	086-51-27.0 W	243.8	82.3	1043225

Address: 1.3 KM EAST OF SR-100 & JEFF DAVIS HIGHWAY
City: RUSSELLVILLE **County:** LOGAN **State:** KY **Construction Deadline:**

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	133.200	104.800	100.900	107.400	123.200	117.300	105.900	123.700
Transmitting ERP (watts)	153.310	72.160	9.790	0.510	0.420	0.540	11.230	75.590

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	133.200	104.800	100.900	107.400	123.200	117.300	105.900	123.700
Transmitting ERP (watts)	0.870	21.280	113.650	147.250	38.070	3.570	0.330	0.410

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	133.200	104.800	100.900	107.400	123.200	117.300	105.900	123.700
Transmitting ERP (watts)	1.480	0.400	0.430	2.930	40.950	143.640	111.910	19.230

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.

FCC 601-C
March 2018

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
2	36-58-11.0 N	086-31-15.0 W	205.4	117.3	1043045

Address: Bowling Green Main, 3.4 KM southwest of
City: BOWLING GREEN **County:** WARREN **State:** KY **Construction Deadline:**

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)	108.200	135.100	135.400	118.600	102.700	103.000	111.100	110.800
Transmitting ERP (watts)	186.450	83.280	10.010	0.510	0.420	0.490	10.730	87.210

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)	47.300	74.100	74.500	57.600	41.800	42.100	50.200	49.900
Transmitting ERP (watts)	0.270	2.540	54.390	78.620	9.450	0.350	0.270	0.270

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)	108.200	135.100	135.400	118.600	102.700	103.000	111.100	110.800
Transmitting ERP (watts)	1.020	0.240	0.310	2.130	24.000	70.020	56.310	11.460

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
3	37-08-47.0 N	086-39-02.0 W	189.0	128.0	1043044

Address: 9.7 KM SOUTH SOUTHEAST OF
City: MORGANTOWN **County:** BUTLER **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)	126.200	118.800	110.000	116.600	100.700	122.200	119.800	131.300
Transmitting ERP (watts)	0.330	0.690	16.910	90.270	116.960	30.240	2.840	0.260

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)	126.200	118.800	110.000	116.600	100.700	122.200	119.800	131.300
Transmitting ERP (watts)	2.100	0.260	0.330	1.050	21.320	101.470	108.950	23.430

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)	126.200	118.800	110.000	116.600	100.700	122.200	119.800	131.300
Transmitting ERP (watts)	90.270	14.390	1.070	0.260	0.340	2.530	33.930	116.960

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
4	37-47-53.0 N	086-19-51.0 W	257.3	125.0	1043043

Address: WITHIN THE CITY LIMITS OF
City: GARFIELD **County:** BRECKINRIDGE **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)	164.300	145.800	148.800	118.100	136.500	132.100	154.800	164.500
Transmitting ERP (watts)	104.850	46.830	5.630	0.290	0.240	0.280	6.030	49.040

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)	164.300	145.800	148.800	118.100	136.500	132.100	154.800	164.500
Transmitting ERP (watts)	0.560	13.820	74.230	95.620	25.740	2.460	0.240	0.270

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)	164.300	145.800	148.800	118.100	136.500	132.100	154.800	164.500
Transmitting ERP (watts)	0.930	0.240	0.280	2.040	27.580	95.620	74.230	12.320

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
6	36-46-32.1 N	086-33-56.0 W	206.3	91.1	1043041

Address: 2.4 KM NORTH OF
City: FRANKLIN **County:** SIMPSON **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)	78.700	81.100	68.500	56.000	56.400	56.600	64.300	64.200
Transmitting ERP (watts)	144.730	63.540	7.340	0.360	0.300	0.380	8.420	66.540

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)	78.700	81.100	68.500	56.000	56.400	56.600	64.300	64.200
Transmitting ERP (watts)	0.710	17.400	93.440	120.380	32.400	3.090	0.300	0.340

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)	78.700	81.100	68.500	56.000	56.400	56.600	64.300	64.200
Transmitting ERP (watts)	1.280	0.300	0.390	2.690	30.220	88.150	70.900	14.430

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
7	37-03-33.7 N	087-01-50.4 W	200.0	77.7	1266950

Address: Lake Malone, 1038 Heltsley Road

City: Lewisburg **County:** LOGAN **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)	120.200	116.000	119.100	120.900	103.100	89.400	78.300	104.000
Transmitting ERP (watts)	102.840	191.490	71.150	7.980	0.430	0.450	0.570	14.860

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)	120.200	116.000	119.100	120.900	103.100	89.400	78.300	104.000
Transmitting ERP (watts)	0.570	14.860	102.840	191.490	71.150	7.980	0.430	0.450

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)	120.200	116.000	119.100	120.900	103.100	89.400	78.300	104.000
Transmitting ERP (watts)	3.330	0.430	0.500	1.560	31.780	148.650	162.990	36.490

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
8	36-47-11.0 N	086-08-35.3 W	253.3	91.1	1043039

Address: 4.8 KM NORTHEAST OF

City: SCOTTSVILLE **County:** ALLEN **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)	151.400	124.900	113.700	118.200	77.200	108.300	128.800	139.000
Transmitting ERP (watts)	117.640	52.550	6.320	0.320	0.260	0.310	6.770	55.020

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)	151.400	124.900	113.700	118.200	77.200	108.300	128.800	139.000
Transmitting ERP (watts)	0.630	15.510	83.280	107.290	28.880	2.760	0.260	0.300

Antenna: 3

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	151.400	124.900	113.700	118.200	77.200	108.300	128.800	139.000
Transmitting ERP (watts)	1.050	0.260	0.310	2.290	30.940	107.290	83.280	13.820

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
9	37-53-45.0 N	086-49-51.0 W	164.5	65.6	1043711

Address: OLD LEWISPORT OWENSBORO RD, 7.6 KM WEST OF
City: HAWESVILLE **County:** HANCOCK **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)	81.600	79.800	95.100	59.500	72.200	82.700	89.400	93.100
Transmitting ERP (watts)	7.600	61.740	131.990	58.960	7.090	0.360	0.300	0.350

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)	81.600	79.800	95.100	59.500	72.200	82.700	89.400	93.100
Transmitting ERP (watts)	0.300	0.340	0.710	17.400	93.440	120.380	32.400	3.090

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)	81.600	79.800	95.100	59.500	72.200	82.700	89.400	93.100
Transmitting ERP (watts)	93.440	15.510	1.180	0.300	0.350	2.570	34.720	120.380

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
10	37-16-52.0 N	087-06-06.0 W	150.0	128.0	1043038

Address: 0.4 MI. EAST OF INTERCHANGE OF 58 & W. KY PKWY; IMMED. ESE OF
City: CENTRAL CITY **County:** MUHLENBERG **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)	126.500	101.500	105.400	104.300	100.200	87.900	94.300	112.900
Transmitting ERP (watts)	50.380	128.750	66.660	8.640	0.500	0.260	0.330	5.430

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)	126.500	101.500	105.400	104.300	100.200	87.900	94.300	112.900
Transmitting ERP (watts)	0.300	0.480	13.100	80.300	122.700	38.140	3.840	0.260

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)	126.500	101.500	105.400	104.300	100.200	87.900	94.300	112.900
Transmitting ERP (watts)	18.570	1.520	0.260	0.340	1.630	26.900	108.950	99.160

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
11	37-27-33.0 N	086-17-41.0 W	220.7	128.0	1043037

Address: 0.8 KM SSE OF INT OF W KY PKWY & SR-259
City: LEITCHFIELD **County:** GRAYSON **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)	136.500	139.400	136.800	139.500	172.500	127.300	136.600	156.800
Transmitting ERP (watts)	92.370	12.750	0.300	0.450	0.200	0.420	3.510	48.480

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)	136.500	139.400	136.800	139.500	172.500	127.300	136.600	156.800
Transmitting ERP (watts)	3.700	26.630	74.790	73.070	22.660	3.610	0.490	0.490

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)	136.500	139.400	136.800	139.500	172.500	127.300	136.600	156.800
Transmitting ERP (watts)	2.080	0.820	0.770	7.520	42.060	84.790	55.750	12.610

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
12	37-59-17.0 N	086-08-53.0 W	202.4	61.0	1043036

Address: 1.6 km ESE of
City: BRANDENBURG **County:** MEADE **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)	82.800	58.900	109.700	63.200	40.600	55.600	61.600	100.400
Transmitting ERP (watts)	0.480	12.480	87.870	162.090	56.190	6.380	0.330	0.360

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)	82.800	58.900	109.700	63.200	40.600	55.600	61.600	100.400
Transmitting ERP (watts)	5.570	0.500	0.330	0.330	4.740	24.940	42.710	26.730

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
13	37-24-41.0 N	086-32-12.0 W	233.5	128.0	1043035

Address: 3.2 KM WEST SOUTHWEST OF
City: CANEYVILLE **County:** GRAYSON **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)	136.900	135.600	147.900	125.100	152.900	161.200	146.000	164.600
Transmitting ERP (watts)	202.510	94.240	14.690	1.160	1.000	8.520	44.320	169.340

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
13	37-24-41.0 N	086-32-12.0 W	233.5	128.0	1043035

Address: 3.2 KM WEST SOUTHWEST OF
City: CANEYVILLE **County:** GRAYSON **State:** KY **Construction Deadline:**

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)	136.900	135.600	147.900	125.100	152.900	161.200	146.000	164.600
Transmitting ERP (watts)	20.040	101.220	204.390	162.460	34.720	3.620	0.410	2.990

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)	136.900	135.600	147.900	125.100	152.900	161.200	146.000	164.600
Transmitting ERP (watts)	4.910	0.410	2.960	14.520	88.120	204.810	176.590	43.820

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
14	36-55-48.0 N	086-56-27.0 W	207.9	60.7	

Address: 6.4 KM SOUTH OF
City: LEWISBURG **County:** LOGAN **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)	116.400	93.400	82.400	74.500	68.800	70.800	79.200	98.300
Transmitting ERP (watts)	113.650	147.250	38.070	3.570	0.330	0.410	0.870	21.280

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)	116.400	93.400	82.400	74.500	68.800	70.800	79.200	98.300
Transmitting ERP (watts)	0.430	3.180	42.710	147.250	113.650	18.120	1.350	0.330

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)	116.400	93.400	82.400	74.500	68.800	70.800	79.200	98.300
Transmitting ERP (watts)	8.230	0.410	0.330	0.420	9.450	74.650	162.390	71.290

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
15	36-59-27.0 N	086-26-29.0 W	160.9	79.3	1201033

Address: 537 10th Street at Chestnut Street
City: BOWLING GREEN **County:** WARREN **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)	60.100	54.500	67.300	54.300	51.400	51.700	45.400	61.600
Transmitting ERP (watts)	162.390	71.290	8.230	0.410	0.330	0.420	9.450	74.650

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
15	36-59-27.0 N	086-26-29.0 W	160.9	79.3	1201033

Address: 537 10th Street at Chestnut Street
City: BOWLING GREEN **County:** WARREN **State:** KY **Construction Deadline:**

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)	60.100	54.500	67.300	54.300	51.400	51.700	45.400	61.600
Transmitting ERP (watts)	0.310	2.780	58.870	89.730	12.030	0.400	0.310	0.310

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)	60.100	54.500	67.300	54.300	51.400	51.700	45.400	61.600
Transmitting ERP (watts)	0.310	0.310	0.310	0.460	21.160	106.060	35.940	1.760

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
16	36-50-40.2 N	087-12-42.0 W	256.6	60.7	

Address: 5.8 KM NW OF
City: ELKTON **County:** TODD **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)	102.100	95.500	91.800	117.800	119.100	128.800	118.300	103.200
Transmitting ERP (watts)	112.350	104.850	19.980	1.660	0.300	0.350	1.660	27.580

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)	102.100	95.500	91.800	117.800	119.100	128.800	118.300	103.200
Transmitting ERP (watts)	0.940	15.530	144.900	372.460	200.020	26.370	1.550	0.840

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)	102.100	95.500	91.800	117.800	119.100	128.800	118.300	103.200
Transmitting ERP (watts)	4.170	0.300	0.320	0.500	13.510	83.280	126.050	39.860

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
17	37-32-55.4 N	087-16-05.4 W	140.2	93.0	1244911

Address: 235 WEST KY 136
City: CALHOUN **County:** MCLEAN **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)	81.300	91.000	88.000	100.800	95.300	104.000	105.400	89.700
Transmitting ERP (watts)	30.940	106.670	82.330	13.120	0.980	0.240	0.310	2.310

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
17	37-32-55.4 N	087-16-05.4 W	140.2	93.0	1244911

Address: 235 WEST KY 136
City: CALHOUN **County:** MCLEAN **State:** KY **Construction Deadline:**

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)	81.300	91.000	88.000	100.800	95.300	104.000	105.400	89.700
Transmitting ERP (watts)	0.240	0.310	6.850	54.080	117.640	51.650	5.960	0.290

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)	81.300	91.000	88.000	100.800	95.300	104.000	105.400	89.700
Transmitting ERP (watts)	27.580	2.590	0.240	0.300	0.630	15.420	82.330	106.670

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
18	37-38-33.2 N	086-42-46.0 W	210.3	60.7	

Address: 6 KM EAST OF
City: FORDSVILLE **County:** OHIO **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)	84.000	65.700	96.800	89.400	105.200	118.300	113.200	109.900
Transmitting ERP (watts)	144.730	63.540	7.340	0.360	0.300	0.380	8.420	66.540

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)	84.000	65.700	96.800	89.400	105.200	118.300	113.200	109.900
Transmitting ERP (watts)	0.780	18.970	101.290	131.240	33.930	3.180	0.300	0.370

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)	84.000	65.700	96.800	89.400	105.200	118.300	113.200	109.900
Transmitting ERP (watts)	1.200	0.300	0.390	2.840	38.070	131.240	101.290	16.150

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
19	38-00-08.4 N	086-19-20.3 W	237.4	103.9	1049227

Address: 1.2 km Northwest of
City: PAYNEVILLE **County:** MEADE **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)	115.700	125.400	135.500	103.300	111.300	123.300	141.900	137.900
Transmitting ERP (watts)	172.880	116.290	19.640	1.990	0.530	4.460	28.140	120.910

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
19	38-00-08.4 N	086-19-20.3 W	237.4	103.9	1049227

Address: 1.2 km Northwest of
City: PAYNEVILLE **County:** MEADE **State:** KY **Construction Deadline:**

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)	115.700	125.400	135.500	103.300	111.300	123.300	141.900	137.900
Transmitting ERP (watts)	8.740	48.710	165.560	182.540	70.320	9.950	0.770	1.160

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)	115.700	125.400	135.500	103.300	111.300	123.300	141.900	137.900
Transmitting ERP (watts)	4.430	0.370	2.670	13.090	79.440	184.650	159.200	39.500

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
20	37-11-25.0 N	087-11-51.0 W	182.9	66.4	1065886

Address: 701 BASS LANE
City: GREENVILLE **County:** MUHLENBERG **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)	103.800	96.500	95.100	84.500	77.800	98.000	117.300	91.200
Transmitting ERP (watts)	155.980	120.380	19.190	1.430	0.350	0.460	3.370	45.240

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)	103.800	96.500	95.100	84.500	77.800	98.000	117.300	91.200
Transmitting ERP (watts)	0.510	13.220	93.080	171.700	62.700	6.760	0.350	0.380

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)	103.800	96.500	95.100	84.500	77.800	98.000	117.300	91.200
Transmitting ERP (watts)	2.800	0.350	0.450	1.400	28.440	135.320	145.300	31.240

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
21	37-11-39.2 N	086-15-53.9 W	213.4	52.0	

Address: WATER TOWER ROAD
City: BROWNSVILLE **County:** EDMONSON **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)	69.000	44.100	63.000	60.300	76.600	76.200	93.300	97.400
Transmitting ERP (watts)	331.960	148.280	17.830	0.910	0.740	0.870	19.100	155.270

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
21	37-11-39.2 N	086-15-53.9 W	213.4	52.0	

Address: WATER TOWER ROAD
City: BROWNSVILLE **County:** EDMONSON **State:** KY **Construction Deadline:**

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)	69.000	44.100	63.000	60.300	76.600	76.200	93.300	97.400
Transmitting ERP (watts)	1.780	43.760	235.010	302.750	81.490	7.780	0.740	0.850

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)	69.000	44.100	63.000	60.300	76.600	76.200	93.300	97.400
Transmitting ERP (watts)	2.960	0.740	0.870	6.470	87.310	302.750	235.010	39.000

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
22	36-40-28.0 N	086-51-30.0 W	192.9	38.1	

Address: WITHIN THE TOWN OF
City: ADAIRVILLE **County:** LOGAN **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)	35.900	37.000	29.900	34.100	29.900	40.700	57.000	48.700
Transmitting ERP (watts)	148.100	65.400	7.600	0.390	0.300	0.430	8.720	70.070

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)	35.900	37.000	29.900	34.100	29.900	40.700	57.000	48.700
Transmitting ERP (watts)	1.830	30.180	122.250	111.260	20.840	1.700	0.300	0.380

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)	35.900	37.000	29.900	34.100	29.900	40.700	57.000	48.700
Transmitting ERP (watts)	2.360	0.300	0.370	1.180	23.930	113.860	122.250	26.290

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
23	37-13-17.0 N	086-42-02.0 W	190.8	57.9	

Address: Morgantown Downtown, Approx 1.5 KM (1.0 MI) ENE OF
City: MORGANTOWN **County:** BUTLER **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)	102.300	72.100	81.900	88.300	85.600	94.300	111.800	102.700
Transmitting ERP (watts)	42.710	147.250	113.650	18.120	1.350	0.330	0.430	3.180

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
23	37-13-17.0 N	086-42-02.0 W	190.8	57.9	

Address: Morgantown Downtown, Approx 1.5 KM (1.0 MI) ENE OF
City: MORGANTOWN **County:** BUTLER **State:** KY **Construction Deadline:**

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)	102.300	72.100	81.900	88.300	85.600	94.300	111.800	102.700
Transmitting ERP (watts)	0.330	0.420	9.450	74.650	162.390	71.290	8.230	0.410

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)	102.300	72.100	81.900	88.300	85.600	94.300	111.800	102.700
Transmitting ERP (watts)	38.070	3.570	0.330	0.410	0.870	21.280	113.650	147.250

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
24	37-38-30.2 N	086-28-14.9 W	202.7	50.2	

Address: Rough River, 9.5KM (6.0 MI) SW OF
City: KINGSWOOD **County:** BRECKINRIDGE **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)	43.600	58.600	57.500	57.700	60.100	89.000	70.700	65.400
Transmitting ERP (watts)	264.330	116.050	13.400	0.660	0.540	0.690	15.390	121.520

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)	43.600	58.600	57.500	57.700	60.100	89.000	70.700	65.400
Transmitting ERP (watts)	1.420	34.650	184.990	239.690	61.970	5.820	0.540	0.670

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)	43.600	58.600	57.500	57.700	60.100	89.000	70.700	65.400
Transmitting ERP (watts)	2.200	0.540	0.700	5.180	69.530	239.690	184.990	29.490

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
25	36-51-02.0 N	086-42-26.0 W	198.1	59.4	

Address: JCT. SR-103 & SR-603, APPROX. 3.2 KM SW OF
City: AUBURN **County:** LOGAN **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)	61.200	65.800	54.700	38.200	54.400	60.300	51.100	56.100
Transmitting ERP (watts)	124.760	162.210	90.940	14.810	1.300	0.640	5.680	30.740

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
25	36-51-02.0 N	086-42-26.0 W	198.1	59.4	

Address: JCT. SR-103 & SR-603, APPROX. 3.2 KM SW OF
City: AUBURN **County:** LOGAN **State:** KY **Construction Deadline:**

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)	61.200	65.800	54.700	38.200	54.400	60.300	51.100	56.100
Transmitting ERP (watts)	1.480	8.260	53.490	159.390	161.650	53.380	6.730	0.530

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)	61.200	65.800	54.700	38.200	54.400	30.300	51.100	56.100
Transmitting ERP (watts)	41.260	4.310	0.490	3.550	23.820	120.300	242.920	193.090

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
26	37-23-00.0 N	086-52-28.0 W	163.4	125.3	1043042

Address: 1.6 KM SSE
City: BEAVER DAM **County:** OHIO **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)	127.600	102.300	92.500	117.700	113.600	112.400	112.300	132.200
Transmitting ERP (watts)	3.020	33.930	100.130	64.650	9.650	0.650	0.240	0.270

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)	127.600	102.300	92.500	117.700	113.600	112.400	112.300	132.200
Transmitting ERP (watts)	0.240	0.250	0.310	8.140	56.310	104.850	38.950	4.370

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)	127.600	102.300	92.500	117.700	113.600	112.400	112.300	132.200
Transmitting ERP (watts)	100.130	31.660	3.320	0.240	0.260	0.400	10.730	66.150

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
27	37-02-39.4 N	086-10-59.9 W	212.8	106.4	1213318

Address: 470 Hayes Road
City: Smiths Grove **County:** WARREN **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)	101.300	97.700	91.800	90.100	117.500	131.500	124.400	116.400
Transmitting ERP (watts)	96.880	58.040	4.690	0.270	0.190	0.360	4.280	56.720

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
27	37-02-39.4 N	086-10-59.9 W	212.8	106.4	1213318

Address: 470 Hayes Road
City: Smiths Grove **County:** WARREN **State:** KY **Construction Deadline:**

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)	101.600	97.700	91.800	90.100	117.500	131.500	124.400	116.400
Transmitting ERP (watts)	0.970	16.520	117.640	131.230	43.210	2.250	0.300	0.270

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)	101.600	97.700	91.800	90.100	117.500	131.500	124.400	116.400
Transmitting ERP (watts)	0.570	0.190	0.210	1.560	29.210	92.910	81.390	12.800

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
28	36-44-52.5 N	086-11-51.7 W	219.4	77.7	1219613

Address: Downtown
City: Scottsville **County:** ALLEN **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)	85.000	66.900	61.300	43.400	61.400	63.100	73.600	85.500
Transmitting ERP (watts)	148.300	99.760	16.850	1.700	0.460	3.820	24.140	103.720

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)	85.000	66.900	61.300	43.400	61.400	63.100	73.600	85.500
Transmitting ERP (watts)	7.500	41.790	142.020	156.580	60.320	8.540	0.660	0.990

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)	85.000	66.900	61.300	43.400	61.400	63.100	73.600	85.500
Transmitting ERP (watts)	3.800	0.320	2.290	11.230	68.150	158.400	136.570	33.890

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
29	37-52-14.6 N	086-16-43.1 W	243.8	39.6	

Address: Irvington WT, 1.0 km ESE of
City: Irvington **County:** BRECKINRIDGE **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)	72.800	71.900	56.800	59.600	69.700	80.000	110.200	67.900
Transmitting ERP (watts)	47.930	165.220	127.520	20.330	1.520	0.370	0.480	3.570

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
29	37-52-14.6 N	086-16-43.1 W	243.8	39.6	

Address: Irvington WT, 1.0 km ESE of
City: Irvington **County:** BRECKINRIDGE **State:** KY **Construction Deadline:**

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)	72.800	71.900	56.800	59.600	69.700	80.000	110.200	67.900
Transmitting ERP (watts)	0.370	0.480	10.610	83.760	182.210	79.990	9.240	0.460

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)	72.800	71.900	56.800	59.600	69.700	80.000	110.200	67.900
Transmitting ERP (watts)	42.710	4.010	0.370	0.460	0.980	23.880	127.520	165.220

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
30	37-56-31.2 N	086-03-37.8 W	193.5	77.7	1221515

Address: 0.8 km North Northwest of
City: Lickskillet **County:** MEADE **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)	63.900	127.200	65.800	54.400	36.100	30.500	59.300	102.600
Transmitting ERP (watts)	61.740	82.330	23.470	2.370	0.260	0.260	0.510	11.360

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)	63.900	127.200	65.800	54.400	36.100	30.500	59.300	102.600
Transmitting ERP (watts)	0.380	3.220	20.310	87.270	124.780	83.940	14.180	1.430

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)	63.900	127.200	65.800	54.400	36.100	30.500	59.300	102.600
Transmitting ERP (watts)	14.180	1.430	0.380	3.220	20.310	87.270	124.780	83.940

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
31	36-57-06.0 N	086-26-12.0 W	166.1	16.8	

Address: Downtown
City: Bowling Green **County:** WARREN **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)	29.900	29.900	29.900	29.900	29.900	29.900	29.900	29.900
Transmitting ERP (watts)	124.780	83.940	14.180	1.430	0.380	3.220	20.310	87.270

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
31	36-57-06.0 N	086-26-12.0 W	166.1	16.8	

Address: Downtown
City: Bowling Green **County:** WARREN **State:** KY **Construction Deadline:**

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)	29.900	29.900	29.900	29.900	29.900	29.900	29.900	29.900
Transmitting ERP (watts)	6.310	35.160	119.490	131.750	50.750	7.180	0.550	0.830

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)	29.900	29.900	29.900	29.900	29.900	29.900	29.900	29.900
Transmitting ERP (watts)	3.200	0.270	1.930	9.450	57.340	133.270	114.910	28.510

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
32	37-59-31.1 N	086-11-44.3 W	187.7	77.7	1232593

Address: 1.6 km West of
City: Brandenburg **County:** MEADE **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)	58.400	56.600	82.400	34.400	36.100	41.000	40.100	67.700
Transmitting ERP (watts)	9.710	60.570	96.350	32.270	3.500	0.300	0.300	0.420

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)	58.400	56.600	82.400	34.400	36.100	41.000	40.100	67.700
Transmitting ERP (watts)	0.300	0.380	8.420	66.540	144.730	63.540	7.340	0.360

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)	58.400	56.600	82.400	34.400	36.100	41.000	40.100	67.700
Transmitting ERP (watts)	28.390	3.310	0.300	0.380	0.830	17.510	70.860	87.550

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
33	37-56-46.1 N	085-59-38.4 W	222.8	57.3	1200354

Address: 115 Timber Ct.
City: Muldraugh **County:** MEADE **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)	84.500	85.900	93.700	56.800	54.600	40.300	67.400	81.700
Transmitting ERP (watts)	57.050	54.960	17.180	1.960	0.330	0.430	1.840	21.320

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
33	37-56-46.1 N	085-59-38.4 W	222.8	57.3	1200354

Address: 115 Timber Ct.
City: Muldraugh **County:** MEADE **State:** KY **Construction Deadline:**

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)	84.500	85.900	93.700	56.800	54.600	40.300	67.400	81.700
Transmitting ERP (watts)	0.380	0.800	19.520	104.850	135.070	36.350	3.470	0.330

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)	84.500	85.900	93.700	56.800	54.600	40.300	67.400	81.700
Transmitting ERP (watts)	2.570	0.330	0.390	1.200	24.580	114.960	156.050	28.220

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
34	37-46-03.7 N	086-26-10.4 W	219.5	45.7	

Address: Hardinsburg Water Tank, 3.0 km SE of
City: Hardinsburg **County:** BRECKINRIDGE **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)	77.900	54.500	36.600	52.000	74.200	60.600	78.300	83.900
Transmitting ERP (watts)	182.210	79.990	9.240	0.460	0.370	0.480	10.610	83.760

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)	77.900	54.500	36.600	52.000	74.200	60.600	78.300	83.900
Transmitting ERP (watts)	0.980	23.880	127.520	165.220	42.710	4.010	0.370	0.460

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)	77.900	54.500	36.600	52.000	74.200	60.600	78.300	83.900
Transmitting ERP (watts)	1.520	0.370	0.480	3.570	47.930	165.220	127.520	20.330

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
35	36-42-08.6 N	086-33-19.0 W	217.0	114.3	1200032

Address: Franklin South, Turners Ford Road
City: Franklin **County:** SIMPSON **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)	75.500	67.800	58.900	47.700	34.900	56.000	62.700	57.000
Transmitting ERP (watts)	8.520	69.270	148.100	66.150	7.950	0.410	0.330	0.390

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
35	36-42-08.6 N	086-33-19.0 W	217.0	114.3	1200032

Address: Franklin South, Turners Ford Road
City: Franklin **County:** SIMPSON **State:** KY **Construction Deadline:**

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)	75.500	67.800	58.900	47.700	34.900	56.000	62.700	57.000
Transmitting ERP (watts)	0.620	0.330	0.370	6.170	57.620	148.100	79.530	10.480

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)	75.500	67.800	58.900	47.700	34.900	56.000	62.700	57.000
Transmitting ERP (watts)	126.050	28.220	2.570	0.330	0.390	1.200	24.580	114.960

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
36	36-44-58.7 N	087-01-10.9 W	179.8	37.5	

Address: Russellville Southwest, 0.8 km SW of
City: Olmstead **County:** LOGAN **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)	29.900	29.900	31.500	45.900	38.200	39.100	29.900	29.900
Transmitting ERP (watts)	124.780	83.940	14.180	1.430	0.380	3.220	20.310	87.270

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)	29.900	29.900	31.500	45.900	38.200	39.100	29.900	29.900
Transmitting ERP (watts)	6.310	35.160	119.490	131.750	50.750	7.180	0.550	0.830

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)	29.900	29.900	31.500	45.900	38.200	39.100	29.900	29.900
Transmitting ERP (watts)	3.200	0.270	1.930	9.450	57.340	133.270	114.910	28.510

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
37	36-49-37.9 N	086-18-51.3 W	192.0	77.7	1232590

Address: Allen Northwest cell, 13.7 km Northwest of
City: Scottsville **County:** ALLEN **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	102.800	60.100	49.200	58.900	71.000	89.900	100.000
Transmitting ERP (watts)	0.540	4.010	53.770	185.380	143.070	22.810	1.700	0.420

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
37	36-49-37.9 N	086-18-51.3 W	192.0	77.7	1232590

Address: Allen Northwest cell, 13.7 km Northwest of
City: Scottsville **County:** ALLEN **State:** KY **Construction Deadline:**

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	102.800	60.100	49.200	58.900	71.000	89.900	100.000
Transmitting ERP (watts)	0.400	0.290	0.290	0.290	5.380	93.450	104.850	10.250

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	102.800	60.100	49.200	58.900	71.000	89.900	100.000
Transmitting ERP (watts)	211.380	60.790	7.140	0.540	2.800	11.880	85.700	226.550

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
38	36-55-15.1 N	086-25-38.5 W	171.0	62.5	1210120

Address: 1140 Three Springs Road
City: Bowling Green **County:** WARREN **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)	62.400	67.900	45.500	40.600	40.900	36.000	40.900	56.100
Transmitting ERP (watts)	41.740	24.340	4.420	0.400	0.330	0.330	3.510	21.690

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)	62.400	67.900	45.500	40.600	40.900	36.000	40.900	56.100
Transmitting ERP (watts)	0.870	21.280	113.650	147.250	38.070	3.570	0.330	0.410

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)	62.400	67.900	45.500	40.600	40.900	36.000	40.900	56.100
Transmitting ERP (watts)	1.130	0.260	0.370	2.600	30.680	93.270	73.680	13.650

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
39	36-49-54.5 N	086-29-39.3 W	192.6	66.1	1202759

Address: Warren South, 3184 Woodburn-Allen Springs Road
City: Woodburn **County:** WARREN **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)	58.500	58.500	57.100	39.300	32.800	33.900	35.000	49.400
Transmitting ERP (watts)	157.120	103.520	17.130	1.570	0.350	3.440	23.000	104.220

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
39	36-49-54.5 N	086-29-39.3 W	192.6	66.1	1202759

Address: Warren South, 3184 Woodburn-Allen Springs Road
City: Woodburn **County:** WARREN **State:** KY **Construction Deadline:**

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)	58.500	58.500	57.100	39.300	32.800	33.900	35.000	49.400
Transmitting ERP (watts)	6.890	41.510	144.360	164.760	61.880	8.540	0.570	0.780

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)	58.500	58.500	57.100	39.300	32.800	33.900	35.000	49.400
Transmitting ERP (watts)	0.610	0.310	0.310	0.310	2.120	58.290	121.780	19.300

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
40	37-03-19.5 N	086-35-24.6 W	184.4	67.1	1219414

Address: Warren Northwest cell, Old Morgantown Road
City: Bowling Green **County:** WARREN **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	71.100	64.500	67.200	57.900	67.700	67.900	70.300
Transmitting ERP (watts)	0.430	11.130	78.320	144.460	52.750	5.690	0.300	0.320

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	71.100	64.500	67.200	57.900	67.700	67.900	70.300
Transmitting ERP (watts)	0.560	0.300	0.370	6.090	56.530	144.460	74.790	9.690

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	71.100	64.500	67.200	57.900	67.700	67.900	70.300
Transmitting ERP (watts)	101.290	16.150	1.200	0.300	0.390	2.840	38.070	131.240

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
41	37-08-05.9 N	087-01-05.2 W	187.8	77.7	1278320

Address: Muhlenberg South, 21 Myers Chapel Road
City: Belton **County:** MUHLENBERG **State:** KY **Construction Deadline:**

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	110.500	126.100	111.400	114.500	86.400	73.900	100.200	112.200
Transmitting ERP (watts)	124.780	83.940	14.180	1.430	0.380	3.220	20.310	87.270

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
41	37-08-05.9 N	087-01-05.2 W	187.8	77.7	1278320

Address: Muhlenberg South, 21 Myers Chapel Road
City: Belton **County:** MUHLENBERG **State:** KY **Construction Deadline:**

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	110.500	126.100	111.400	114.500	86.400	73.900	100.200	112.200
Transmitting ERP (watts)	6.310	35.160	119.490	131.750	50.750	7.180	0.550	0.830

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	110.500	126.100	111.400	114.500	86.400	73.900	100.200	112.200
Transmitting ERP (watts)	3.200	0.270	1.930	9.450	57.340	133.270	114.910	28.510

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
42	37-00-06.1 N	086-19-52.5 W	161.2	77.4	1207196

Address: Bowling Green Corvette site, 1188 Red Pond Road
City: Bowling Green **County:** WARREN **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)	48.300	48.300	47.300	66.500	54.700	68.100	79.200	59.700
Transmitting ERP (watts)	149.820	65.780	7.600	0.370	0.310	0.390	8.720	68.880

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)	48.300	48.300	47.300	66.500	54.700	68.100	79.200	59.700
Transmitting ERP (watts)	0.850	18.620	85.580	108.340	31.760	3.380	0.310	0.410

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)	48.300	48.300	47.300	66.500	54.700	68.100	79.200	59.700
Transmitting ERP (watts)	1.320	0.310	0.430	3.020	35.640	108.340	85.580	15.850

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
43	37-50-10.4 N	086-35-44.7 W	225.6	77.7	1242951

Address: Breckinridge West, 1.6 km ENE of
City: Cloverport **County:** BRECKINRIDGE **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)	138.300	128.300	120.400	132.900	123.200	133.200	139.400	156.600
Transmitting ERP (watts)	63.170	117.640	43.710	4.900	0.260	0.280	0.350	9.130

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
43	37-50-10.4 N	086-35-44.7 W	225.6	77.7	1242951

Address: Breckinridge West, 1.6 km ENE of
City: Cloverport **County:** BRECKINRIDGE **State:** KY **Construction Deadline:**

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)	138.300	128.300	120.400	132.900	123.200	133.200	139.400	156.600
Transmitting ERP (watts)	0.310	2.290	30.940	107.290	83.280	13.820	1.050	0.260

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)	138.300	128.300	120.400	132.900	123.200	133.200	139.400	156.600
Transmitting ERP (watts)	4.400	0.370	0.370	0.530	12.230	76.250	121.300	40.630

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
44	37-51-15.4 N	086-06-03.2 W	303.9	67.4	1042711

Address: Garrett, State Road 44 (092010 / Fort Knox)
City: FORT KNOX **County:** MEADE **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)	153.600	154.600	149.600	132.900	121.400	131.200	143.100	146.300
Transmitting ERP (watts)	79.530	54.370	13.580	1.630	0.410	3.580	18.240	54.730

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)	153.600	154.600	149.600	132.900	121.400	131.200	143.100	146.300
Transmitting ERP (watts)	5.460	32.920	114.480	130.660	49.070	6.770	0.450	0.620

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)	153.600	154.600	149.600	132.900	121.400	131.200	143.100	146.300
Transmitting ERP (watts)	2.950	0.270	1.500	8.200	53.810	130.660	112.910	27.380

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
45	37-52-54.4 N	086-12-42.9 W	274.3	29.0	

Address: Meade South, 1.4 km southeast of
City: Guston **County:** MEADE **State:** KY **Construction Deadline:**

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	109.800	103.800	82.400	63.100	79.200	105.900	114.800	76.100
Transmitting ERP (watts)	4.970	37.720	85.280	49.710	8.130	0.540	0.260	0.330

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
45	37-52-54.4 N	086-12-42.9 W	274.3	29.0	

Address: Meade South, 1.4 km southeast of
City: Guston **County:** MEADE **State:** KY **Construction Deadline:**

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	109.800	103.800	82.400	63.100	79.200	105.900	114.800	76.100
Transmitting ERP (watts)	1.870	0.260	0.280	0.860	17.310	81.910	91.780	21.270

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	109.800	103.800	82.400	63.100	79.200	105.900	114.800	76.100
Transmitting ERP (watts)	67.960	31.280	4.680	0.260	0.300	0.380	7.690	41.430

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
46	36-54-15.9 N	086-36-29.1 W	202.7	83.8	1200363

Address: Warren-Logan cell, 11372 Russellville Road
City: Rockfield **County:** WARREN **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)	105.100	84.600	84.000	77.200	66.700	61.500	67.700	81.100
Transmitting ERP (watts)	19.380	98.240	108.110	44.550	2.720	0.270	0.230	1.010

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)	105.100	84.600	84.000	77.200	66.700	61.500	67.700	81.100
Transmitting ERP (watts)	0.270	0.270	5.300	90.270	100.820	9.580	0.400	0.270

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)	105.100	84.600	84.000	77.200	66.700	61.500	67.700	81.100
Transmitting ERP (watts)	0.880	0.230	0.310	2.530	42.550	110.630	96.000	20.290

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
47	37-24-19.0 N	086-42-17.0 W	199.9	94.5	1213965

Address: Ohio West, 3893 State Route 505 South
City: Horse Branch **County:** OHIO **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)	112.900	104.700	91.700	117.300	127.400	134.600	135.400	100.900
Transmitting ERP (watts)	117.640	63.170	8.330	0.490	0.260	0.300	4.900	45.770

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
47	37-24-19.0 N	086-42-17.0 W	199.9	94.5	1213965

Address: Ohio West, 3893 State Route 505 South
City: Horse Branch **County:** OHIO **State:** KY **Construction Deadline:**

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)	112.900	104.700	91.700	117.300	127.400	134.600	135.400	100.900
Transmitting ERP (watts)	1.260	33.960	209.410	316.960	100.230	10.500	0.740	0.810

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)	112.900	104.700	91.700	117.300	127.400	134.600	135.400	100.900
Transmitting ERP (watts)	1.480	0.260	0.310	1.480	24.580	100.120	93.440	17.800

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
48	36-57-24.8 N	086-28-42.2 W	167.0	84.1	1056469

Address: 3090 Fitzgerald Industrial Drive
City: Bowling Green **County:** WARREN **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)	71.400	63.700	65.900	62.600	44.100	41.900	36.500	59.500
Transmitting ERP (watts)	61.180	69.730	7.330	0.310	0.310	0.310	0.310	3.930

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)	71.400	63.700	65.900	62.600	44.100	41.900	36.500	59.500
Transmitting ERP (watts)	0.310	2.460	45.980	65.510	8.220	0.390	0.310	0.310

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)	71.400	63.700	65.900	62.600	44.100	41.900	36.500	59.500
Transmitting ERP (watts)	1.080	0.260	0.280	1.840	17.800	47.490	39.840	10.320

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
49	36-49-53.1 N	086-54-51.9 W	253.9	78.6	1043422

Address: RUSSELLVILLE WEST, 0.64 KM NORTH OF HWY 79, 0.16 KM WEST OF HWY 68 BYPASS
City: LEWISBURG **County:** LOGAN **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)	107.500	100.000	79.700	100.100	113.000	110.200	90.700	106.900
Transmitting ERP (watts)	151.070	101.210	20.030	2.250	0.630	5.060	28.690	105.230

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
49	36-49-53.1 N	086-54-51.9 W	253.9	78.6	1043422

Address: RUSSELLVILLE WEST, 0.64 KM NORTH OF HWY 79, 0.16 KM WEST OF HWY 68 BYPASS

City: LEWISBURG **County:** LOGAN **State:** KY **Construction Deadline:**

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)	107.500	100.000	79.700	100.100	113.000	110.200	90.700	106.900
Transmitting ERP (watts)	9.170	55.270	192.200	219.360	82.390	11.370	0.760	1.030

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)	107.500	100.000	79.700	100.100	113.000	110.200	90.700	106.900
Transmitting ERP (watts)	4.520	0.380	2.720	13.340	81.000	188.260	162.320	40.280

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
50	37-05-38.9 N	086-25-49.5 W	217.6	103.6	1232131

Address: Richardsville, 604 Scroggins Road

City: Bowling Green **County:** WARREN **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)	108.300	97.200	74.500	103.300	110.500	127.000	127.000	111.000
Transmitting ERP (watts)	144.730	63.540	7.340	0.360	0.300	0.380	8.420	66.540

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)	108.300	97.200	74.500	103.300	110.500	100.500	127.000	111.000
Transmitting ERP (watts)	0.780	18.970	101.290	131.240	33.930	3.180	0.300	0.370

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)	108.300	97.200	74.500	103.300	110.500	100.500	127.000	111.000
Transmitting ERP (watts)	1.200	0.300	0.390	2.840	38.070	131.240	101.290	16.150

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
51	37-31-30.4 N	086-55-04.2 W	195.7	97.8	1214609

Address: Beda, 729 Sherwood Drive

City: Hartford **County:** OHIO **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)	107.800	100.300	110.100	108.400	122.200	117.000	103.100	107.200
Transmitting ERP (watts)	38.070	131.240	101.290	16.150	1.200	0.300	0.390	2.840

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
51	37-31-30.4 N	086-55-04.2 W	195.7	97.8	1214609

Address: Beda, 729 Sherwood Drive
City: Hartford **County:** OHIO **State:** KY **Construction Deadline:**

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)	107.800	100.300	110.100	108.400	122.200	117.000	103.100	107.200
Transmitting ERP (watts)	0.340	0.540	14.700	90.110	137.670	42.790	4.300	0.300

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	107.800	100.300	110.100	108.400	122.200	117.000	103.100	107.200
Transmitting ERP (watts)	52.750	5.690	0.300	0.320	0.430	11.130	78.320	144.460

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
52	37-29-36.0 N	086-11-16.5 W	221.9	83.8	1217206

Address: Braton Road
City: Clarkson **County:** GRAYSON **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)	80.100	57.600	68.100	71.000	82.900	101.700	77.300	93.100
Transmitting ERP (watts)	23.930	113.860	122.250	26.290	2.360	0.300	0.370	1.180

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)	80.100	57.600	68.100	71.000	82.900	101.700	77.300	93.100
Transmitting ERP (watts)	2.360	0.300	0.370	1.180	23.930	113.860	122.250	26.290

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)	80.100	57.600	68.100	71.000	82.900	101.700	77.300	93.100
Transmitting ERP (watts)	103.640	9.240	0.340	0.270	0.270	0.270	5.700	92.370

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
53	37-31-11.9 N	087-09-13.7 W	141.7	95.4	1018270

Address: 550 SCHNEIDER TANNER ROAD
City: LIVERMORE **County:** MCLEAN **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)	86.400	69.100	70.300	81.600	92.100	93.900	102.600	85.400
Transmitting ERP (watts)	73.900	149.230	118.620	25.350	2.650	0.300	2.180	14.630

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
53	37-31-11.9 N	087-09-13.7 W	141.7	95.4	1018270

Address: 550 SCHNEIDER TANNER ROAD
City: LIVERMORE **County:** MCLEAN **State:** KY **Construction Deadline:**

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)	86.400	69.100	70.300	81.600	92.100	93.900	102.600	85.400
Transmitting ERP (watts)	0.570	5.060	27.400	111.190	144.570	81.050	13.200	1.160

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)	86.400	69.100	70.300	81.600	92.100	93.900	102.600	85.400
Transmitting ERP (watts)	47.570	6.000	0.480	1.320	7.360	47.670	142.060	144.070

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
54	37-19-05.4 N	086-12-12.3 W	231.6	83.8	1235514

Address: Nolin Lake North, 1900 Dickey's Mill Road
City: Mammoth Cave **County:** EDMONSON **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)	93.200	91.500	87.800	91.400	103.800	115.800	129.600	104.400
Transmitting ERP (watts)	117.640	54.390	6.620	0.360	0.300	0.330	6.460	54.390

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)	93.200	91.500	87.800	91.400	103.800	115.800	129.600	104.400
Transmitting ERP (watts)	3.300	11.570	54.260	67.250	19.880	3.340	0.340	0.490

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)	93.200	91.500	87.800	91.400	103.800	115.800	129.600	104.400
Transmitting ERP (watts)	1.110	0.300	0.320	2.200	30.710	107.710	83.920	14.420

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
55	36-40-20.5 N	086-15-11.1 W	239.6	60.7	

Address: Allen South, 371 Andrew Jackson Highway
City: Adolphus **County:** ALLEN **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)	87.000	70.200	64.700	57.200	44.500	66.500	82.700	88.700
Transmitting ERP (watts)	117.640	63.170	8.330	0.490	0.260	0.300	4.900	45.770

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
55	36-40-20.5 N	086-15-11.1 W	239.6	60.7	

Address: Allen South, 371 Andrew Jackson Highway
City: Adolphus **County:** ALLEN **State:** KY **Construction Deadline:**

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)	87.000	70.200	64.700	57.200	44.500	66.500	82.700	88.700
Transmitting ERP (watts)	0.490	8.150	38.780	44.150	11.680	1.200	0.260	0.260

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)	87.000	70.200	64.700	57.200	44.500	66.500	82.700	88.700
Transmitting ERP (watts)	4.900	0.260	0.280	0.350	9.130	63.170	117.640	43.710

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
56	36-42-03.8 N	086-23-15.8 W	226.2	77.7	1263047

Address: Alonzo, 4651 Perrytown Road
City: Franklin **County:** ALLEN **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)	114.500	97.300	87.900	75.000	66.000	77.000	88.300	100.400
Transmitting ERP (watts)	111.060	68.480	3.430	0.250	0.370	0.250	1.220	16.430

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)	114.500	97.300	87.900	75.000	66.000	77.000	88.300	100.400
Transmitting ERP (watts)	1.480	24.580	100.120	93.440	17.800	1.480	0.260	0.310

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)	114.500	97.300	87.900	75.000	66.000	77.000	88.300	100.400
Transmitting ERP (watts)	10.730	0.730	0.260	0.300	3.390	38.070	112.340	72.530

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
57	36-53-20.1 N	086-12-48.7 W	203.9	77.7	1264536

Address: Allen North, 173 Ray Vernon Lane
City: Scottsville **County:** ALLEN **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)	94.400	87.800	105.100	69.200	68.400	92.400	105.300	118.000
Transmitting ERP (watts)	12.040	74.220	112.340	35.530	3.720	0.260	0.290	0.450

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
57	36-53-20.1 N	086-12-48.7 W	203.9	77.7	1264536

Address: Allen North, 173 Ray Vernon Lane
City: Scottsville **County:** ALLEN **State:** KY **Construction Deadline:**

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)	94.400	87.800	105.100	69.200	68.400	92.400	105.300	118.000
Transmitting ERP (watts)	0.260	0.310	1.480	24.580	100.120	93.440	17.800	1.480

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)	94.400	87.800	105.100	69.200	68.400	92.400	105.300	118.000
Transmitting ERP (watts)	63.170	8.330	0.490	0.260	0.300	4.900	45.770	117.640

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
58	37-07-58.9 N	086-13-12.8 W	197.8	77.7	1263384

Address: Edmonson South, 466 Rhea Road
City: Smiths Grove **County:** EDMONSON **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)	70.900	74.500	47.600	73.500	83.900	88.000	89.200	76.800
Transmitting ERP (watts)	128.990	56.630	6.540	0.320	0.260	0.340	7.510	59.300

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)	70.900	74.500	47.600	73.500	83.900	88.000	89.200	76.800
Transmitting ERP (watts)	0.690	16.910	90.270	116.960	30.240	2.840	0.260	0.330

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)	70.900	74.500	47.600	73.500	83.900	88.000	89.200	76.800
Transmitting ERP (watts)	1.070	0.260	0.340	2.530	33.930	116.960	90.270	14.390

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
59	37-13-31.0 N	086-07-40.6 W	262.1	58.0	

Address: Near entrance to Mammoth Cave Park
City: Mammoth Cave **County:** EDMONSON **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)	122.200	91.300	119.200	86.600	117.300	116.700	135.200	124.600
Transmitting ERP (watts)	170.670	78.910	9.600	0.520	0.430	0.480	9.380	78.910

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
59	37-13-31.0 N	086-07-40.6 W	262.1	58.0	

Address: Near entrance to Mammoth Cave Park
City: Mammoth Cave **County:** EDMONSON **State:** KY **Construction Deadline:**

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)	122.200	91.300	119.200	86.600	117.300	116.700	135.200	124.600
Transmitting ERP (watts)	0.920	21.900	118.970	156.260	43.540	4.210	0.430	0.450

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)	122.200	91.300	119.200	86.600	117.300	116.700	135.200	124.600
Transmitting ERP (watts)	1.600	0.430	0.470	3.190	44.550	156.260	121.750	20.910

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
60	37-23-49.1 N	087-08-43.7 W	135.0	94.2	1244765

Address: Bremen, 12849 Kentucky Highway
City: CENTRAL CITY **County:** MUHLENBERG **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)	90.200	93.400	74.900	83.100	73.300	66.600	87.200	92.000
Transmitting ERP (watts)	122.700	78.480	11.150	0.740	0.260	0.340	3.750	40.860

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)	90.200	93.400	74.900	83.100	73.300	66.600	87.200	92.000
Transmitting ERP (watts)	0.330	5.430	50.380	128.750	66.660	8.640	0.500	0.260

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)	90.200	93.400	74.900	83.100	73.300	66.600	87.200	92.000
Transmitting ERP (watts)	3.840	0.260	0.300	0.480	13.100	80.300	122.700	38.140

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
61	37-57-06.1 N	086-24-38.3 W	260.0	96.3	1043429

Address: HWY 144, 4.8 KM (3 MILES) EAST OF
City: UNION STAR **County:** BRECKINRIDGE **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)	155.100	133.800	120.800	135.100	151.300	176.200	170.600	164.100
Transmitting ERP (watts)	100.130	64.650	9.560	0.650	0.240	0.270	3.020	33.930

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
61	37-57-06.1 N	086-24-38.3 W	260.0	96.3	1043429

Address: HWY 144, 4.8 KM (3 MILES) EAST OF
City: UNION STAR **County:** BRECKINRIDGE **State:** KY **Construction Deadline:**

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)	155.100	133.800	120.800	135.100	151.300	176.200	170.600	164.100
Transmitting ERP (watts)	0.310	8.140	56.310	104.850	38.950	4.370	0.240	0.250

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)	155.100	133.800	120.800	135.100	151.300	176.200	170.600	164.100
Transmitting ERP (watts)	1.820	0.240	0.280	0.850	17.400	81.390	89.240	19.980

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
62	37-32-44.1 N	086-18-58.4 W	200.9	77.7	1258451

Address: 2408 Hanging Rock Road
City: Leitchfield **County:** GRAYSON **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)	75.500	84.400	70.100	67.400	67.900	86.700	82.300	95.400
Transmitting ERP (watts)	97.150	35.730	4.550	0.310	0.380	0.580	13.630	68.070

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)	75.500	84.400	70.100	67.400	67.900	86.700	82.300	95.400
Transmitting ERP (watts)	0.630	15.510	83.280	107.290	28.880	2.760	0.260	0.300

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	75.500	84.400	70.100	67.400	67.900	86.700	82.300	95.400
Transmitting ERP (watts)	1.050	0.260	0.310	2.290	30.940	107.290	83.280	13.820

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
63	36-41-48.4 N	087-07-44.2 W	176.5	60.7	1274279

Address: 4799 Russellville Road
City: Allensville **County:** TODD **State:** KY **Construction Deadline:**

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	39.500	56.100	59.000	64.900	64.800	67.600	57.500	49.800
Transmitting ERP (watts)	19.520	91.310	100.120	22.420	2.040	0.260	0.310	0.960

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
63	36-41-48.4 N	087-07-44.2 W	176.5	60.7	1274279

Address: 4799 Russellville Road
City: Allensville **County:** TODD **State:** KY **Construction Deadline:**

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	39.500	56.100	59.000	64.900	64.800	67.600	57.500	49.800
Transmitting ERP (watts)	0.260	0.290	0.450	12.040	74.220	112.340	35.530	3.720

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	39.500	56.100	59.000	64.900	64.800	67.600	57.500	49.800
Transmitting ERP (watts)	72.530	10.730	0.730	0.260	0.300	3.390	38.070	112.340

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
64	37-14-00.7 N	086-28-02.1 W	183.2	103.6	1231934

Address: 109 Peach Road North
City: Roundhill **County:** BUTLER **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)	64.400	90.500	87.200	101.000	93.800	118.600	91.600	91.500
Transmitting ERP (watts)	363.980	159.800	18.450	0.910	0.740	0.950	21.190	167.330

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)	64.400	90.500	87.200	101.000	93.800	118.600	91.600	91.500
Transmitting ERP (watts)	1.950	47.700	254.680	329.990	85.310	8.010	0.740	0.920

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)	64.400	90.500	87.200	101.000	93.800	118.600	91.600	91.500
Transmitting ERP (watts)	3.030	0.740	0.970	7.140	95.740	330.050	254.730	40.610

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
65	37-52-03.2 N	086-41-39.8 W	149.0	60.7	

Address: Hancock South, 4586 Midway Lane
City: Hawesville **County:** HANCOCK **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)	42.800	44.700	66.200	57.400	29.900	51.200	52.700	89.200
Transmitting ERP (watts)	115.500	73.040	10.410	0.540	0.280	0.490	4.480	36.360

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
65	37-52-03.2 N	086-41-39.8 W	149.0	60.7	

Address: Hancock South, 4586 Midway Lane
City: Hawesville **County:** HANCOCK **State:** KY **Construction Deadline:**

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)	42.800	44.700	66.200	57.400	29.900	51.200	52.700	89.200
Transmitting ERP (watts)	3.060	20.470	92.740	139.820	92.120	15.240	1.400	0.310

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)	42.800	44.700	66.200	57.400	29.900	51.200	52.700	89.200
Transmitting ERP (watts)	14.390	1.320	0.300	2.890	19.320	87.550	132.000	86.970

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
66	37-48-20.2 N	086-28-22.4 W	213.7	98.8	1215268

Address: Hardinsburg North, West side of Finley/Dowell Road
City: Hardinsburg **County:** BRECKINRIDGE **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)	117.700	128.800	92.100	83.000	91.500	112.900	146.900	129.700
Transmitting ERP (watts)	65.140	85.560	23.840	2.300	0.240	0.240	0.510	11.990

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)	117.700	128.800	92.100	83.000	91.500	112.900	146.900	129.700
Transmitting ERP (watts)	0.260	1.750	24.390	85.560	66.660	11.450	0.880	0.240

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)	117.700	128.800	92.100	83.000	91.500	112.900	146.900	129.700
Transmitting ERP (watts)	5.250	0.290	0.240	0.260	5.140	43.210	93.440	43.210

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
67	37-31-51.2 N	086-28-23.9 W	192.0	123.4	1244902

Address: 3690 FALLS OF ROUGH ROAD
City: SHORT CREEK **County:** GRAYSON **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)	81.800	72.500	68.000	60.600	85.600	82.500	104.300	89.800
Transmitting ERP (watts)	30.940	107.290	83.280	13.820	1.050	0.260	0.310	2.290

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
67	37-31-51.2 N	086-28-23.9 W	192.0	123.4	1244902

Address: 3690 FALLS OF ROUGH ROAD
City: SHORT CREEK **County:** GRAYSON **State:** KY **Construction Deadline:**

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)	81.800	72.500	68.000	60.600	85.600	82.500	104.300	89.800
Transmitting ERP (watts)	0.260	0.310	6.770	55.020	117.640	52.550	6.320	0.320

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)	81.800	72.500	68.000	60.600	85.600	82.500	104.300	89.800
Transmitting ERP (watts)	28.880	2.760	0.260	0.300	0.630	15.510	83.280	107.290

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
68	37-19-34.6 N	086-57-44.7 W	167.0	83.8	1217201

Address: Western KY Parkway, 256 Pond Run Church Road
City: Beaver Dam **County:** OHIO **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)	94.000	93.500	89.600	96.400	94.000	100.700	102.100	97.600
Transmitting ERP (watts)	33.930	116.960	90.270	14.390	1.070	0.260	0.340	2.530

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)	94.000	93.500	89.600	96.400	94.000	100.700	102.100	97.600
Transmitting ERP (watts)	3.840	0.260	0.300	0.480	13.100	80.300	122.700	38.140

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)	94.000	93.500	89.600	96.400	94.000	100.700	102.100	97.600
Transmitting ERP (watts)	88.210	8.620	0.340	0.240	0.240	0.240	4.520	78.620

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
69	37-16-08.2 N	086-40-27.4 W	175.0	77.7	1268018

Address: Welcome, 224 Cook Road
City: Morgantown **County:** BUTLER **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)	94.800	67.500	90.400	96.600	102.900	98.300	116.100	103.600
Transmitting ERP (watts)	117.640	52.550	6.320	0.320	0.260	0.310	6.770	55.020

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
69	37-16-08.2 N	086-40-27.4 W	175.0	77.7	1268018

Address: Welcome, 224 Cook Road
City: Morgantown **County:** BUTLER **State:** KY **Construction Deadline:**

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)	94.800	67.500	90.400	96.600	102.900	98.300	116.100	103.600
Transmitting ERP (watts)	0.630	15.510	83.280	107.290	28.880	2.760	0.260	0.300

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	94.800	67.500	90.400	96.600	102.900	98.300	116.100	103.600
Transmitting ERP (watts)	1.050	0.260	0.310	2.290	30.940	107.290	83.280	13.820

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
70	37-12-05.9 N	087-02-26.4 W	153.0	111.3	1231935

Address: 1317 US HWY 431
City: DRAKESBORO **County:** MUHLENBERG **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)	106.300	109.400	98.200	89.900	81.000	80.100	89.600	94.400
Transmitting ERP (watts)	102.460	44.990	5.190	0.260	0.210	0.270	5.960	47.110

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)	106.300	109.400	98.200	89.900	81.000	80.100	89.600	94.400
Transmitting ERP (watts)	0.550	13.430	71.710	92.910	24.020	2.250	0.210	0.260

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)	106.300	109.400	98.200	89.900	81.000	80.100	89.600	94.400
Transmitting ERP (watts)	0.850	0.210	0.270	2.010	26.950	92.910	71.710	11.430

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
71	36-58-34.3 N	086-57-59.8 W	190.2	93.0	1246006

Address: Lewinsburg Downtown, Spa Road
City: LEWISBURG **County:** LOGAN **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)	107.500	103.300	93.900	90.700	82.900	85.300	84.200	89.200
Transmitting ERP (watts)	100.120	93.440	17.800	1.480	0.260	0.310	1.480	24.580

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
71	36-58-34.3 N	086-57-59.8 W	190.2	93.0	1246006

Address: Lewinsburg Downtown, Spa Road
City: LEWISBURG **County:** LOGAN **State:** KY **Construction Deadline:**

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)	107.500	103.300	93.900	90.700	82.900	85.300	84.200	89.200
Transmitting ERP (watts)	0.300	4.900	45.770	117.640	63.170	8.330	0.490	0.260

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)	107.500	103.300	93.900	90.700	82.900	85.300	84.200	89.200
Transmitting ERP (watts)	2.040	0.260	0.310	0.960	19.520	91.310	100.120	22.420

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
72	37-02-45.0 N	086-21-53.0 W	167.6	102.7	1046177

Address: Bristow, KY Hwy 526, 5.9 MI (9.5 km) NE of
City: BOWLING GREEN **County:** WARREN **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)	48.600	42.800	42.800	67.000	66.800	77.800	53.600	55.000
Transmitting ERP (watts)	144.730	63.540	7.340	0.360	0.300	0.380	8.420	66.540

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)	48.600	42.800	42.800	67.000	66.800	77.800	53.600	55.000
Transmitting ERP (watts)	0.640	15.100	82.010	107.710	30.010	2.900	0.300	0.310

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)	48.600	42.800	42.800	67.000	66.800	77.800	53.600	55.000
Transmitting ERP (watts)	1.180	0.300	0.350	2.570	34.720	120.380	93.440	15.510

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
73	36-48-17.7 N	087-09-29.0 W	195.1	37.0	

Address: Elkton Downtown, Water Tank within the Town of
City: Elkton **County:** TODD **State:** KY **Construction Deadline:**

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)	29.900	29.900	36.400	49.400	47.700	51.300	46.600	29.900
Transmitting ERP (watts)	0.330	0.390	2.890	38.950	135.070	104.850	17.400	1.320

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
73	36-48-17.7 N	087-09-29.0 W	195.1	37.0	

Address: Elkton Downtown, Water Tank within the Town of
City: Elkton **County:** TODD **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)	29.900	29.900	36.400	49.400	47.700	51.300	46.600	29.900
Transmitting ERP (watts)	186.670	22.440	1.150	0.940	1.100	24.050	195.470	417.910

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)	29.900	29.900	36.400	49.400	47.700	51.300	46.600	29.900
Transmitting ERP (watts)	69.360	324.400	355.700	79.630	7.260	0.940	1.100	3.400

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
74	36-45-37.5 N	086-43-02.9 W	197.2	77.7	1268208

Address: Middleton, 2514 Neely Road
City: Franklin **County:** SIMPSON **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)	65.100	67.700	65.900	61.000	73.500	89.900	84.400	76.100
Transmitting ERP (watts)	108.950	99.160	18.570	1.520	0.260	0.340	1.630	26.900

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	65.100	67.700	65.900	61.000	73.500	89.900	84.400	76.100
Transmitting ERP (watts)	0.340	7.510	59.300	128.990	56.630	6.540	0.320	0.260

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)	65.100	67.700	65.900	61.000	73.500	89.900	84.400	76.100
Transmitting ERP (watts)	6.540	0.320	0.260	0.340	7.510	59.300	128.990	56.630

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
75	36-44-33.6 N	086-30-05.7 W	209.4	74.7	1057217

Address: Simpson I-65, 680 Phillips Lane
City: Franklin **County:** SIMPSON **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)	74.500	60.400	58.100	45.300	43.900	54.700	56.900	65.000
Transmitting ERP (watts)	113.860	122.250	26.290	2.360	0.300	0.370	1.180	23.930

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
75	36-44-33.6 N	086-30-05.7 W	209.4	74.7	1057217

Address: Simpson I-65, 680 Phillips Lane
City: Franklin **County:** SIMPSON **State:** KY **Construction Deadline:**

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)	74.500	60.400	58.100	45.300	43.900	54.700	56.900	65.000
Transmitting ERP (watts)	0.430	11.130	78.320	144.460	52.750	5.690	0.300	0.320

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)	74.500	60.400	58.100	45.300	43.900	54.700	56.900	65.000
Transmitting ERP (watts)	0.830	0.300	0.380	4.210	45.850	137.670	88.060	12.510

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
76	36-41-45.2 N	086-08-55.9 W	299.9	42.7	

Address: Allen Southeast, 7.0 km southeast of
City: Scottsville **County:** ALLEN **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)	108.900	124.900	127.700	96.400	75.800	97.900	122.100	116.000
Transmitting ERP (watts)	156.880	103.360	17.100	1.570	0.350	3.430	22.970	104.060

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)	108.900	124.900	127.700	96.400	75.800	97.900	122.100	116.000
Transmitting ERP (watts)	6.870	41.440	144.130	164.500	61.780	8.520	0.570	0.770

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)	108.900	124.900	127.700	96.400	75.800	97.900	122.100	116.000
Transmitting ERP (watts)	1.120	0.240	0.870	3.340	18.280	65.860	50.650	9.530

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
77	37-41-44.8 N	086-25-06.2 W	210.6	77.7	1262107

Address: Kingswood, 1065 Stinnett-Taul Lane
City: Harned **County:** BRECKINRIDGE **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)	78.900	76.900	78.500	81.600	105.100	108.200	91.500	108.400
Transmitting ERP (watts)	6.770	55.020	117.640	52.550	6.320	0.320	0.260	0.310

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
77	37-41-44.8 N	086-25-06.2 W	210.6	77.7	1262107

Address: Kingswood, 1065 Stinnett-Taul Lane
City: Harned **County:** BRECKINRIDGE **State:** KY **Construction Deadline:**

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)	78.900	76.900	78.500	81.600	105.100	108.200	91.500	108.400
Transmitting ERP (watts)	0.260	0.300	3.390	38.070	112.340	72.530	10.730	0.730

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)	78.900	76.900	78.500	81.600	105.100	108.200	91.500	108.400
Transmitting ERP (watts)	112.340	35.530	3.720	0.260	0.290	0.450	12.040	74.220

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
78	36-54-24.5 N	086-19-35.4 W	172.8	77.7	1275463

Address: Claypool, 2818 Alvaton-Greenhill Road
City: Bowling Green **County:** WARREN **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)	82.200	76.200	79.200	52.800	60.600	78.000	69.500	86.500
Transmitting ERP (watts)	18.240	82.650	124.610	82.100	13.580	1.250	0.280	2.730

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)	82.200	76.200	79.200	52.800	60.600	78.000	69.500	86.500
Transmitting ERP (watts)	0.450	0.620	5.460	32.920	114.480	130.660	49.070	6.770

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)	82.200	76.200	79.200	52.800	60.600	78.000	69.500	86.500
Transmitting ERP (watts)	112.910	27.380	2.950	0.270	1.500	8.200	53.810	130.660

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
79	37-54-07.2 N	086-31-56.1 W	185.9	30.3	

Address: 1.0 km SSW of
City: Stephensports **County:** BRECKINRIDGE **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)	69.900	29.900	49.700	43.700	40.700	48.900	79.700	37.400
Transmitting ERP (watts)	20.210	136.640	63.910	3.510	0.310	0.310	0.310	0.340

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
79	37-54-07.2 N	086-31-56.1 W	185.9	30.3	

Address: 1.0 km SSW of
City: Stephensports **County:** BRECKINRIDGE **State:** KY **Construction Deadline:**

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)	69.900	29.900	49.700	43.700	40.700	48.900	79.700	37.400
Transmitting ERP (watts)	0.310	0.310	3.510	82.330	124.620	15.330	0.570	0.310

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)	69.900	29.900	49.700	43.700	40.700	48.900	79.700	37.400
Transmitting ERP (watts)	5.190	0.310	0.310	0.310	0.310	13.660	127.520	78.630

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
80	37-42-39.3 N	086-31-34.6 W	218.5	77.7	1272916

Address: 245 Dejarnette Lane
City: McQuady **County:** BRECKINRIDGE **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)	122.000	93.600	90.700	109.100	120.100	106.500	93.000	113.900
Transmitting ERP (watts)	128.360	93.210	17.180	1.520	0.270	1.720	14.250	71.470

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)	122.000	93.600	90.700	109.100	120.100	106.500	93.000	113.900
Transmitting ERP (watts)	4.860	26.750	105.570	130.690	59.850	9.030	0.640	0.460

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)	122.000	93.600	90.700	109.100	120.100	106.500	93.000	113.900
Transmitting ERP (watts)	3.780	0.270	1.280	5.690	46.750	127.920	120.460	33.780

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
81	37-29-16.7 N	086-16-14.7 W	231.6	44.2	

Address: Leitchfield WT, 1.5 km East of
City: Leitchfield **County:** GRAYSON **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)	84.200	71.900	49.000	65.200	69.200	59.900	55.400	68.100
Transmitting ERP (watts)	127.520	78.630	5.190	0.310	0.310	0.310	0.310	13.660

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
81	37-29-16.7 N	086-16-14.7 W	231.6	44.2	

Address: Leitchfield WT, 1.5 km East of
City: Leitchfield **County:** GRAYSON **State:** KY **Construction Deadline:**

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)	84.200	71.900	49.000	65.200	69.200	59.900	55.400	68.100
Transmitting ERP (watts)	0.310	0.790	40.320	146.410	38.510	1.570	0.310	0.310

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)	84.200	71.900	49.000	65.200	69.200	59.900	55.400	68.100
Transmitting ERP (watts)	0.570	0.310	0.310	0.310	3.510	82.330	124.620	15.330

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
82	37-12-13.0 N	086-52-35.7 W	161.2	77.7	1263383

Address: 354 New Cut Road North
City: Rochester **County:** BUTLER **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)	92.200	104.300	79.800	74.100	80.300	95.900	89.700	112.900
Transmitting ERP (watts)	63.170	117.640	43.710	4.900	0.260	0.280	0.350	9.130

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)	92.200	104.300	79.800	74.100	80.300	95.900	89.700	112.900
Transmitting ERP (watts)	0.310	0.960	19.520	91.310	100.120	22.420	2.040	0.260

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)	92.200	104.300	79.800	74.100	80.300	95.900	89.700	112.900
Transmitting ERP (watts)	10.730	0.730	0.260	0.300	3.390	38.070	112.340	72.530

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
83	36-45-39.5 N	086-51-51.6 W	186.6	77.7	1256442

Address: Logan South, 75 Hall Store Road
City: Russellville **County:** LOGAN **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)	70.500	51.300	69.000	75.700	80.000	87.100	81.800	59.200
Transmitting ERP (watts)	128.990	56.630	6.540	0.320	0.260	0.340	7.510	59.300

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
83	36-45-39.5 N	086-51-51.6 W	186.6	77.7	1256442

Address: Logan South, 75 Hall Store Road
City: Russellville **County:** LOGAN **State:** KY **Construction Deadline:**

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)	70.500	51.300	69.000	75.700	80.000	87.100	81.800	59.200
Transmitting ERP (watts)	0.340	2.530	33.930	116.960	90.270	14.390	1.070	0.260

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)	70.500	51.300	69.000	75.700	80.000	87.100	81.800	59.200
Transmitting ERP (watts)	3.840	0.260	0.300	0.480	13.100	80.300	122.700	38.140

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
84	36-58-47.9 N	086-23-20.0 W	155.1	56.4	1241356

Address: Bowling Green Cemetery Road, 3700 Cumberland Trace Cell
City: Bowling Green **County:** WARREN **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)	29.900	35.000	33.800	29.900	39.200	29.900	29.900	54.700
Transmitting ERP (watts)	129.890	61.320	3.430	0.310	0.310	0.310	0.450	18.690

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)	29.900	35.000	33.800	29.900	39.200	29.900	29.900	54.700
Transmitting ERP (watts)	0.310	3.260	77.190	119.560	14.880	0.420	0.310	0.310

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)	29.900	35.000	33.800	29.900	39.200	29.900	29.900	54.700
Transmitting ERP (watts)	0.310	0.310	0.310	0.570	26.700	136.640	48.150	2.270

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
85	36-53-34.0 N	086-24-38.0 W	184.4	46.7	

Address: Plano Water Tank, 9.0 SSE of
City: Bowling Green **County:** WARREN **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)	61.200	49.800	45.800	33.400	35.100	33.600	34.800	46.200
Transmitting ERP (watts)	1.340	39.400	76.830	11.900	0.480	0.240	0.240	0.240

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
85	36-53-34.0 N	086-24-38.0 W	184.4	46.7	

Address: Plano Water Tank, 9.0 SSE of
City: Bowling Green **County:** WARREN **State:** KY **Construction Deadline:**

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)	61.200	49.800	45.800	33.400	35.100	33.600	34.800	46.200
Transmitting ERP (watts)	0.240	0.240	0.240	5.320	66.920	53.150	4.220	0.240

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)	61.200	49.800	45.800	33.400	35.100	33.600	34.800	46.200
Transmitting ERP (watts)	28.550	1.400	0.240	0.240	0.240	0.370	16.810	84.240

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
86	36-53-16.1 N	086-30-48.3 W	183.8	60.6	

Address: Richpond, 608 Skeek Road
City: Bowling Green **County:** WARREN **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)	69.900	78.100	67.600	58.700	47.300	43.600	56.900	73.400
Transmitting ERP (watts)	87.200	42.220	5.380	0.310	0.260	0.260	4.790	40.320

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)	69.900	78.100	67.600	58.700	47.300	43.600	56.900	73.400
Transmitting ERP (watts)	1.480	24.580	100.120	93.440	17.800	1.480	0.260	0.310

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)	69.900	78.100	67.600	58.700	47.300	43.600	56.900	73.400
Transmitting ERP (watts)	0.490	0.260	0.300	4.900	45.770	117.640	63.170	8.330

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
87	36-44-23.3 N	086-34-22.4 W	211.2	93.6	1007990

Address: Franklin Downtown, Ogles Road (Franklin #9142)
City: Franklin **County:** SIMPSON **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)	82.400	91.500	77.000	60.200	57.000	65.400	75.500	64.400
Transmitting ERP (watts)	1.890	59.640	119.000	18.430	0.750	0.270	0.270	0.270

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
87	36-44-23.3 N	086-34-22.4 W	211.2	93.6	1007990

Address: Franklin Downtown, Ogles Road (Franklin #9142)
City: Franklin **County:** SIMPSON **State:** KY **Construction Deadline:**

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)	82.400	91.500	77.000	60.200	57.000	65.400	75.500	64.400
Transmitting ERP (watts)	0.270	0.270	0.270	8.050	101.290	84.250	6.540	0.310

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)	82.400	91.500	77.000	60.200	57.000	65.400	75.500	64.400
Transmitting ERP (watts)	44.210	2.120	0.270	0.270	0.270	0.400	25.440	127.510

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
88	36-50-51.7 N	086-46-11.1 W	198.4	82.3	1237175

Address: Rockcastle, 1365 Echo Valley Road
City: Auburn **County:** LOGAN **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)	64.000	66.400	63.200	58.100	74.800	70.400	71.300	75.200
Transmitting ERP (watts)	122.700	78.480	11.150	0.740	0.260	0.340	3.750	40.860

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)	64.000	66.400	63.200	58.100	74.800	70.400	71.300	75.200
Transmitting ERP (watts)	0.380	9.920	69.800	128.750	47.020	5.070	0.260	0.280

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)	64.000	66.400	63.200	58.100	74.800	70.400	71.300	75.200
Transmitting ERP (watts)	2.100	0.260	0.330	1.050	21.320	101.470	108.950	23.430

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
89	37-25-24.5 N	086-24-14.9 W	197.8	83.8	1217214

Address: Millwood, 1006 Pleasant View Road
City: Millwood **County:** GRAYSON **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)	62.400	41.800	60.100	71.500	58.400	67.600	87.100	76.500
Transmitting ERP (watts)	39.870	122.420	126.750	40.620	4.930	0.330	0.900	5.470

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
89	37-25-24.5 N	086-24-14.9 W	197.8	83.8	1217214

Address: Millwood, 1006 Pleasant View Road
City: Millwood **County:** GRAYSON **State:** KY **Construction Deadline:**

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)	62.400	41.800	60.100	71.500	58.400	67.600	87.100	76.500
Transmitting ERP (watts)	0.890	0.350	3.940	22.290	94.500	128.360	70.660	11.140

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)	62.400	41.800	60.100	71.500	58.400	67.600	87.100	76.500
Transmitting ERP (watts)	103.880	21.640	2.140	0.270	1.490	11.530	61.810	130.990

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
90	37-17-38.2 N	086-44-29.7 W	129.8	83.8	1217204

Address: Natcher Parkway, 1 C. Beck Rd.
City: Morgantown **County:** BUTLER **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)	37.600	36.200	41.100	50.200	36.800	52.200	53.300	52.700
Transmitting ERP (watts)	7.510	59.300	128.990	56.630	6.540	0.320	0.260	0.340

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)	37.600	36.200	41.100	50.200	36.800	52.200	53.300	52.700
Transmitting ERP (watts)	0.260	0.340	3.750	40.860	122.700	78.480	11.150	0.740

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)	37.600	36.200	41.100	50.200	36.800	52.200	53.300	52.700
Transmitting ERP (watts)	122.700	38.140	3.840	0.260	0.300	0.480	13.100	30.300

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
91	37-10-17.8 N	086-46-48.7 W	157.3	90.0	1273826

Address: South Hill, 231 Freeman Staples Road
City: Morgantown **County:** BUTLER **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)	114.500	84.600	81.200	73.600	93.700	70.900	96.300	102.200
Transmitting ERP (watts)	71.470	128.360	93.210	17.180	1.520	0.270	1.720	14.250

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
91	37-10-17.8 N	086-46-48.7 W	157.3	90.0	1273826

Address: South Hill, 231 Freeman Staples Road
City: Morgantown **County:** BUTLER **State:** KY **Construction Deadline:**

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)	114.500	84.600	81.200	73.600	93.700	70.900	96.300	102.200
Transmitting ERP (watts)	0.620	5.460	32.920	114.480	130.660	49.070	6.770	0.450

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)	114.500	84.600	81.200	73.600	93.700	70.900	96.300	102.200
Transmitting ERP (watts)	21.640	2.140	0.270	1.490	11.530	61.810	130.990	103.880

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
92	36-57-07.6 N	086-47-36.4 W	210.0	77.7	1261473

Address: Chandler, 8773 Morgantown Road
City: Russellville **County:** LOGAN **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)	122.500	88.200	98.600	86.200	75.500	96.400	126.200	114.800
Transmitting ERP (watts)	122.700	78.480	11.150	0.740	0.260	0.340	3.750	40.860

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)	122.500	88.200	98.600	86.200	75.500	96.400	126.200	114.800
Transmitting ERP (watts)	0.480	13.100	80.300	122.700	38.140	3.840	0.260	0.300

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	122.500	88.200	98.600	86.200	75.500	96.400	126.200	114.800
Transmitting ERP (watts)	0.500	0.260	0.330	5.430	50.380	128.750	66.660	8.640

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
93	37-03-12.4 N	086-44-45.3 W	184.4	77.7	1273825

Address: Davis Crossroads, 63 Fire Station Lane
City: Morgantown **County:** BUTLER **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)	90.300	104.500	88.100	79.900	67.600	85.300	105.100	96.800
Transmitting ERP (watts)	94.500	128.360	70.660	11.140	0.890	0.350	3.940	22.290

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
93	37-03-12.4 N	086-44-45.3 W	184.4	77.7	1273825

Address: Davis Crossroads, 63 Fire Station Lane
City: Morgantown **County:** BUTLER **State:** KY **Construction Deadline:**

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)	90.300	104.500	88.100	79.900	67.600	85.300	105.100	96.800
Transmitting ERP (watts)	0.350	3.940	22.290	94.500	128.360	70.660	11.140	0.890

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)	90.300	104.500	88.100	79.900	67.600	85.300	105.100	96.800
Transmitting ERP (watts)	17.180	1.520	0.270	1.720	14.250	71.470	128.360	93.210

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
94	36-49-14.6 N	087-02-42.8 W	198.7	77.7	1261471

Address: Daysville, 1270 Daysville Road
City: Russellville **County:** LOGAN **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)	80.600	79.200	75.600	95.700	90.500	86.800	61.000	55.000
Transmitting ERP (watts)	2.290	30.940	107.290	83.280	13.820	1.050	0.260	0.310

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)	80.600	79.200	75.600	95.700	90.500	86.800	61.000	55.000
Transmitting ERP (watts)	0.490	0.260	0.300	4.900	45.770	117.640	63.170	8.330

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)	80.600	79.200	75.600	95.700	90.500	86.800	61.000	55.000
Transmitting ERP (watts)	112.340	35.530	3.720	0.260	0.290	0.450	12.040	74.220

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
95	36-41-25.9 N	086-04-02.1 W	237.1	77.7	1278967

Address: Holland, 359 Lafayette Road
City: Scottsville **County:** ALLEN **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)	114.100	88.200	100.700	73.600	49.300	69.400	81.800	87.800
Transmitting ERP (watts)	12.260	67.850	91.320	22.470	1.930	0.240	0.240	1.460

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
95	36-41-25.9 N	086-04-02.1 W	237.1	77.7	1278967

Address: Holland, 359 Lafayette Road
City: Scottsville **County:** ALLEN **State:** KY **Construction Deadline:**

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)	114.100	88.200	100.700	73.600	49.300	69.400	81.800	87.800
Transmitting ERP (watts)	0.230	1.100	4.900	40.250	110.140	103.720	29.080	3.250

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)	114.100	88.200	100.700	73.600	49.300	69.400	81.800	87.800
Transmitting ERP (watts)	93.210	17.180	1.520	0.270	1.720	14.250	71.470	128.360

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
96	36-59-23.5 N	086-28-21.6 W	146.6	76.2	1277050

Address: Lampkin Park, Behind Dept of Hwys Dist. Office on Old Morgantown Rd. off Hwy 231
City: Bowling Green **County:** WARREN **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)	30.300	29.900	37.300	29.900	29.900	29.900	29.900	29.900
Transmitting ERP (watts)	111.310	29.890	1.180	0.240	0.240	0.240	0.710	29.750

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)	30.300	29.900	37.300	29.900	29.900	29.900	29.900	29.900
Transmitting ERP (watts)	0.240	2.330	51.180	79.740	9.900	0.320	0.240	0.240

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)	30.300	29.900	37.300	29.900	29.900	29.900	29.900	29.900
Transmitting ERP (watts)	0.240	0.240	0.240	0.280	10.010	96.730	60.750	3.910

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
97	37-25-27.1 N	086-13-46.7 W	252.1	41.1	1280487

Address: Johnson Crossroads, 2601 St. Augustine Road
City: Clarkson **County:** GRAYSON **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)	97.900	73.900	78.500	96.700	106.000	108.500	99.600	95.600
Transmitting ERP (watts)	157.100	105.670	17.850	1.800	0.480	4.050	25.570	109.870

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN867 **File Number:** 0009262184 **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
97	37-25-27.1 N	086-13-46.7 W	252.1	41.1	1280487

Address: Johnson Crossroads, 2601 St. Augustine Road
City: Clarkson **County:** GRAYSON **State:** KY **Construction Deadline:**

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)	97.900	73.900	78.500	96.700	106.000	108.500	99.600	95.600
Transmitting ERP (watts)	7.940	44.270	150.440	165.870	63.900	9.040	0.700	1.050

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)	97.900	73.900	78.500	96.700	106.000	108.500	99.600	95.600
Transmitting ERP (watts)	4.030	0.340	2.430	11.890	72.190	167.790	144.670	35.900

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
98	37-54-31.9 N	085-59-25.9 W	236.2	35.0	

Address: Fort Knox IV, 5800 Block of Adams Street
City: Fort Knox **County:** MEADE **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)	94.000	74.300	90.800	60.900	57.100	53.800	55.700	114.300
Transmitting ERP (watts)	36.310	138.730	165.910	77.210	12.030	0.950	0.820	6.980

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)	94.000	74.300	90.800	60.900	57.100	53.800	55.700	114.300
Transmitting ERP (watts)	1.300	0.640	5.680	30.740	124.760	162.210	90.940	14.810

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)	94.000	74.300	90.800	60.900	57.100	53.800	55.700	114.300
Transmitting ERP (watts)	117.350	21.640	1.920	0.340	2.170	17.950	89.980	161.610

Control Points:

Control Pt. No. 1

Address: 216 W LINCOLN TRAIL
City: RADCLIFF **County:** **State:** KY **Telephone Number:**

Waivers/Conditions:

NONE

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WPZV473	0009262040
Radio Service	
CW - PCS Broadband	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
06-23-2015	01-13-2021	06-23-2025	03-10-2021

Market Number	Channel Block	Sub-Market Designator
MTA026	A	23

Market Name
Louisville-Lexington-Evansvill

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
06-23-2000	06-23-2005		

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.

FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WPZV473 **File Number:** 0009262040 **Print Date:** 03-10-2021

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WQGA718	0009793647
Radio Service AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
02-22-2022	02-22-2022	11-29-2036	02-23-2022

Market Number	Channel Block	Sub-Market Designator
REA004	F	15

Market Name
Mississippi Valley

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: CELLCO PARTNERSHIP

Call Sign: WQGA718 **File Number:** 0009793647 **Print Date:** 02-23-2022

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WQGA959	0009775569
Radio Service AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
01-03-2022	01-03-2022	11-29-2036	01-05-2022

Market Number	Channel Block	Sub-Market Designator
BEA071	B	0

Market Name
Nashville, TN-KY

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.

FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WQGA959 **File Number:** 0009775569 **Print Date:** 01-05-2022

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WQJQ692	
Radio Service	
WU - 700 MHz Upper Band (Block C)	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
01-10-2020	02-11-2021	06-13-2029	

Market Number	Channel Block	Sub-Market Designator
REA004	C	0

Market Name
Mississippi Valley

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
06-13-2013	06-13-2019		

Waivers/Conditions:

If the facilities authorized herein are used to provide broadcast operations, whether exclusively or in combination with other services, the licensee must seek renewal of the license either within eight years from the commencement of the broadcast service or within the term of the license had the broadcast service not been provided, whichever period is shorter in length. See 47 CFR §27.13(b).

This authorization is conditioned upon compliance with section 27.16 of the Commission's rules

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.

FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WQJQ692 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WQVN764	
Radio Service AT - AWS-3 (1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz)	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
04-08-2015	02-24-2017	04-08-2027	

Market Number	Channel Block	Sub-Market Designator
BEA071	H	0

Market Name
Nashville, TN-KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
04-08-2021	04-08-2027		

Waivers/Conditions:

NONE

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.

FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WQVN764 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WQVN765	
Radio Service AT - AWS-3 (1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz)	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
04-08-2015	02-24-2017	04-08-2027	

Market Number	Channel Block	Sub-Market Designator
BEA071	I	0

Market Name
Nashville, TN-KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
04-08-2021	04-08-2027		

Waivers/Conditions:

NONE

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.

FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WQVN765 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRAM746	0009262184
Radio Service	
WT - 600 MHz Band	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
01-09-2018	01-13-2021	01-09-2030	03-11-2021

Market Number	Channel Block	Sub-Market Designator
PEA112	A	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
01-09-2024			

Waivers/Conditions:

NONE

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.

FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WRAM746 **File Number:** 0009262184 **Print Date:** 03-11-2021

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRBB966	0009262037
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
07-09-2019	01-13-2021	08-09-2029	03-10-2021

Market Number	Channel Block	Sub-Market Designator
BTA052	L1	0

Market Name
Bowling Green-Glasgow, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
06-01-2024			

Waivers/Conditions:

NONE

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.

FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WRBB966 **File Number:** 0009262037 **Print Date:** 03-10-2021

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRBB967	0009262037
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
07-09-2019	01-13-2021	08-09-2029	03-10-2021

Market Number	Channel Block	Sub-Market Designator
BTA052	L2	0

Market Name
Bowling Green-Glasgow, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
06-01-2024			

Waivers/Conditions:

NONE

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: CELLCO PARTNERSHIP

Call Sign: WRBB967 **File Number:** 0009262037 **Print Date:** 03-10-2021

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WREV449	0009262184
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
12-11-2019	01-13-2021	12-11-2029	03-11-2021

Market Number	Channel Block	Sub-Market Designator
PEA112	A	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

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.

FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WREV449 **File Number:** 0009262184 **Print Date:** 03-11-2021

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WREV451	0009262184
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
12-11-2019	01-13-2021	12-11-2029	03-11-2021

Market Number	Channel Block	Sub-Market Designator
PEA112	B	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

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.

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FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WREV451 **File Number:** 0009262184 **Print Date:** 03-11-2021

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WREV453	0009262184
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
12-11-2019	01-13-2021	12-11-2029	03-11-2021

Market Number	Channel Block	Sub-Market Designator
PEA112	C	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

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.

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FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WREV453 **File Number:** 0009262184 **Print Date:** 03-11-2021

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: STRAIGHT PATH SPECTRUM, LLC

ATTN: REGULATORY
STRAIGHT PATH SPECTRUM, LLC
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRHF210	
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0012576435

Grant Date	Effective Date	Expiration Date	Print Date
06-04-2020	06-04-2020	06-04-2030	

Market Number	Channel Block	Sub-Market Designator
PEA112	M1	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

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.

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FCC 601-MB
August 2021

Licensee Name: STRAIGHT PATH SPECTRUM, LLC

Call Sign: WRHF210 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: STRAIGHT PATH SPECTRUM, LLC

ATTN: REGULATORY
STRAIGHT PATH SPECTRUM, LLC
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRHF211	
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0012576435

Grant Date	Effective Date	Expiration Date	Print Date
06-04-2020	06-04-2020	06-04-2030	

Market Number	Channel Block	Sub-Market Designator
PEA112	M10	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

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.

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FCC 601-MB
August 2021

Licensee Name: STRAIGHT PATH SPECTRUM, LLC

Call Sign: WRHF211 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: STRAIGHT PATH SPECTRUM, LLC

ATTN: REGULATORY
STRAIGHT PATH SPECTRUM, LLC
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRHF212	
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0012576435

Grant Date	Effective Date	Expiration Date	Print Date
06-04-2020	06-04-2020	06-04-2030	

Market Number	Channel Block	Sub-Market Designator
PEA112	M2	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

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.

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FCC 601-MB
August 2021

Licensee Name: STRAIGHT PATH SPECTRUM, LLC

Call Sign: WRHF212 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: STRAIGHT PATH SPECTRUM, LLC

ATTN: REGULATORY
STRAIGHT PATH SPECTRUM, LLC
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRHF213	
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0012576435

Grant Date	Effective Date	Expiration Date	Print Date
06-04-2020	06-04-2020	06-04-2030	

Market Number	Channel Block	Sub-Market Designator
PEA112	M3	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

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.

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FCC 601-MB
August 2021

Licensee Name: STRAIGHT PATH SPECTRUM, LLC

Call Sign: WRHF213 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: STRAIGHT PATH SPECTRUM, LLC

ATTN: REGULATORY
STRAIGHT PATH SPECTRUM, LLC
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRHF214	
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0012576435

Grant Date	Effective Date	Expiration Date	Print Date
06-04-2020	06-04-2020	06-04-2030	

Market Number	Channel Block	Sub-Market Designator
PEA112	M4	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

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.

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FCC 601-MB
August 2021

Licensee Name: STRAIGHT PATH SPECTRUM, LLC

Call Sign: WRHF214 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: STRAIGHT PATH SPECTRUM, LLC

ATTN: REGULATORY
STRAIGHT PATH SPECTRUM, LLC
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRHF215	
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0012576435

Grant Date	Effective Date	Expiration Date	Print Date
06-04-2020	06-04-2020	06-04-2030	

Market Number	Channel Block	Sub-Market Designator
PEA112	M5	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

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.

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FCC 601-MB
August 2021

Licensee Name: STRAIGHT PATH SPECTRUM, LLC

Call Sign: WRHF215 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: STRAIGHT PATH SPECTRUM, LLC

ATTN: REGULATORY
STRAIGHT PATH SPECTRUM, LLC
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRHF216	
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0012576435

Grant Date	Effective Date	Expiration Date	Print Date
06-04-2020	06-04-2020	06-04-2030	

Market Number	Channel Block	Sub-Market Designator
PEA112	M6	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

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.

FCC 601-MB
August 2021

Licensee Name: STRAIGHT PATH SPECTRUM, LLC

Call Sign: WRHF216 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: STRAIGHT PATH SPECTRUM, LLC

ATTN: REGULATORY
STRAIGHT PATH SPECTRUM, LLC
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRHF217	
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0012576435

Grant Date	Effective Date	Expiration Date	Print Date
06-04-2020	06-04-2020	06-04-2030	

Market Number	Channel Block	Sub-Market Designator
PEA112	M7	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

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.

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FCC 601-MB
August 2021

Licensee Name: STRAIGHT PATH SPECTRUM, LLC

Call Sign: WRHF217 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: STRAIGHT PATH SPECTRUM, LLC

ATTN: REGULATORY
STRAIGHT PATH SPECTRUM, LLC
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRHF218	
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0012576435

Grant Date	Effective Date	Expiration Date	Print Date
06-04-2020	06-04-2020	06-04-2030	

Market Number	Channel Block	Sub-Market Designator
PEA112	M8	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

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.

FCC 601-MB
August 2021

Licensee Name: STRAIGHT PATH SPECTRUM, LLC

Call Sign: WRHF218 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: STRAIGHT PATH SPECTRUM, LLC

ATTN: REGULATORY
STRAIGHT PATH SPECTRUM, LLC
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRHF219	
Radio Service UU - Upper Microwave Flexible Use Service	

FCC Registration Number (FRN): 0012576435

Grant Date	Effective Date	Expiration Date	Print Date
06-04-2020	06-04-2020	06-04-2030	

Market Number	Channel Block	Sub-Market Designator
PEA112	M9	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

NONE

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.

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FCC 601-MB
August 2021

Licensee Name: STRAIGHT PATH SPECTRUM, LLC

Call Sign: WRHF219 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRNF682	
Radio Service PM - 3.7 GHz Service	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
07-23-2021	07-23-2021	07-23-2036	

Market Number	Channel Block	Sub-Market Designator
PEA112	A1	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
07-23-2029	07-23-2033		

Waivers/Conditions:

Operation for this combination license grants both interim and final rights for this PEA and is not impacted by the relocation process pursuant to 47 CFR ? 27.1412(g).

License is conditioned on compliance with all applicable FCC rules and regulations, including licensee making payments required by 47 C.F.R. §§ 27.1401- 27.1424 as described in FCC 20-22. See FCC 20-22, paras. 178-331.

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.

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FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WRNF682 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRNF683	
Radio Service PM - 3.7 GHz Service	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
07-23-2021	07-23-2021	07-23-2036	

Market Number	Channel Block	Sub-Market Designator
PEA112	A2	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
07-23-2029	07-23-2033		

Waivers/Conditions:

Operation for this combination license grants both interim and final rights for this PEA and is not impacted by the relocation process pursuant to 47 CFR ? 27.1412(g).

License is conditioned on compliance with all applicable FCC rules and regulations, including licensee making payments required by 47 C.F.R. §§ 27.1401- 27.1424 as described in FCC 20-22. See FCC 20-22, paras. 178-331.

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FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WRNF683 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRNF684	
Radio Service PM - 3.7 GHz Service	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
07-23-2021	07-23-2021	07-23-2036	

Market Number	Channel Block	Sub-Market Designator
PEA112	A3	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
07-23-2029	07-23-2033		

Waivers/Conditions:

Operation for this combination license grants both interim and final rights for this PEA and is not impacted by the relocation process pursuant to 47 CFR ? 27.1412(g).

License is conditioned on compliance with all applicable FCC rules and regulations, including licensee making payments required by 47 C.F.R. §§ 27.1401- 27.1424 as described in FCC 20-22. See FCC 20-22, paras. 178-331.

Conditions:
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FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WRNF684 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRNF685	
Radio Service PM - 3.7 GHz Service	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
07-23-2021	07-23-2021	07-23-2036	

Market Number	Channel Block	Sub-Market Designator
PEA112	A4	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
07-23-2029	07-23-2033		

Waivers/Conditions:

Operation for this combination license grants both interim and final rights for this PEA and is not impacted by the relocation process pursuant to 47 CFR ? 27.1412(g).

License is conditioned on compliance with all applicable FCC rules and regulations, including licensee making payments required by 47 C.F.R. §§ 27.1401- 27.1424 as described in FCC 20-22. See FCC 20-22, paras. 178-331.

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FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WRNF685 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRNF686	
Radio Service PM - 3.7 GHz Service	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
07-23-2021	07-23-2021	07-23-2036	

Market Number	Channel Block	Sub-Market Designator
PEA112	A5	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
07-23-2029	07-23-2033		

Waivers/Conditions:

Operation for this combination license grants both interim and final rights for this PEA and is not impacted by the relocation process pursuant to 47 CFR ? 27.1412(g).

License is conditioned on compliance with all applicable FCC rules and regulations, including licensee making payments required by 47 C.F.R. §§ 27.1401- 27.1424 as described in FCC 20-22. See FCC 20-22, paras. 178-331.

Conditions:
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FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WRNF686 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRNF687	
Radio Service PM - 3.7 GHz Service	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
07-23-2021	07-23-2021	07-23-2036	

Market Number	Channel Block	Sub-Market Designator
PEA112	B1	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
07-23-2029	07-23-2033		

Waivers/Conditions:

This interim license, in conjunction with one or more final licenses, collectively provides authorization during the full 15-year license term. Operation under this final license may begin on the earlier of (1) 12/5/2025 or (2) the date that thecertification for accelerated relocation for this PEA is validated by the FCC pursuant to 47 CFR ? 27.1412(g). Assignment application(s) and transfers of control filed for this interim license must be done in conjunction with any linked final license.

License is conditioned on compliance with all applicable FCC rules and regulations, including licensee making payments required by 47 C.F.R. §§ 27.1401- 27.1424 as described in FCC 20-22. See FCC 20-22, paras. 178-331.

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FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WRNF687 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRNF688	
Radio Service PM - 3.7 GHz Service	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
07-23-2021	07-23-2021	07-23-2036	

Market Number	Channel Block	Sub-Market Designator
PEA112	B2	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
07-23-2029	07-23-2033		

Waivers/Conditions:

This interim license, in conjunction with one or more final licenses, collectively provides authorization during the full 15-year license term. Operation under this final license may begin on the earlier of (1) 12/5/2025 or (2) the date that thecertification for accelerated relocation for this PEA is validated by the FCC pursuant to 47 CFR ? 27.1412(g). Assignment application(s) and transfers of control filed for this interim license must be done in conjunction with any linked final license.

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FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WRNF688 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY
CELLCO PARTNERSHIP
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING
ALPHARETTA, GA 30022

Call Sign	File Number
WRNF689	
Radio Service PM - 3.7 GHz Service	

FCC Registration Number (FRN): 0003290673

Grant Date	Effective Date	Expiration Date	Print Date
07-23-2021	07-23-2021	07-23-2036	

Market Number	Channel Block	Sub-Market Designator
PEA112	B3	0

Market Name
Bowling Green, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
07-23-2029	07-23-2033		

Waivers/Conditions:

This interim license, in conjunction with one or more final licenses, collectively provides authorization during the full 15-year license term. Operation under this final license may begin on the earlier of (1) 12/5/2025 or (2) the date that thecertification for accelerated relocation for this PEA is validated by the FCC pursuant to 47 CFR ? 27.1412(g). Assignment application(s) and transfers of control filed for this interim license must be done in conjunction with any linked final license.

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FCC 601-MB
August 2021

Licensee Name: CELLCO PARTNERSHIP

Call Sign: WRNF689 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

HARMONI TOWERS

11101 ANDERSON DRIVE, SUITE 200
LITTLE ROCK, AR 72212

CK RUSSELLVILLE CAP

CREEKWOOD DRIVE
RUSSELLVILLE, KY 42276
LOGAN COUNTY

TOWER OWNER: HARMONI TOWERS

FROM LOGAN COUNTY CLERK: 229 W 3RD ST, RUSSELLVILLE, KY 42276: HEAD EAST ON W 3RD ST TOWARD WINTER ST (0.3 MI). TURN LEFT ONTO N BREATHITT ST (0.3 MI). CONTINUE ONTO ARMORY DR (0.2 MI). TURN RIGHT ONTO FRANCES RD/FRANCIS ST (0.4 MI). CONTINUE ONTO NEWTOWN RD (0.4 MI). SITE WILL BE LOCATED ON RIGHT (EAST) SIDE OF ROAD.

FROM LOUISVILLE MTSO: 2421 HOLLOWAY ROAD LOUISVILLE, KY 40299: HEAD SOUTH ON HOLLOWAY RD TOWARD PLANTSIDE DR (0.1 MI). TURN RIGHT AT THE 1ST CROSS STREET ONTO PLANTSIDE DR (0.3 MI). TURN LEFT ONTO WATTERSON TRAIL (0.7 MI). CONTINUE ONTO RUCKRIEGEL PKWY (0.5 MI). TURN LEFT ONTO OLD TAYLORSVILLE RD (0.2 MI). TURN RIGHT ONTO CHENOWETH RUN RD (2.5 MI). TURN RIGHT ONTO GELLHAUS LN (0.9 MI). TURN LEFT ONTO BILLTOWN RD (0.2 MI). TAKE THE RAMP ONTO I-265 W/KY-841 W (0.4 MI). MERGE ONTO I-265 W/KY-841 W (8.3 MI). CONTINUE ONTO KY-841 W (0.5 MI). TAKE EXIT 10B TO MERGE ONTO I-65 S TOWARD NASHVILLE (65.0 MI). KEEP LEFT TO STAY ON I-65 S (39.6 MI). TAKE THE WILLIAM H. NATCHER GREEN RIVER PARKWAY/KY-9007 N EXIT TOWARD BOWLING GREEN/OWENSBORO (0.2 MI). KEEP RIGHT AT THE FORK TO CONTINUE ON EXIT 20 B, FOLLOW SIGNS FOR I-165 N/OWENSBORO AND MERGE ONTO I-165/KY-9007 N (4.9 MI). TAKE EXIT 5 FOR US-68 TOWARD RUSSELLVILLE/BOWLING GREEN (0.3 MI). CONTINUE STRAIGHT ONTO US-68 W/RUSSELLVILLE RD & CONTINUE TO FOLLOW US-68 W (23.3 MI). TURN RIGHT ONTO US-68 (2.9 MI). TURN LEFT ONTO NEWTOWN RD (0.2 MI). SITE WILL BE LOCATED ON LEFT (EAST) SIDE OF ROAD.

NEW 195'-0" SELF SUPPORT TOWER w/4' LIGHTNING ARRESTOR -TOTAL TOWER HEIGHT 199'-0"

PROJECT SUMMARY

HARMONI TOWERS SITE
RUSSELLVILLE
SITE #: KYBGN2037

VERIZON SITE
CK RUSSELLVILLE CAP
FUZE ID: 16507368
LOCATION CODE: 689715

SITE ADDRESS
CREEKWOOD DRIVE
RUSSELLVILLE, KY 42276
LOGAN COUNTY
E911 ADDRESS: TBD

CLIENT CONTACT
VERIZON
2902 RING ROAD
ELIZABETHTOWN, KY 42701
CONTACT: JACKIE STRAIGHT
PHONE: (290) 750-0023
E-MAIL: JACKIE.STRAIGHT@VERIZONWIRELESS.COM

TOWER OWNER
HARMONI TOWERS
11101 ANDERSON DRIVE, SUITE 200
LITTLE ROCK, AR 72212
CONTACT: NATHAN OLSON
PHONE: (616) 633-9730
E-MAIL: NATHAN.OLSON@HARMONITOWERS.COM

PROPERTY OWNER
JOHN & ELIZABETH TABOR
5349 BUENA VISTA ROAD
RUSSELLVILLE, KY 42276
CONTACT: JOHN TABOR
PHONE: (270) 792-7181
E-MAIL: TABOR_BETH@YAHOO.COM

POLICE
RUSSELLVILLE POLICE DEPT.
168 S MAIN ST
RUSSELLVILLE, KY 42276
PHONE: (270) 726-7669

FIRE
RUSSELLVILLE FIRE DEPT.
620 N MAIN ST
RUSSELLVILLE, KY 42276
PHONE: (270) 726-5020

GENERAL INFORMATION
LATITUDE : 36.863972 N
LONGITUDE : 86.886069 W
1983 (NAD83)
ELEVATION : 581'± AMSL
1988 (NAVD88)

HARMONI TOWERS LEASE AREA
100'-0" x 100'-0"
(10,000 SF)

VERIZON LEASE AREA
12'-0" X 25'-0"
(300 SF)

PROJECT TOTAL DISTURBED AREA
COMPOUND: (10,000 SF) = (0.23 ACRE)
ACCESS DRIVE: (24,848 SF) = (0.57 ACRE)
GROSS AREA: (34,848 SF) = (0.80 ACRE)

PROJECT DESCRIPTION

NOTE:ALL ITEMS WITHIN THESE CONSTRUCTION DOCUMENTS ARE BY TOWER OWNER'S GENERAL CONTRACTOR AND HIS SUB-CONTRACTORS UNLESS NOTED AS (VZW GC) WHICH SHALL INCLUDE VERIZON GENERAL CONTRACTOR AND HIS SUB-CONTRACTORS. GENERALLY DESCRIBED BELOW:

HARMONI TOWERS SCOPE:
- INSTALL A NEW 195'-0" SELF SUPPORT TOWER w/ 4' LIGHTNING ROD (TOTAL 199'-0")
- INSTALL A NEW TOWER FOUNDATION SYSTEM
- INSTALL A NEW 90'x90' FENCED GRAVEL COMPOUND
- INSTALL A NEW SITE H-FRAME
- INSTALL A NEW ELECTRICAL SERVICE RUN TO SITE H-FRAME
- INSTALL A NEW GRAVEL ACCESS DRIVE
- NO WATER OR SEWAGE SERVICES RUN TO SITE
- INSTALL NEW TOWER & SITE GROUNDING SYSTEM
- INSTALL NEW VZW SUBSURFACE GROUNDING SYSTEM
- INSTALL A NEW 11'-6"x19'-6" CONCRETE EQUIPMENT / GENERATOR PAD
- INSTALL NEW 3'-6"X10'-0" CONCRETE PROPANE TANK PAD
- INSTALL ELECTRICAL SERVICE CONDUIT WITH PULL TAPES FROM ILC ENCLOSURE STUB-UP WITHIN VZW EQUIPMENT PAD TO UTILITY H-FRAME
- INSTALL NEW CONDUITS WITH PULL TAPES FROM VZW ILC ENCLOSURE STUB-UPS TO EQUIPMENT ENCLOSURE STUB-UPS WITHIN VZW EQUIPMENT PAD
- INSTALL NEW CONDUITS WITH PULL TAPES FROM VZW ILC & EQUIPMENT ENCLOSURE STUB-UP LOCATIONS TO THE GENERATOR LOCATION WITHIN VZW EQUIPMENT PAD
- INSTALL NEW CONDUITS WITH PULL TAPES FROM RF CABINET TO OVP H-FRAME LIT FIBER LOCATION
- INSTALL (1) NEW "VERIZON ONLY" FIBER OPTIC CONDUIT WITH PULL TAPE AND TRACER WIRE FROM VZW EQUIPMENT TO NEW "VERIZON ONLY" 24" x 36" HAND HOLE OUTSIDE COMPOUND
- INSTALL (1) NEW "VERIZON ONLY" FIBER OPTIC CONDUIT WITH PULL TAPE AND TRACER WIRE FROM NEW "VERIZON ONLY" 24" x 36" HAND HOLE OUTSIDE COMPOUND AND STUB UP AT FUTURE FIBER PEDESTAL LOCATION
- INSTALL (1) NEW "VERIZON ONLY" FIBER OPTIC CONDUIT WITH PULL TAPE FROM NEW "VERIZON ONLY" 24" x 36" HAND HOLE OUTSIDE COMPOUND AND STUB UP AT FUTURE FIBER PEDESTAL LOCATION
- PERMANENT ELECTRIC POWER MUST BE AVAILABLE FOR VERIZON AT THE METER BASE PRIOR TO THE SITE BEING RELEASED AS TENANT READY.

VERIZON SCOPE (VZW GC):
- INSTALL A NEW 11'-6"x14'-9" PREFABRICATED CANOPY ON EXISTING CONCRETE PAD
- INSTALL NEW 35KW GAS VAPOR GENERATOR ON EXISTING CONCRETE PAD
- INSTALL NEW 500 GALLON PROPANE TANK ON EXISTING 3'-6"x10'-0" CONCRETE PAD
- INSTALL VZW ICE BRIDGE AND FOUNDATIONS
- INSTALL VZW ANTENNA MOUNTING SUPPORT STRUCTURE ON TOWER
- INSTALL VZW ANTENNAS, LINES, COAX, GPS ANTENNA AND RADIO EQUIPMENT
- INSTALL EXISTING SUBSURFACE GROUND LEADS TO VZW EQUIPMENT & FACILITIES
- INSTALL VZW ELECTRIC SERVICE CONDUCTORS FROM UTILITY H-FRAME TO VZW ILC ENCLOSURE
- INSTALL VZW GENERATOR CIRCUITS FROM VZW ILC & EQUIPMENT ENCLOSURES TO VZW GENERATOR
- INSTALL CIRCUITS FROM VZW ILC TO VZW EQUIPMENT ENCLOSURES
- INSTALL NEW OUTDOOR OVP AND CABLING H-FRAME SUPPORT
- INSTALL (2) 1-1/4" & (1) 1" INNERDUCTS WITH PULL TAPES AND TRACER WIRE WITHIN OWNER INSTALLED "VERIZON ONLY" FIBER OPTIC CONDUITS

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

BUILDING CODE	2018 KENTUCKY BUILDING CODE
STRUCTURAL CODE	TIA/EIA-222 - REVISION G (INCLUDES ADDENDUM #2)
MECHANICAL CODE	2012 INTERNATIONAL MECHANICAL CODE (IMC 2012)
PLUMBING CODE	KENTUCKY STATE PLUMBING CODE (815 KAR CHAP. 20)
ELECTRICAL CODE	2017 NATIONAL ELECTRICAL CODE (NEC) - NFPA 70
FIRE/LIFE SAFETY CODE	2012 INTERNATIONAL FIRE CODE (2012 IFC)
ENERGY CODE	2012 INTERNATIONAL ENERGY CODE (COMMERCIAL)
GAS CODE	2009 NATIONAL FUEL GAS CODE (NFPA 54)

ACCESSIBILITY REQUIREMENTS:
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2009 IBC BUILDING CODE.

APPLICABLE CODES

CONSULTANT TEAM

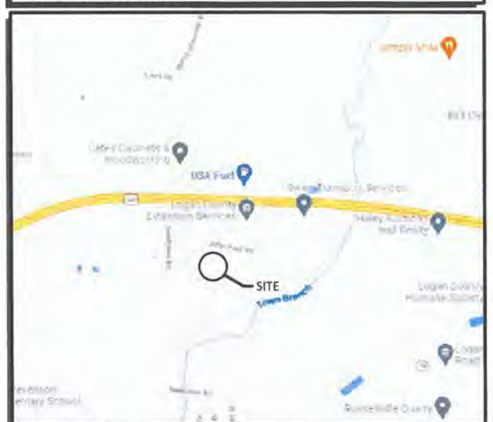
SURVEYOR
POWER OF DESIGN GROUP, LLC
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
PHONE: (502) 437-5252

ARCHITECTURAL
POWER OF DESIGN GROUP, LLC
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
PHONE: (502) 437-5252

ELECTRICAL
RUSSELLVILLE ELECTRIC PLANT BOARD
ADDRESS: 165 E 4TH ST
RUSSELLVILLE, KY 42276
CONTACT: TBD
PHONE: (270) 726-2466
EMAIL: TBD

ELECTRICAL UTILITY COORDINATION IS NOT FINALIZED. DO NOT PROCEED WITH CONSTRUCTION.

SHEET NUMBER	DESCRIPTION
T-1	PROJECT INFORMATION, SITE MAPS, SHEET INDEX
B-1 TO B-1.1	SITE SURVEY
B-2	500' RADIUS AND ABUTTERS MAP
R-1	REVISION LOG
TOWER ELEVATION	
TE-1	TOWER ELEVATION
CIVIL	
C-1	OVERALL SITE PLAN W/ AERIAL OVERLAY
C-1A	OVERALL SITE PLAN W/ DISTANCE TO PROPERTY LINES
C-1B	DISTANCE TO RESIDENTIAL STRUCTURE
C-3	DETAILED SITE PLAN
C-4	DIMENSIONED SITE PLAN



VICINITY MAP

LOCATION MAP

AERIAL

POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

HARMONI TOWERS

11101 ANDERSON DRIVE, SUITE 200
LITTLE ROCK, AR 72212

07/19/2022

STATE OF KENTUCKY
MARK E. PATTERSON
16,300
LICENSED PROFESSIONAL ENGINEER

EN PERMIT: 3594

ZONING DRAWINGS

REV.	DATE	DESCRIPTION
A	6.28.22	ISSUED FOR REVIEW
B	7.18.22	TOWER OWNER COMMENTS
0	7.19.22	ISSUED AS FINAL

SITE INFORMATION:
CK RUSSELLVILLE CAP

CREEKWOOD DRIVE
RUSSELLVILLE, KY 42276
LOGAN COUNTY

HARMONI TOWERS SITE NUMBER:
KYBGN2037

HARMONI TOWERS SITE NAME:
RUSSELLVILLE

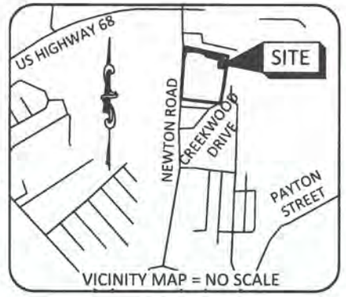
POD NUMBER:	21-102848
DRAWN BY:	POD
CHECKED BY:	MEP
DATE:	05.16.22

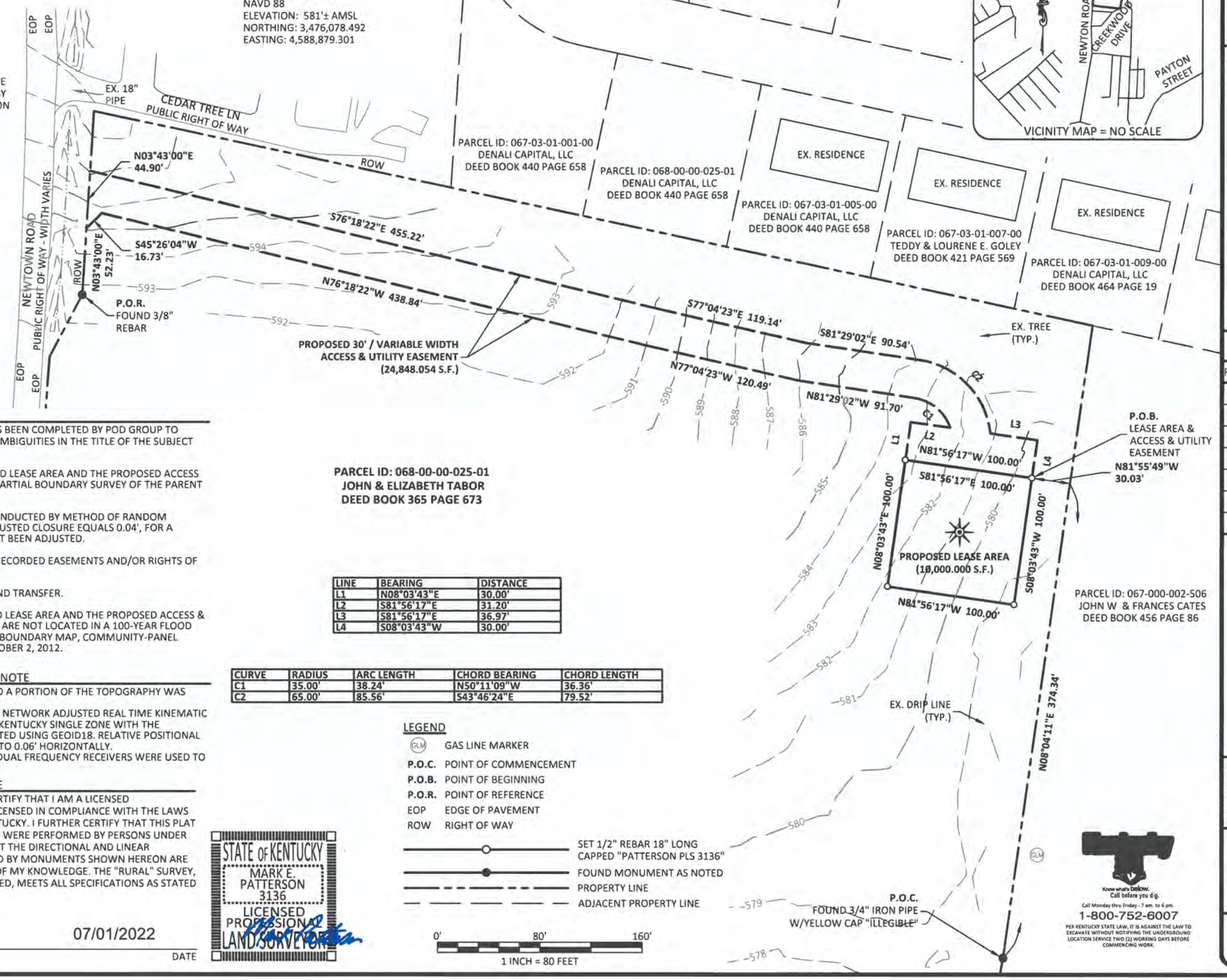
SHEET TITLE:
PROJECT INFORMATION, SITE MAPS, SHEET INDEX

SHEET NUMBER:
T-1

BASED ON KENTUCKY STATE PLANE SINGLE ZONE AND DETERMINED BY GPS OBSERVATIONS COMPLETED ON APRIL 29, 2022.

FAA COORDINATE POINT
NAD 83
LATITUDE: 36°51'50.300568"
LONGITUDE: -86°53'09.848060"
NAVD 88
ELEVATION: 581'± AMSL
NORTHING: 3,476,078.492
EASTING: 4,588,879.301





PARCEL ID: 068-00-00-025-01
JOHN & ELIZABETH TABOR
DEED BOOK 365 PAGE 673

LINE	BEARING	DISTANCE
L1	N08°03'43"E	30.00'
L2	S81°56'17"E	31.20'
L3	S81°56'17"E	36.97'
L4	S08°03'43"W	30.00'

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH
C1	35.00'	38.24'	N50°11'09"W	36.36'
C2	65.00'	85.56'	S43°46'24"E	79.52'

GENERAL NOTES

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED BY POD GROUP TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE SUBJECT PROPERTY.

THIS DRAWING IS FOR THE PROPOSED LEASE AREA AND THE PROPOSED ACCESS & UTILITY EASEMENT, AND ONLY A PARTIAL BOUNDARY SURVEY OF THE PARENT PARCEL HAS BEEN PERFORMED.

A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. UNADJUSTED CLOSURE EQUALS 0.04', FOR A PRECISION OF 1:39,290 AND HAS NOT BEEN ADJUSTED.

THIS PROPERTY IS SUBJECT TO ANY RECORDED EASEMENTS AND/OR RIGHTS OF WAY SHOWN HEREON OR NOT.

THIS PLAT IS NOT INTENDED FOR LAND TRANSFER.

THE PARENT PARCEL, THE PROPOSED LEASE AREA AND THE PROPOSED ACCESS & UTILITY EASEMENT SHOWN HEREON ARE NOT LOCATED IN A 100-YEAR FLOOD PLAIN (ZONE X) PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NUMBER 21141C0257D, DATED OCTOBER 2, 2012.

GLOBAL POSITIONING SYSTEMS NOTE

1. RANDOM CONTROL POINTS AND A PORTION OF THE TOPOGRAPHY WAS LOCATED USING GPS.
2. THE TYPE OF GPS UTILIZED WAS NETWORK ADJUSTED REAL TIME KINEMATIC (KDOT VRS NETWORK), NAD 83 KENTUCKY SINGLE ZONE WITH THE ORTHOMETRIC HEIGHT COMPUTED USING GEOID18. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.03' TO 0.06' HORIZONTALLY.
3. SPECTRA PRECISION EPOCH 50 DUAL FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.

LAND SURVEYOR'S CERTIFICATE

I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.

Mark Patterson — 07/01/2022

MARK PATTERSON, PLS #3136 — DATE

STATE OF KENTUCKY
MARK E. PATTERSON
3136
LICENSED PROFESSIONAL LAND SURVEYOR

LEGEND

- GLM — GAS LINE MARKER
- P.O.C. — POINT OF COMMENCEMENT
- P.O.B. — POINT OF BEGINNING
- P.O.R. — POINT OF REFERENCE
- EOP — EDGE OF PAVEMENT
- ROW — RIGHT OF WAY
- SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136"
- FOUND MONUMENT AS NOTED
- PROPERTY LINE
- ADJACENT PROPERTY LINE

0' 80' 160'
1 INCH = 80 FEET

Know what's below. Call before you dig.
Call Monday thru Friday - 7 am. to 6 pm
1-800-752-6007
PER KENTUCKY STATE LAW, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

PREPARED BY:
POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:
CELLCO PARTNERSHIP D/B/A verizon

REVISIONS

REV.	DATE	DESCRIPTION
A	5.9.22	PRELIMINARY ISSUE
B	5.12.22	EASEMENT ROUTE
0	6.30.22	ISSUED AS FINAL

SITE INFORMATION:
CK RUSSELLVILLE CAP
CREEKWOOD DRIVE
RUSSELLVILLE, KY, 42276
LOGAN COUNTY

TAX PARCEL NUMBER:
068-00-00-025-01

PROPERTY OWNER:
JOHN & ELIZABETH TABOR
5349 BUENA VISTA ROAD,
RUSSELLVILLE, KY 42276

SOURCE OF TITLE:
DEED BOOK 365, PAGE 673

POD NUMBER:	22-124720
DRAWN BY:	AIM/ADM
CHECKED BY:	MEP
SURVEY DATE:	4.29.22
PLAT DATE:	5.9.22

SHEET TITLE:
SITE SURVEY
THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

SHEET NUMBER: (2 pages)
B-1

LEGAL DESCRIPTIONS

PROPOSED LEASE AREA

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED LEASE AREA TO BE LEASED FROM THE PROPERTY CONVEYED TO JOHN & ELIZABETH TABOR AS RECORDED IN DEED BOOK 365, PAGE 673 IN THE OFFICE OF THE CLERK IN LOGAN COUNTY, KENTUCKY, PARCEL ID: 068-00-00-025-01, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, KENTUCKY SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON JANUARY 26, 2022.

COMMENCING AT A FOUND 3/4" IRON PIPE WITH A YELLOW CAP (ILLEGIBLE) IN THE EAST LINE OF THE PROPERTY CONVEYED TO JOHN & ELIZABETH TABOR AS RECORDED IN DEED BOOK 365, PAGE 673, AND ALSO BEING IN THE WEST LINE OF THE PROPERTY CONVEYED TO JOHN W & FRANCES CATES AS RECORDED IN DEED BOOK 456 PAGE 86; THENCE WITH THE COMMON LINE OF SAID TABOR AND CATES, N08°04'11"E 374.34'; THENCE LEAVING THE WEST LINE OF SAID CATES, AND LEAVING THE EAST LINE OF SAID TABOR AND TRAVERSING THE LAND OF TABOR, N81°55'49"W 30.03' TO A SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136", HEREAFTER REFERRED TO AS A "SET IPC" IN THE NORTHEAST CORNER OF THE PROPOSED LEASE AREA AND BEING **THE TRUE POINT OF BEGINNING** OF THE PROPOSED LEASE AREA; THENCE WITH THE EAST LINE OF THE PROPOSED LEASE AREA, S08°03'43"W 100.00' TO A SET IPC; THENCE N81°56'17"W 100.00' TO A SET IPC; THENCE N08°03'43"E 100.00' TO A SET IPC; THENCE S81°56'17"E 100.00' TO THE POINT OF BEGINNING CONTAINING 10,00.000 SQ. FT. AS PER SURVEY BY MARK PATTERSON, PLS #3136 WITH POWER OF DESIGN GROUP, LLC DATED APRIL 29, 2022.

PROPOSED 30' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 30' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT TO BE GRANTED FROM THE PROPERTY CONVEYED TO JOHN & ELIZABETH TABOR AS RECORDED IN DEED BOOK 365, PAGE 673 IN THE OFFICE OF THE CLERK IN LOGAN COUNTY, KENTUCKY, PARCEL ID: 068-00-00-025-01, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, KENTUCKY SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON JANUARY 26, 2022.

COMMENCING AT A FOUND 3/4" IRON PIPE WITH A YELLOW CAP (ILLEGIBLE) IN THE EAST LINE OF THE PROPERTY CONVEYED TO JOHN & ELIZABETH TABOR AS RECORDED IN DEED BOOK 365, PAGE 673, AND ALSO BEING IN THE WEST LINE OF THE PROPERTY CONVEYED TO JOHN W & FRANCES CATES AS RECORDED IN DEED BOOK 456 PAGE 86; THENCE WITH THE COMMON LINE OF SAID TABOR AND CATES, N08°04'11"E 374.34'; THENCE LEAVING THE WEST LINE OF SAID CATES, AND LEAVING THE EAST LINE OF SAID TABOR AND TRAVERSING THE LAND OF TABOR, N81°55'49"W 30.03' TO A SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136", HEREAFTER REFERRED TO AS A "SET IPC" IN THE SOUTHEAST CORNER OF THE PROPOSED 30' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT, AND BEING THE NORTHEAST CORNER OF THE PROPOSED LEASE AREA, AND BEING **THE TRUE POINT OF BEGINNING** OF THE PROPOSED 30' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT; THENCE WITH THE NORTH LINE OF THE PROPOSED LEASE AREA, N81°56'17"W 100.00' TO A SET IPC; THENCE N08°03'43"E 30.00'; THENCE S81°56'17"E 31.20'; THENCE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 35.00', ARC LENGTH OF 38.24', THE CHORD OF WHICH BEARS N50°11'09"W, WITH A CHORD LENGTH OF 36.36'; THENCE N81°29'02"W 91.70'; THENCE N77°04'23"W 120.49'; THENCE N76°18'22"W 438.84'; THENCE S45°26'04"W 16.73' TO A POINT IN THE WEST LINE OF SAID TABOR, SAID POINT ALSO BEING IN THE EAST RIGHT OF WAY LINE OF NEWTOWN ROAD, SAID POINT FOR REFERENCE BEING N03°43'00"E 52.23' FROM A FOUND 3/8" REBAR IN THE WEST LINE OF SAID TABOR AND EAST RIGHT OF WAY LINE OF NEWTOWN ROAD; THENCE WITH THE WEST LINE OF SAID TABOR AND THE EAST RIGHT OF WAY LINE OF SAID NEWTOWN ROAD, N03°43'00"E 44.90'; THENCE LEAVING THE EAST RIGHT OF WAY LINE OF SAID NEWTOWN ROAD AND LEAVING THE WEST LINE OF SAID TABOR AND TRAVERSING THE LAND OF SAID TABOR, S76°18'22"E 455.22'; THENCE S77°04'23"E 119.14'; THENCE S81°29'02"E 90.54'; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 65.00', ARC LENGTH OF 85.56', THE CHORD OF WHICH BEARS S43°46'24"E, WITH A CHORD LENGTH OF 79.52'; THENCE S81°56'17"E 36.97'; THENCE S08°03'43"W 30.00' TO THE POINT OF BEGINNING CONTAINING 24,848.054 SQUARE FEET AS PER SURVEY BY MARK PATTERSON, PLS #3136 WITH POWER OF DESIGN GROUP, LLC DATED APRIL 29, 2022.

LAND SURVEYOR'S CERTIFICATE

I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.

07/01/2022

MARK PATTERSON, PLS #3136 — DATE

STATE OF KENTUCKY
MARK E. PATTERSON
3136
LICENSED PROFESSIONAL LAND SURVEYOR

REPORT OF TITLE - PARCEL ID: 068-00-00-025-01 - DEED BOOK 365, PAGE 673

THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY POD GROUP, LLC. AND AS SUCH WE ARE NOT RESPONSIBLE FOR THE INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, UNRECORDED EASEMENTS, AUGMENTING EASEMENTS, IMPLIED OR PRESCRIPTIVE EASEMENTS, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE AND THIS SURVEY WAS COMPLETED WITH THE AID OF TITLE WORK PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, FOR THE BENEFIT OF FNF - INDIANAPOLIS, ORDER NO. 35208091, ISSUE DATE OF AUGUST 25, 2021. THE FOLLOWING COMMENTS ARE IN REGARD TO SAID REPORT.

SEARCH DISCLOSED THE FOLLOWING:

1. TAXES
   TYPE OF TAX: COUNTY - CALENDAR YEAR: 2020 - AMOUNT: $149.63 ANNUALLY - PARCEL ID#: 068-00-00-025-01 - PAID THROUGH: 2020 - ASSESSMENT: $11,590.00 (TOTAL = LAND AND IMPROVEMENTS, IF ANY) (POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)
2. RIGHT OF WAY EASEMENT IN FAVOR OF JOHN W. CATES SET FORTH IN INSTRUMENT RECORDED ON AUGUST 28, 1989 IN DEED BOOK 40, PAGE 647. (LOCATION OF AGREEMENT CAN NOT BE DETERMINED.)
3. MEMORANDUM AGREEMENT DATED AUGUST 23, 1989 BY AND BETWEEN REBECCA MONTGOMERY SIMOR AND GEORGE SIMOR AND JOHN W. CATES, D/B/A CATES CONSTRUCTION COMPANY RECORDED ON AUGUST 29, 1989 IN DEED BOOK 40, PAGE 638. (LOCATION OF AGREEMENT CAN NOT BE DETERMINED.)
4. RIGHT OF WAY EASEMENT IN FAVOR OF REBECCA MONTGOMERY SIMOR AND GEORGE SIMOR SET FORTH IN INSTRUMENT RECORDED ON AUGUST 28, 2009 IN DEED BOOK 40, PAGE 649. (LOCATION OF AGREEMENT CAN NOT BE DETERMINED.)
5. AGREEMENT DATED AUGUST 23M 1989 BY AND BETWEEN JOHN W. CATES, D/B/A CATES CONSTUCTION COMPANY AND REBECCA SIMOR AND GEORGE SIMOR RECORDED ON AUGUST 28, 1989 IN DEED BOOK 40, PAGE 643. (LOCATION OF AGREEMENT CAN NOT BE DETERMINED.)
6. HIGHWAY DEED DATED MAY 17, 1993 BY AND BETWEEN REBECCA M. SIMOR AND GEORGE G. SIMOR, AS GRANTER, AND THE COMMONWEALTH OF KENTUCKY, AS GRANTEE, RECORDED ON JULY 15, 1993 IN DEED BOOK 283, PAGE 475. (DEED BOOK 283, PAGE 475 DOES NOT AFFECT THE PARENT PARCEL, THE PROPOSED LEASE AREA OR THE PROPOSED ACCESS & UTILITY EASEMENT AND IS SHOWN HEREON.)
7. MORTGAGE OF REAL ESTATE FROM JOHN J TABOR AND ELIZABETH TABOR, GRANTOR(S), IN FAVOR OF BRANCH BANKING AND TRUST COMPANY , DATED JANUARY 31, 2006, AND RECORDED FEBRUARY 17, 1960 IN DEED BOOK 394, PAGE 437, IN THE ORIGINAL AMOUNT OF $95,500.00; MORTGAGE EXTENSION AGREEMENT RECORDED ON FEBRUARY 7, 2008 IN DEED BOOK 432, PAGE 767; KENTUCKY AFFIDAVIT OF AMENDMENT TO MORTGAGE (TERM NOTE) RECORDED ON DECEMBER 17, 2012 IN DEED BOOK 505, PAGE 178; MORTGAGE EXTENSION AGREEMENT RECORDED ON DECEMBER 17, 2012 IN DEED BOOK 505, PAGE 180; MODIFICATION OF MORTGAGE RECORDED ON DECEMBER 23, 2019 IN DEED BOOK M614, PAGE 208. (DOCUMENTS AFFECT THE PARENT PARCEL, THE PROPOSED LEASE AREA OR THE PROPOSED ACCESS & UTILITY EASEMENT.)
8. MORTGAGE OF REAL ESTATE FROM JOHN P TABOR AND ELIZABETH TABOR, GRANTOR(S), IN FAVOR OF BRANCH BANKING AND TRUST COMPANY, DATED APRIL 23, 2013, AND RECORDED APRIL 25, 2013 IN DEED BOOK 510, PAGE 451, IN THE ORIGINAL AMOUNT OF $260,000.00. (DOCUMENT AFFECTS THE PARENT PARCEL, THE PROPOSED LEASE AREA OR THE PROPOSED ACCESS & UTILITY EASEMENT.)

PARENT PARCEL - LEGAL DESCRIPTION - DEED BOOK 365, PAGE 673 (NOT FIELD SURVEYED)

PROPERTY LOCATED IN LOGAN COUNTY, KENTUCKY

UNLESS STATED OTHERWISE, ANY MONUMENT REFERRED TO HEREIN AS A "SET IRON PIN" IS A 5/8" DIAMETER STEEL REINFORCING BAR, EIGHTEEN INCHES IN LENGTH WITH A PLASTIC CAP STAMPED "J.L. HARRIS-P.L.S. 3148". ALL BEARINGS STATED HEREIN ARE REFERRED TO FOUND MONUMENTATION AS DESCRIBED ON A PLAT OF CREEKWOOD SUBDIVISION-PLAT CABINET 1-ENVELOPE 174-PLAT #258.

BEGINNING AT A SET IRON PIN IN THE EAST RIGHT OF WAY OF THE NEWTOWN ROAD (RIGHT OF WAY VARIES), CORNER TO CATES (DEED BOOK 309, PAGE 426); THENCE LEAVING SAID RIGHT OF WAY WITH THE LINE OF CATES THEN TWIN OAKS ESTATES SUBDIVISION (PLAT CABINET 1, ENVELOPE 134 PLAT #218) S 79° 12' 48" E 797.32 FEET TO A FOUND IRON PIN # 2474, CORNER OF HOLLAND (DEED BOOK 322, PAGE 133); THENCE TURNING RIGHT WITH THE LINE OF HOLLAND S 06° 45' 18" W 499.36 FEET TO A FOUND 3/4" DIAMETER IRON PIPE # 906, CORNER TO HOLLAND (DEED BOOK 297, PAGE 050); THENCE WITH THE LINE OF HOLLAND S 08° 56' 53" W 387.12 FEET TO A FOUND DISTURBED IRON PIN (NO. I.S. CAP), CORNER TO THE CREEKWOOD SUBDIVISION (PLAT CABINET 1, ENVELOPE 174-PLAT # 258); THENCE TURNING RIGHT WITH THE LINE OF THE CREEKWOOD SUBDIVISION N 84° 56' 27" W 734-78 FEET TO A SET IRON PIN IN SAID RIGHT OF WAY; THENCE TURNING RIGHT WITH SAID RIGHT OF WAY N 02° 45' 51" E 770.84 FEET TO A SET IRON PIN; THENCE N 26° 27' 56" E 54.83 FEET TO A SET IRON PIN; THENCE N 02°24' 07" E 143.82 FEET TO THE POINT OF BEGINNING, DESCRIBED PARCEL CONTAINING 16.47 ACRES AS SHOWN BY SURVEY PERFORMED BY JEFFREY L. HARRIS, P.L.S. # 3148 WITH BENCHMARK LAND SURVEYING, DATED JANUARY 16, 2006.

AND BEING THE SAME PROPERTY CONVEYED TO JOHN TABOR AND ELIZABETH TABOR FROM GEORGE SIMOR AND REBECCA M. SIMOR BY DEED DATED JANUARY 31, 2006 AND RECORDED FEBRUARY 17, 2006 IN DEED BOOK 365, PAGE 673.

TAX PARCEL NO. 068-00-00-025-01

PREPARED BY:
POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:
CELLCO PARTNERSHIP D/B/A verizon

REVISIONS

REV.	DATE	DESCRIPTION
A	5.9.22	PRELIMINARY ISSUE
B	5.12.22	EASEMENT ROUTE
0	6.30.22	ISSUED AS FINAL

SITE INFORMATION:
CK RUSSELLVILLE CAP
CREEKWOOD DRIVE
RUSSELLVILLE, KY, 42276
LOGAN COUNTY

TAX PARCEL NUMBER:
068-00-00-025-01

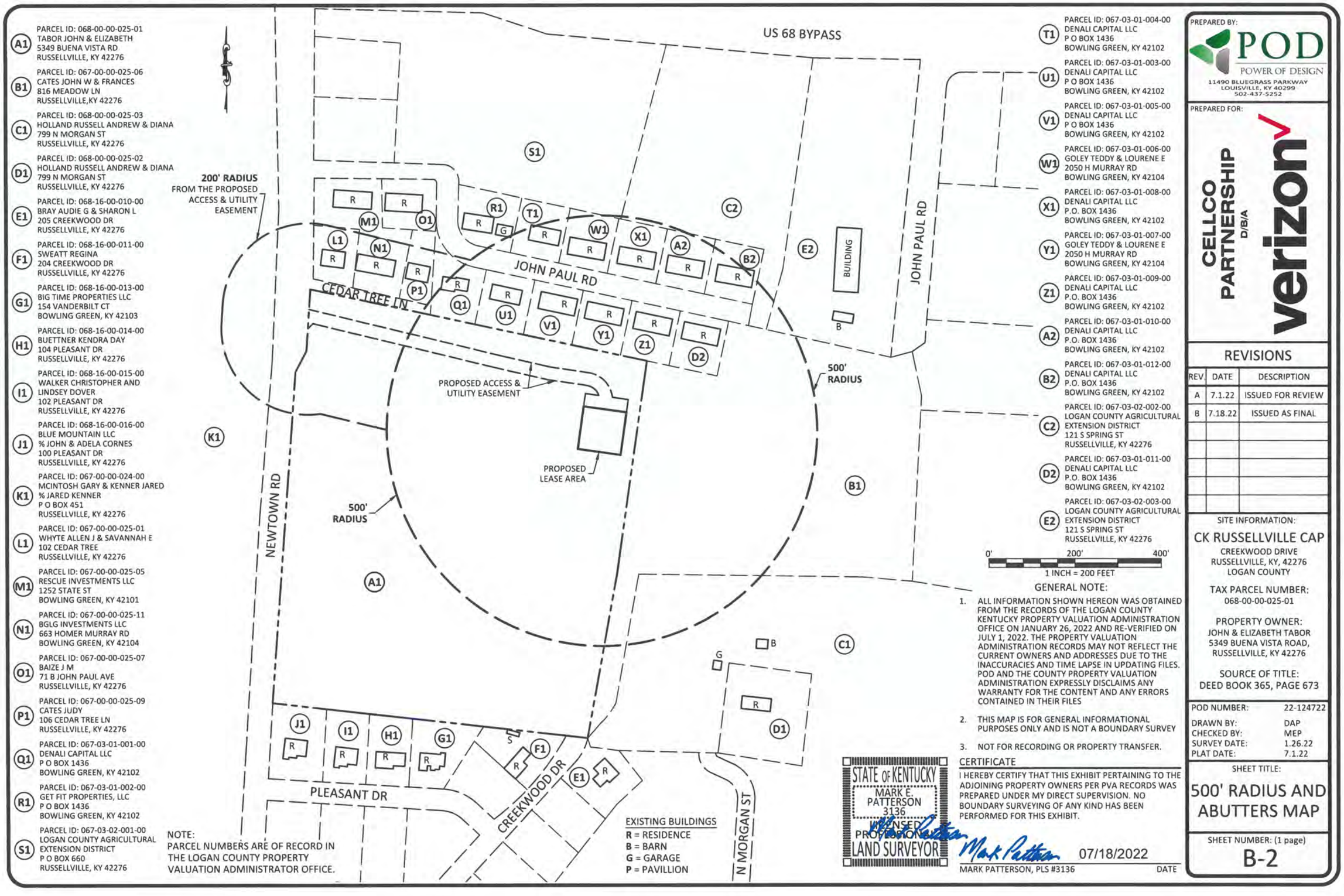
PROPERTY OWNER:
JOHN & ELIZABETH TABOR
5349 BUENA VISTA ROAD,
RUSSELLVILLE, KY 42276

SOURCE OF TITLE:
DEED BOOK 365, PAGE 673

POD NUMBER:	22-124720
DRAWN BY:	AIM/ADM
CHECKED BY:	MEP
SURVEY DATE:	4.29.22
PLAT DATE:	5.9.22

SHEET TITLE:
SITE SURVEY
THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

SHEET NUMBER: (2 pages)
B-1.1



GENERAL NOTE:

1. ALL INFORMATION SHOWN HEREON WAS OBTAINED FROM THE RECORDS OF THE LOGAN COUNTY KENTUCKY PROPERTY VALUATION ADMINISTRATION OFFICE ON JANUARY 26, 2022 AND RE-VERIFIED ON JULY 1, 2022. THE PROPERTY VALUATION ADMINISTRATION RECORDS MAY NOT REFLECT THE CURRENT OWNERS AND ADDRESSES DUE TO THE INACCURACIES AND TIME LAPSE IN UPDATING FILES. POD AND THE COUNTY PROPERTY VALUATION ADMINISTRATION EXPRESSLY DISCLAIMS ANY WARRANTY FOR THE CONTENT AND ANY ERRORS CONTAINED IN THEIR FILES
2. THIS MAP IS FOR GENERAL INFORMATIONAL PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY
3. NOT FOR RECORDING OR PROPERTY TRANSFER.

CERTIFICATE

I HEREBY CERTIFY THAT THIS EXHIBIT PERTAINING TO THE ADJOINING PROPERTY OWNERS PER PVA RECORDS WAS PREPARED UNDER MY DIRECT SUPERVISION. NO BOUNDARY SURVEYING OF ANY KIND HAS BEEN PERFORMED FOR THIS EXHIBIT.

STATE OF KENTUCKY
MARK E. PATTERSON
3136
LICENSED PROFESSIONAL
LAND SURVEYOR

Mark Patterson 07/18/2022

MARK PATTERSON, PLS #3136 DATE

PREPARED BY:
POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:
CELLCO PARTNERSHIP D/B/A verizon

REVISIONS

REV.	DATE	DESCRIPTION
A	7.1.22	ISSUED FOR REVIEW
B	7.18.22	ISSUED AS FINAL

SITE INFORMATION:
CK RUSSELLVILLE CAP
CREEKWOOD DRIVE
RUSSELLVILLE, KY, 42276
LOGAN COUNTY

TAX PARCEL NUMBER:
068-00-00-025-01

PROPERTY OWNER:
JOHN & ELIZABETH TABOR
5349 BUENA VISTA ROAD,
RUSSELLVILLE, KY 42276

SOURCE OF TITLE:
DEED BOOK 365, PAGE 673

POD NUMBER:	22-124722
DRAWN BY:	DAP
CHECKED BY:	MEP
SURVEY DATE:	1.26.22
PLAT DATE:	7.1.22

SHEET TITLE:
500' RADIUS AND ABUTTERS MAP

SHEET NUMBER: (1 page)
B-2

REVISION LOG

REV *	MM/DD/YY	SHEET NUMBER	DESCRIPTION OF REVISION
A	6/28/2022	ALL SHEETS	ISSUED FOR REVIEW
B	7/18/2022	ALL SHEETS	TOWER OWNER COMMENTS
0	7/19/2022	ALL SHEETS	ISSUED AS FINAL

POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

HARMONI

11101 ANDERSON DRIVE, SUITE 200
LITTLE ROCK, AR 72212

07/19/2022

STATE OF KENTUCKY
MARK E. PATTERSON
16,300
LICENSED PROFESSIONAL ENGINEER

EN PERMIT: 3594

ZONING DRAWINGS

REV.	DATE	DESCRIPTION
A	6.28.22	ISSUED FOR REVIEW
B	7.18.22	TOWER OWNER COMMENTS
0	7.19.22	ISSUED AS FINAL

SITE INFORMATION:
CK RUSSELLVILLE CAP

CREEKWOOD DRIVE
RUSSELLVILLE, KY 42276
LOGAN COUNTY

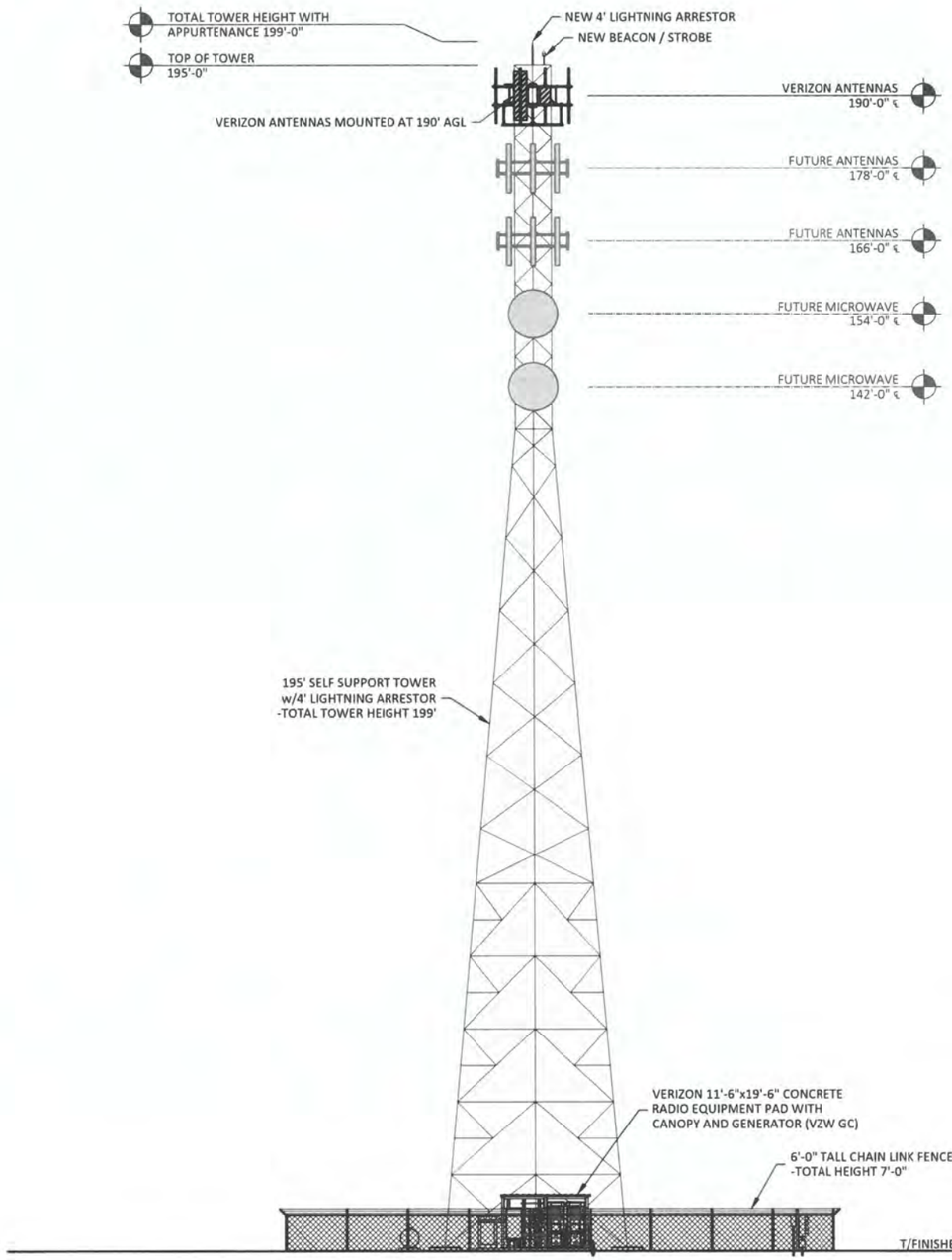
HARMONI TOWERS SITE NUMBER:
KYBGN2037

HARMONI TOWERS SITE NAME:
RUSSELLVILLE

POD NUMBER:	21-102848
DRAWN BY:	POD
CHECKED BY:	MEP
DATE:	05.16.22

SHEET TITLE:
REVISION LOG

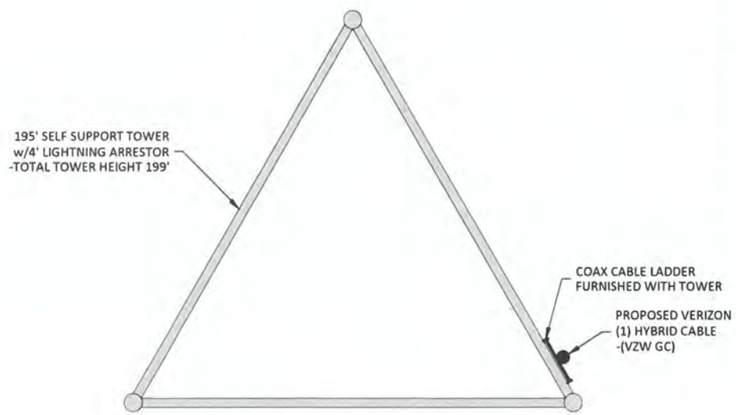
SHEET NUMBER:
R-1



TOWER ELEVATION 1 / TE-1
SCALE: N.T.S.

NOTE:

1. IT IS THE INSTALLING CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL ANTENNA INFORMATION AGAINST FINAL RADIO ENGINEERING PLAN PROVIDED BY CELLCO PARTNERSHIP d/b/a VERIZON (VZW GC)



COAX PLAN
SCALE: N.T.S.

N

POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

HARMONI TOWERS
11101 ANDERSON DRIVE, SUITE 200
LITTLE ROCK, AR 72212

07/19/2022

STATE OF KENTUCKY
MARK E. PATTERSON
16,300
LICENSED PROFESSIONAL ENGINEER

EN PERMIT: 3594

ZONING DRAWINGS

REV.	DATE	DESCRIPTION
A	6.28.22	ISSUED FOR REVIEW
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SITE INFORMATION:
CK RUSSELLVILLE CAP
CREEKWOOD DRIVE
RUSSELLVILLE, KY 42276
LOGAN COUNTY

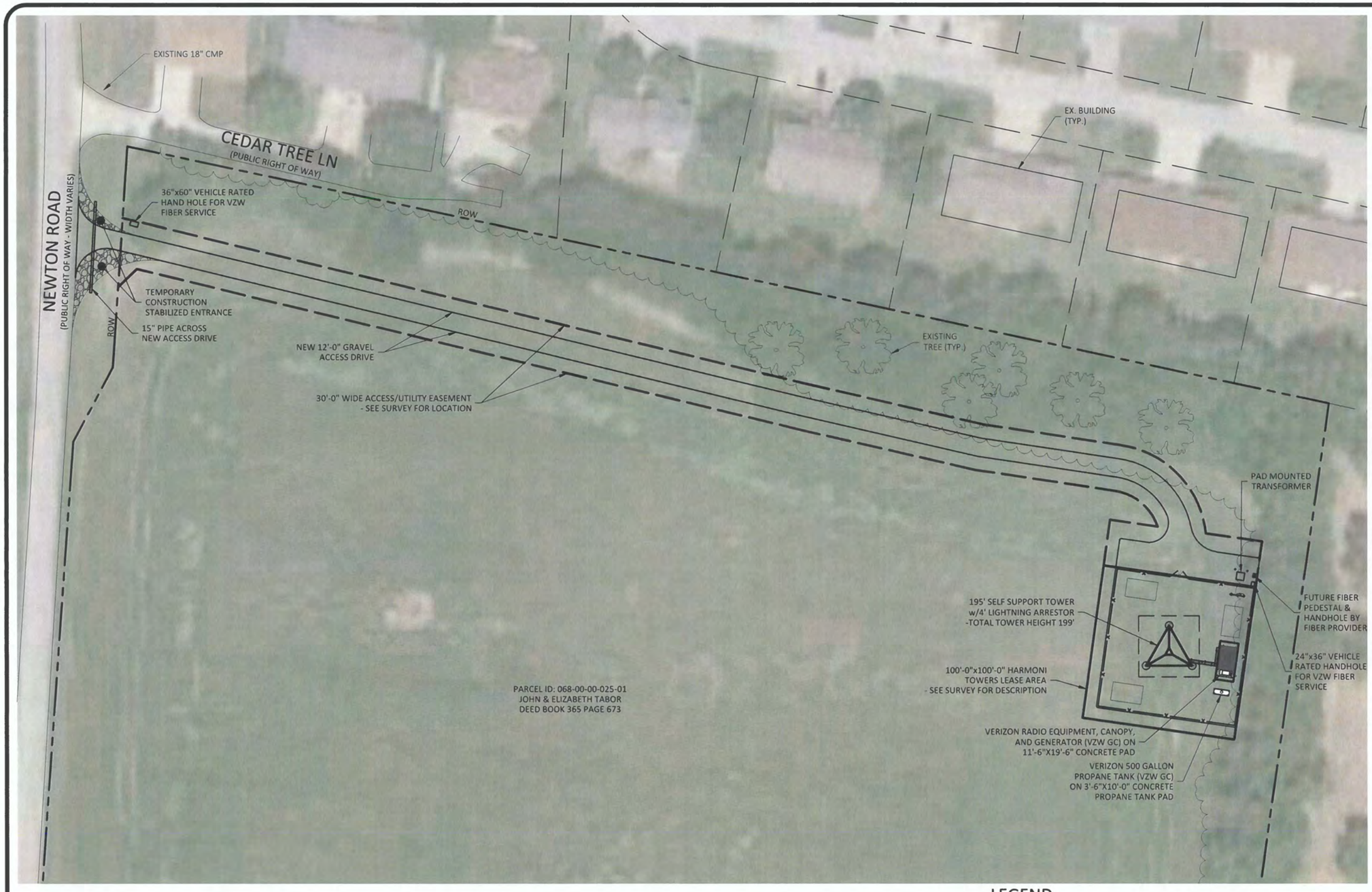
HARMONI TOWERS SITE NUMBER:
KYBGN2037

HARMONI TOWERS SITE NAME:
RUSSELLVILLE

POD NUMBER:	21-102848
DRAWN BY:	POD
CHECKED BY:	MEP
DATE:	05.16.22

SHEET TITLE:
TOWER ELEVATION

SHEET NUMBER:
TE-1



Know what's below. Call before you dig.
Call Monday thru Friday - 7 am. to 6 pm.
1-800-752-6007
PER KENTUCKY STATE LAW, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

0' 65' 130'
1"=65'

OVERALL SITE PLAN W/AERIAL OVERLAY
SCALE: 1" = 65'

N

LEGEND
- PROPOSED LEASE LINE
- PROPOSED EASEMENT
- PROPOSED GRAVEL
- PROPOSED FENCE
- EXISTING DITCH
- EXISTING PAVEMENT
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- PROPOSED MULCH

POD
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LOUISVILLE, KY 40299
502-437-5252

HARMONI TOWERS
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STATE OF KENTUCKY
MARK E. PATTERSON
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CK RUSSELLVILLE CAP
CREEKWOOD DRIVE
RUSSELLVILLE, KY 42276
LOGAN COUNTY

HARMONI TOWERS SITE NUMBER:
KYBGN2037

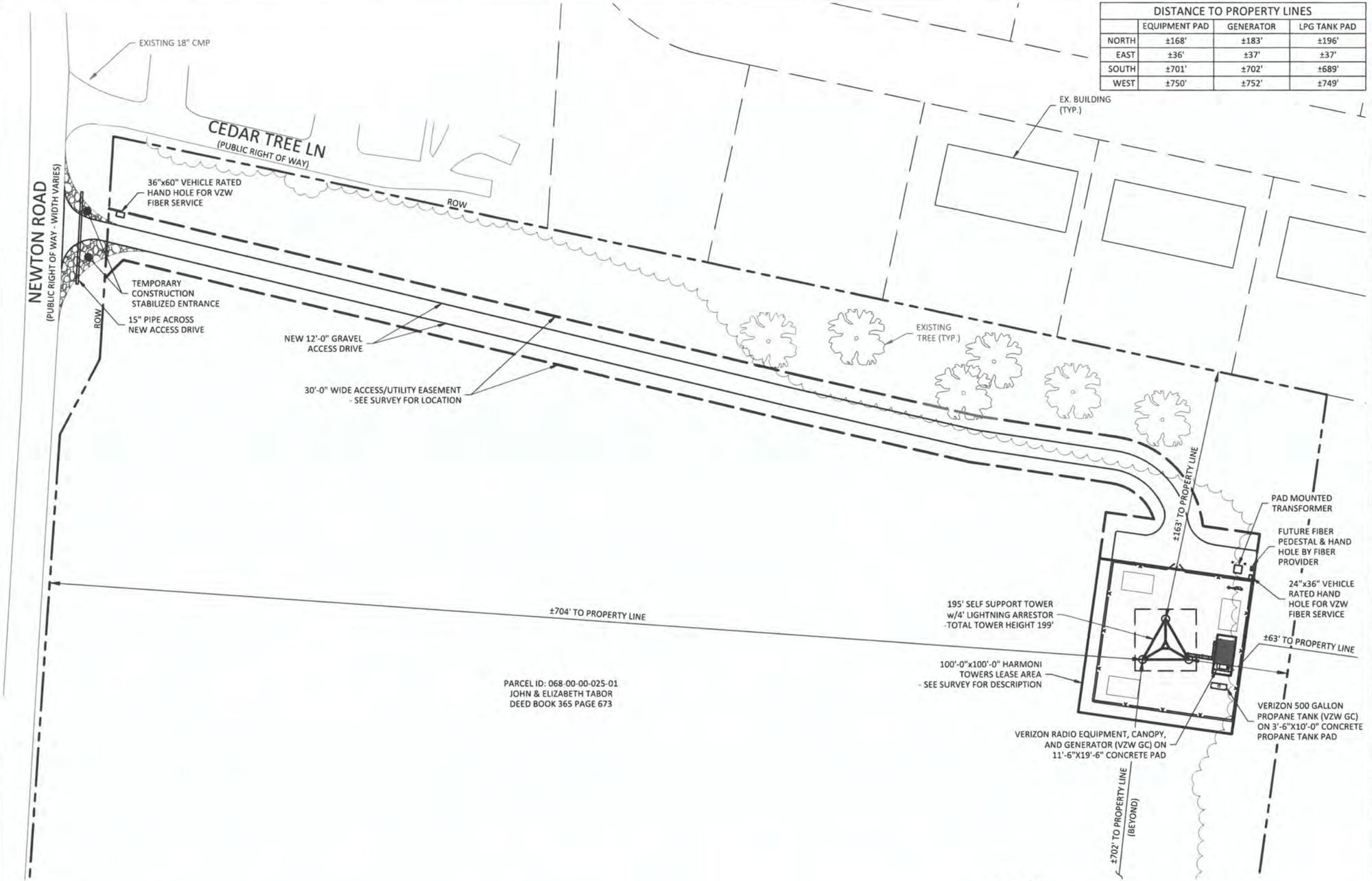
HARMONI TOWERS SITE NAME:
RUSSELLVILLE

POD NUMBER:	21-102848
DRAWN BY:	POD
CHECKED BY:	MEP
DATE:	05.16.22

SHEET TITLE:
OVERALL SITE PLAN W/AERIAL OVERLAY

SHEET NUMBER:
C-1

DISTANCE TO PROPERTY LINES			
	EQUIPMENT PAD	GENERATOR	LPG TANK PAD
NORTH	±168'	±183'	±196'
EAST	±36'	±37'	±37'
SOUTH	±701'	±702'	±689'
WEST	±750'	±752'	±749'



LEGEND

- PROPOSED LEASE LINE
- PROPOSED EASEMENT
- PROPOSED GRAVEL
- PROPOSED FENCE
- EXISTING DITCH
- EXISTING PAVEMENT
- PROPERTY LINE
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- PROPOSED MULCH

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OVERALL SITE PLAN W/DISTANCE TO PROPERTY LINES

SCALE: 1" = 65'

POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

HARMONI
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LITTLE ROCK, AR 72212

07/19/2022

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ZONING DRAWINGS

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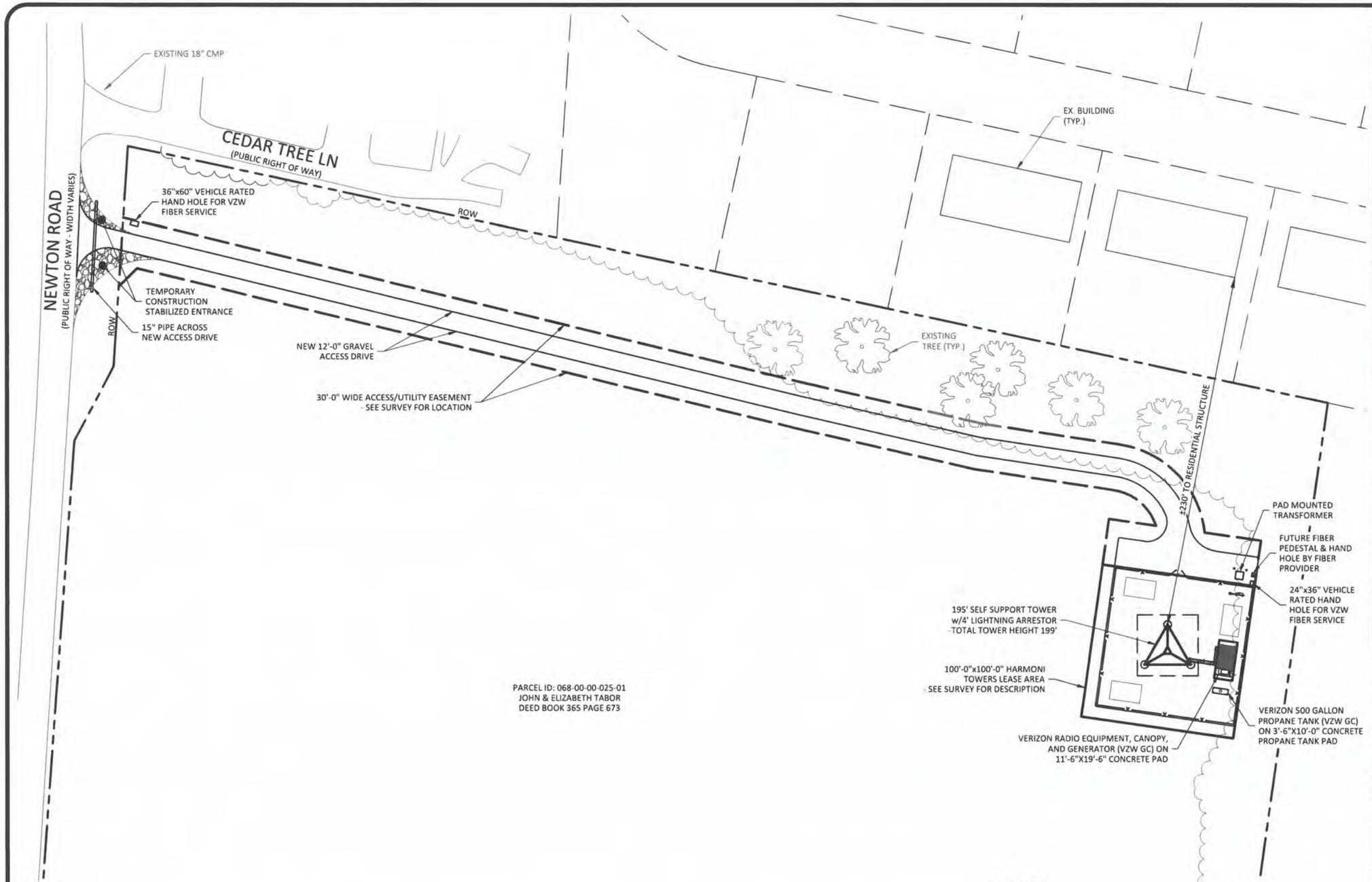
POD NUMBER:	21-102848
DRAWN BY:	POD
CHECKED BY:	MEP
DATE:	05.16.22

SHEET TITLE:
OVERALL SITE PLAN W/DISTANCE TO PROPERTY LINES

SHEET NUMBER:
C-1A

DigiSigner Document ID: 3378c843-75bc-4b18-a47c-a7587c9519f4



PARCEL ID: 068-00-00-025-01
JOHN & ELIZABETH TABOR
DEED BOOK 365 PAGE 673

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0' 65' 130'
1"=65'

DISTANCE TO RESIDENTIAL STRUCTURES
SCALE: 1" = 65'

N

LEGEND

- PROPOSED LEASE LINE
- PROPOSED EASEMENT
- PROPOSED GRAVEL
- PROPOSED FENCE
- EXISTING DITCH
- EXISTING PAVEMENT
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- PROPOSED MULCH

POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

HARMONI
11101 ANDERSON DRIVE, SUITE 200
LITTLE ROCK, AR 72212

07/19/2022

STATE OF KENTUCKY
MARK E. PATTERSON
16,300
LICENSED PROFESSIONAL ENGINEER

EN PERMIT: 3594

ZONING DRAWINGS

REV.	DATE	DESCRIPTION
A	6.28.22	ISSUED FOR REVIEW
B	7.18.22	TOWER OWNER COMMENTS
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SITE INFORMATION:
CK RUSSELLVILLE CAP
CREEKWOOD DRIVE
RUSSELLVILLE, KY 42276
LOGAN COUNTY

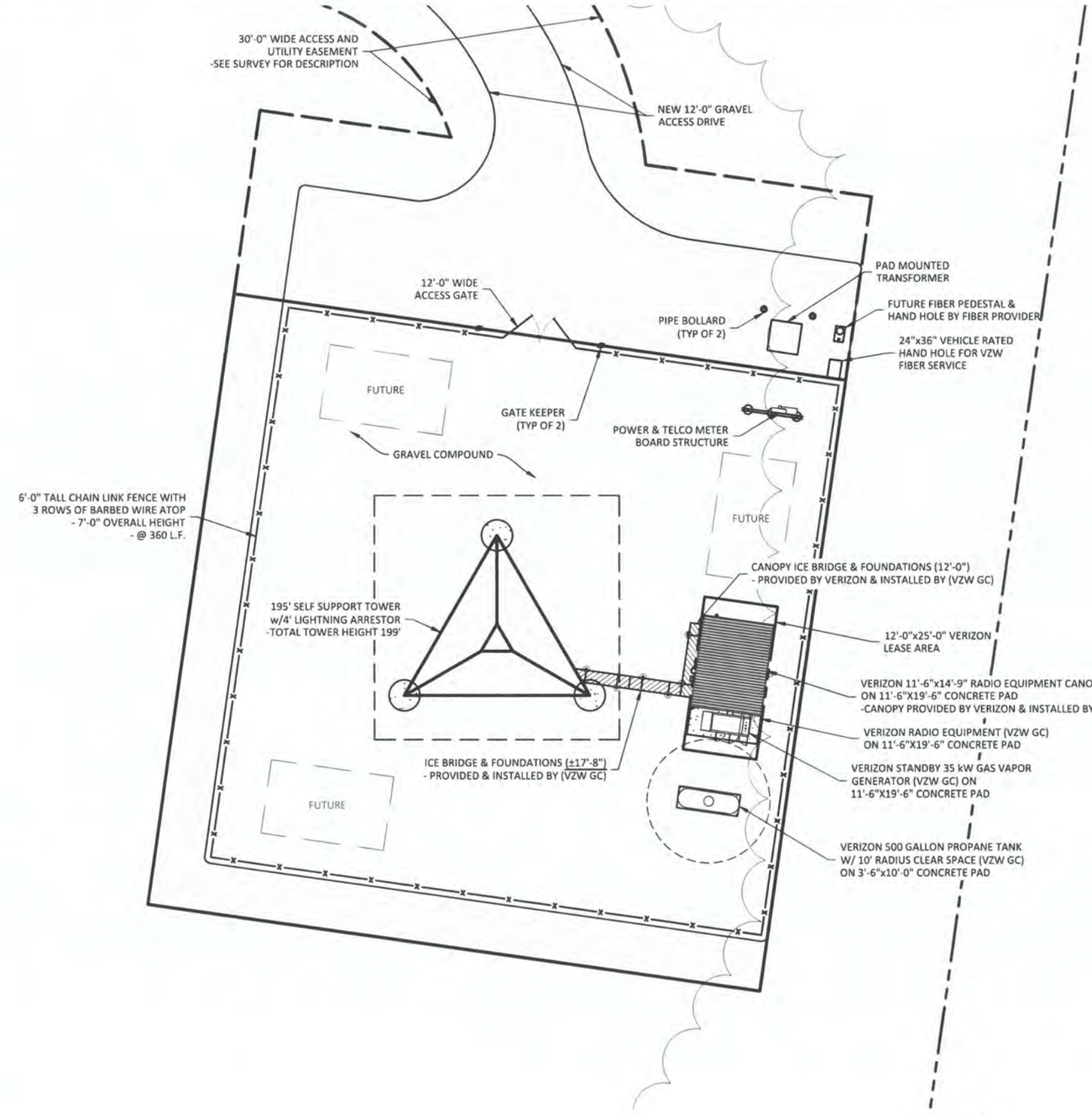
HARMONI TOWERS SITE NUMBER:
KYBGN2037

HARMONI TOWERS SITE NAME:
RUSSELLVILLE

POD NUMBER:	21-102848
DRAWN BY:	POD
CHECKED BY:	MEP
DATE:	05.16.22

SHEET TITLE:
DISTANCE TO RESIDENTIAL STRUCTURES

SHEET NUMBER:
C-1B



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1-800-752-6007
PER KENTUCKY STATE LAW, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

*NOTE:
GENERAL CONTRACTOR IS TO ENSURE THERE IS NO DISTURBANCE OF PROPERTY, SOIL, ETC. OUTSIDE OF THE STAKED LEASE AREA WITHOUT APPROVAL FROM VERIZON CONSTRUCTION MANAGER

0' 20' 40'
1"=20'

DETAILED SITE PLAN
SCALE: 1" = 20'

N

LEGEND
- PROPOSED LEASE LINE
- PROPOSED EASEMENT
- PROPOSED GRAVEL
- PROPOSED FENCE
- PROPERTY LINE
- PROPOSED MULCH

POD
POWER OF DESIGN
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LOUISVILLE, KY 40299
502-437-5252

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LITTLE ROCK, AR 72212

07/19/2022

STATE OF KENTUCKY
MARK E. PATTERSON
16,300
LICENSED PROFESSIONAL ENGINEER

EN PERMIT: 3594

ZONING DRAWINGS

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CREEKWOOD DRIVE
RUSSELLVILLE, KY 42276
LOGAN COUNTY

HARMONI TOWERS SITE NUMBER:
KYBGN2037

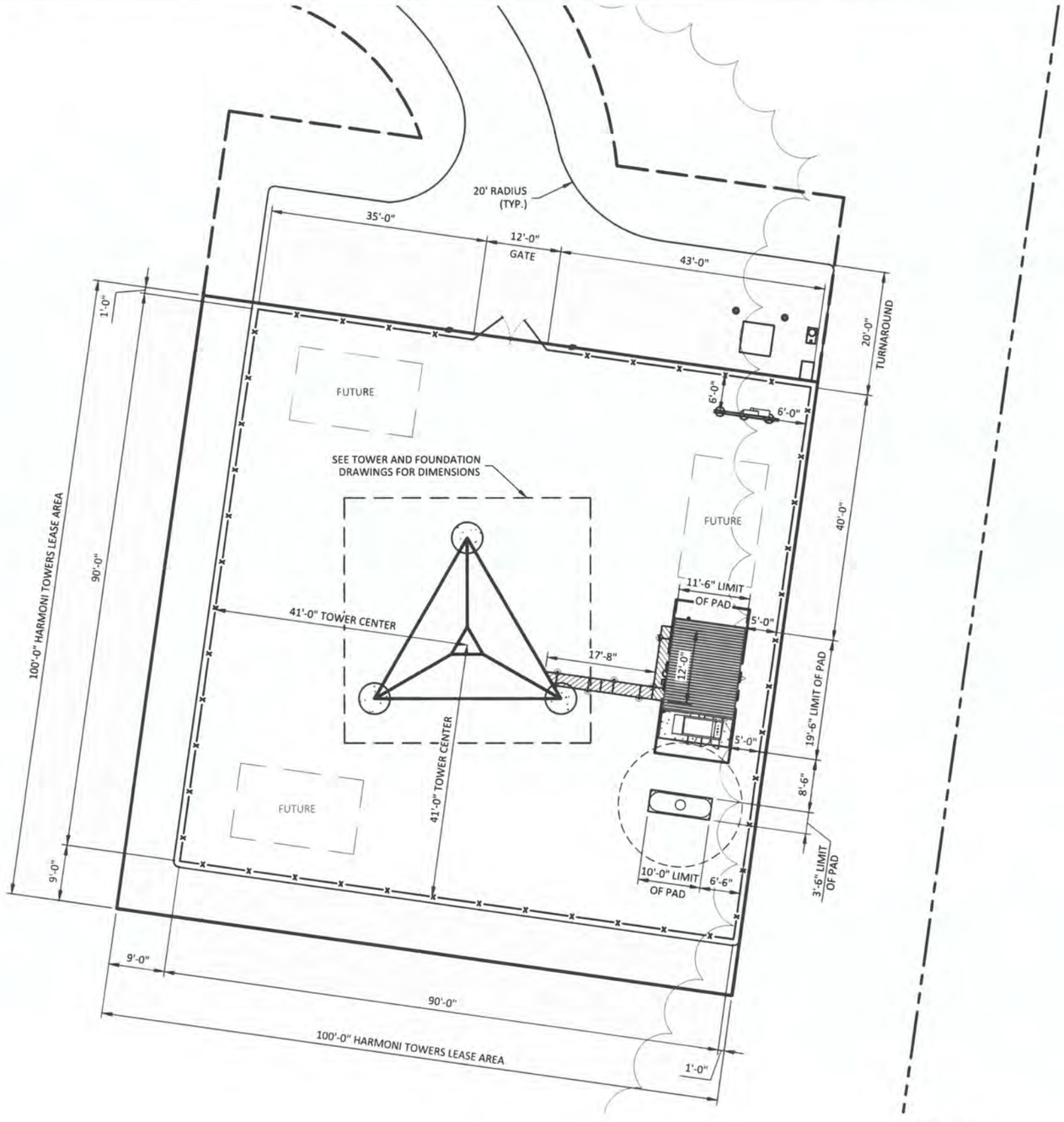
HARMONI TOWERS SITE NAME:
RUSSELLVILLE

POD NUMBER:	21-102848
DRAWN BY:	POD
CHECKED BY:	MEP
DATE:	05.16.22

SHEET TITLE:
DETAILED SITE PLAN

SHEET NUMBER:
C-3

DigiSigner Document ID: 3378c843-75bc-4b18-a47c-a7587c9519f4



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0' 20' 40'
1"=20'

DIMENSIONED SITE PLAN
SCALE: 1" = 20'

N

LEGEND
- PROPOSED LEASE LINE
- PROPOSED EASEMENT
- PROPOSED GRAVEL
- PROPOSED FENCE
- PROPERTY LINE
- PROPOSED MULCH

POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

HARMONI
11101 ANDERSON DRIVE, SUITE 200
LITTLE ROCK, AR 72212

07/19/2022

STATE OF KENTUCKY
MARK E. PATTERSON
16,300
LICENSED PROFESSIONAL ENGINEER

EN PERMIT: 3594

ZONING DRAWINGS

REV.	DATE	DESCRIPTION
A	6.28.22	ISSUED FOR REVIEW
B	7.18.22	TOWER OWNER COMMENTS
0	7.19.22	ISSUED AS FINAL

SITE INFORMATION:
CK RUSSELLVILLE CAP
CREEKWOOD DRIVE
RUSSELLVILLE, KY 42276
LOGAN COUNTY

HARMONI TOWERS SITE NUMBER:
KYBGN2037

HARMONI TOWERS SITE NAME:
RUSSELLVILLE

POD NUMBER:	21-102848
DRAWN BY:	POD
CHECKED BY:	MEP
DATE:	05.16.22

SHEET TITLE:
DIMENSIONED SITE PLAN

SHEET NUMBER:
C-4

May 6, 2022 POD Project #: 22-124720

VERIZON WIRELESS

1A Letter
Site Name: **CK Russellville Cap**
Site Number: **689715**
Site Address: **East side of Newtown Road**
North of Creekwood Drive
Russellville, KY 42276
County: **Logan**
USGS Quad Map: **Russellville, KY**

Site Coordinates:

NAD 83
Latitude: **36° 51' 50.300568" (36.863972°)**
Longitude: **-86° 53' 09.848060" (-86.886069°)**

Site Elevation **(NAVD88)**: **580.8' ± AMSL**

The horizontal coordinates are per the North American Datum of 1983 (2011) Kentucky State Plane Single Zone. Coordinates are shown as degrees, minutes and seconds which were derived from KDOT VRS RTK Network.

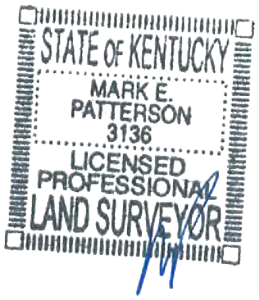
The vertical elevations are per the North American Vertical Datum of 1988, which were derived from KDOT VRS RTK Network.

I hereby certify that the horizontal and vertical locations are accurate to within 1A reporting requirements (20'± horizontally and 3'± feet vertically). The type of GPS survey utilized was network adjusted real time kinematic (KDOT VRS RTK Network) with the orthometric height computed using GEOID18.

The above-mentioned coordinates were established using "Spectra Precision Epoch 50 receivers" and are tied to the National Geodetic Reference System established by the National Geodetic Survey.

Consultant

Mark E. Patterson, PLS
Power of Design Group, LLC
11490 Bluegrass Parkway
Louisville, KY 40299



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod 1"x10'	195	Sector2(CaAa=10000 Sq.in)No Ice (Carrier 3)	166
Sector1(CaAa=13333,33 Sq.in)No Ice (Carrier 1)	190	Sector3(CaAa=10000 Sq.in)No Ice (Carrier 3)	166
Sector2(CaAa=13333,33 Sq.in)No Ice (Carrier 1)	190	4 1/2" OD Dish Mount (Carrier 4)	154
Sector3(CaAa=13333,33 Sq.in)No Ice (Carrier 1)	190	4 1/2" OD Dish Mount (Carrier 4)	154
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 2)	178	6' MW Dish (Carrier 4)	154
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 2)	178	6' MW Dish (Carrier 4)	154
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 2)	178	4 1/2" OD Dish Mount (Carrier 5)	142
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 3)	166	4 1/2" OD Dish Mount (Carrier 5)	142
		6' MW Dish (Carrier 5)	142
		6' MW Dish (Carrier 5)	142

MATERIAL STRENGTH

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

TOWER DESIGN NOTES

1. Tower is located in Logan County, Kentucky.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 106 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 30 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.000 ft
8. Please see feedline plan for proper feedline placement. Deviation from plan may reduce tower capacity.

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 406 K
SHEAR: 31 K

UPLIFT: -360 K
SHEAR: 29 K

AXIAL 151 K
SHEAR 7 K
MOMENT 946 kip-ft
TORQUE 2 kip-ft
30 mph WIND - 1.500 in ICE

AXIAL 54 K
SHEAR 53 K
MOMENT 6550 kip-ft
TORQUE 17 kip-ft
REACTIONS - 106 mph WIND

STATE OF KENTUCKY
BRAD F. MILANOWSKI
203111
LICENSED PROFESSIONAL ENGINEER

12/13/22

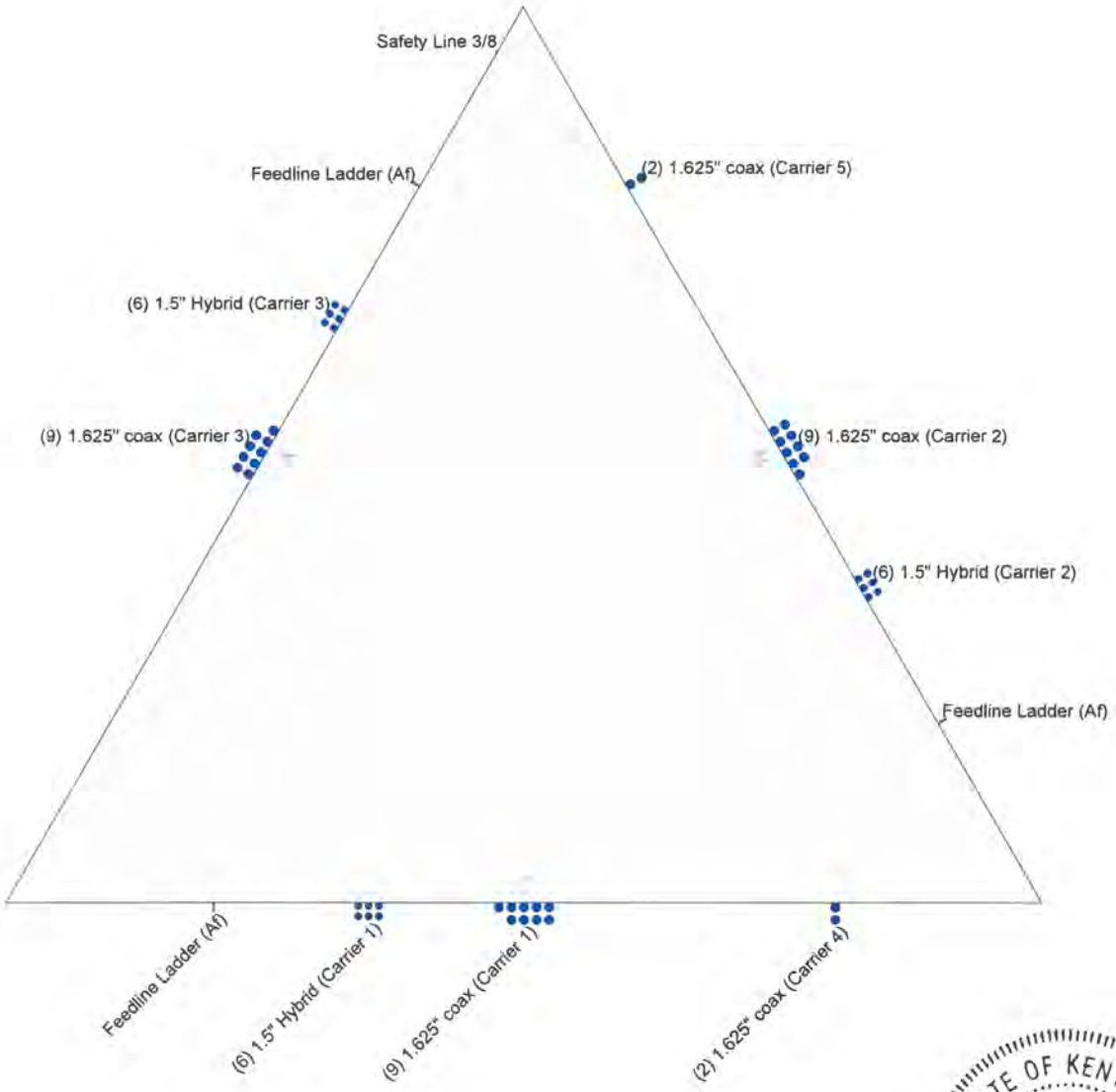
ARCOSA
TELECOM STRUCTURES

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

Job: ATS# 9830 - Russellville (Site# KYBGN2037)			
Project: 195' SST/36.863972, -86.886069			
Client: Harmoni Towers	Drawn by: daniel.hast	App'd:	
Code: TIA-222-H	Date: 12/09/22	Scale: NTS	
Path:		Dwg No. E-1	

Feed Line Plan

_____ Round _____ Flat _____ App In Face _____ App Out Face



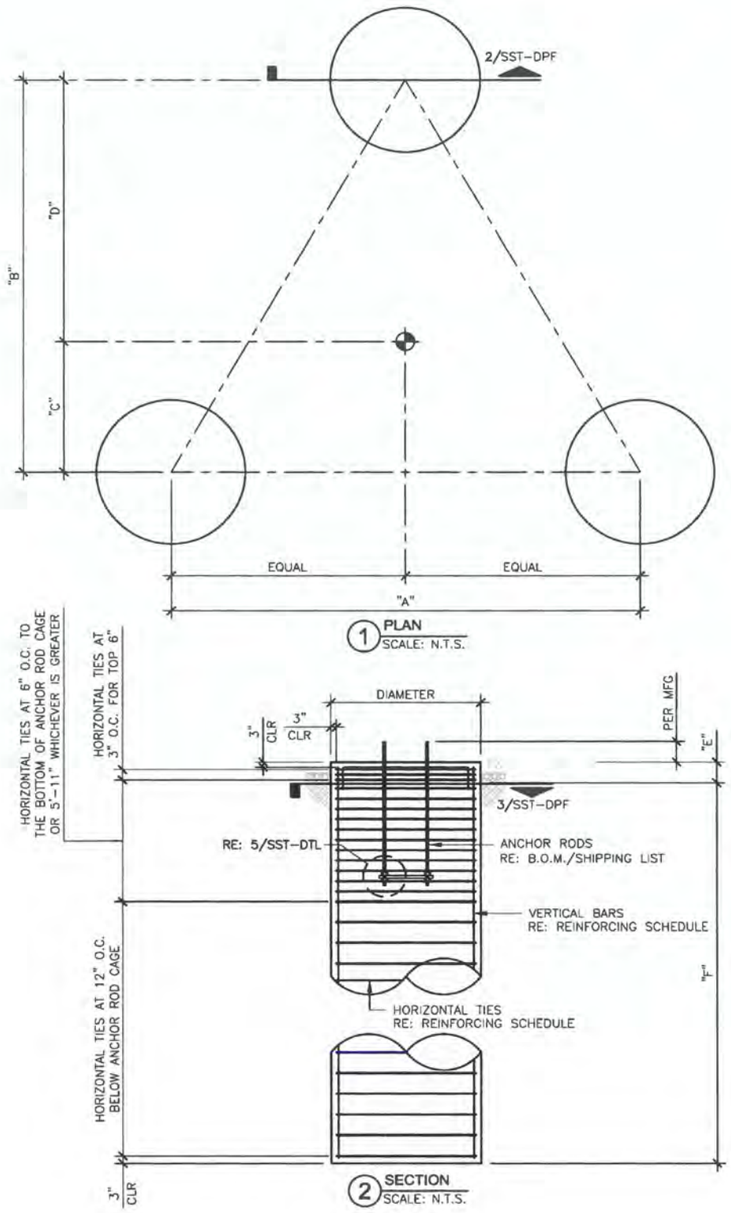
STATE OF KENTUCKY
BRAD P. MILANOWSKI
203
PROFESSIONAL ENGINEER
LICENSED

12/13/22

ARCOSA
TELECOM STRUCTURES

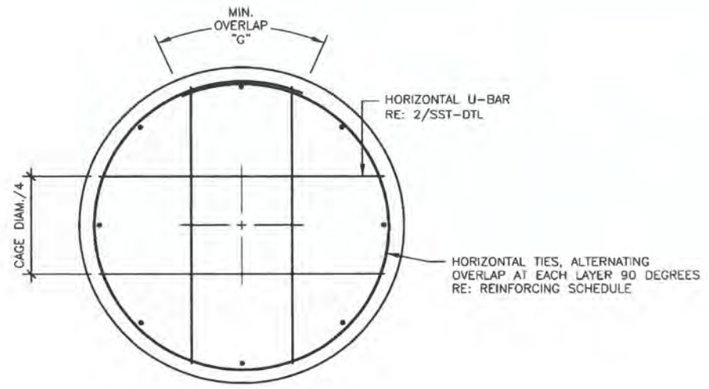
B+T Group
1717 S Boulder Ave, Suite 300
Tulsa, OK 74119
Phone: (918) 587-4630
FAX: (918) 295-0265

Job: ATS# 9830 - Russellville (Site# KYBGN2037)			
Project: 195' SST/36.863972, -86.886069			
Client: Harmoni Towers	Drawn by: daniel.hast	App'd:	
Code: TIA-222-H	Date: 12/09/22	Scale: NTS	
Path:		Dwg No. E-7	



1 PLAN
SCALE: N.T.S.

2 SECTION
SCALE: N.T.S.



3 SECTION
SCALE: N.T.S.

NOTES:
1. REINFORCEMENT STEEL SHALL CONFIRM TO THE REQUIREMENT OF ASTM A-615 (GRADE 60) EXCEPT THAT TIES MAY BE ASTM-615 (GRADE 40) WITH 3" MINIMUM CLEAR COVER.
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: POWER OF DESIGN
   PROJECT NUMBER: 21-102846
   DATE: 11/11/2022
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. TOTAL CONCRETE VOLUME FOR ALL (3) PIERS IN CUBIC YARDS: 32.81
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 (2) 6"X12" OR (3) 4"X8" CONCRETE CYLINDERS PER INDIVIDUAL FOUNDATION AND A MINIMUM OF (6) 6"X12" OR (6) 4"X8" CYLINDERS PER BATCH REQUIRED.
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	19' 6"
B	16' 10-5/8"
C	5' 7-9/16"
D	11' 3-1/8"
E	0' 6"
F	23' 0"
MIN. OVERLAP "G"	2' 3"
DIAMETER	4' 0"

REINFORCING SCHEDULE	SIZE	TOTAL QTY
VERTICAL BARS	# 8	36
HORIZONTAL TIES	# 4	93
U-BAR HORIZONTAL	# 4	12

BASE REACTIONS: (FACTORED LOADS)		
GLOBAL REACTIONS		
MOMENT	6550	KIP-FT
AXIAL	54	KIPS
SHEAR	53	KIPS
REACTIONS PER LEG		
COMPRESSION AXIAL	406	KIPS
COMPRESSION SHEAR	31	KIPS
UPLIFT AXIAL	360	KIPS
UPLIFT SHEAR	29	KIPS

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

ARCOSA
TELECOM STRUCTURES
4020 TULL AVE. MUSKOGEE, OK 74403

ISSUED FOR:

REV	DATE	DESCRIPTION
0	12/09/22	ISSUED FOR CONSTRUCTION

COA: 4011

EXPIRES: 12/31/2023

STATE OF KENTUCKY
BRAD R. MILANOWSKI
25011
LICENSED PROFESSIONAL ENGINEER
12/13/22

PROJECT INFORMATION:

PROJECT NO: 166509_001_01_0001
SITE NAME: RUSSELLVILLE
SITE NO: 9830
CLIENT NAME: ARCOSA TELECOM STRUCTURES

DRAWN BY: DANIEL HAST
CHECKED BY:

SHEET TITLE:

DRILLED PIER FOUNDATION

SHEET NUMBER:	REVISION:
SST-DPF	0

DIMENSIONING SCHEDULE	
A	28' 6"
B	4' 6"
C	19' 6"
D	5' 9-11/16"
E	16' 10-5/8"
F	2' 9-3/4"
J	0' 6"
K	6' 0"
L	2' 0"
MIN. OVERLAP "M"	2' 3"
DIAMETER	3' 0"

REINFORCING SCHEDULE	SIZE	TOTAL QTY
VERTICAL BARS WITH 90° BEND	# 8	30
HORIZONTAL TIES	# 4	42
HORIZONTAL U-BAR (PEDESTAL)	# 4	12
TOP HORIZONTAL BARS	# 8	58
BOTTOM HORIZONTAL BARS	# 8	58
CORNER BARS	# 4	8
VERTICAL U-BARS (PAD)	# 4	58

BASE REACTIONS: (FACTORED LOADS)		
GLOBAL REACTIONS		
MOMENT	6550	KIP-FT
AXIAL	54	KIPS
SHEAR	53	KIPS
REACTIONS PER LEG		
COMPRESSION AXIAL	406	KIPS
COMPRESSION SHEAR	31	KIPS
UPLIFT AXIAL	360	KIPS
UPLIFT SHEAR	29	KIPS

NOTES:

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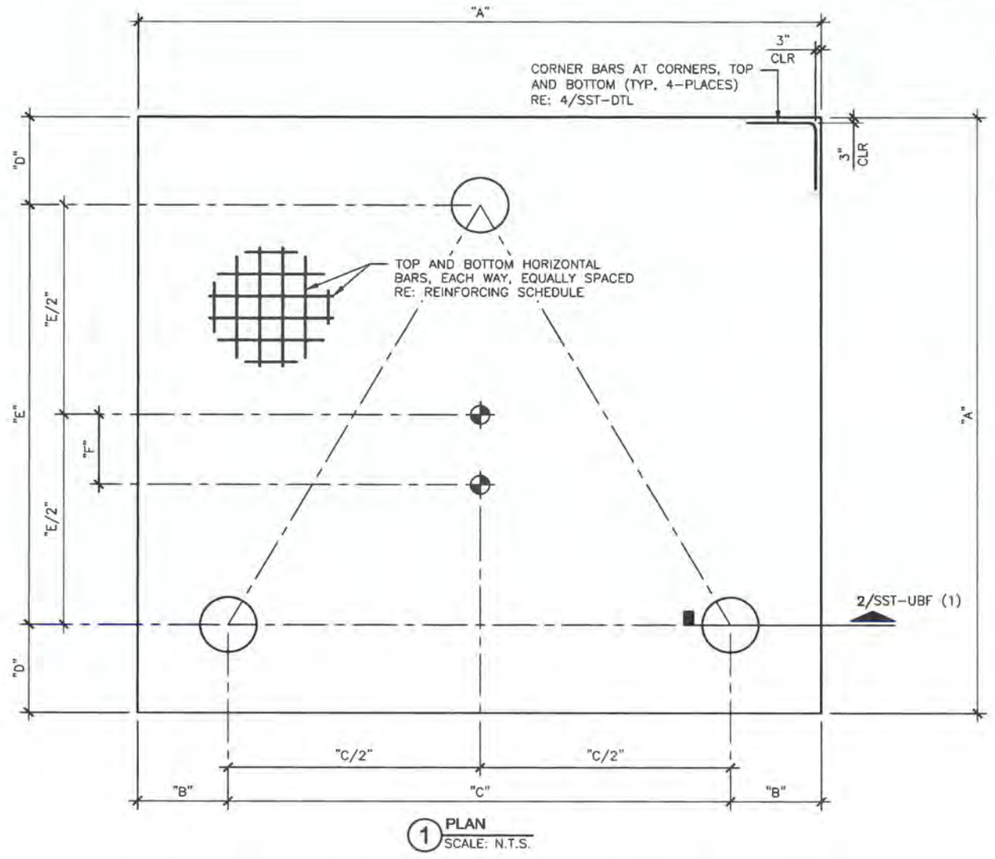
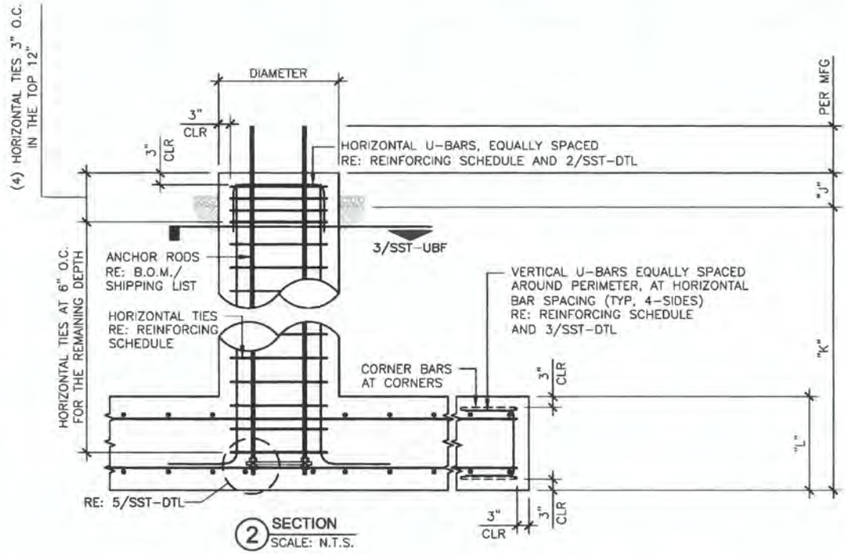
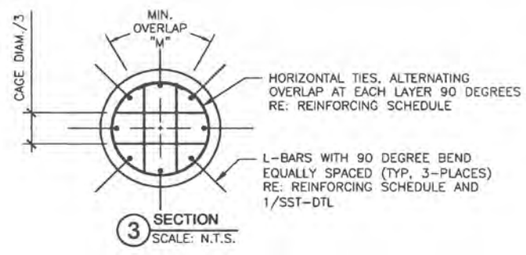


1 PLAN
SCALE: N.T.S.



2 SECTION
SCALE: N.T.S.



3 SECTION
SCALE: N.T.S.

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(918) 587-4630

ARCOSA
TELECOM STRUCTURES

4020 TULL AVE. MUSKOGEE, OK 74403

ISSUED FOR:

REV	DATE	DESCRIPTION
0	12/09/22	ISSUED FOR CONSTRUCTION

COA: 4011

EXPIRES: 12/31/2023

STATE OF KENTUCKY
BRAD R. MILANOWSKI
25211
LICENSED PROFESSIONAL ENGINEER
12/13/22

PROJECT INFORMATION:

PROJECT NO: 166509_001_01_0001
SITE NAME: RUSSELLVILLE
SITE NO: 9830
CLIENT NAME: ARCOSA TELECOM STRUCTURES

DRAWN BY: DANIEL HAST
CHECKED BY:

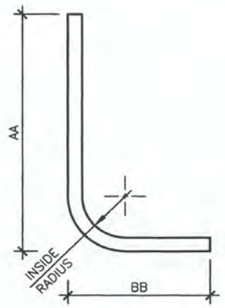
SHEET TITLE:

UNIT BASE FOUNDATION

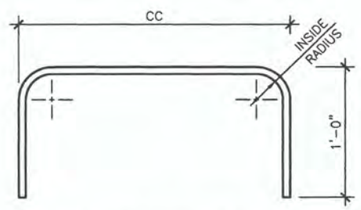
SHEET NUMBER:	REVISION:
SST-UBF	0

DIMENSIONING SCHEDULE	
AA*	5' 10"
BB	1' 3"
CC*	VARIES
DD*	1' 6"
EE	3' 0"

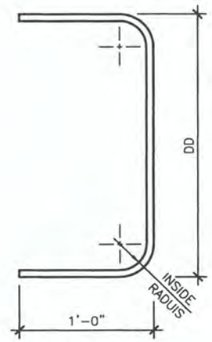
*NOTE: CONTRACTOR TO VERIFY DIMENSIONS PRIOR TO FABRICATION



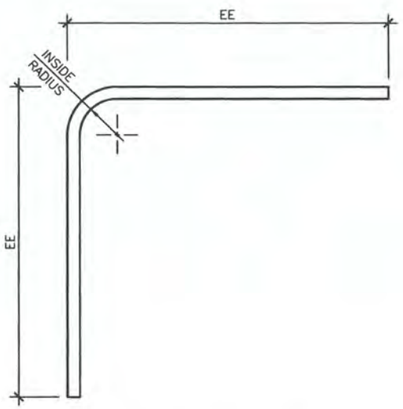
1 L-BAR
SCALE: N.T.S.



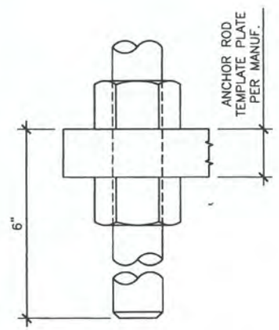
2 HORIZONTAL U-BAR
SCALE: N.T.S.



3 VERTICAL U-BAR
SCALE: N.T.S.



4 CORNER BAR
SCALE: N.T.S.



5 ANCHOR ROD DETAIL
SCALE: N.T.S.

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(918) 587-4630

ARCOSA
TELECOM STRUCTURES
4020 TULL AVE. MUSKOGEE, OK 74403

ISSUED FOR:

REV	DATE	DESCRIPTION
0	12/09/22	ISSUED FOR CONSTRUCTION

COA: 4011

EXPIRES: 12/31/2023

STATE OF KENTUCKY
BRAD R. MILANOWSKI
25911
LICENSED PROFESSIONAL ENGINEER
12/13/22

PROJECT INFORMATION:

PROJECT NO: 166509_001_01_0001
SITE NAME: RUSSELLVILLE
SITE NO: 9830
CLIENT NAME: ARCOSA TELECOM STRUCTURES

DRAWN BY: DANIEL HAST
CHECKED BY:

SHEET TITLE:

DIMENSIONING DETAIL

SHEET NUMBER:	REVISION:
SST-DTL	0

Drilled Pier Foundation

Project # :	166509_001_01_0001
Site Name:	Russellville
Site Number:	9830
TIA-222 Revison:	H
Tower Type:	Self Support

Applied Loads	Comp.	Uplift
Moment (kip-ft)		
Axial Force (kips)	406	360
Shear Force (kips)	31	29

Material Properties		
Concrete Strength, f'c:	4	ksi
Rebar Strength, Fy:	60	ksi
Tie Yield Strength, Fyt:	40	ksi

Pier Design Data		
Depth	23	ft
Ext. Above Grade	0.5	ft
Pier Section 1		
From 0.5' above grade to 23' below grade		
Pier Diameter	4	ft
Rebar Quantity	12	
Rebar Size	8	
Clear Cover to Ties	3	in
Tie Size	4	
Tie Spacing	12	in

Rebar & Pier Options
Embedded Pole Inputs
Belled Pier Inputs

Analysis Results		
Soil Lateral Check	*Compression*	*Uplift*
$D_{v=0}$ (ft from TOC)	10.83	10.83
Soil Safety Factor	75.56	80.77
Max Moment (kip-ft)	254.81	238.37
Rating	*1.8%*	*1.6%*
Soil Vertical Check	*Compression*	*Uplift*
Skin Friction (kips)	330.15	330.15
End Bearing (kips)	706.86	-
Weight of Concrete (kips)	53.16	39.87
Total Capacity (kips)	1037.01	370.02
Axial (kips)	459.16	360.00
Rating	*44.3%*	*97.3%*
Reinforced Concrete Flexure	*Compression*	*Uplift*
Critical Depth (ft from TOC)	11.07	8.32
Critical Moment (kip-ft)	254.63	219.58
Critical Moment Capacity	1328.50	419.98
Rating	*19.2%*	*52.3%*
Reinforced Concrete Shear	*Compression*	*Uplift*
Critical Depth (ft from TOC)	17.17	0.00
Critical Shear (kip)	40.23	29.00
Critical Shear Capacity	340.83	127.05
Rating	*11.8%*	*22.8%*

Structural Foundation Rating	**52.8%**
Soil Interaction Rating	**97.7%**

Check Limitation	
Apply TIA-222-H Section 15.5:	☐
N/A	☐
Additional Longitudinal Rebar	
Input Effective Depths (else Actual):	☐
Shear Design Options	
Check Shear along Depth of Pier:	☑
Utilize Shear-Friction Methodology:	☐
Override Critical Depth:	☐

Go to Soil Calculations

Soil Profile

Groundwater Depth	N/A	# of Layers	4

Layer	Top (ft)	Bottom (ft)	Thickness (ft)	γ_{soil} (pcf)	$\gamma_{concrete}$ (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	1.7	1.7	110	150			0.000	0.000					Cohesionless
2	1.7	2.5	0.3	110	150			0.275	0.275	0.00	0.00			Cohesive
3	2	6	4	120	150	2		1.100	1.100	0.25	0.25			Cohesive
4	6	23	17	135	150	15		6.750	6.750	2.00	2.00	75		Cohesive

SST Unit Base Foundation

Project #:	166509_001_01_0
Site Name:	Russellville
Site #:	9830

TIA-222 Revision: H

Top & Bot. Pad Rein. Different?:	☐
Tower Centroid Offset?:	☑
Block Foundation?:	☐
Rectangular Pad?:	☐

Superstructure Analysis Reactions

Global Moment, **M**:	6550	ft-kips
Global Axial, **P**:	54	kips
Global Shear, **V**:	53	kips
Leg Compression, P_{comp}:	406	kips
Leg Comp. Shear, V_{u_comp}:	31	kips
Leg Uplift, P_{uplift}:	360	kips
Leg Uplift. Shear, V_{u_uplift}:	29	kips
Tower Height, **H**:	195	ft
Base Face Width, **BW**:	19.5	ft
BP Dist. Above Fdn, bp_{dist}:	3	in

Foundation Analysis Checks

	Capacity	Demand	Rating	Check
Lateral (Sliding) (kips)	1457.01	53.00	**3.6%**	**Pass**
Bearing Pressure (ksf)	7.50	4.98	**66.4%**	**Pass**
*Overturning (kip*ft)*	7893.71	7058.00	**89.4%**	**Pass**
*Pier Flexure (Comp.) (kip*ft)*	820.60	139.50	**17.0%**	**Pass**
*Pier Flexure (Tension) (kip*ft)*	138.49	130.50	**94.2%**	**Pass**
Pier Compression (kip)	4499.01	411.73	**9.2%**	**Pass**
*Pad Flexure (kip*ft)*	1949.42	1634.97	**83.9%**	**Pass**
Pad Shear - 1-way (kips)	632.68	328.50	**51.9%**	**Pass**
Pad Shear - Comp 2-way (ksi)	0.190	0.125	**65.8%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	1214.14	83.70	**6.9%**	**Pass**
Pad Shear - Tension 2-way (ksi)	0.190	0.128	**67.4%**	**Pass**
*Flexural 2-way (Tension) (kip*ft)*	1214.14	78.30	**6.4%**	**Pass**

Structural Rating:	**94.2%**
Soil Rating:	**89.4%**

Pier Properties

Pier Shape:	Circular	
Pier Diameter, **dpier**:	3.0	ft
Ext. Above Grade, **E**:	0.50	ft
Pier Rebar Size, **Sc**:	8	
Pier Rebar Quantity, **mc**:	10	
Pier Tie/Spiral Size, **St**:	4	
Pier Tie/Spiral Quantity, **mt**:	14	
Pier Reinforcement Type:	Tie	
Pier Clear Cover, cc_{pier}:	3	in

Pad Properties

Depth, **D**:	6.00	ft
Pad Width, W_1:	28.50	ft
Pad Thickness, **T**:	2.00	ft
Pad Rebar Size (Bottom dir. 2), Sp_2:	8	
Pad Rebar Quantity (Bottom dir. 2), mp_2:	29	
Pad Clear Cover, cc_{pad}:	3	in

Material Properties

Rebar Grade, **Fy**:	60	ksi
Concrete Compressive Strength, **F'c**:	4	ksi
Dry Concrete Density, **δc**:	150	pcf

Soil Properties

Total Soil Unit Weight, **γ**:	110	pcf
Ultimate Gross Bearing, Qult:	10.000	ksf
Cohesion, **Cu**:	2.000	ksf
Friction Angle, **ϕ**:		degrees
SPT Blow Count, N_{blows}:		
Base Friction, **μ**:		
Neglected Depth, **N**:	2.5	ft
Foundation Bearing on Rock?	Yes	
Groundwater Depth, **gw**:	N/A	ft

<-- Toggle between Gross and Net

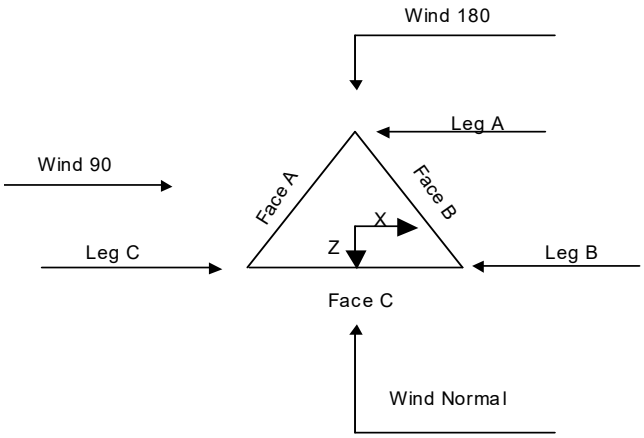
Tower Input Data

The main tower is a 3x free standing tower with an overall height of 195.000 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 4.875 ft at the top and 19.500 ft at the base.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

Tower is located in Logan County, Kentucky.
Tower base elevation above sea level: 582.000 ft.
Basic wind speed of 106 mph.
Risk Category II.
Exposure Category C.
Simplified Topographic Factor Procedure for wind speed-up calculations is used.
Topographic Category: 1.
Crest Height: 0.000 ft.
Nominal ice thickness of 1.500 in.
Ice thickness is considered to increase with height.
Ice density of 56.000 pcf.
A wind speed of 30 mph is used in combination with ice.
Temperature drop of 50.000 °F.
Deflections calculated using a wind speed of 60 mph.
Please see feedline plan for proper feedline placement. Deviation from plan may reduce tower capacity..
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in tower member design is 1.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Horizontals	Assume Legs Pinned	√ Calculate Redundant Bracing Forces
Consider Moments - Diagonals	√ Assume Rigid Index Plate	Ignore Redundant Members in FEA
Use Moment Magnification	√ Use Clear Spans For Wind Area	√ SR Leg Bolts Resist Compression
√ Use Code Stress Ratios	√ Use Clear Spans For KL/r	All Leg Panels Have Same Allowable
√ Use Code Safety Factors - Guys	Retension Guys To Initial Tension	Offset Girt At Foundation
Escalate Ice	√ Bypass Mast Stability Checks	√ Consider Feed Line Torque
Always Use Max Kz	√ Use Azimuth Dish Coefficients	√ Include Angle Block Shear Check
Use Special Wind Profile	√ Project Wind Area of Appurt.	Use TIA-222-H Bracing Resist. Exemption
√ Include Bolts In Member Capacity	Autocalc Torque Arm Areas	Use TIA-222-H Tension Splice Exemption
√ Leg Bolts Are At Top Of Section	Add IBC .6D+W Combination	Poles
√ Secondary Horizontal Braces Leg	√ Sort Capacity Reports By Component	Include Shear-Torsion Interaction
Use Diamond Inner Bracing (4 Sided)	Triangulate Diamond Inner Bracing	Always Use Sub-Critical Flow
SR Members Have Cut Ends	Treat Feed Line Bundles As Cylinder	Use Top Mounted Sockets
SR Members Are Concentric	Ignore KL/ry For 60 Deg. Angle Legs	Pole Without Linear Attachments
		Pole With Shroud Or No Appurtenances
		Outside and Inside Corner Radii Are Known



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation ft	Assembly Database	Description	Section Width ft	Number of Sections	Section Length ft
T1	195.000-180.000			4.875	1	15.000
T2	180.000-160.000			6.000	1	20.000
T3	160.000-140.000			7.500	1	20.000
T4	140.000-120.000			9.000	1	20.000
T5	120.000-100.000			10.500	1	20.000
T6	100.000-80.000			12.000	1	20.000
T7	80.000-60.000			13.500	1	20.000
T8	60.000-40.000			15.000	1	20.000
T9	40.000-20.000			16.500	1	20.000
T10	20.000-0.000			18.000	1	20.000

Tower Section Geometry *(cont'd)*

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T1	195.000-180.000	4.667	X Brace	No	No	6.000	6.000
T2	180.000-160.000	4.750	X Brace	No	No	6.000	6.000
T3	160.000-140.000	4.750	X Brace	No	No	6.000	6.000
T4	140.000-120.000	4.750	X Brace	No	No	6.000	6.000
T5	120.000-100.000	4.750	X Brace	No	No	6.000	6.000

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T6	100.000-80.000	4.750	X Brace	No	No	6.000	6.000
T7	80.000-60.000	4.750	X Brace	No	No	6.000	6.000
T8	60.000-40.000	4.750	X Brace	No	No	6.000	6.000
T9	40.000-20.000	4.750	X Brace	No	No	6.000	6.000
T10	20.000-0.000	4.750	X Brace	No	No	6.000	6.000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 195.000-180.000	Solid Round	1 3/4	A529-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
T2 180.000-160.000	Solid Round	2 1/4	A529-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
T3 160.000-140.000	Solid Round	2 1/2	A529-50 (50 ksi)	Equal Angle	L2x2x3/16	A36M-50 (50 ksi)
T4 140.000-120.000	Solid Round	2 3/4	A529-50 (50 ksi)	Equal Angle	L2x2x1/4	A36M-50 (50 ksi)
T5 120.000-100.000	Solid Round	3	A529-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36M-50 (50 ksi)
T6 100.000-80.000	Solid Round	3 1/4	A529-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36M-50 (50 ksi)
T7 80.000-60.000	Solid Round	3 1/2	A529-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x1/4	A36M-50 (50 ksi)
T8 60.000-40.000	Solid Round	3 3/4	A529-50 (50 ksi)	Equal Angle	L3x3x3/16	A36M-50 (50 ksi)
T9 40.000-20.000	Solid Round	3 3/4	A529-50 (50 ksi)	Equal Angle	L3x3x1/4	A36M-50 (50 ksi)
T10 20.000-0.000	Solid Round	4	A529-50 (50 ksi)	Equal Angle	L3x3x1/4	A36M-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 195.000-180.000	Equal Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)	Solid Round		A529-50 (50 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T1 195.000-180.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T2 180.000-160.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T3 160.000-140.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T4 140.000-120.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T5 120.000-100.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T6 100.000-80.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T7 80.000-60.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T8 60.000-40.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T9 40.000-20.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000
T10 20.000-0.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T1 195.000-180.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T2 180.000-160.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T3 160.000-140.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T4 140.000-120.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T5 120.000-100.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T6 100.000-80.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1
T7 80.000-60.000	No	No	1	1 1	1 1	1 1	1 1	1 1	1 1	1 1

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T8	No	No	1	1	1	1	1	1	1	1
60.000-40.000				1	1	1	1	1	1	1
T9	No	No	1	1	1	1	1	1	1	1
40.000-20.000				1	1	1	1	1	1	1
T10	No	No	1	1	1	1	1	1	1	1
20.000-0.000				1	1	1	1	1	1	1

[1]*Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.*

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Net Width Deduct in	Leg U	Diagonal Net Width Deduct in	Diagonal U	Top Girt Net Width Deduct in	Top Girt U	Bottom Girt Net Width Deduct in	Bottom Girt U	Mid Girt Net Width Deduct in	Mid Girt U	Long Horizontal Net Width Deduct in	Long Horizontal U	Short Horizontal Net Width Deduct in	Short Horizontal U
T1	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
195.000-180.000														
T2	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
180.000-160.000														
T3	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
160.000-140.000														
T4	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
140.000-120.000														
T5	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
120.000-100.000														
T6	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
100.000-80.000														
T7	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
80.000-60.000														
T8	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
60.000-40.000														
T9	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
40.000-20.000														
T10	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
20.000-0.000														

Tower Elevation ft	Redundant Horizontal		Redundant Diagonal		Redundant Sub-Diagonal		Redundant Sub-Horizontal		Redundant Vertical		Redundant Hip		Redundant Hip Diagonal	
	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
T1 195.000-180.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T2 180.000-160.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T3 160.000-140.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T4 140.000-120.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T5 120.000-100.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T6 100.000-80.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T7 80.000-60.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T8 60.000-40.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T9 40.000-20.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T10 20.000-0.000	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 195.000-180.000	Flange	0.000 A325N	0	0.625 A325X	1	0.625 A325X	1	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T2 180.000-160.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T3 160.000-140.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T4 140.000-120.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T5 120.000-100.000	Flange	1.000 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T6 100.000-80.000	Flange	1.000 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0

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.
T7 80.000-60.000	Flange	1.000 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T8 60.000-40.000	Flange	1.250 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T9 40.000-20.000	Flange	1.250 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T10 20.000-0.000	Flange	1.250 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0

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
1.625" coax (Carrier 1)	C	No	No	Ar (CaAa)	190.000 - 10.000	0.000	0	9	5	0.750	1.980		0.001
1.5" Hybrid (Carrier 1) **	C	No	No	Ar (CaAa)	190.000 - 10.000	0.000	0.15	6	3	0.750	1.500		0.001
1.625" coax (Carrier 2)	B	No	No	Ar (CaAa)	178.000 - 10.000	0.000	0	9	5	0.750	1.980		0.001
1.5" Hybrid (Carrier 2) **	B	No	No	Ar (CaAa)	178.000 - 10.000	0.000	0.15	6	3	0.750	1.500		0.001
1.625" coax (Carrier 3)	A	No	No	Ar (CaAa)	166.000 - 10.000	0.000	0	9	5	0.750	1.980		0.001
1.5" Hybrid (Carrier 3) **	A	No	No	Ar (CaAa)	166.000 - 10.000	0.000	0.15	6	3	0.750	1.500		0.001
1.625" coax (Carrier 4) **	C	No	No	Ar (CaAa)	154.000 - 10.000	0.000	-0.3	2	1	0.750	1.980		0.001
1.625" coax (Carrier 5) **	B	No	No	Ar (CaAa)	142.000 - 10.000	0.000	-0.3	2	1	0.750	1.980		0.001
Safety Line 3/8 **	A	No	No	Ar (CaAa)	195.000 - 10.000	0.000	0.45	1	1	0.375	0.375		0.000
Feedline Ladder (Af)	C	No	No	Af (CaAa)	190.000 - 10.000	0.000	0.3	1	1	3.000	0.250		0.008
Feedline Ladder (Af)	B	No	No	Af (CaAa)	178.000 - 10.000	0.000	0.3	1	1	3.000	0.250		0.008
Feedline Ladder (Af) **	A	No	No	Af (CaAa)	166.000 - 10.000	0.000	0.3	1	1	3.000	0.250		0.008

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C_AA_A ft^2/ft	Weight klf
**								

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	195.000-180.000	A	0.000	0.000	0.563	0.000	0.003
		B	0.000	0.000	0.000	0.000	0.000
		C	0.000	0.000	27.237	0.000	0.214
T2	180.000-160.000	A	0.000	0.000	17.092	0.000	0.133
		B	0.000	0.000	49.026	0.000	0.386
		C	0.000	0.000	54.473	0.000	0.428
T3	160.000-140.000	A	0.000	0.000	55.223	0.000	0.433
		B	0.000	0.000	55.265	0.000	0.432
		C	0.000	0.000	60.017	0.000	0.451
T4	140.000-120.000	A	0.000	0.000	55.223	0.000	0.433
		B	0.000	0.000	62.393	0.000	0.461
		C	0.000	0.000	62.393	0.000	0.461
T5	120.000-100.000	A	0.000	0.000	55.223	0.000	0.433
		B	0.000	0.000	62.393	0.000	0.461
		C	0.000	0.000	62.393	0.000	0.461
T6	100.000-80.000	A	0.000	0.000	55.223	0.000	0.433
		B	0.000	0.000	62.393	0.000	0.461
		C	0.000	0.000	62.393	0.000	0.461
T7	80.000-60.000	A	0.000	0.000	55.223	0.000	0.433
		B	0.000	0.000	62.393	0.000	0.461
		C	0.000	0.000	62.393	0.000	0.461
T8	60.000-40.000	A	0.000	0.000	55.223	0.000	0.433
		B	0.000	0.000	62.393	0.000	0.461
		C	0.000	0.000	62.393	0.000	0.461
T9	40.000-20.000	A	0.000	0.000	55.223	0.000	0.433
		B	0.000	0.000	62.393	0.000	0.461
		C	0.000	0.000	62.393	0.000	0.461
T10	20.000-0.000	A	0.000	0.000	27.612	0.000	0.216
		B	0.000	0.000	31.197	0.000	0.231
		C	0.000	0.000	31.197	0.000	0.231

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_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
T1	195.000-180.000	A	1.785	0.000	0.000	5.916	0.000	0.074
		B		0.000	0.000	0.000	0.000	0.000
		C		0.000	0.000	42.086	0.000	0.863
T2	180.000-160.000	A	1.767	0.000	0.000	32.978	0.000	0.611
		B		0.000	0.000	75.478	0.000	1.543
		C		0.000	0.000	83.865	0.000	1.714
T3	160.000-140.000	A	1.745	0.000	0.000	91.206	0.000	1.794
		B		0.000	0.000	85.940	0.000	1.734

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight K
		C		0.000	0.000	100.726	0.000	1.944
T4	140.000-120.000	A	1.720	0.000	0.000	90.668	0.000	1.774
		B		0.000	0.000	107.508	0.000	2.026
		C		0.000	0.000	107.508	0.000	2.026
T5	120.000-100.000	A	1.692	0.000	0.000	90.049	0.000	1.752
		B		0.000	0.000	106.806	0.000	1.998
		C		0.000	0.000	106.806	0.000	1.998
T6	100.000-80.000	A	1.658	0.000	0.000	89.319	0.000	1.725
		B		0.000	0.000	105.978	0.000	1.966
		C		0.000	0.000	105.978	0.000	1.966
T7	80.000-60.000	A	1.617	0.000	0.000	88.426	0.000	1.694
		B		0.000	0.000	104.964	0.000	1.928
		C		0.000	0.000	104.964	0.000	1.928
T8	60.000-40.000	A	1.564	0.000	0.000	87.265	0.000	1.653
		B		0.000	0.000	103.647	0.000	1.878
		C		0.000	0.000	103.647	0.000	1.878
T9	40.000-20.000	A	1.486	0.000	0.000	85.577	0.000	1.594
		B		0.000	0.000	101.731	0.000	1.807
		C		0.000	0.000	101.731	0.000	1.807
T10	20.000-0.000	A	1.331	0.000	0.000	41.114	0.000	0.741
		B		0.000	0.000	48.967	0.000	0.835
		C		0.000	0.000	48.967	0.000	0.835

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	195.000-180.000	-1.219	4.305	-1.687	2.711
T2	180.000-160.000	1.785	-0.240	1.711	0.174
T3	160.000-140.000	0.299	-2.685	0.687	-1.860
T4	140.000-120.000	1.008	-3.876	1.688	-3.196
T5	120.000-100.000	1.017	-3.976	1.779	-3.425
T6	100.000-80.000	1.082	-4.262	1.902	-3.701
T7	80.000-60.000	1.140	-4.519	2.007	-3.950
T8	60.000-40.000	1.106	-4.443	2.018	-4.039
T9	40.000-20.000	1.152	-4.652	2.082	-4.231
T10	20.000-0.000	0.708	-2.935	1.287	-2.725

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	1	1.625" coax	180.00 - 190.00	0.6000	0.6000
T1	2	1.5" Hybrid	180.00 - 190.00	0.6000	0.6000
T1	14	Safety Line 3/8	180.00 - 195.00	0.6000	0.6000
T1	16	Feedline Ladder (Af)	180.00 - 190.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T2	1	1.625" coax	160.00 - 180.00	0.6000	0.6000
T2	2	1.5" Hybrid	160.00 - 180.00	0.6000	0.6000
T2	4	1.625" coax	160.00 - 178.00	0.6000	0.6000
T2	5	1.5" Hybrid	160.00 - 178.00	0.6000	0.6000
T2	7	1.625" coax	160.00 - 166.00	0.6000	0.6000
T2	8	1.5" Hybrid	160.00 - 166.00	0.6000	0.6000
T2	14	Safety Line 3/8	160.00 - 180.00	0.6000	0.6000
T2	16	Feedline Ladder (Af)	160.00 - 180.00	0.6000	0.6000
T2	17	Feedline Ladder (Af)	160.00 - 178.00	0.6000	0.6000
T2	18	Feedline Ladder (Af)	160.00 - 166.00	0.6000	0.6000
T3	1	1.625" coax	140.00 - 160.00	0.6000	0.6000
T3	2	1.5" Hybrid	140.00 - 160.00	0.6000	0.6000
T3	4	1.625" coax	140.00 - 160.00	0.6000	0.6000
T3	5	1.5" Hybrid	140.00 - 160.00	0.6000	0.6000
T3	7	1.625" coax	140.00 - 160.00	0.6000	0.6000
T3	8	1.5" Hybrid	140.00 - 160.00	0.6000	0.6000
T3	10	1.625" coax	140.00 - 154.00	0.6000	0.6000
T3	12	1.625" coax	140.00 - 142.00	0.6000	0.6000
T3	14	Safety Line 3/8	140.00 - 160.00	0.6000	0.6000
T3	16	Feedline Ladder (Af)	140.00 - 160.00	0.6000	0.6000
T3	17	Feedline Ladder (Af)	140.00 - 160.00	0.6000	0.6000
T3	18	Feedline Ladder (Af)	140.00 - 160.00	0.6000	0.6000
T4	1	1.625" coax	120.00 - 140.00	0.6000	0.6000
T4	2	1.5" Hybrid	120.00 - 140.00	0.6000	0.6000
T4	4	1.625" coax	120.00 - 140.00	0.6000	0.6000
T4	5	1.5" Hybrid	120.00 - 140.00	0.6000	0.6000
T4	7	1.625" coax	120.00 - 140.00	0.6000	0.6000
T4	8	1.5" Hybrid	120.00 - 140.00	0.6000	0.6000
T4	10	1.625" coax	120.00 - 140.00	0.6000	0.6000
T4	12	1.625" coax	120.00 - 140.00	0.6000	0.6000
T4	14	Safety Line 3/8	120.00 - 140.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T4	16	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T4	17	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T4	18	Feedline Ladder (Af)	120.00 - 140.00	0.6000	0.6000
T5	1	1.625" coax	100.00 - 120.00	0.6000	0.6000
T5	2	1.5" Hybrid	100.00 - 120.00	0.6000	0.6000
T5	4	1.625" coax	100.00 - 120.00	0.6000	0.6000
T5	5	1.5" Hybrid	100.00 - 120.00	0.6000	0.6000
T5	7	1.625" coax	100.00 - 120.00	0.6000	0.6000
T5	8	1.5" Hybrid	100.00 - 120.00	0.6000	0.6000
T5	10	1.625" coax	100.00 - 120.00	0.6000	0.6000
T5	12	1.625" coax	100.00 - 120.00	0.6000	0.6000
T5	14	Safety Line 3/8	100.00 - 120.00	0.6000	0.6000
T5	16	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T5	17	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T5	18	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T6	1	1.625" coax	80.00 - 100.00	0.6000	0.6000
T6	2	1.5" Hybrid	80.00 - 100.00	0.6000	0.6000
T6	4	1.625" coax	80.00 - 100.00	0.6000	0.6000
T6	5	1.5" Hybrid	80.00 - 100.00	0.6000	0.6000
T6	7	1.625" coax	80.00 - 100.00	0.6000	0.6000
T6	8	1.5" Hybrid	80.00 - 100.00	0.6000	0.6000
T6	10	1.625" coax	80.00 - 100.00	0.6000	0.6000
T6	12	1.625" coax	80.00 - 100.00	0.6000	0.6000
T6	14	Safety Line 3/8	80.00 - 100.00	0.6000	0.6000
T6	16	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T6	17	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T6	18	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T7	1	1.625" coax	60.00 - 80.00	0.6000	0.6000
T7	2	1.5" Hybrid	60.00 - 80.00	0.6000	0.6000
T7	4	1.625" coax	60.00 - 80.00	0.6000	0.6000
T7	5	1.5" Hybrid	60.00 - 80.00	0.6000	0.6000
T7	7	1.625" coax	60.00 - 80.00	0.6000	0.6000
T7	8	1.5" Hybrid	60.00 - 80.00	0.6000	0.6000
T7	10	1.625" coax	60.00 - 80.00	0.6000	0.6000
T7	12	1.625" coax	60.00 - 80.00	0.6000	0.6000
T7	14	Safety Line 3/8	60.00 - 80.00	0.6000	0.6000
T7	16	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T7	17	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T7	18	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T8	1	1.625" coax	40.00 - 60.00	0.6000	0.6000
T8	2	1.5" Hybrid	40.00 - 60.00	0.6000	0.6000
T8	4	1.625" coax	40.00 - 60.00	0.6000	0.6000
T8	5	1.5" Hybrid	40.00 - 60.00	0.6000	0.6000
T8	7	1.625" coax	40.00 - 60.00	0.6000	0.6000
T8	8	1.5" Hybrid	40.00 - 60.00	0.6000	0.6000
T8	10	1.625" coax	40.00 - 60.00	0.6000	0.6000
T8	12	1.625" coax	40.00 - 60.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T8	14	Safety Line 3/8	40.00 - 60.00	0.6000	0.6000
T8	16	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T8	17	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T8	18	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T9	1	1.625" coax	20.00 - 40.00	0.6000	0.6000
T9	2	1.5" Hybrid	20.00 - 40.00	0.6000	0.6000
T9	4	1.625" coax	20.00 - 40.00	0.6000	0.6000
T9	5	1.5" Hybrid	20.00 - 40.00	0.6000	0.6000
T9	7	1.625" coax	20.00 - 40.00	0.6000	0.6000
T9	8	1.5" Hybrid	20.00 - 40.00	0.6000	0.6000
T9	10	1.625" coax	20.00 - 40.00	0.6000	0.6000
T9	12	1.625" coax	20.00 - 40.00	0.6000	0.6000
T9	14	Safety Line 3/8	20.00 - 40.00	0.6000	0.6000
T9	16	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T9	17	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T9	18	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T10	1	1.625" coax	10.00 - 20.00	0.6000	0.6000
T10	2	1.5" Hybrid	10.00 - 20.00	0.6000	0.6000
T10	4	1.625" coax	10.00 - 20.00	0.6000	0.6000
T10	5	1.5" Hybrid	10.00 - 20.00	0.6000	0.6000
T10	7	1.625" coax	10.00 - 20.00	0.6000	0.6000
T10	8	1.5" Hybrid	10.00 - 20.00	0.6000	0.6000
T10	10	1.625" coax	10.00 - 20.00	0.6000	0.6000
T10	12	1.625" coax	10.00 - 20.00	0.6000	0.6000
T10	14	Safety Line 3/8	10.00 - 20.00	0.6000	0.6000
T10	16	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000
T10	17	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000
T10	18	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
Lightning Rod 1"x10'	C	From Leg	0.000 0.000 5.000	0.000	195.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.000 2.017 3.050 5.148	1.000 2.017 3.050 5.148	0.040 0.049 0.065 0.116
**									
Sector1(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	A	From Leg	4.000 0.000 0.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	92.600 115.750 138.900 185.200	62.040 77.550 93.060 124.080	0.700 1.400 2.100 3.500
Sector2(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	B	From Leg	4.000 0.000 0.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	92.600 115.750 138.900 185.200	62.040 77.550 93.060 124.080	0.700 1.400 2.100 3.500
Sector3(CaAa=13333.33 Sq.in)No Ice (Carrier 1)	C	From Leg	4.000 0.000 0.000	0.000	190.000	No Ice 1/2" Ice 1" Ice 2" Ice	92.600 115.750 138.900 185.200	62.040 77.550 93.060 124.080	0.700 1.400 2.100 3.500

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
**									
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 2)	A	From Leg	4.000 0.000 0.000	0.000	178.000	No Ice 1/2" Ice 1" Ice 2" Ice	69.440 86.800 104.160 138.880	46.525 58.156 69.787 93.050	0.700 1.400 2.100 3.500
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 2)	B	From Leg	4.000 0.000 0.000	0.000	178.000	No Ice 1/2" Ice 1" Ice 2" Ice	69.440 86.800 104.160 138.880	46.525 58.156 69.787 93.050	0.700 1.400 2.100 3.500
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 2)	C	From Leg	4.000 0.000 0.000	0.000	178.000	No Ice 1/2" Ice 1" Ice 2" Ice	69.440 86.800 104.160 138.880	46.525 58.156 69.787 93.050	0.700 1.400 2.100 3.500
**									
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 3)	A	From Leg	4.000 0.000 0.000	0.000	166.000	No Ice 1/2" Ice 1" Ice 2" Ice	69.440 86.800 104.160 138.880	46.525 58.156 69.787 93.050	0.700 1.400 2.100 3.500
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 3)	B	From Leg	4.000 0.000 0.000	0.000	166.000	No Ice 1/2" Ice 1" Ice 2" Ice	69.440 86.800 104.160 138.880	46.525 58.156 69.787 93.050	0.700 1.400 2.100 3.500
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 3)	C	From Leg	4.000 0.000 0.000	0.000	166.000	No Ice 1/2" Ice 1" Ice 2" Ice	69.440 86.800 104.160 138.880	46.525 58.156 69.787 93.050	0.700 1.400 2.100 3.500
**									
4 1/2" OD Dish Mount (Carrier 4)	C	From Leg	0.500 0.000 0.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.870 2.207 2.543 3.241	1.621 2.207 2.543 3.241	0.057 0.074 0.094 0.148
4 1/2" OD Dish Mount (Carrier 4)	B	From Leg	0.500 0.000 0.000	0.000	154.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.870 2.207 2.543 3.241	1.621 2.207 2.543 3.241	0.057 0.074 0.094 0.148
**									
4 1/2" OD Dish Mount (Carrier 5)	C	From Leg	0.500 0.000 0.000	0.000	142.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.870 2.207 2.543 3.241	1.628 2.207 2.543 3.241	0.057 0.074 0.094 0.148
4 1/2" OD Dish Mount (Carrier 5)	B	From Leg	0.500 0.000 0.000	0.000	142.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.870 2.207 2.543 3.241	1.628 2.207 2.543 3.241	0.057 0.074 0.094 0.148
**									

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft²	Weight K
6' MW Dish (Carrier 4)	C	Paraboloid w/o Radome	From Leg	1.000 0.000 0.000	0.000		154.000	6.000	No Ice 1/2" Ice 1" Ice 2" Ice	28.270 29.050 29.831 31.392	0.143 0.292 0.441 0.740
6' MW Dish (Carrier 4) **	B	Paraboloid w/o Radome	From Leg	1.000 0.000 0.000	0.000		154.000	6.000	No Ice 1/2" Ice 1" Ice 2" Ice	28.270 29.050 29.831 31.392	0.143 0.292 0.441 0.740
6' MW Dish (Carrier 5)	C	Paraboloid w/o Radome	From Leg	1.000 0.000 0.000	0.000		142.000	6.000	No Ice 1/2" Ice 1" Ice 2" Ice	28.270 29.050 29.831 31.392	0.143 0.292 0.441 0.740
6' MW Dish (Carrier 5) **	B	Paraboloid w/o Radome	From Leg	1.000 0.000 0.000	0.000		142.000	6.000	No Ice 1/2" Ice 1" Ice 2" Ice	28.270 29.050 29.831 31.392	0.143 0.292 0.441 0.740

Load Combinations

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

Comb. No.	Description
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	195 - 180	Leg	Max Tension	15	13.889	0.567	0.005
			Max. Compression	2	-15.861	0.832	0.004
			Max. Mx	14	13.640	-0.851	-0.004
			Max. My	24	-1.296	-0.035	0.691
			Max. Vy	2	-2.886	0.832	0.004
			Max. Vx	24	-2.269	-0.006	0.173
		Diagonal	Max Tension	2	3.471	0.000	0.000
			Max. Compression	2	-3.552	0.000	0.000
			Max. Mx	38	0.217	0.018	-0.002
			Max. My	8	-3.044	-0.001	-0.007
			Max. Vy	32	0.022	0.017	0.002
			Max. Vx	8	0.002	0.000	0.000
		Top Girt	Max Tension	23	0.373	0.000	0.000
			Max. Compression	11	-0.446	0.000	0.000
			Max. Mx	31	-0.076	-0.036	0.000
			Max. My	28	-0.018	0.000	0.001
			Max. Vy	31	0.029	0.000	0.000
			Max. Vx	28	-0.001	0.000	0.000
T2	180 - 160	Leg	Max Tension	15	56.900	3.087	-0.003
			Max. Compression	2	-63.404	0.547	-0.003
			Max. Mx	2	-63.398	-3.772	0.006
			Max. My	24	-1.308	-0.080	1.661
			Max. Vy	2	-8.631	0.547	-0.003
			Max. Vx	4	3.606	-0.063	-0.464
		Diagonal	Max Tension	16	7.815	0.000	0.000
			Max. Compression	8	-7.201	0.000	0.000
			Max. Mx	2	-0.958	0.037	-0.002
			Max. My	20	-7.176	-0.006	0.038
			Max. Vy	35	0.028	0.026	-0.003
			Max. Vx	20	-0.009	0.000	0.000
T3	160 - 140	Leg	Max Tension	15	105.121	3.039	-0.005
			Max. Compression	2	-115.895	1.113	-0.002
			Max. Mx	2	-63.417	4.855	-0.011
			Max. My	4	-3.928	-0.102	-2.269
			Max. Vy	2	-10.728	1.113	-0.002
			Max. Vx	4	4.640	0.077	-0.747

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
		Diagonal	Max Tension	20	8.729	0.000	0.000
			Max. Compression	16	-7.826	0.000	0.000
			Max. Mx	28	0.447	0.037	0.003
			Max. My	20	-7.616	-0.009	0.022
			Max. Vy	28	0.036	0.037	0.003
			Max. Vx	20	-0.005	0.000	0.000
T4	140 - 120	Leg	Max Tension	7	151.757	3.479	0.171
			Max. Compression	2	-166.261	0.913	-0.004
			Max. Mx	2	-115.916	6.434	-0.013
			Max. My	4	-6.972	0.322	-3.069
			Max. Vy	2	-10.967	0.913	-0.004
			Max. Vx	4	4.642	0.322	-3.069
		Diagonal	Max Tension	20	8.883	0.000	0.000
			Max. Compression	20	-9.634	0.000	0.000
			Max. Mx	34	0.372	0.051	-0.005
			Max. My	8	-9.571	-0.002	-0.021
			Max. Vy	34	0.044	0.051	-0.005
			Max. Vx	8	0.004	0.000	0.000
T5	120 - 100	Leg	Max Tension	7	192.934	3.726	0.158
			Max. Compression	2	-211.406	0.929	-0.004
			Max. Mx	2	-166.280	6.365	-0.023
			Max. My	4	-11.071	0.215	-2.705
			Max. Vy	2	-11.665	0.929	-0.004
			Max. Vx	4	4.630	0.215	-2.705
		Diagonal	Max Tension	20	8.841	0.000	0.000
			Max. Compression	20	-9.193	0.000	0.000
			Max. Mx	34	0.391	0.070	-0.007
			Max. My	20	-9.118	-0.006	0.020
			Max. Vy	34	0.054	0.070	-0.007
			Max. Vx	20	-0.004	0.000	0.000
T6	100 - 80	Leg	Max Tension	7	230.565	3.932	0.141
			Max. Compression	2	-253.487	1.018	-0.006
			Max. Mx	2	-211.428	6.733	-0.030
			Max. My	4	-14.562	0.200	-2.701
			Max. Vy	2	-12.306	1.018	-0.006
			Max. Vx	4	4.711	0.027	-0.539
		Diagonal	Max Tension	20	8.946	0.000	0.000
			Max. Compression	20	-9.215	0.000	0.000
			Max. Mx	28	0.467	0.085	0.008
			Max. My	18	-9.015	-0.006	0.015
			Max. Vy	28	0.060	0.085	0.008
			Max. Vx	18	-0.003	0.000	0.000
T7	80 - 60	Leg	Max Tension	7	265.631	4.346	0.147
			Max. Compression	2	-293.708	0.893	-0.004
			Max. Mx	2	-253.511	7.142	-0.037
			Max. My	4	-17.721	0.197	-2.897
			Max. Vy	2	-12.993	0.893	-0.004
			Max. Vx	4	4.852	0.021	-0.391
		Diagonal	Max Tension	20	9.309	0.000	0.000
			Max. Compression	20	-9.489	0.000	0.000
			Max. Mx	28	0.451	0.110	0.010
			Max. My	18	-9.281	0.005	0.013
			Max. Vy	28	0.070	0.110	0.010
			Max. Vx	28	-0.003	0.000	0.000
T8	60 - 40	Leg	Max Tension	7	298.987	5.072	0.145
			Max. Compression	2	-332.595	0.354	-0.003
			Max. Mx	2	-293.733	7.371	-0.040
			Max. My	4	-20.857	0.193	-2.820
			Max. Vy	10	-13.909	0.353	-0.015
			Max. Vx	4	5.109	0.013	-0.359
		Diagonal	Max Tension	20	9.755	0.000	0.000

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Compression	20	-9.684	0.000	0.000
			Max. Mx	28	0.454	0.135	0.012
			Max. My	6	-8.805	0.033	-0.013
			Max. Vy	28	0.080	0.135	0.012
			Max. Vx	28	-0.003	0.000	0.000
T9	40 - 20	Leg	Max Tension	7	330.691	4.843	0.132
			Max. Compression	2	-370.457	1.013	-0.004
			Max. Mx	10	-330.546	7.300	-0.109
			Max. My	4	-23.854	0.184	-2.916
			Max. Vy	10	-14.767	1.013	-0.016
			Max. Vx	4	5.319	0.026	-0.469
		Diagonal	Max Tension	20	10.156	0.000	0.000
			Max. Compression	20	-10.179	0.000	0.000
			Max. Mx	31	1.115	0.166	-0.015
			Max. My	28	-0.185	0.154	-0.015
			Max. Vy	30	0.090	0.161	-0.015
			Max. Vx	28	-0.003	0.000	0.000
T10	20 - 0	Leg	Max Tension	7	360.892	5.818	0.140
			Max. Compression	2	-406.830	0.000	0.000
			Max. Mx	10	-368.476	8.375	-0.087
			Max. My	4	-26.952	0.205	-3.131
			Max. Vy	10	-15.447	0.000	-0.000
			Max. Vx	4	5.322	0.205	-3.131
		Diagonal	Max Tension	20	10.472	0.000	0.000
			Max. Compression	20	-10.576	0.000	0.000
			Max. Mx	29	-0.651	0.209	-0.019
			Max. My	28	-2.268	0.206	-0.019
			Max. Vy	29	0.093	0.209	-0.019
			Max. Vx	28	-0.004	0.000	0.000

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	404.589	26.570	-15.019
	Max. H_x	18	404.589	26.570	-15.019
	Max. H_z	5	-314.535	-20.979	14.342
	Min. Vert	7	-359.899	-25.232	14.177
	Min. H_x	7	-359.899	-25.232	14.177
	Min. H_z	18	404.589	26.570	-15.019
Leg B	Max. Vert	10	404.045	-26.496	-15.207
	Max. H_x	23	-359.083	25.140	14.396
	Max. H_z	25	-313.131	20.825	14.516
	Min. Vert	23	-359.083	25.140	14.396
	Min. H_x	10	404.045	-26.496	-15.207
	Min. H_z	10	404.045	-26.496	-15.207
Leg A	Max. Vert	2	405.970	0.068	30.597
	Max. H_x	21	23.979	4.706	1.363
	Max. H_z	2	405.970	0.068	30.597
	Min. Vert	15	-349.070	-0.079	-28.138
	Min. H_x	9	23.979	-4.705	1.363
	Min. H_z	15	-349.070	-0.079	-28.138

Tower Mast Reaction Summary

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
Dead Only	45.330	0.000	0.000	2.763	-1.263	0.000
1.2 Dead+1.0 Wind 0 deg - No Ice	54.396	-0.000	-52.952	-6549.615	-1.531	2.504
0.9 Dead+1.0 Wind 0 deg - No Ice	40.797	-0.000	-52.953	-6540.385	-1.149	2.501
1.2 Dead+1.0 Wind 30 deg - No Ice	54.396	26.277	-42.919	-5353.564	-3317.517	17.362
0.9 Dead+1.0 Wind 30 deg - No Ice	40.797	26.277	-42.920	-5346.139	-3312.029	17.353
1.2 Dead+1.0 Wind 60 deg - No Ice	54.396	43.560	-24.837	-3120.574	-5493.100	9.898
0.9 Dead+1.0 Wind 60 deg - No Ice	40.797	43.558	-24.836	-3116.427	-5483.935	9.883
1.2 Dead+1.0 Wind 90 deg - No Ice	54.396	50.864	-1.196	-174.699	-6361.463	-4.110
0.9 Dead+1.0 Wind 90 deg - No Ice	40.797	50.865	-1.196	-175.284	-6351.291	-4.126
1.2 Dead+1.0 Wind 120 deg - No Ice	54.396	46.848	24.655	2993.200	-5797.178	-1.634
0.9 Dead+1.0 Wind 120 deg - No Ice	40.797	46.848	24.656	2987.767	-5787.909	-1.646
1.2 Dead+1.0 Wind 150 deg - No Ice	54.396	24.799	42.825	5335.442	-3090.920	4.868
0.9 Dead+1.0 Wind 150 deg - No Ice	40.797	24.799	42.825	5326.385	-3085.766	4.863
1.2 Dead+1.0 Wind 180 deg - No Ice	54.396	-0.000	48.841	6134.891	-1.529	-2.503
0.9 Dead+1.0 Wind 180 deg - No Ice	40.797	-0.000	48.842	6124.578	-1.147	-2.500
1.2 Dead+1.0 Wind 210 deg - No Ice	54.396	-24.841	42.898	5357.228	3100.426	-12.030
0.9 Dead+1.0 Wind 210 deg - No Ice	40.797	-24.841	42.899	5348.128	3096.012	-12.021
1.2 Dead+1.0 Wind 240 deg - No Ice	54.396	-46.780	24.616	2999.138	5804.366	-5.739
0.9 Dead+1.0 Wind 240 deg - No Ice	40.797	-46.781	24.617	2993.688	5795.831	-5.724
1.2 Dead+1.0 Wind 270 deg - No Ice	54.396	-50.864	-1.196	-174.700	6358.417	4.110
0.9 Dead+1.0 Wind 270 deg - No Ice	40.797	-50.865	-1.196	-175.285	6349.009	4.126
1.2 Dead+1.0 Wind 300 deg - No Ice	54.396	-43.627	-24.876	-3114.680	5479.795	-2.525
0.9 Dead+1.0 Wind 300 deg - No Ice	40.797	-43.625	-24.875	-3110.551	5471.425	-2.513
1.2 Dead+1.0 Wind 330 deg - No Ice	54.396	-26.235	-42.846	-5331.801	3301.877	-10.200
0.9 Dead+1.0 Wind 330 deg - No Ice	40.797	-26.235	-42.847	-5324.419	3297.179	-10.194
1.2 Dead+1.0 Ice+1.0 Temp	150.671	-0.000	-0.001	6.108	-12.782	-0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	150.671	-0.000	-7.177	-926.509	-13.007	0.549
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	150.671	3.584	-5.980	-775.291	-484.106	1.540
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	150.671	6.068	-3.476	-449.391	-809.564	0.788
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	150.671	7.053	-0.105	-9.400	-934.316	-0.543

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	150.671	6.317	3.438	448.331	-833.159	-0.673
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	150.671	3.469	5.998	788.176	-465.228	-0.195
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	150.671	-0.000	6.877	907.274	-13.005	-0.549
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	150.671	-3.458	5.978	787.905	439.061	-1.071
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	150.671	-6.298	3.427	448.177	806.876	-0.422
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	150.671	-7.053	-0.105	-9.400	908.306	0.543
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	150.671	-6.087	-3.487	-449.547	783.825	0.308
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	150.671	-3.595	-6.000	-775.562	458.251	-0.273
Dead+Wind 0 deg - Service	45.330	-0.000	-16.966	-2094.736	-1.269	0.802
Dead+Wind 30 deg - Service	45.330	8.419	-13.751	-1711.904	-1062.633	5.578
Dead+Wind 60 deg - Service	45.330	13.956	-7.958	-997.152	-1759.025	3.167
Dead+Wind 90 deg - Service	45.330	16.297	-0.383	-54.201	-2036.997	-1.337
Dead+Wind 120 deg - Service	45.330	15.010	7.900	959.790	-1856.395	-0.530
Dead+Wind 150 deg - Service	45.330	7.946	13.721	1709.498	-990.159	1.575
Dead+Wind 180 deg - Service	45.330	-0.000	15.649	1965.393	-1.269	-0.801
Dead+Wind 210 deg - Service	45.330	-7.959	13.745	1716.468	991.644	-3.869
Dead+Wind 240 deg - Service	45.330	-14.989	7.887	961.687	1857.136	-1.833
Dead+Wind 270 deg - Service	45.330	-16.297	-0.383	-54.201	2034.460	1.338
Dead+Wind 300 deg - Service	45.330	-13.978	-7.970	-995.262	1753.209	-0.806
Dead+Wind 330 deg - Service	45.330	-8.406	-13.728	-1704.936	1056.070	-3.283

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX	PY	PZ	PX	PY	PZ	% Error
	K	K	K	K	K	K	
1	0.000	-45.330	0.000	-0.000	45.330	-0.000	0.000%
2	0.000	-54.396	-52.955	0.000	54.396	52.952	0.003%
3	0.000	-40.797	-52.955	0.000	40.797	52.953	0.003%
4	26.278	-54.396	-42.921	-26.277	54.396	42.919	0.003%
5	26.278	-40.797	-42.921	-26.277	40.797	42.920	0.002%
6	43.561	-54.396	-24.838	-43.560	54.396	24.837	0.002%
7	43.561	-40.797	-24.838	-43.558	40.797	24.836	0.006%
8	50.866	-54.396	-1.195	-50.864	54.396	1.196	0.003%
9	50.866	-40.797	-1.195	-50.865	40.797	1.196	0.003%
10	46.850	-54.396	24.657	-46.848	54.396	-24.655	0.003%
11	46.850	-40.797	24.657	-46.848	40.797	-24.656	0.003%
12	24.800	-54.396	42.827	-24.799	54.396	-42.825	0.003%
13	24.800	-40.797	42.827	-24.799	40.797	-42.825	0.003%
14	0.000	-54.396	48.843	0.000	54.396	-48.841	0.002%
15	0.000	-40.797	48.843	0.000	40.797	-48.842	0.002%
16	-24.842	-54.396	42.900	24.841	54.396	-42.898	0.003%
17	-24.842	-40.797	42.900	24.841	40.797	-42.899	0.003%
18	-46.783	-54.396	24.618	46.780	54.396	-24.616	0.003%
19	-46.783	-40.797	24.618	46.781	40.797	-24.617	0.003%
20	-50.866	-54.396	-1.195	50.864	54.396	1.196	0.003%
21	-50.866	-40.797	-1.195	50.865	40.797	1.196	0.003%
22	-43.628	-54.396	-24.877	43.627	54.396	24.876	0.002%
23	-43.628	-40.797	-24.877	43.625	40.797	24.875	0.006%
24	-26.235	-54.396	-42.848	26.235	54.396	42.846	0.003%

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
25	-26.235	-40.797	-42.848	26.235	40.797	42.847	0.002%
26	0.000	-150.671	0.000	0.000	150.671	0.001	0.001%
27	0.000	-150.671	-7.177	0.000	150.671	7.177	0.000%
28	3.584	-150.671	-5.981	-3.584	150.671	5.980	0.000%
29	6.068	-150.671	-3.477	-6.068	150.671	3.476	0.000%
30	7.053	-150.671	-0.105	-7.053	150.671	0.105	0.000%
31	6.318	-150.671	3.438	-6.317	150.671	-3.438	0.000%
32	3.469	-150.671	5.998	-3.469	150.671	-5.998	0.000%
33	0.000	-150.671	6.877	0.000	150.671	-6.877	0.000%
34	-3.458	-150.671	5.979	3.458	150.671	-5.978	0.000%
35	-6.298	-150.671	3.427	6.298	150.671	-3.427	0.000%
36	-7.053	-150.671	-0.105	7.053	150.671	0.105	0.000%
37	-6.087	-150.671	-3.488	6.087	150.671	3.487	0.000%
38	-3.595	-150.671	-6.000	3.595	150.671	6.000	0.000%
39	0.000	-45.330	-16.967	0.000	45.330	16.966	0.001%
40	8.419	-45.330	-13.752	-8.419	45.330	13.751	0.001%
41	13.957	-45.330	-7.958	-13.956	45.330	7.958	0.001%
42	16.297	-45.330	-0.383	-16.297	45.330	0.383	0.001%
43	15.011	-45.330	7.900	-15.010	45.330	-7.900	0.001%
44	7.946	-45.330	13.722	-7.946	45.330	-13.721	0.001%
45	0.000	-45.330	15.649	0.000	45.330	-15.649	0.001%
46	-7.959	-45.330	13.745	7.959	45.330	-13.745	0.001%
47	-14.989	-45.330	7.887	14.989	45.330	-7.887	0.001%
48	-16.297	-45.330	-0.383	16.297	45.330	0.383	0.001%
49	-13.978	-45.330	-7.970	13.978	45.330	7.970	0.001%
50	-8.406	-45.330	-13.728	8.406	45.330	13.728	0.001%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	6	0.00000001	0.00000001
2	Yes	11	0.00000001	0.00011421
3	Yes	11	0.00000001	0.00008958
4	Yes	11	0.00000001	0.00009774
5	Yes	11	0.00000001	0.00007379
6	Yes	11	0.00000001	0.00008289
7	Yes	10	0.00005937	0.00014971
8	Yes	11	0.00000001	0.00009803
9	Yes	11	0.00000001	0.00007410
10	Yes	11	0.00000001	0.00011376
11	Yes	11	0.00000001	0.00008917
12	Yes	11	0.00000001	0.00009907
13	Yes	11	0.00000001	0.00007508
14	Yes	11	0.00000001	0.00008325
15	Yes	11	0.00000001	0.00005929
16	Yes	11	0.00000001	0.00009916
17	Yes	11	0.00000001	0.00007515
18	Yes	11	0.00000001	0.00011397
19	Yes	11	0.00000001	0.00008936
20	Yes	11	0.00000001	0.00009804
21	Yes	11	0.00000001	0.00007411
22	Yes	11	0.00000001	0.00008285
23	Yes	10	0.00005935	0.00014964
24	Yes	11	0.00000001	0.00009765
25	Yes	11	0.00000001	0.00007372

26	Yes	6	0.00000001	0.00005888
27	Yes	12	0.00000001	0.00008047
28	Yes	12	0.00000001	0.00007947
29	Yes	12	0.00000001	0.00007983
30	Yes	12	0.00000001	0.00008118
31	Yes	12	0.00000001	0.00008268
32	Yes	12	0.00000001	0.00008115
33	Yes	12	0.00000001	0.00008045
34	Yes	12	0.00000001	0.00008065
35	Yes	12	0.00000001	0.00008177
36	Yes	12	0.00000001	0.00007996
37	Yes	12	0.00000001	0.00007863
38	Yes	12	0.00000001	0.00007870
39	Yes	11	0.00000001	0.00008206
40	Yes	11	0.00000001	0.00007699
41	Yes	11	0.00000001	0.00007270
42	Yes	11	0.00000001	0.00007701
43	Yes	11	0.00000001	0.00008189
44	Yes	11	0.00000001	0.00007743
45	Yes	11	0.00000001	0.00007290
46	Yes	11	0.00000001	0.00007749
47	Yes	11	0.00000001	0.00008199
48	Yes	11	0.00000001	0.00007703
49	Yes	11	0.00000001	0.00007266
50	Yes	11	0.00000001	0.00007695

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	195 - 180	8.544	39	0.352	0.056
T2	180 - 160	7.420	39	0.347	0.056
T3	160 - 140	5.912	39	0.323	0.054
T4	140 - 120	4.517	39	0.283	0.046
T5	120 - 100	3.325	39	0.235	0.036
T6	100 - 80	2.336	39	0.189	0.028
T7	80 - 60	1.536	39	0.145	0.020
T8	60 - 40	0.926	39	0.105	0.014
T9	40 - 20	0.461	39	0.070	0.009
T10	20 - 0	0.161	39	0.033	0.004

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
195.000	Lightning Rod 1"x10'	39	8.544	0.352	0.056	271307
190.000	Sector1(CaAa=13333.33 Sq.in)No Ice	39	8.171	0.351	0.057	271307
178.000	Sector1(CaAa=10000 Sq.in)No Ice	39	7.269	0.345	0.056	146374
166.000	Sector1(CaAa=10000 Sq.in)No Ice	39	6.360	0.332	0.055	61059
154.000	6' MW Dish	39	5.476	0.312	0.052	29717
142.000	6' MW Dish	39	4.648	0.287	0.047	22123

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	195 - 180	26.794	2	1.101	0.175
T2	180 - 160	23.266	2	1.087	0.175
T3	160 - 140	18.531	2	1.012	0.167
T4	140 - 120	14.150	2	0.885	0.142
T5	120 - 100	10.412	2	0.737	0.112
T6	100 - 80	7.313	2	0.590	0.086
T7	80 - 60	4.807	2	0.454	0.063
T8	60 - 40	2.898	2	0.329	0.045
T9	40 - 20	1.444	2	0.218	0.027
T10	20 - 0	0.503	2	0.102	0.013

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
195.000	Lightning Rod 1"x10'	2	26.794	1.101	0.175	86897
190.000	Sector1(CaAa=13333.33 Sq.in)No Ice	2	25.622	1.098	0.175	86897
178.000	Sector1(CaAa=10000 Sq.in)No Ice	2	22.791	1.082	0.175	46821
166.000	Sector1(CaAa=10000 Sq.in)No Ice	2	19.936	1.041	0.171	19648
154.000	6' MW Dish	2	17.161	0.978	0.161	9561
142.000	6' MW Dish	2	14.562	0.899	0.145	7118

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load / Allowable	Allowable Ratio	Criteria
T1	195	Diagonal	A325X	0.625	1	3.471	9.598	0.362 ✔	1	Member Block Shear
		Top Girt	A325X	0.625	1	0.373	9.598	0.039 ✔	1	Member Block Shear
T2	180	Leg	A325N	0.750	6	2.313	30.101	0.077 ✔	1	Bolt Tension
		Diagonal	A325X	0.625	1	7.815	9.598	0.814 ✔	1	Member Block Shear
T3	160	Leg	A325N	0.750	6	9.482	30.101	0.315 ✔	1	Bolt Tension
		Diagonal	A325X	0.625	1	8.729	10.740	0.813 ✔	1	Member Block Shear
T4	140	Leg	A325N	0.750	6	17.518	30.101	0.582 ✔	1	Bolt Tension
		Diagonal	A325X	0.625	1	8.883	14.320	0.620 ✔	1	Member Block Shear
T5	120	Leg	A325N	1.000	6	25.291	54.517	0.464 ✔	1	Bolt Tension

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
		Diagonal	A325X	0.625	1	8.841	13.025	0.679 ✔	1	Member Block Shear
T6	100	Leg	A325N	1.000	6	32.154	54.517	0.590 ✔	1	Bolt Tension
		Diagonal	A325X	0.625	1	8.946	13.025	0.687 ✔	1	Member Block Shear
T7	80	Leg	A325N	1.000	6	38.425	54.517	0.705 ✔	1	Bolt Tension
		Diagonal	A325X	0.625	1	9.489	17.257	0.550 ✔	1	Bolt Shear
T8	60	Leg	A325N	1.250	6	44.269	87.220	0.508 ✔	1	Bolt Tension
		Diagonal	A325X	0.625	1	9.755	14.168	0.689 ✔	1	Member Block Shear
T9	40	Leg	A325N	1.250	6	49.828	87.220	0.571 ✔	1	Bolt Tension
		Diagonal	A325X	0.625	1	10.179	17.257	0.590 ✔	1	Bolt Shear
T10	20	Leg	A325N	1.250	6	55.112	87.220	0.632 ✔	1	Bolt Tension
		Diagonal	A325X	0.625	1	10.576	17.257	0.613 ✔	1	Bolt Shear

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	195 - 180	1 3/4	15.014	4.671	128.1 K=1.00	2.405	-13.040	33.103	0.394 [1] ✔
T2	180 - 160	2 1/4	20.019	4.754	101.4 K=1.00	3.976	-56.701	84.331	0.672 [1] ✔
T3	160 - 140	2 1/2	20.019	4.754	91.3 K=1.00	4.909	-109.646	120.108	0.913 [1] ✔
T4	140 - 120	2 3/4	20.019	4.754	83.0 K=1.00	5.940	-160.409	161.540	0.993 [1] ✔
T5	120 - 100	3	20.019	4.754	76.1 K=1.00	7.069	-205.790	208.347	0.988 [1] ✔
T6	100 - 80	3 1/4	20.019	4.754	70.2 K=1.00	8.296	-248.033	260.312	0.953 [1] ✔
T7	80 - 60	3 1/2	20.019	4.754	65.2 K=1.00	9.621	-288.348	317.273	0.909 [1] ✔
T8	60 - 40	3 3/4	20.019	4.754	60.9 K=1.00	11.045	-327.241	379.106	0.863 [1] ✔
T9	40 - 20	3 3/4	20.019	4.754	60.9 K=1.00	11.045	-365.248	379.106	0.963 [1] ✔
T10	20 - 0	4	20.019	4.754	57.1 K=1.00	12.566	-401.684	445.717	0.901 [1] ✔

[1] P_u / ϕP_n controls

Diagonal 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	195 - 180	L1 3/4x1 3/4x3/16	7.166	3.605	125.9 K=1.00	0.621	-3.552	11.206	0.317 [1] ✔
T2	180 - 160	L1 3/4x1 3/4x3/16	8.697	4.343	151.7 K=1.00	0.621	-7.201	7.721	0.933 [1] ✔
T3	160 - 140	L2x2x3/16	9.987	4.976	151.6 K=1.00	0.715	-7.658	8.909	0.860 [1] ✔
T4	140 - 120	L2x2x1/4	11.329	5.636	173.0 K=1.00	0.938	-8.179	8.972	0.912 [1] ✔
T5	120 - 100	L2 1/2x2 1/2x3/16	12.706	6.314	153.1 K=1.00	0.902	-8.317	11.018	0.755 [1] ✔
T6	100 - 80	L2 1/2x2 1/2x3/16	14.108	7.005	169.8 K=1.00	0.902	-8.593	8.952	0.960 [1] ✔
T7	80 - 60	L2 1/2x2 1/2x1/4	15.529	7.705	188.3 K=1.00	1.190	-8.967	9.605	0.933 [1] ✔
T8	60 - 40	L3x3x3/16	16.963	8.412	169.4 K=1.00	1.090	-9.520	10.877	0.875 [1] ✔
T9	40 - 20	L3x3x1/4	18.408	9.134	185.2 K=1.00	1.440	-9.827	12.022	0.817 [1] ✔
T10	20 - 0	L3x3x1/4	19.861	9.851	199.7 K=1.00	1.440	-10.174	10.338	0.984 [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	195 - 180	L1 3/4x1 3/4x3/16	4.913	4.767	166.5 K=1.00	0.621	-0.446	6.409	0.070 [1] ✔

[1] P_u / ϕP_n controls

Tension Checks

Leg 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	195 - 180	1 3/4	15.014	0.500	13.7	2.405	13.889	108.238	0.128 [1] ✔
T2	180 - 160	2 1/4	20.019	0.500	10.7	3.976	56.900	178.924	0.318 [1] ✔
T3	160 - 140	2 1/2	20.019	0.500	9.6	4.909	105.121	220.893	0.476 [1] ✔
T4	140 - 120	2 3/4	20.019	0.500	8.7	5.940	151.757	267.281	0.568 [1] ✔
T5	120 - 100	3	20.019	0.500	8.0	7.069	192.934	318.086	0.607 [1] ✔
T6	100 - 80	3 1/4	20.019	0.500	7.4	8.296	230.565	373.310	0.618 [1] ✔
T7	80 - 60	3 1/2	20.019	0.500	6.9	9.621	265.631	432.951	0.614 [1] ✔
T8	60 - 40	3 3/4	20.019	0.500	6.4	11.045	298.987	497.010	0.602 [1] ✔
T9	40 - 20	3 3/4	20.019	0.500	6.4	11.045	330.691	497.010	0.665 [1] ✔
T10	20 - 0	4	20.019	0.500	6.0	12.566	360.892	565.487	0.638 [1] ✔

[1] P_u / ϕP_n controls

Diagonal 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	195 - 180	L1 3/4x1 3/4x3/16	7.435	3.736	83.5	0.360	3.471	17.567	0.198 [1] ✔
T2	180 - 160	L1 3/4x1 3/4x3/16	8.697	4.343	97.1	0.360	7.815	17.567	0.445 [1] ✔
T3	160 - 140	L2x2x3/16	9.987	4.976	96.8	0.431	8.729	21.001	0.416 [1] ✔
T4	140 - 120	L2x2x1/4	11.329	5.636	111.1	0.563	8.883	27.440	0.324 [1] ✔
T5	120 - 100	L2 1/2x2 1/2x3/16	12.706	6.314	97.4	0.571	8.841	27.838	0.318 [1] ✔
T6	100 - 80	L2 1/2x2 1/2x3/16	14.108	7.005	108.0	0.571	8.946	27.838	0.321 [1] ✔
T7	80 - 60	L2 1/2x2 1/2x1/4	15.529	7.705	120.2	0.752	9.309	36.654	0.254 [1] ✔
T8	60 - 40	L3x3x3/16	16.963	8.412	107.5	0.712	9.755	34.712	0.281 [1] ✔
T9	40 - 20	L3x3x1/4	18.408	9.134	117.9	0.939	10.156	45.794	0.222 [1] ✔
T10	20 - 0	L3x3x1/4	19.861	9.851	127.1	0.939	10.472	45.794	0.229 [1] ✔

[1] P_u / ϕP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation	Size	L	L_u	Kl/r	A	P_u	ϕP_n	Ratio $\frac{P_u}{\phi P_n}$
	ft		ft	ft		in^2	K	K	
T1	195 - 180	L1 3/4x1 3/4x3/16	4.913	4.767	106.5	0.360	0.373	17.567	0.021 [1] ✔

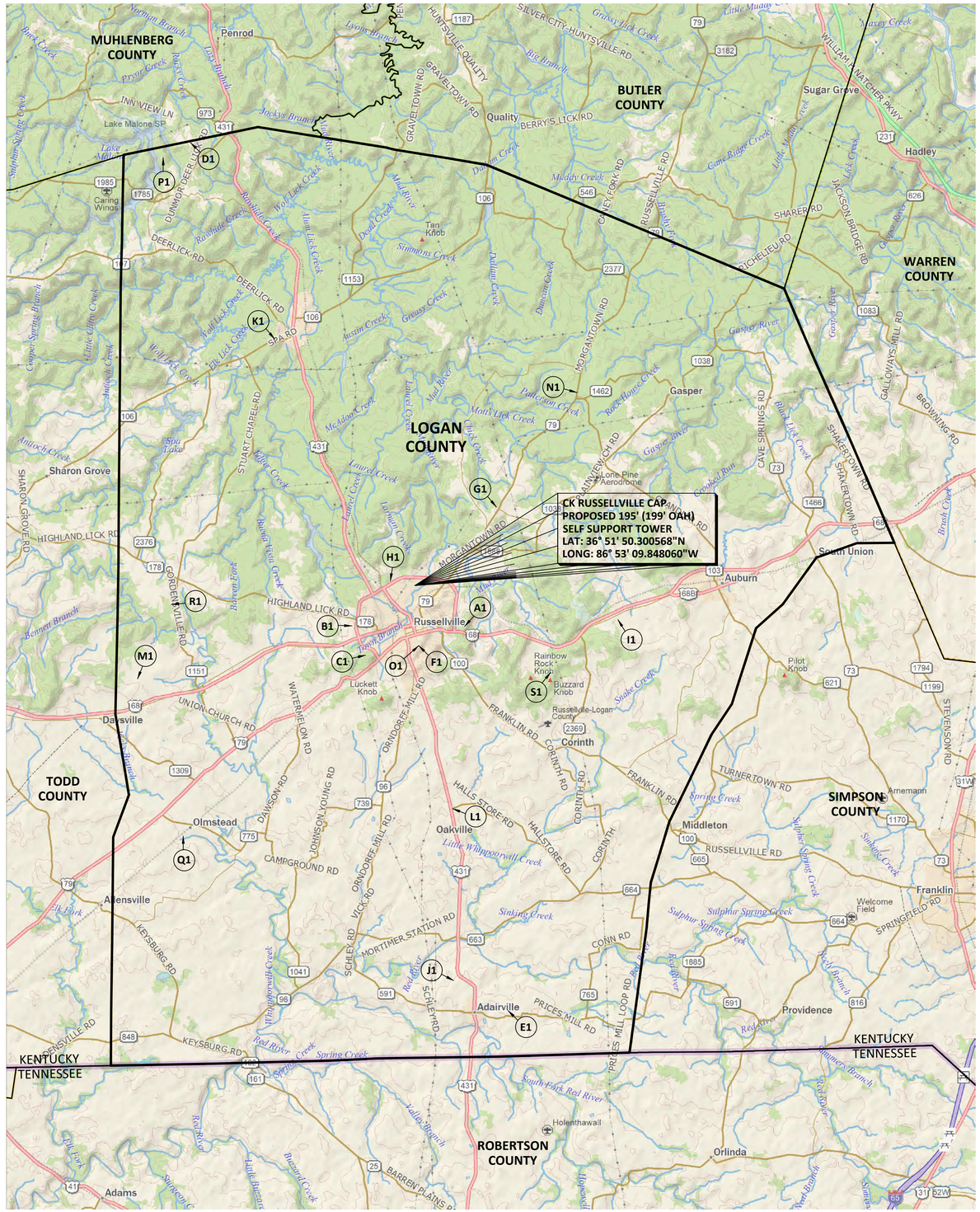
[1] P_u / ϕP_n controls

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
T1	195 - 180	Leg	1 3/4	1	-13.040	33.103	39.4	Pass
T2	180 - 160	Leg	2 1/4	27	-56.701	84.331	67.2	Pass
T3	160 - 140	Leg	2 1/2	54	-109.646	120.108	91.3	Pass
T4	140 - 120	Leg	2 3/4	81	-160.409	161.540	99.3	Pass
T5	120 - 100	Leg	3	108	-205.790	208.347	98.8	Pass
T6	100 - 80	Leg	3 1/4	135	-248.033	260.312	95.3	Pass
T7	80 - 60	Leg	3 1/2	162	-288.348	317.273	90.9	Pass
T8	60 - 40	Leg	3 3/4	189	-327.241	379.106	86.3	Pass
T9	40 - 20	Leg	3 3/4	216	-365.248	379.106	96.3	Pass
T10	20 - 0	Leg	4	243	-401.684	445.717	90.1	Pass
T1	195 - 180	Diagonal	L1 3/4x1 3/4x3/16	17	-3.552	11.206	31.7 36.2 (b)	Pass
T2	180 - 160	Diagonal	L1 3/4x1 3/4x3/16	29	-7.201	7.721	93.3	Pass
T3	160 - 140	Diagonal	L2x2x3/16	55	-7.658	8.909	86.0	Pass
T4	140 - 120	Diagonal	L2x2x1/4	82	-8.179	8.972	91.2	Pass
T5	120 - 100	Diagonal	L2 1/2x2 1/2x3/16	109	-8.317	11.018	75.5	Pass
T6	100 - 80	Diagonal	L2 1/2x2 1/2x3/16	136	-8.593	8.952	96.0	Pass
T7	80 - 60	Diagonal	L2 1/2x2 1/2x1/4	163	-8.967	9.605	93.3	Pass
T8	60 - 40	Diagonal	L3x3x3/16	190	-9.520	10.877	87.5	Pass
T9	40 - 20	Diagonal	L3x3x1/4	217	-9.827	12.022	81.7	Pass
T10	20 - 0	Diagonal	L3x3x1/4	244	-10.174	10.338	98.4	Pass
T1	195 - 180	Top Girt	L1 3/4x1 3/4x3/16	6	-0.446	6.409	7.0	Pass
							Summary	
						Leg (T4)	99.3	Pass
						Diagonal (T10)	98.4	Pass
						Top Girt (T1)	7.0	Pass
						Bolt Checks	81.4	Pass
						RATING =	**99.3**	**Pass**

LOGAN COUNTY, KENTUCKY

VERIZON WIRELESS SITE NAME: CK RUSSELLVILLE CAP



NOTE: TOWERS DEPICTED ARE ALL KNOWN TOWER SITES REGISTERED WITH THE FEDERAL COMMUNICATIONS COMMISSION IN LOGAN COUNTY, KENTUCKY.

USGS 7.5 MINUTE QUADRANGLE: RUSSELLVILLE, KY

EXISTING TOWER LEGEND

A1 FCC REGISTRATION #: 1043225
CELLCO PARTNERSHIP
LAT: 36° 50' 41.0"N
LONG: 86° 51' 27.0"W

B1 (GRANTED)
FCC REGISTRATION #: 1043269
LOGAN RADIO INC
LAT: 36° 50' 41.0"N
LONG: 86° 55' 21.0"W

C1 FCC REGISTRATION #: 1043422
CROWN CASTLE SOUTH LLC
LAT: 36° 49' 53.1"N
LONG: 86° 54' 51.9"W

D1 FCC REGISTRATION #: 1043427
CROWN CASTLE SOUTH LLC
LAT: 37° 03' 58.8"N
LONG: 87° 00' 53.8"W

E1 FCC REGISTRATION #: 1043439
FRANKLYNN FARMS, INC.
LAT: 36° 40' 05.6"N
LONG: 86° 49' 57.3"W

F1 FCC REGISTRATION #: 1043532
PENNYRILE RECC
LAT: 36° 50' 09.0"N
LONG: 86° 53' 02.0"W

G1 FCC REGISTRATION #: 1044828
COMMONWEALTH OF KENTUCKY dba=
KY EMERGENCY WARNING SYSTEM KEWS
LAT: 36° 53' 58.0"N
LONG: 86° 50' 21.7"W

H1 FCC REGISTRATION #: 1050236
CEQUEL III COMMUNICATIONS I
dba= SUDDENLINK COMMUNICATIONS
LAT: 36° 51' 55.0"N
LONG: 86° 54' 01.0"W

I1 FCC REGISTRATION #: 1237175
GLOBAL TOWER, LLC.
through AMERICAN TOWERS, LLC
LAT: 36° 50' 51.7"N
LONG: 86° 46' 11.1"W

J1 FCC REGISTRATION #: 1246004
CCATT LLC
LAT: 36° 40' 56.0"N
LONG: 86° 51' 50.5"W

K1 FCC REGISTRATION #: 1246006
CCATT LLC
LAT: 36° 58' 34.3"N
LONG: 86° 57' 59.8"W

L1 FCC REGISTRATION #: 1256442
CELLCO PARTNERSHIP
LAT: 36° 45' 39.5"N
LONG: 86° 51' 51.6"W

M1 FCC REGISTRATION #: 1261471
CELLCO PARTNERSHIP
LAT: 36° 49' 14.6"N
LONG: 87° 02' 42.8"W

N1 FCC REGISTRATION #: 1261473
CELLCO PARTNERSHIP
LAT: 36° 57' 07.6"N
LONG: 86° 47' 36.4"W

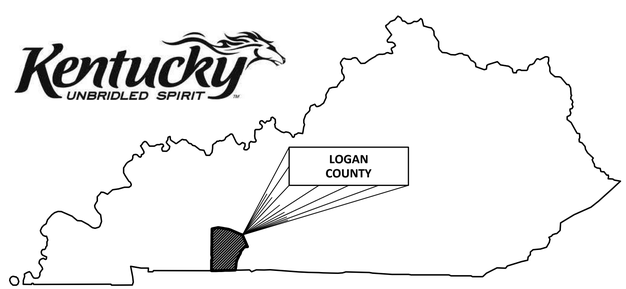
O1 FCC REGISTRATION #: 1262078
CITY OF RUSSELLVILLE
ELECTRIC PLANT BOARD
LAT: 36° 50' 09.6"N
LONG: 86° 53' 01.8"W

P1 FCC REGISTRATION #: 1266950
CELLCO PARTNERSHIP
LAT: 37° 03' 33.7"N
LONG: 87° 01' 50.4"W

Q1 FCC REGISTRATION #: 1287202
CELLCO PARTNERSHIP
LAT: 36° 44' 53.9"N
LONG: 87° 01' 08.7"W

R1 FCC REGISTRATION #: 1303476
TILLMAN INFRASTRUCTURE LLC
LAT: 36° 51' 15.9"N
LONG: 87° 01' 32.6"W

S1 FCC REGISTRATION #: 1306388
CELLCO PARTNERSHIP
LAT: 36° 49' 24.6"N
LONG: 86° 48' 30.3"W



PREPARED BY:
POD
POWER OF DESIGN
11490 BLUEGRASS PARKWAY
LOUISVILLE, KY 40299
502-437-5252

PREPARED FOR:
CELLCO PARTNERSHIP D/B/A verizon

REVISIONS

REV.	DATE	DESCRIPTION
A	2.21.22	ISSUED FOR REVIEW
B	6.30.22	REVISED TOWER & LOCATION

SITE INFORMATION:

CK RUSSELLVILLE CAP
CREEKWOOD DRIVE
RUSSELLVILLE, KY, 42276
LOGAN COUNTY

TAX PARCEL NUMBER:
068-00-00-025-01

PROPERTY OWNER:
JOHN & ELIZABETH TABOR
5349 BUENA VISTA ROAD,
RUSSELLVILLE, KY 42276

SOURCE OF TITLE:
DEED BOOK 365, PAGE 673

POD NUMBER:	22-121714
DRAWN BY:	DAP
CHECKED BY:	MEP
SURVEY DATE:	1.26.22
PLAT DATE:	2.21.22

SHEET TITLE:

TOWER GRID MAP

SHEET NUMBER: (1 page)

C-1

Federal Aviation Administration

The system will be going offline from 7pm ET to midnight on Thursday, August 18, 2022 for scheduled upgrades. We apologize for any inconvenience.

« OE/AAA

Notice Criteria Tool

Notice Criteria Tool - Desk Reference Guide V_2018.2.0

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9.

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the FAA Co-location Policy
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the Air Traffic Areas of Responsibility map for Off Airport construction, or contact the FAA Airports Region / District Office for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

Latitude:	36 Deg 51 M 50.30 S N
Longitude:	86 Deg 53 M 09.85 S W
Horizontal Datum:	NAD83
Site Elevation (SE):	581 (nearest foot)
Structure Height :	199 (nearest foot)
Traverseway:	No Traverseway (Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway
Is structure on airport:	(●) No ( ) Yes

Results

You do not exceed Notice Criteria.


4M

RE: [E] FW: Assistance Requested: BTS 2.0 Assignment: CK Russellville Cap - F# 16507368

From: Lee Littleton (lee.littleton@harmonitowers.com)

To: barbara.evans@verizonwireless.com

Cc: pattonacq@yahoo.com; abigail.ball@verizonwireless.com; dancoots@chwlaw.com; jcoulon@chwlaw.com; jackie.straight@verizonwireless.com; Abigale.McClain@harmonitowers.com; Nathan.Olson@harmonitowers.com; cdamico@podgrp.com

Date: Monday, October 3, 2022, 01:54 PM EDT

Barb,
Here is the reply from KAZC:

Good Morning,

This proposed site and height does not fall within the jurisdiction of the Zoning Commission so no permit is required. You are free to proceed from an airspace standpoint.

Note: If you plug your coordinates into this FAA site (link below) and no airspace study is required (i.e.; 'You do not exceed Notice Criteria'), then you are not required to file with us either. I hope this helps save you some paperwork in the future, as well as selecting potential sites.
No ce Criteria Tool (faa.gov)

Regards, Brad

Brad Schwandt
Airport Zoning Administration
Department of Aviation
90 Airport Road
Frankfort, KY 40601
Office: 502-564-0151
AirportZoning@ky.gov

KENTUCKY TRANSPORTATION CABINET

From: Evans, Barbara J <barbara.evans@verizonwireless.com>
Sent: Monday, October 3, 2022 8:50 AM
To: Lee Littleton <Lee.Littleton@harmonitowers.com>
Cc: Preston Patton <pattonacq@yahoo.com>; Ball, Abigail Diane Dewey <abigail.ball@verizonwireless.com>; Dan Coots <dancoots@chwlaw.com>; Jennifer Coulon <jcoulon@chwlaw.com>; Straight, Jackie <jackie.straight@verizonwireless.com>; Abigale McClain <Abigale.McClain@harmonitowers.com>; Nathan Olson <Nathan.Olson@harmonitowers.com>; Cali D'Amico POD <cdamico@podgrp.com>
Subject: Re: [E] FW: Assistance Requested: BTS 2.0 Assignment: CK Russellville Cap - F# 16507368

Thanks.

verizon

Barbara Madigan Evans

Sr Engineer Spec - Network Reg/RE

24242 Northwestern Highway

Southfield, MI 48075

O 248-915-3577 | M 248-721-1097

Barbara.Evans@verizonwireless.com

On Mon, Oct 3, 2022 at 9:46 AM Lee Littleton <Lee.Littleton@harmonitowers.com> wrote:

> Good morning, Barb.
>
> We submitted the KAZC application this morning.
>
> Additionally, we requested the application to be included on the 10/10 agenda.
>
> Preston,
>
> Updated title report attached. There are 2 modifications of mortgage and 1 partial release of mtg, recorded.
>
> Thanks always,
>
> Lee Littleton
>
> 501-352-2464
>
> ---
>
> **From:** Evans, Barbara J <barbara.evans@verizonwireless.com>
> **Sent:** Thursday, September 29, 2022 9:48 AM
> **To:** Preston Patton <pattonacq@yahoo.com>
> **Cc:** Ball, Abigail Diane Dewey <abigail.ball@verizonwireless.com>; Lee Littleton <Lee.Littleton@harmonitowers.com>; Dan Coots <dancoots@chwlaw.com>; Jennifer Coulon <jcoulon@chwlaw.com>; Straight, Jackie <jackie.straight@verizonwireless.com>; Nathan Olson <Nathan.Olson@harmonitowers.com>; Cali D'Amico POD <cdamico@podgrp.com>
> **Subject:** Re: [E] FW: Assistance Requested: BTS 2.0 Assignment: CK Russellville Cap - F# 16507368
>
> **CAUTION:** This email is from outside the organization
>
> Hi Preston:
>
> That is correct.
>
> Thanks,
>
> Barb
>
> verizon
>
> Barbara Madigan Evans
>
> Sr Engineer Spec - Network Reg/RE
>
> 24242 Northwestern Highway
>
> Southfield, MI 48075
>
> O 248-915-3577 | M 248-721-1097
>
> Barbara.Evans@verizonwireless.com

On Wed, Sep 28, 2022 at 8:58 AM Preston Patton <pattonacq@yahoo.com> wrote:

Hi Lee,

Per the Verizon deployment call yesterday, the new direction from Barb regarding the KAZC is as follows:

If Verizon is required to file notice with the FAA, Verizon will also file for the KAZC. If the FAA is NNR- Notice Not Required, the BTS company needs to file for the KAZC (Kentucky Airport Zoning Commission).

I have attached the 1A and Airspace study I pulled from FUZE.

Hi Barb,

Could you please confirm I am understanding the new direction correctly and that this one falls into the category of the BTS company needing to file for the KAZC?

Thanks much,

Preston F. Patton, Jr.
President
Patton Acquisition Inc.

Mobile: 601-260-9994

On Monday, September 26, 2022, 12:06:52 PM EDT, Lee Littleton <lee.littleton@harmonitowers.com> wrote:

Thank you for the time on the phone, Preston.

No further action needed at this time regarding the sewer easement.

Lee

From: Preston Patton <pattonacq@yahoo.com>
Sent: Monday, September 26, 2022 8:19 AM
To: Ball, Abigail Diane Dewey <abigail.ball@verizonwireless.com>
Cc: Lee Littleton <Lee.Littleton@harmonitowers.com>; Dan Coots <dancoots@chwlaw.com>; Jennifer Coulon <jcoulon@chwlaw.com>; Straight, Jackie <jackie.straight@verizonwireless.com>; Nathan Olson <Nathan.Olson@harmonitowers.com>; Barbara J. Evans <barbara.evans@verizonwireless.com>; Cali D'Amico POD <cdamico@podgrp.com>
Subject: Re: [E] FW: Assistance Requested: BTS 2.0 Assignment: CK Russellville Cap - F# 16507368

CAUTION: This email is from outside the organization

Hi Abbey and Lee,

We have the PE lease. We received an email with the partial release of lien, but can not send the lease up for full execution until it's recorded. They will send us that as soon as it is complete. I will follow back up with the LL today to see if the bank has completed this.

Dan, did we need anything else, besides having that one document recorded, to clear us for FE?

Lee,

I just left a voicemail regarding this. As for the easement, since the information wasn't available in the title docs theres no way for the surveyor to plat the easement. From looking on page 84 of supporting title docs and comparing to the LE and google earth, it looks to me to be the sewer easement that runs on the adjoining property to the east and then turns to just cross our SE property corner. The tower Lease area and access/ utility easement is not encroaching on that sewer easement.

Is there an issue here that needs to be addressed? If so, please advise how you would like us to proceed.

Thanks,

Preston F. Patton, Jr.

President

Patton Acquisition Inc.

Mobile: 601-260-9994

On Sep 26, 2022, at 7:30 AM, Ball, Abigail Diane Dewey <abigail.ball@verizonwireless.com> wrote:

I do not see any digital record of the lease in my inbox for processing -

+Dan Coots +Jennifer Coulon

Can you please get me the lease agreement for this and I will get it processed today?

Thank you

abbey

verizon

Abigail Ball

Sr Engr Cslt-Ntwk Reg/RE

M 989-944-0850

F 614-339-4889

abigail.ball@verizonwireless.com

On Sun, Sep 25, 2022 at 12:10 PM Lee Littleton <Lee.Littleton@harmonitowers.com> wrote:

> Hi Preston,

Hope everyone is doing well.

Did the Lease Agreement get fully executed?

Are SNDAs forthcoming? Seems like there are two mortgages. One that originally was 95.000 and another one for 260,000.

Also note that the Surveyor did not plot (could not determine location) the 15' wide perpetual ROW Easement. Page 84 of the Supporting Title docs is a simple survey of where this easement is located and page 91 describes a "plat attached hereto" but there is not a plat attached. I suspect this easement is paralleling the North property line of our LO, to service the houses there.

2. RIGHT OF WAY EASEMENT IN FAVOR OF JOHN W. CATES SET FORTH IN INSTRUMENT RECORDED ON AUGUST 28, 1989 IN DEED BOOK 40, PAGE 647. **(LOCATION OF AGREEMENT CAN NOT BE DETERMINED.)**
3. MEMORANDUM AGREEMENT DATED AUGUST 23, 1989 BY AND BETWEEN REBECCA MONTGOMERY SIMOR AND GEORGE SIMOR AND JOHN W. CATES, D/B/A CATES CONSTRUCTION COMPANY RECORDED ON AUGUST 29, 1989 IN DEED BOOK 40, PAGE 638. **(LOCATION OF AGREEMENT CAN NOT BE DETERMINED.)**
4. RIGHT OF WAY EASEMENT IN FAVOR OF REBECCA MONTGOMERY SIMOR AND GEORGE SIMOR SET FORTH IN INSTRUMENT RECORDED ON AUGUST 28, 2009 IN DEED BOOK 40, PAGE 649. **(LOCATION OF AGREEMENT CAN NOT BE DETERMINED.)**
5. AGREEMENT DATED AUGUST 23M 1989 BY AND BETWEEN JOHN W. CATES, D/B/A CATES CONSTUCTION COMPANY AND REBECCA SIMOR AND GEORGE SIMOR RECORDED ON AUGUST 28, 1989 IN DEED BOOK 40, PAGE 643. **(LOCATION OF AGREEMENT CAN NOT BE DETERMINED.)**

Thank you,

Lee

From: Lee Littleton
Sent: Friday, August 5, 2022 10:02 AM
To: Preston Patton <pattonacq@yahoo.com>; Straight, Jackie <jackie.straight@verizonwireless.com>; Nathan Olson <Nathan.Olson@harmonitowers.com>
Cc: Barbara J. Evans <barbara.evans@verizonwireless.com>; Abigail Diane Dewey Ball <abigail.ball@verizonwireless.com>
Subject: RE: [E] FW: Assistance Requested: BTS 2.0 Assignment: CK Russellville Cap - F# 16507368

Excellent news, Preston!

Thank you so very much for this update.

Lee

From: Preston Patton <pattonacq@yahoo.com>
Sent: Friday, August 5, 2022 10:00 AM
To: Straight, Jackie <jackie.straight@verizonwireless.com>; Nathan Olson <Nathan.Olson@harmonitowers.com>
Cc: Barbara J. Evans <barbara.evans@verizonwireless.com>; Abigail Diane Dewey Ball <abigail.ball@verizonwireless.com>; Lee Littleton <Lee.Littleton@harmonitowers.com>
Subject: Re: [E] FW: Assistance Requested: BTS 2.0 Assignment: CK Russellville Cap - F# 16507368

CAUTION: This email is from outside the organization

Hi All,

Just wanted to provide another update here in relations to the LL executed Lease. I just spoke to Dr. Tabor again a moment ago. He reviewed the revised doc that Dan Coots sent while he was on vacation and is has approved the Lease language. He said he will find a notary for the MOL either today or first thing Monday morning and then send the PE docs back to Dan no later than Monday.

Have a great Friday and weekend.

Thanks,

Preston F. Patton, Jr.
President
Patton Acquisition Inc.

Mobile: 601-260-9994

On Tuesday, July 19, 2022, 04:16:42 PM EDT, Nathan Olson <nathan.olson@harmonitowers.com> wrote:

Good news, Preston! Thanks for the update.

Nathan Olson

Business Development Manager

C 616-633-9730

nathan.olson@harmonitowers.com

HARMONITOWERS

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From: Straight, Jackie <jackie.straight@verizonwireless.com>
Sent: Tuesday, July 19, 2022 2:23 PM
To: Preston Patton <pattonacq@yahoo.com>
Cc: Nathan Olson <Nathan.Olson@harmonitowers.com>; Barbara J. Evans <barbara.evans@verizonwireless.com>; Abigail Diane Dewey Ball <abigail.ball@verizonwireless.com>; Lee Littleton <Lee.Littleton@harmonitowers.com>
Subject: Re: [E] FW: Assistance Requested: BTS 2.0 Assignment: CK Russellville Cap - F# 16507368

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Thanks, Preston. That is great news.

verizon

Jackie Straight

Sr Eng Cslt Network Reg RE

M 2707500023
2902 Ring Road
Elizabethtown, KY 42701

On Tue, Jul 19, 2022 at 10:47 AM Preston Patton <pattonacq@yahoo.com> wrote:

> Hi All,
>
> I wanted to provide another update regarding this Lease. We have finally been able to work out all of the issues regarding the lease language. We previously had the language worked out, so we sent the executable docs to the landowner a couple of weeks ago. He came back with more redlines. We were able to accommodate him on 1 of the 2 requests. I just spoke to him again and he agreed to let the other issue drop. He is leaving tomorrow morning for a family trip to Wyoming and will be home on 7/28. I have asked Dan Coots to mail him the revised executable Ground Lease again for his signature when he returns. I expect to have the PE docs to Verizon for Full execution by 8/3.
>
> Sorry for the delays. Although this landowner is very nice, he is also very particular.
>
> Thanks much,
>
> Preston F. Patton, Jr.
> President
> Patton Acquisition Inc.
>
> Mobile: 601-260-9994
>
> On Tuesday, July 12, 2022, 04:33:30 PM EDT, Nathan Olson <nathan.olson@harmonitowers.com> wrote:
>
> Thanks, Preston.
>
> **Nathan Olson**
>
> **Business Development Manager**
>
> **C** 616-633-9730
>
> nathan.olson@harmonitowers.com
>
> HARMONITOWERS
>
> harmonitowers.com
>
> ---
>
> **From:** Preston Patton <pattonacq@yahoo.com>
> **Sent:** Tuesday, July 12, 2022 10:47 AM
> **To:** Nathan Olson <Nathan.Olson@harmonitowers.com>
> **Subject:** Re: [E] FW: Assistance Requested: BTS 2.0 Assignment: CK Russellville Cap - F# 16507368
>
> **CAUTION:** This email is from outside the organization
>
> No Sir. Sorry to say, but once he receive the executable docs he sent it to his attorney and he asked for a few more small revisions. The redlined lease, with his requests incorporated, is back with him and his attorney for review. I expect to have his approval or more comments by mid to late this week.

Sorry for the delay here.

Thanks much,

Preston F. Patton, Jr.
President
Patton Acquisition Inc.

Mobile: 601-260-9994

On Tuesday, July 12, 2022, 11:07:57 AM EDT, Nathan Olson <nathan.olson@harmonitowers.com> wrote:

Hi Preston,

Just wanted to check in and see if the LL signed the ground lease yet. Thanks,

Nathan Olson

Business Development Manager

C 616-633-9730

nathan.olson@harmonitowers.com

HARMONITOWERS

harmonitowers.com

From: Preston Patton <pattonacq@yahoo.com>
Sent: Tuesday, June 21, 2022 9:31 AM
To: Nathan Olson <Nathan.Olson@harmonitowers.com>
Subject: Re: [E] FW: Assistance Requested: BTS 2.0 Assignment: CK Russellville Cap - F# 16507368

CAUTION: This email is from outside the organization

Hi Nathan,

The Phase 1 came back clean. The Landowner said he will have the partially executed Lease docs back to Verizon by the end of the week. The NEPA is in process, but we still need the NEPA clearance back to order the Geotech and SRR. You will need those to order the tower and foundation drawings.

Thanks much,

Preston F. Patton, Jr.
President
Patton Acquisition Inc.

Mobile: 601-260-9994

On Thursday, May 26, 2022, 06:55:40 PM EDT, Preston Patton <pattonacq@yahoo.com> wrote:

Hi Nathan,

I just wanted to provide you an update. I just received approval of the revised survey tower location from the landowner today. I have ordered the Phase 1 and NEPA and alerted Verizon that we can move forward now. I will also contact Dan Coots, Verizon's outside council to send the executable docs to the landowner when he get back in the office on Tuesday morning.

Have a great weekend!

Thanks,

Preston F. Patton, Jr.
President
Patton Acquisition Inc.

Mobile: 601-260-9994

On Monday, May 16, 2022, 01:56:24 PM EDT, Preston Patton <pattonacq@yahoo.com> wrote:

Hi Nathan,

Sorry for the delayed response. Your email along with many other of my contacts have started going to spam for some reason.

Also, I was off 5/12 & 5/13, so I'm digging out of emails right now. We did received the revised location survey on 5/12 and I will be sending it to the LL for approval. The LE is due 5/20. I am sending the survey to the LL for approval today and will have the attorney send him the executable lease and order the Phase 1 and NEPA once he approves. The Lease language has already been agreed to. The delay has been the landowner wanting to move the site after we did the original survey.

I'll let you know as soon as have more updates.

Thanks much,

Preston F. Patton, Jr.
President
Patton Acquisition Inc.

Mobile: 601-260-9994

On Wednesday, May 11, 2022, 12:28:49 PM EDT, Nathan Olson <nathan.olson@harmonitowers.com> wrote:

Hi Preston,

Just wanted to check in and see how things are progressing with this site. Do you need anything from us?

How are things going with the LL and negotiating the ground lease? Any ETA on when you expect that to be complete? Thanks,

Nathan Olson

Business Development Manager

C 616-633-9730

nathan.olson@harmonitowers.com

HARMONITOWERS

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From: Patton Acq <pattonacq@yahoo.com>
Sent: Monday, April 11, 2022 3:53 PM
To: Straight, Jackie <jackie.straight@verizonwireless.com>
Cc: Nathan Olson <Nathan.Olson@harmonitowers.com>; Abigail Diane Dewey Ball <abigail.ball@verizonwireless.com>; Palanjian, Anna T <anna.palanjian@verizonwireless.com>; Evans, Barbara J <barbara.evans@verizonwireless.com>
Subject: Re: [E] FW: Assistance Requested: BTS 2.0 Assignment: CK Russellville Cap - F# 16507368

Thanks so much Jackie. I have let POD know so we can meet setbacks from the houses to the north.

Thanks,

Preston F. Patton, Jr.

President

Patton Acquisition Inc.

Mobile: 601-260-9994

On Apr 11, 2022, at 4:42 PM, Straight, Jackie <jackie.straight@verizonwireless.com> wrote:

Nathan,

Approved for self-support instead of monopole. I have asked for an updated RFDS to reflect mounts for the self-support. If anyone has any questions, please let me know.

Thank You,

verizon

Jackie Straight

Sr Eng Cslt Network Reg RE

M 2707500023
2902 Ring Road
Elizabethtown, KY 42701

On Mon, Apr 11, 2022 at 3:13 PM Nathan Olson <Nathan.Olson@harmonitowers.com> wrote:

> Hi Jackie,
>
> I was out of the office last Thursday and Friday so I did not send you an email asking if Verizon is Ok with us building a self-support at this location as opposed to a monopole.
>
> It appears zoning does not care if it is a monopole or self-support so our Dev team would prefer to do a self-support due to overall cost.
>
> If Verizon has any issue with that we'll be fine with doing a monopole or if Preston sees any issue come up from permitting same thing.
> Thanks,
>
> **Nathan Olson**
>
> **Business Development Manager**
>
> **C** 616-633-9730
>
> nathan.olson@harmonitowers.com
>
> harmonitowers.com
>
> ---
>
> **From:** Patton Acq <pattonacq@yahoo.com>
> **Sent:** Monday, April 11, 2022 8:21 AM
> **To:** Nathan Olson <Nathan.Olson@harmonitowers.com>
> **Subject:** Re: Assistance Requested: BTS 2.0 Assignment: CK Russellville Cap - F# 16507368
>
> **CAUTION:** This email is from outside the organization
>
> Hi Nathan,
>
> I just spoke to Jackie regarding the tower change. I let her know you sent her an email as well because I'm sure she'll have a lot of emails to go through today. She said she will look into it and let us know something ASAP. Please let me know as soon as you hear back from her. I will do the same.
>
> Thanks,
>
> Preston F. Patton, Jr.
>
> President
>
> Patton Acquisition Inc.

Mobile: 601-260-9994

On Apr 7, 2022, at 11:05 AM, Nathan Olson <Nathan.Olson@harmonitowers.com> wrote:

Hey Preston,

Just got confirmation back from our Dev group they would prefer a self support but I'll need to make sure Verizon is Ok with that also.

I believe Jackie is OOO today and I am also but will try to confirm with her tomorrow for you.

Nathan Olson

Sent from my iPhone

On Apr 7, 2022, at 9:06 AM, Preston Patton <pattonacq@yahoo.com> wrote:

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Hi Nathan,

Just needing to check back on this.

Thanks much,

Preston F. Patton, Jr.
President
Patton Acquisition Inc.

Mobile: 601-260-9994

On Wednesday, April 6, 2022, 09:53:29 AM EDT, Preston Patton <pattonacq@yahoo.com> wrote:

Hi Nathan,

I just left you a voicemail. I wanted to provide you an update on this site. We had another A&E walk yesterday because the landowner wanted to move the tower to the NE corner of the property. So we are going to redo the survey and 1A. We are pushing the tower as close as zoning setbacks will allow to the houses on the north property line. Our setback can not be determined until we know for sure what the tower type will be. Are you for sure wanting to use a SST here? If so, have you discussed that tower change with Verizon and received their approval. The RFDS is currently still showing a monopole. We will need to get the RFDS revised to show a Self Support and change the antenna mounts as well.

Please let me know at your earliest convenience, as this will affect the placement the tower to meet setbacks.

Thanks much,

Preston F. Patton, Jr.
President
Patton Acquisition Inc.

Mobile: 601-260-9994

On Monday, March 7, 2022, 11:44:59 AM EST, Nathan Olson <nathan.olson@harmonitowers.com> wrote:

Hi Preston,

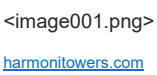
One more question for you on this site. Do you think zoning would allow a self-support here? I believe this is showing as a 195' MP but steel costs for a MP are way higher right now than a self-support so wanted to check with you on that. Thanks,

Nathan Olson

Business Development Manager

C 616-633-9730

nathan.olson@harmonitowers.com



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From: Preston Patton <pattonacq@yahoo.com>
Sent: Tuesday, February 22, 2022 9:10 AM
To: Straight, Jackie <jackie.straight@verizonwireless.com>; Michael McCormick <Michael.McCormick@harmonitowers.com>; Nathan Olson <Nathan.Olson@harmonitowers.com>
Cc: Abigail Diane Dewey Ball <abigail.ball@verizonwireless.com>; Anna T Palanjian <anna.palanjian@verizonwireless.com>; Barbara J Evans <barbara.evans@verizonwireless.com>; Cali D'Amico POD <cdamico@podgrp.com>
Subject: Re: Assistance Requested: BTS 2.0 Assignment: CK Russellville Cap - F# 16507368

Sorry Nathan. I forgot to include one thing. The landowner will not allow for a guyed tower.

Preston F. Patton, Jr.
President
Patton Acquisition Inc.

Mobile: 601-260-9994

On Tuesday, February 22, 2022, 10:09:13 AM EST, Preston Patton <pattonacq@yahoo.com> wrote:

Hi All,

Nathan, I just wanted to give you a quick rundown of were we are on this project. We are currently waiting for lease comments back from the landowner. We are also working through some Lease Exhibit and survey questions/ comments with the landowner.

I have attached the SCIP for your review.

Please note: The information in the SCIP regarding zoning is not accurate, due to the County/City Zoning Administrator not know what the zoning requirements were at the time of SCIP submittal. This is explained in the SCIP. I have recently confirmed with the Joint County/ city Zoning Administrator and County Judge Executive, that there will be no zoning requirements through the county or city. We will submit zoning through the KY Public Service Commission.

Feel free to call me with any questions or comments.

Thanks,

Preston F. Patton, Jr.
President
Patton Acquisition Inc.

Mobile: 601-260-9994

On Tuesday, February 22, 2022, 09:19:04 AM EST, Nathan Olson <nathan.olson@harmonitowers.com> wrote:

Thanks, Jackie. Email received and we'll be in touch.

Nathan Olson

Business Development Manager

C 616-633-9730

nathan.olson@harmonitowers.com

harmonitowers.com

From: Straight, Jackie <jackie.straight@verizonwireless.com>
Sent: Tuesday, February 22, 2022 7:47 AM
To: Nathan Olson <Nathan.Olson@harmonitowers.com>; Michael McCormick <Michael.McCormick@harmonitowers.com>
Cc: Preston Patton <pattonacq@yahoo.com>; Abigail Diane Dewey Ball <abigail.ball@verizonwireless.com>; Anna T Palanjian <anna.palanjian@verizonwireless.com>; Barbara J Evans <barbara.evans@verizonwireless.com>
Subject: Assistance Requested: BTS 2.0 Assignment: CK Russellville Cap - F# 16507368

CAUTION: This email is from outside the organization

Good Morning,

Please let this serve as notice that this 2022 POR Macro NB - BG is being assigned to Harmoni Tower for BTS2.0 review and acceptance.

All documents are loaded into Fuze. The site acq assigned to this site is Preston Patton (copied on this email) if you have any questions.

We are working toward a 12/01/22 RTC date.

Please respond back via email by COB 03/08/22 with acceptance or rejection.

Thank You,

verizon✓

Jackie Straight

Sr Eng Cslt Network Reg RE

M 2707500023
2902 Ring Road
Elizabethtown, KY 42701

ATTENTION: New office address, as of 2/1/2022: 11101 Anderson Drive, Suite 200, Little Rock, AR 72212

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<image001.png>

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Date: November 11, 2022

POD Job Number: 21-102846

GEOTECHNICAL REPORT

CK RUSSELLVILLE CAP

P 36° 51' 50.300568" N
86° 53' 09.848060" W

Creekwood Drive,
Russellville, KY 42276

Prepared For:

verizon

Prepared By:

POD
POWER OF DESIGN

11490 Bluegrass Parkway | Louisville, Kentucky 40299 | 502.437.5252
POWER OF DESIGN GROUP, LLC

POD
POWER OF DESIGN

November 11, 2022

Ms. Jackie Straight
Verizon Wireless
2902 Ring Road
Elizabethtown, KY 42701

Re: Geotechnical Report – **PROPOSED 195' SELF-SUPPORT TOWER w/ 4' LIGHTNING ARRESTOR**
Site Name: **CK RUSSELLVILLE CAP**
Site Address: Creekwood Drive, Russellville, Logan County, Kentucky
Coordinates: N36° 51' 50.30", W86° 53' 09.85"
POD Project No. 21-102846

Dear Ms. Straight:

Attached is our geotechnical engineering report for the referenced project. This report contains our findings, an engineering interpretation of these findings with respect to the available project characteristics, and recommendations to aid design and construction of the tower and equipment support foundations.

We appreciate the opportunity to be of service to you on this project. If you have any questions regarding this report, please contact our office.

Cordially,

Mark Patterson, P.E.
Project Engineer
License No.: KY 16300

STATE OF KENTUCKY
MARK E. PATTERSON
16,300
LICENSED
PROFESSIONAL ENGINEER

Copies submitted: (3) Ms. Jackie Straight

LETTER OF TRANSMITTAL

TABLE OF CONTENTS

APPENDIX

Geotechnical Report
PROPOSED 195' SELF-SUPPORT TOWER w/ 4' LIGHTNING ARRESTOR
Site Name: **CK RUSSELLVILLE CAP**
Creekwood Drive, Russellville, Logan County, Kentucky
N36° 51' 50.300568", W86° 53' 09.848060"

1. PURPOSE AND SCOPE

The purpose of this study was to determine the general subsurface conditions at the site of the proposed tower by drilling three borings and to evaluate this data with respect to foundation concept and design for the proposed tower. Also included is an evaluation of the site with respect to potential construction problems and recommendations dealing with quality control during construction.

2. PROJECT CHARACTERISTICS

Verizon is proposing to construct a self-support tower and either an equipment shelter, slab, or platform at N36° 51' 50.300568", W86° 53' 09.848060", Creekwood Drive, Russellville, Logan County, Kentucky. The site is located in a farm field just south of US 68 on the north side of Russellville. The proposed lease area will be 10,000 square feet and will be accessed by a new access road off Newtown Road running east to the site. The proposed elevation at the tower location is about EL 581 and there is about 4-feet of change in elevation across the proposed lease area. The proposed tower location is shown on the Boring Location Plan in the Appendix.

3. SUBSURFACE CONDITIONS

The subsurface conditions were explored by drilling three test borings near the base of the proposed tower. The Geotechnical Soil Test Boring Logs, which are included in the Appendix, describes the materials and conditions encountered. A sheet defining the terms and symbols used on the boring logs is also included in the Appendix. The general subsurface conditions disclosed by the test boring is discussed in the following paragraphs.

According to the Kentucky Geological Survey, Kentucky Geologic Map Information Services, the site is underlain by the Mississippian age Ste Genevieve and St Louis Limestone. These formations are intensely karst. There are a few small sinkholes mapped within about a half mile of the site. Most all of the Russellville area is karst, and it is an inherited risk in building in the area.

The borings encountered some topsoil at the existing ground surface. Below the topsoil, the borings encountered clay (CH) of medium to high plasticity. The SPT N-values in the clay were between 9 to 11 blows per foot (bpf) generally indicating medium stiff to stiff consistency. The borings encountered auger refusal between 3.2 and 6.3 feet. Auger refusal is defined as the depth at which the boring can no longer be advanced using the current drilling method.

The refusal material was cored in Boring B-1 from 3.5 to 23.5 feet below the ground surface. Limestone that was continuous, hard, slightly weathered to fresh and light gray was encountered. The recoveries of the rock cores were about 100 percent and the RQD values were 86, 92, 97 and 95 percent. These values generally represent fair to excellent quality rock from a foundation support viewpoint.

Observations made at the completion of soil drilling operations indicated the borings to be dry. It must be noted, however, that short-term water readings in test borings are not necessarily a reliable indication of the actual groundwater level. Furthermore, it must be emphasized that the groundwater level is not stationary but will fluctuate seasonally.

Based on the limited subsurface conditions encountered at the site and using Table 1615.1.1 of the 2018 Kentucky Building Code, the site class is considered "B". Seismic design requirements for telecommunication towers are given in section 1622 of the code. A detailed seismic study was beyond the scope of this report.

4. FOUNDATION DESIGN RECOMMENDATIONS

The following design recommendations are based on the previously described project information, the subsurface conditions encountered in our borings, the results of our laboratory testing, empirical correlations for the soil types encountered, our analyses, and our experience. If there is any change in the project criteria or structure location, you should retain us to review our recommendations so that we can determine if any modifications are required. The findings of such a review can then be presented in a supplemental report or addendum.

We recommend that the geotechnical engineer be retained to review the near-final project plans and specifications, pertaining to the geotechnical aspects of the project, prior to bidding and construction. We recommend this review to check that our assumptions and evaluations are appropriate based on the current project information provided to us, and to check that our foundation and earthwork recommendations were properly interpreted and implemented.

4.1. Proposed Tower

Our findings indicate that the proposed self-support tower can be supported on drilled piers or on a common mat foundation. Please note that auger refusal was encountered as shallow as 3.2 below the existing ground surface. The contractor should plan to deal with bedrock that may not be able to be excavated by soil methods from the ground surface.

4.1.1. Drilled Piers

The following table summarizes the recommended values for use in analyzing lateral and frictional resistance for the various strata encountered at the test boring. It is important to note that these values are estimated based on the standard penetration test results and soil types and were not directly measured. The all values provided are ultimate values and appropriate factors of safety should be used in conjunction with these values. If the piers will bear deeper than about 23 feet, a deeper boring should be drilled to determine the nature of the deeper material.

Depth Below Ground Surface, feet	0 - 2	2 – 6	6 – 23
Ultimate Bearing Pressure (psf)		11,000	75,000
C Undrained Shear Strength, psf	500	2,000	15,000
Ø Angle of Internal Friction degrees	0	0	0
Total Unit Weight, pcf	110	120	135
Soil Modulus Parameter k, pci	30	500	2000
Passive Soil Pressure, psf/one foot of depth		1,350 + 40(D-2)	10,000 + 45(D-6)
Side Friction, psf	100	250	2000

Note: D = Depth below ground surface (in feet) to point at which the passive pressure is calculated.

It is important that the drilled piers be installed by an experienced, competent drilled pier contractor who will be responsible for properly installing the piers in accordance with industry standards and generally accepted methods, without causing deterioration of the subgrade. The recommendations contained herein relate only to the soil-pier interaction and do not account for the structural design of the piers.

4.1.2. Mat Foundation

The tower could be supported on a common mat foundation bearing on the limestone bedrock at least 4 feet in depth can be designed using a net allowable bearing pressure of 5,000 pounds per square foot may be used. This value may

be increased by 30 percent for the maximum edge pressure under transient loads. The friction value can be increased to 0.40 between the concrete and bedrock. The passive pressures given for the drilled pier foundation may be used to resist lateral forces.

It is important that the mat be designed with an adequate factor of safety with regard to overturning under the maximum design wind load.

The mat must found on either soil or bedrock but not both. Soil pockets must be removed and replaced with KY #57 or equivalent.

4.2. Equipment Platform

An equipment platform may be supported on shallow piers bearing in the very highly weathered rock and designed for a net allowable soil pressure of 2,500 pounds per square foot. The piers should bear at a depth of at least 30 inches to minimize the effects of frost action. All existing topsoil or clay soil should be removed beneath footings.

4.3. Equipment Slab

A concrete slab supporting the equipment must be supported on at least 6-inch layer of relatively clean granular material such as gravel or crushed stone containing not more than 10 percent material that passes through a No. 4 sieve. This is to help distribute concentrated loads and equalize moisture conditions beneath the slab. Provided that a minimum of 6 in. of granular material is placed below the slab, a modulus of subgrade reaction (k) of 120 lbs/cu.in. can be used for design of the slab. All existing topsoil or soft natural soil should be removed beneath crushed stone layer.

4.4. Equipment Building

If an equipment building support on a slab is chosen in place of the equipment platform, it may be supported on shallow spread footings bearing in the highly weathered siltstone and designed for a net allowable soil pressure of 2,500 pounds per square foot.

The footings should be at least ten inches wide. If the footings bear on soil they should bear at a depth of at least 30 inches to minimize the effects of frost action. All existing topsoil or clay natural soil should be removed beneath footings.

Floor slabs must be supported on at least 4-inch layer of relatively clean granular material such as gravel or crushed stone containing not more than 10 percent material that passes through a No. 4 sieve. This is to help distribute concentrated loads and equalize moisture conditions beneath the slab. Provided that a minimum of 4 in. of granular material is placed below the slab, a modulus of subgrade reaction (k) of 120 lbs/cu.in. can be used for design of the floor slabs.

4.5. Drainage and Groundwater Considerations

Good site drainage must be provided. Surface run-off water should be drained away from the tower and platform and not allowed to pond. It is recommended that all foundation concrete be placed the same day the excavation is made.

At the time of this investigation, groundwater was not encountered. Therefore, no special provisions regarding groundwater control are considered necessary for shallow foundations. Any seepage should be able to be pumped with sumps.

5. GENERAL CONSTRUCTION PROCEDURES AND RECOMMENDATIONS

It is possible that variations in subsurface conditions will be encountered during construction. Although only minor variations that can be readily evaluated and adjusted for during construction are anticipated, it is recommended the geotechnical engineer, or a qualified representative be retained to perform continuous inspection and review during construction of the soils-related phases of the work. This will permit correlation between the test boring data and the actual soil conditions encountered during construction.

5.1 Drilled Piers

Please note that auger refusal was right at the existing ground surface. The contractor should plan to deal with bedrock that may not be able to be excavated by soil methods from the start of excavations.

The following recommendations are recommended for drilled pier construction:

- Clean the foundation bearing area so it is nearly level or suitably benched and is free of ponded water or loose material.
- Make provisions for ground water removal from the drilled shaft excavation. While groundwater was not encountered during the soil drilling, some seepage may be encountered. The drilled pier contractor should have pumps on hand to remove water from the drilled pier.

- Specify concrete slumps ranging from 4 to 7 inches for the drilled shaft construction. These slumps are recommended to fill irregularities along the sides and bottom of the drilled hole, displace water as it is placed, and permit placement of reinforcing cages into the fluid concrete.

- Retain the geotechnical engineer to observe foundation excavations after the bottom of the hole is leveled, cleaned of any mud or extraneous material, and dewatered.

- Install a temporary protective steel casing to prevent side wall collapse, prevent excessive mud and water intrusion in the drilled shaft.

- The protective steel casing may be extracted as the concrete is placed provided a sufficient head of concrete is maintained inside the steel casing to prevent soil or water intrusion into the newly placed concrete.

- Direct the concrete placement into the drilled hole through a centering chute to reduce side flow or segregation.

5.2 Fill Compaction

All engineered fill placed adjacent to and above the tower foundation should be compacted to a dry density of at least 95 percent of the standard Proctor maximum dry density (ASTM D-698). This minimum compaction requirement should be increased to 98 percent for any fill placed below the tower foundation bearing elevation. Any fill placed beneath the tower foundation should be limited to well-graded sand and gravel or crushed stone. The compaction should be accomplished by placing the fill in about 8 inch (or less) loose lifts and mechanically compacting each lift to at least the specified minimum dry density. Field density tests should be performed on each lift as necessary to ensure that adequate moisture conditioning and compaction is being achieved.

Compaction by flooding is not considered acceptable. This method will generally not achieve the desired compaction and the large quantities of water tend to soften the foundation soils.

5.3 Construction Dewatering

At the time of this investigation, groundwater was not encountered. Therefore, no special provisions regarding groundwater control are considered necessary for shallow foundations. Any seepage should be able to be pumped with sumps.

If groundwater is encountered in the drilled pier excavations, it may be difficult to dewater since pumping directly from the excavations could cause a deterioration of the bottom of the excavation. If the pier excavations are not dewatered, concrete should be placed by the termie method.

6 FIELD INVESTIGATION

Three soil test borings were drilled near the base of the existing tower. Split-spoon samples were obtained by the Standard Penetration Test (SPT) procedure (ASTM D1586) in all test borings. The borings encountered auger refusal from about 3.2 to 6.3 feet. A rock core of the refusal material was taken in Boring B-1 from 3.5 to 23.5 feet. The split-spoon samples were inspected and visually classified by a geotechnical engineer. Representative portions of the soil samples were sealed in glass jars and returned to our laboratory.

The boring logs are included in the Appendix along with a sheet defining the terms and symbols used on the logs and an explanation of the Standard Penetration Test (SPT) procedure. The logs present visual descriptions of the soil strata encountered, Unified System soil classifications, groundwater observations, sampling information, laboratory test results, and other pertinent field data and observations.

7 WARRANTY AND LIMITATIONS OF STUDY

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties, either express or implied. POD Group is not responsible for the independent conclusions, opinions or recommendations made by others based on the field exploration and laboratory test data presented in this report.

A geotechnical study is inherently limited since the engineering recommendations are developed from information obtained from test borings, which depict subsurface conditions only at the specific locations, times and depths shown on the logs. Soil conditions at other locations may differ from those encountered in the test borings, and the passage of time may cause the soil conditions to change from those described in this report.

The nature and extent of variation and change in the subsurface conditions at the site may not become evident until the course of construction. Construction monitoring by the geotechnical engineer or a representative is therefore considered necessary to verify the subsurface conditions and to check that the soils connected construction phases are properly completed. If significant variations or changes are in evidence, it may then be necessary to reevaluate the recommendations of this report. Furthermore, if the project characteristics are altered significantly from those discussed in this report, if the project information contained in this report is incorrect, or if additional information

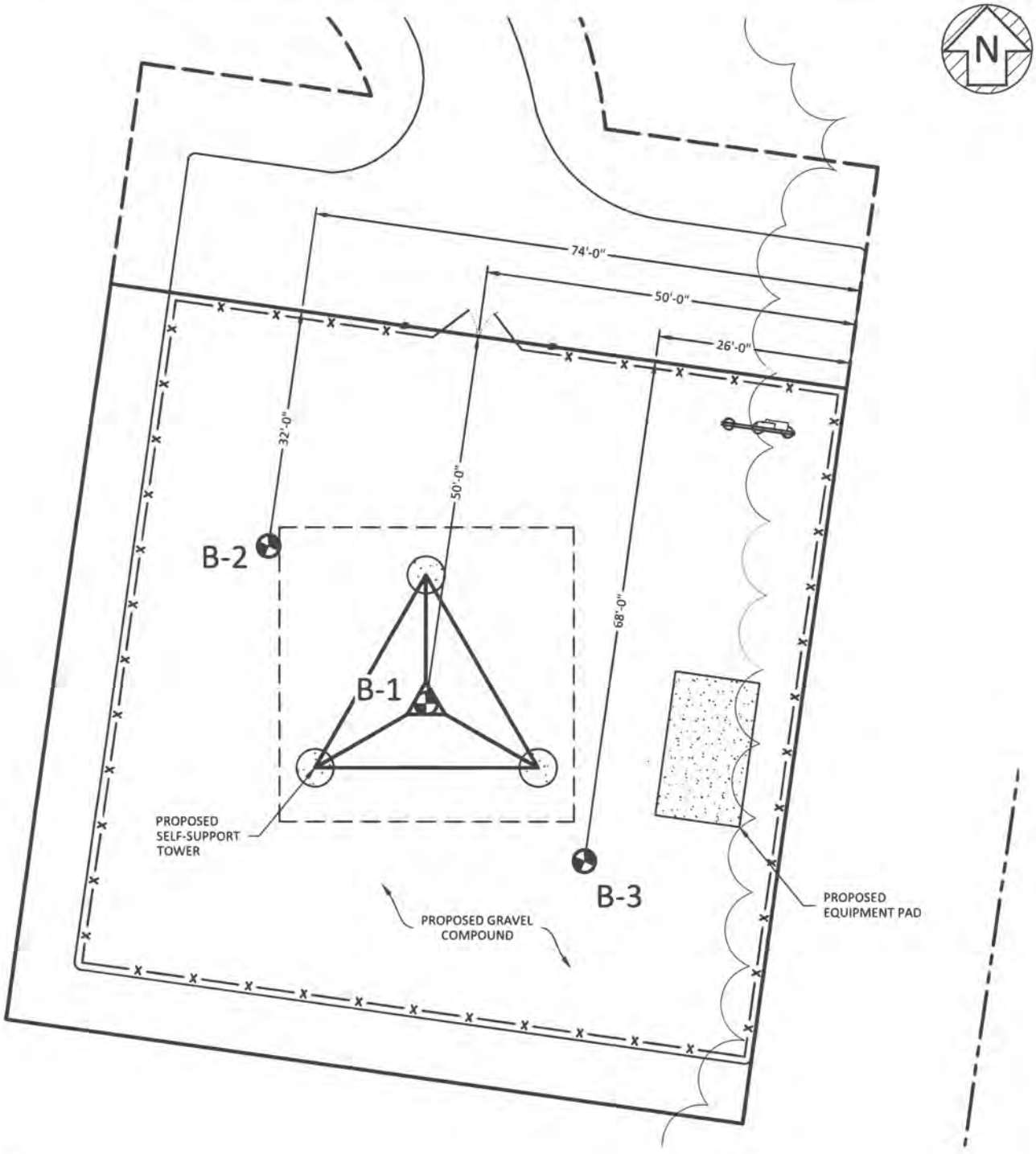
becomes available, a review must be made by this office to determine if any modification in the recommendations will be required.

APPENDIX

BORING LOCATION PLAN

BORING LOGS

SOIL SAMPLE CLASSIFICATION



LEGEND

B-1 BORING LOCATION

0' 20' 40'

1"= 20'

SHEET TITLE: **BORING LOCATION PLAN**	LATITUDE: 36.863972 N LONGITUDE: 86.886069 W	SITE INFORMATION: **CK RUSSELLVILLE CAP** CREEKWOOD DRIVE RUSSELLVILLE, KY 42276 LOGAN COUNTY	POD POWER OF DESIGN 11490 BLUEGRASS PKWY LOUISVILLE, KY 40299 502-437-5252
	PARCEL #: 068-00-00-025-01 DB 365, PG 673		
SHEET NUMBER: **1**	POD NUMBER: 21-102846 DRAWN BY: POD CHECKED BY: MEP DATE: 10.19.2022	OWNER INFORMATION: JOHN & ELIZABETH TABOR 5349 BUENA VISTA ROAD RUSSELLVILLE, KY 42276	verizon

POD
POWER OF DESIGN

Boring Log

Boring: B-1

Project: CK Russellville Cap | **City, State** Russellville, KY

Method: S.F.A.	**Boring Date:** 24-Oct-22	**Location:** Proposed Tower Center
Inside Diameter: 4"	**Drill Rig Type:** D-25 (ATV)	**Hammer Type:** Auto
Groundwater: DRY		**Weather:**
Driller: Greenbaum Associates	**Note:** Topsoil was encountered at the ground surface	

From (ft)	To (ft)	Material Description	Sample Depth (ft)	Sample Type	Blows per 6-inch increment	Recovery (in)	SPT-N value	Rock Quality (RQD,%)	Atterberg Limits	Moisture Content (%)	% Fines (clay & silt)	Unconfined Compressive Strength, (ksf)
0.0	3..5	CLAY (CH) - medium stiff, reddish brown, slightly moist, trace chert	1 - 2.5	SS	5, 5, 40	14	45,			28%		3.7
3.5	18.5	LIMESTONE- continues, hard, slightly weathered, light gray	3.5 - 8.5	RC		60		86%				
			8.5 - 13.5	RC		60		92%				
	13.5	- fresh	13.5-18.5	RC		60		97%				
			18.5-23.5	RC		60		95%				
		Boring Terminated at 23.5 feet										

POD
POWER OF DESIGN

Boring Log

Boring: B-2

Project: CK Russellville Cap | **City, State** Russellville, KY

Method: S.F.A.	**Boring Date:** 24-Oct-22	**Location:** 30' NW of Proposed Tower Center
Inside Diameter: 4"	**Drill Rig Type:** D-25 (ATV)	**Hammer Type:** Auto
Groundwater: DRY		**Weather:**
Driller: Greenbaum Associates	**Note:** Topsoil was encountered at the ground surface	

From (ft)	To (ft)	Material Description	Sample Depth (ft)	Sample Type	Blows per 6-inch increment	Recovery (in)	SPT-N value	Rock Quality (RQD,%)	Atterberg Limits	Moisture Content (%)	% Fines (clay & silt)	Unconfined Compressive Strength, (ksf)
0.0	3..5	CLAY (CH) - medium stiff to stiff, reddish brown	1 - 2.5	SS	2, 4, 5	18	9,			19%		5.8
			3.5 - 5	SS	4, 5, 6	18	11,			23%		4.5
		Auger Refusal at 6.3 feet										

POD
POWER OF DESIGN

Boring Log

Boring: B-3

Project: CK Russellville Cap | **City, State** Russellville, KY

Method: S.F.A.	**Boring Date:** 24-Oct-22	**Location:** 30' SW of Proposed Tower Center
Inside Diameter: 4"	**Drill Rig Type:** D-25 (ATV)	**Hammer Type:** Auto
Groundwater: DRY		**Weather:**
Driller: Greenbaum Associates	**Note:** Topsoil was encountered at the ground surface	

From (ft)	To (ft)	Material Description	Sample Depth (ft)	Sample Type	Blows per 6-inch increment	Recovery (in)	SPT-N value	Rock Quality (RQD,%)	Atterberg Limits	Moisture Content (%)	% Fines (clay & silt)	Unconfined Compressive Strength, (ksf)
0.0	3..5	CLAY (CH) - medium stiff, reddish brown with trace chert	1 - 2.5	SS	4, 50,	10	50,			19%		6.0
		Auger Refusal at 3.2 feet										

SOIL SAMPLE CLASSIFICATION

FINE AND COARSE GRAINED SOIL INFORMATION

COARSE GRAINED SOILS (SANDS & GRAVELS)

N	Relative Density
0-4	Very Loose
5-10	Loose
11-20	Firm
21-30	Very Firm
31-50	Dense
Over 50	Very Dense

FINE GRAINED SOILS (SILTS & CLAYS)

N	Consistency	Qu, KSF Estimated
0-1	Very Soft	0-0.5
2-4	Soft	0.5-1
5-8	Firm	1-2
9-15	Stiff	2-4
16-30	Very Stiff	4-8
Over 31	Hard	8+

PARTICLE SIZE

Boulders	Greater than 300 mm (12 in)
Cobbles	75 mm to 300 mm (3 to 12 in)
Gravel	4.74 mm to 75 mm (3/16 to 3 in)
Coarse Sand	2 mm to 4.75 mm
Medium Sand	0.425 mm to 2 mm
Fine Sand	0.075 mm to 0.425 mm
Silts & Clays	Less than 0.075 mm

The **STANDARD PENETRATION TEST** as defined by ASTM D 1586 is a method to obtain a disturbed soil sample for examination and testing and to obtain relative density and consistency information. A standard 1.4-inch I.D./2-inch O.D. split-barrel sampler is driven three 6-inch increments with a 140 lb. hammer falling 30 inches. The hammer can either be of a trip, free-fall design, or actuated by a rope and cathead. The blow counts required to drive the sampler the final two increments are added together and designate the N-value defined in the above tables.

ROCK PROPERTIES

ROCK QUALITY DESIGNATION (RQD)

Percent RQD	Quality
0-25	Very Poor
25-50	Poor
50-75	Fair
75-90	Good
90-100	Excellent

ROCK HARDNESS

Very Hard:	Rock can be broken by heavy hammer blows.
Hard:	Rock cannot be broken by thumb pressure, but can be broken by moderate hammer blows.
Moderately Hard:	Small pieces can be broken off along sharp edges by considerable hard thumb pressure; can be broken with light hammer blows.
Soft:	Rock is coherent but breaks very easily with thumb pressure at sharp edges and crumbles with firm hand pressure.
Very Soft:	Rock disintegrates or easily compresses when touched; can be hard to very hard soil.

Recovery = $\frac{\text{Length of Rock Core Recovered}}{\text{Length of Core Run}} \times 100$ — 63 REC

RQD = $\frac{\text{Sum of 4 in. and longer Rock Pieces Recovered}}{\text{Length of Core Run}} \times 100$ — 43 RQD

Core Diameter	Inches
BQ	1-7/16
NQ	1-7/8
HQ	2-1/2

SYMBOLS

KEY TO MATERIAL TYPES

SOILS		
Group Symbols		Typical Names
GW		Well graded gravel - sand mixture, little or no fines
GP		Poorly graded gravels or gravel - sand mixture, little or no fines
GM		Silty gravels, gravel - sand silt mixtures
GC		Clayey gravels, gravel - sand - clay mixtures
SW		Well graded sands, gravelly sands, little or no fines
SP		Poorly graded sands or gravelly sands, little or no fines
SM		Silty sands, sand - silt mixtures
SC		Clayey sands, sand - clay mixtures
ML		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts
OL		Organic silts and organic silty clays of low plasticity
CL		Inorganic clays of low range plasticity, gravelly clays, sandy clays, silty clays, lean clays
MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
CH		Inorganic clays of high range plasticity, fat clays

ROCKS	
Symbols	Typical Names
	Limestone or Dolomite
	Shale
	Sandstone

SOIL PROPERTY SYMBOLS

N:	Standard Penetration, BPF
M:	Moisture Content, %
LL:	Liquid Limit, %
PI:	Plasticity Index, %
Qp:	Pocket Penetrometer Value, TSF
Qu:	Unconfined Compressive Strength Estimated Qu, TSF
γ_D:	Dry Unit Weight, PCF
F:	Fines Content

SAMPLING SYMBOLS

SS	Split Spoon Sample
UD	Relatively Undisturbed Sample
Core 1	Rock Core Sample

DIRECTIONS TO SITE

FROM LOGAN COUNTY CLERK: 229 W 3RD ST, RUSSELLVILLE, KY 42276: HEAD EAST ON W 3RD ST TOWARD WINTER ST (0.3 MI). TURN LEFT ONTO N BREATHITT ST (0.3 MI). CONTINUE ONTO ARMORY DR (0.2 MI) TURN RIGHT ONTO FRANCES RD/FRANCIS ST (0.4 MI). CONTINUE ONTO NEWTOWN RD (0.4 MI). SITE WILL BE LOCATED ON RIGHT (EAST) SIDE OF ROAD.

PREPARED BY: POWER OF DESIGN GROUP, LLC - (502) 437-5252

5

This Instrument prepared by and after recording return to:
Cellco Partnership d/b/a Verizon Wireless
Coots Henke & Wheeler, P.C.
255 E. Carmel Drive
Carmel, IN 46032
Daniel E. Coots, Esq. DEC

VzW Site Name: CK Russellville Capacity
Location Code: 689715

STATE OF KENTUCKY

COUNTY OF LOGAN

Prior Deed References: Deed Book 365, Page 673 in Office of Clerk of Logan County, Kentucky

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MEMORANDUM OF LAND LEASE AGREEMENT

This Memorandum of Land Lease Agreement is made this 18 day of Oct., 20 22, between **John Tabor and Elizabeth Tabor,** both Kentucky residents with a mailing address of 798 Walker Wells Road, Lewisburg, Kentucky 42256, hereinafter designated LESSOR, and **Cellco Partnership d/b/a Verizon Wireless**, with its principal offices at One Verizon Way, Mailstop 4AW100, Basking Ridge, NJ 07920, hereinafter designated LESSEE.

1. LESSOR and LESSEE entered into a certain Land Lease Agreement ("Lease") dated Oct 18, 20 22. Such Lease has an initial term of five (5) years which shall be automatically extended for four (4) additional five (5) year terms unless LESSEE terminates the Lease in accordance with the terms thereof.

2. In consideration of the rental set forth in the Lease, LESSOR hereby leases to LESSEE certain ground space area consisting of approximately 100' x 100', or 10,000 square feet, for the construction and maintenance of LESSEE's telecommunications facility upon that certain real estate located approximately at 0 Creekwood Drive, Russellville, Kentucky 42276 (Logan County), with a legal description attached as Exhibit A ("Property"), together with the non-exclusive right for ingress and egress, access, and utility easements.

3. The term of the Lease shall commence the first (1st) day of the month after LESSEE begins construction of the telecommunications facility. A copy of the Lease is on file in the office of the LESSOR and LESSEE.

4. The terms, covenants and provisions of the Lease of which this is a Memorandum, shall extend to and be binding upon the respective executors, administrators, heirs, successors and assigns of LESSOR and LESSEE, including but not limited to any rights of first refusal to purchase the Premises during any given Term of the Lease.

5. The purpose of this Memorandum is to give record notice of the Lease and of the rights created thereby, all of which are hereby confirmed. In the event of a conflict between the terms of this Memorandum and the terms of the Lease, the terms of the Lease shall prevail.

[the remainder of this page is intentionally left blank]

MEMORANDUM OF LAND LEASE AGREEMENT CONTINUED

IN WITNESS WHEREOF, hereunto and to a duplicate hereof, LESSOR and LESSEE have caused this Memorandum to be duly executed on October 18, 2018.

LESSEE:

CELLCO PARTNERSHIP
d/b/a Verizon Wireless

By: _____
Printed: Ed Maher
Title: Director - Network Field Engineering

Address: One Verizon Way, Mailstop 4AW100
Basking Ridge, NJ 07920

LESSEE NOTARY BLOCK:

STATE OF Michigan)
)
COUNTY OF Oakland)

The foregoing instrument was acknowledged before me this 18th day of October, 2018, by Ed Maher Director Network Field Engineering (Title) of **Cellco Partnership d/b/a Verizon Wireless**, who is personally known to me.

[NOTARY SEAL]

BARBARA MADIGAN EVANS
Notary Public, State of Michigan
County of Oakland
My Commission Expires 05-10-2027
Acting in the County of _____

Barbara Madigan Evans
Notary Public

My commission expires 5/10/2027

Barbara Madigan Evans
(Printed Name)

MEMORANDUM OF LAND LEASE AGREEMENT CONTINUED

LESSOR:

John Tabor

Elizabeth Tabor

LESSOR NOTARY BLOCK:

STATE OF Kentucky)
)
COUNTY OF Logan)

The foregoing instrument was acknowledged before me this 9 day of August, 2022, by John Tabor and Elizabeth Tabor, who are personally known to me.

[NOTARY SEAL]
CHARLES W. RIDGEWAY
Notary Public - State at Large
Kentucky
My Commission Expires oct. 28, 2023
Notary ID 634466

My commission expires 10-28-23

Notary Public

Charles W Ridgeway
(Printed Name)

I, affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security number in this document, unless required by law." **(Printed)**

Jennifer J. Coulon

EXHIBIT A
Legal Description

Property located in Logan County, Kentucky

Unless stated otherwise, any monument referred to herein as a "set iron pin" is a 5/8" diameter steel reinforcing bar, eighteen inches in length with a plastic cap stamped "J.L. Harris-P.L.S. 3148". All bearings stated herein are referred to found monumentation as described on a plat of Creekwood Subdivision-Plat Cabinet 1-Envelope 174-Plat #258.

Beginning at a set iron pin in the East right of way of the Newtown Road (right of way varies), corner to Cates (Deed Book 309, Page 426); thence leaving said right of way with the line of Cates then Twin Oaks Estates Subdivision (Plat Cabinet 1, Envelope 134 Plat #218) S 79° 12' 48" E 797.32 feet to a found iron pin # 2474, corner of Holland (Deed Book 322, Page 133); thence turning right with the line of Holland S 06° 45' 18" W 499.36 feet to a found 3/4" diameter iron pipe # 906, corner to Holland (Deed Book 297, Page 050); thence with the line of Holland S 08° 56' 53" W 387.12 feet to a found disturbed iron pin (No. I.S. Cap), corner to the Creekwood Subdivision (Plat Cabinet 1, Envelope 174-Plat # 258); thence turning right with the line of the Creekwood Subdivision N 84° 56' 27" W 734-78 feet to a set iron pin in said right of way; thence turning right with said right of way N 02° 45' 51" E 770.84 feet to a set iron pin; thence N 26° 27' 56" E 54.83 feet to a set iron pin; thence N 02° 24' 07" E 143.82 feet to the point of beginning, described parcel containing 16.47 acres as shown by survey performed by Jeffrey L. Harris, P.L.S. # 3148 with Benchmark Land Surveying, dated January 16, 2006.

AND BEING the same property conveyed to John Tabor and Elizabeth Tabor from George Simor and Rebecca M. Simor by Deed dated January 31, 2006 and recorded February 17, 2006 in Deed Book 365, Page 673.

Tax Parcel No. 068-00-00-025-01

DOCUMENT NO: 225578
RECORDED ON:11/1/2022 12:17:00 PM
COUNTY CLERK: STACY WATKINS
COUNTY: LOGAN COUNTY
BOOK: MC127 PAGE: 633 - 637 LEASE

Signed: CYJ

Notification List

PARCEL ID: 068-00-00-025-01
TABOR JOHN & ELIZABETH
5349 BUENA VISTA RD
RUSSELLVILLE, KY 42276

PARCEL ID: 067-00-00-025-06
CATES JOHN W & FRANCES
816 MEADOW LN
RUSSELLVILLE,KY 42276

PARCEL ID: 068-00-00-025-03
HOLLAND RUSSELL ANDREW & DIANA
799 N MORGAN ST
RUSSELLVILLE, KY 42276

PARCEL ID: 068-00-00-025-02
HOLLAND RUSSELL ANDREW & DIANA
799 N MORGAN ST
RUSSELLVILLE, KY 42276

PARCEL ID: 068-16-00-010-00
BRAY AUDIE G & SHARON L
205 CREEKWOOD DR
RUSSELLVILLE, KY 42276

PARCEL ID: 068-16-00-011-00
SWEATT REGINA
204 CREEKWOOD DR
RUSSELLVILLE, KY 42276

PARCEL ID: 068-16-00-013-00
BIG TIME PROPERTIES LLC
154 VANDERBILT CT
BOWLING GREEN, KY 42103

PARCEL ID: 068-16-00-014-00
BUETTNER KENDRA DAY
104 PLEASANT DR
RUSSELLVILLE, KY 42276

PARCEL ID: 068-16-00-015-00
WALKER CHRISTOPHER AND
LINDSEY DOVER
102 PLEASANT DR
RUSSELLVILLE, KY 42276

PARCEL ID: 068-16-00-016-00
BLUE MOUNTAIN LLC
% JOHN & ADELA CORNES
100 PLEASANT DR
RUSSELLVILLE, KY 42276

PARCEL ID: 067-00-00-024-00
MCINTOSH GARY & KENNER JARED
% JARED KENNER
P O BOX 451
RUSSELLVILLE, KY 42276

PARCEL ID: 067-00-00-025-01
WHYTE ALLEN J & SAVANNAH E
102 CEDAR TREE
RUSSELLVILLE, KY 42276

PARCEL ID: 067-00-00-025-05
RESCUE INVESTMENTS LLC
1252 STATE ST
BOWLING GREEN, KY 42101

PARCEL ID: 067-00-00-025-11
BGLG INVESTMENTS LLC
663 HOMER MURRAY RD
BOWLING GREEN, KY 42104

PARCEL ID: 067-00-00-025-07
BAIZE J M
71 B JOHN PAUL AVE
RUSSELLVILLE, KY 42276

PARCEL ID: 067-00-00-025-09
CATES JUDY
106 CEDAR TREE LN
RUSSELLVILLE, KY 42276

PARCEL ID: 067-03-01-001-00
DENALI CAPITAL LLC
P O BOX 1436
BOWLING GREEN, KY 42102

PARCEL ID: 067-03-01-002-00
GET FIT PROPERTIES, LLC
P O BOX 1436
BOWLING GREEN, KY 42102

PARCEL ID: 067-03-02-001-00
LOGAN COUNTY AGRICULTURAL
EXTENSION DISTRICT
P O BOX 660
RUSSELLVILLE, KY 42276

PARCEL ID: 067-03-01-004-00
DENALI CAPITAL LLC
P O BOX 1436
BOWLING GREEN, KY 42102

PARCEL ID: 067-03-01-003-00
DENALI CAPITAL LLC
P O BOX 1436
BOWLING GREEN, KY 42102

PARCEL ID: 067-03-01-005-00
DENALI CAPITAL LLC
P O BOX 1436
BOWLING GREEN, KY 42102

PARCEL ID: 067-03-01-006-00
GOLEY TEDDY & LOURENE E
2050 H MURRAY RD
BOWLING GREEN, KY 42104

PARCEL ID: 067-03-01-008-00
DENALI CAPITAL LLC
P.O. BOX 1436
BOWLING GREEN, KY 42102

PARCEL ID: 067-03-01-007-00
GOLEY TEDDY & LOURENE E
2050 H MURRAY RD
BOWLING GREEN, KY 42104

PARCEL ID: 067-03-01-009-00
DENALI CAPITAL LLC
P.O. BOX 1436
BOWLING GREEN, KY 42102

PARCEL ID: 067-03-01-010-00
DENALI CAPITAL LLC
P.O. BOX 1436
BOWLING GREEN, KY 42102

PARCEL ID: 067-03-01-012-00
DENALI CAPITAL LLC
P.O. BOX 1436
BOWLING GREEN, KY 42102

PARCEL ID: 067-03-02-002-00
LOGAN COUNTY AGRICULTURAL
EXTENSION DISTRICT
121 S SPRING ST
RUSSELLVILLE, KY 42276

PARCEL ID: 067-03-01-011-00
DENALI CAPITAL LLC
P.O. BOX 1436
BOWLING GREEN, KY 42102

PARCEL ID: 067-03-02-003-00
LOGAN COUNTY AGRICULTURAL
EXTENSION DISTRICT
121 S SPRING ST
RUSSELLVILLE, KY 42276

ClarkQuinn

www.clarkquinnlaw.com

Russell L. Brown
Attorney at Law
rbrown@clarkquinnlaw.com

320 N. Meridian St., Ste. 1100
Indianapolis, IN 46204
(317) 637-1321 main
(317) 687-2344 fax

February 7, 2023

Notice of Proposed Construction of
Wireless Communications Facility
Site Name: Russellville Capacity

Cellco Partnership, d/b/a Verizon Wireless and Harmoni Towers, LLC have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located on Creekwood Drive, Russellville, KY 42276 (North Latitude: (36° 51' 50.30", West Longitude 86° 53' 09.85"). The proposed facility will include a 195-foot tall antenna tower, plus a 4-foot lightning arrestor, for a total height of 199 feet with 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 2023-00043 in any correspondence sent in connection with this matter.

We have attached a map showing the site location for the proposed tower. Applicant'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 at 317-637-1321 if you have any comments or questions about this proposal.

Sincerely,
Russell L. Brown

Attorney for Applicant
RLB/jdj
enclosure

ClarkQuinn

www.clarkquinnlaw.com

Russell L. Brown
Attorney at Law
rbrown@clarkquinnlaw.com

320 N. Meridian St., Ste. 1100
Indianapolis, IN 46204
(317) 637-1321 main
(317) 687-2344 fax

February 7, 2023

Via Certified Mail, Return Receipt Requested
7020 1810 0002 1853 0770

Hon. Phil Baker
PO Box 365
200 W. Fourth Street
Russellville, KY 42276

RE: Notice of Proposal to Construct Wireless Communications Facility
Kentucky Public Service Commission Docket No. 2023-00043
Site Name: Russellville Capacity

Dear Judge Baker:

Cellco Partnership, d/b/a Verizon Wireless and Harmoni Towers, LLC have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located on Creekwood Drive, Russellville, KY 42276 (North Latitude: (36° 51' 50.30", West Longitude 86° 53' 09.85"). The proposed facility will include a 195-foot tall antenna tower, plus a 4-foot lightning arrestor, for a total height of 199 feet with 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 2023-00043 in any correspondence sent in connection with this matter.

We have attached a map showing the site location for the proposed tower. Verizon Wireless' 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,
Russell L. Brown

Attorney for Applicant
RLB/jdj
Enclosures

SITE NAME: Russellville Capacity
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.

Cellco Partnership, d/b/a Verizon Wireless and Harmoni Towers, LLC propose to construct a telecommunications **tower** on this site. If you have questions, please contact Clark, Quinn, Moses, Scott & Grahn, LLP, 320 N. Meridian Street, Indianapolis, IN 46204; 317-637-1321, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2023-00043 in your correspondence.

Cellco Partnership, d/b/a Verizon Wireless and Harmoni Towers, LLC propose to construct a telecommunications **tower** on this site. If you have questions, please contact Clark, Quinn, Moses, Scott & Grahn, LLP, 320 N. Meridian Street, Indianapolis, IN 46204; 317-637-1321, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2023-00043 in your correspondence.

ClarkQuinn
Clark, Quinn, Moses, Scott & Grahn, LLP

Robert B. Scott
Charles R. Grahn
Frank D. Otte*
John "Bart" Herriman
William W. Gooden**
Michael P. Maxwell
Russell L. Brown**†
Jennifer F. Perry
Keith L. Beall
N. Davey Neal
Travis W. Cohron
Maggie L. Sadler
Kristin A. McIlwain
Olivia A. Hess

Land Use Consultant
Elizabeth Bentz Williams, AICP

*Also admitted in Montana
†Also admitted in Kentucky
**
Registered Civil Mediator

VIA EMAIL: classifieds@messenger-inquirer.com

News-Democrat & Leader
250 N. Main St.
Russellville, KY 42276

RE: Legal Notice Advertisement
Site Name: Russellville Capacity

To Whom It May Concern,

Please publish the following legal notice advertisement in the next available edition of the Logan County/Russellville Publication:

NOTICE

Cellco Partnership, d/b/a Verizon Wireless and Harmoni Towers, LLC have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located on Creekwood Drive, Russellville, KY 42276 (North Latitude: (36° 51' 50.30", West Longitude 86° 53' 09.85"). The proposed facility will include a 195-foot tall antenna tower, plus a 4-foot lightning arrestor, for a total height of 199 feet with related ground facilities. 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 2023-00043 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 Clark, Quinn, Moses, Scott & Grahn, LLC, 320 N. Meridian Street, Indianapolis, IN 46204 or by email to ebw@clarkquinnlaw.com. Please call me on my cell with any questions at 317-902-2187 if you have any questions. Thank you for your assistance.

Sincerely,

Elizabeth Bentz Williams, AICP

CK RUSSELLVILLE SEARCH AREA MAP

Write a description for your map.

CK RUSSELLVILLE SEARCH AREA MAP W/ CANDIDATE

Write a description for your map.

January, 10th, 2023

RE: Proposed Cellco Partnership d/b/a Verizon Wireless Communications
Facility Site Name: CK Russellville Cap
Type of Tower: 195 ft. Self-Support
Location: 0 Creekwood Drive, Russellville, KY 42276 Logan County

To Whom It May Concern:

As a radio frequency engineer for Verizon Wireless, I am providing this letter to state the need for a Verizon Wireless site called, CK Russellville Cap.

The CK Russellville Cap site is proposed with the below objectives:

1. To offload existing traffic of existing Verizon sites in this area.
2. To improve cellular service in northern Russellville.

Currently the area is experiencing poor service and a high demand for wireless high-speed data. This tower is needed to provide all Verizon customers in the area with the best experience on their wireless devices.

Raw Land – Design plans for a new tower would provide overall tower height of 199' with a Verizon Wireless Centerline of 190'. The new structure height was decided upon to best offload traffic from the nearby existing Verizon sites. If we are limited to building a structure less than the proposed height, another tower would be needed in the vicinity in the near future. In addition, building a structure that is too short can cause existing taller sites to cover over the proposed site and building a site that is too tall can cause the proposed site to shoot over existing sites. Both situations create a poor experience from a user perspective. The new structure is proposed to be placed near the center of the problem area. The new tower design solves the stated objectives.

Verizon Wireless cares about the communities as well as the environment and prefers to collocate on existing structures when available. Verizon Wireless is currently collocated on many existing structures in the area. We prefer collocation due to reduced construction costs, faster deployment, and environment protection. However, Verizon Wireless was unable to find a suitable structure within the center of demand area to collocate the proposed CK Russellville Cap site.

verizon

Verizon Wireless design engineers establish search area criteria in order to effectively meet coverage objectives as well as offload existing Verizon cell sites. When met, the criterion also reduces the need for a new site to cover the area in the immediate future. Each cellular site covers a limited area, depending on site configuration and the surrounding terrain. Cell sites are built in an interconnected network; which means each cell site must be located so that their respective coverage areas are contiguous. This provides uninterrupted communications throughout the coverage area.

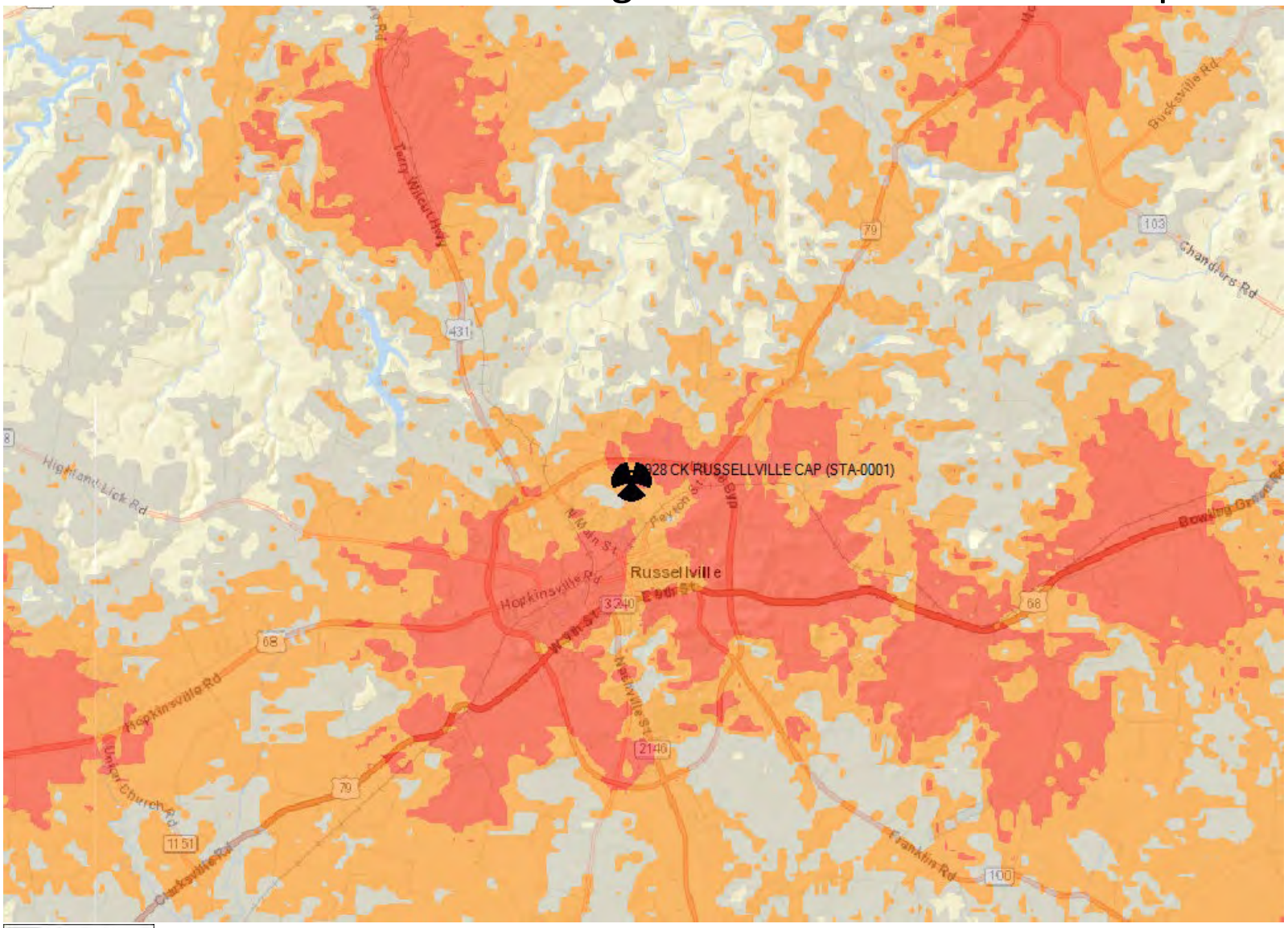
Since collocation is generally the most cost-effective means for prompt deployment of new facilities, Verizon Wireless makes every effort to investigate the feasibility for using existing towers or other tall structures for collocation when designing a new site or system expansion. However, collocation on an existing tower or tall structure is not always feasible due to location of existing cell sites. Cell sites are placed in a way so they provide smooth hand off to each other and are placed at some distance from each other to eliminate too much overlap. Too much overlap may result in a waste of resources and raise a system capacity overload concern.
This cell site has been designed, and shall be constructed and operated in a manner that satisfies regulations and requirements of all applicable governmental agencies that have been charged with regulating tower specifications, operation, construction, and placement, including the FAA and FCC.

Sincerely,

Zachary Parsons
RF Engineer

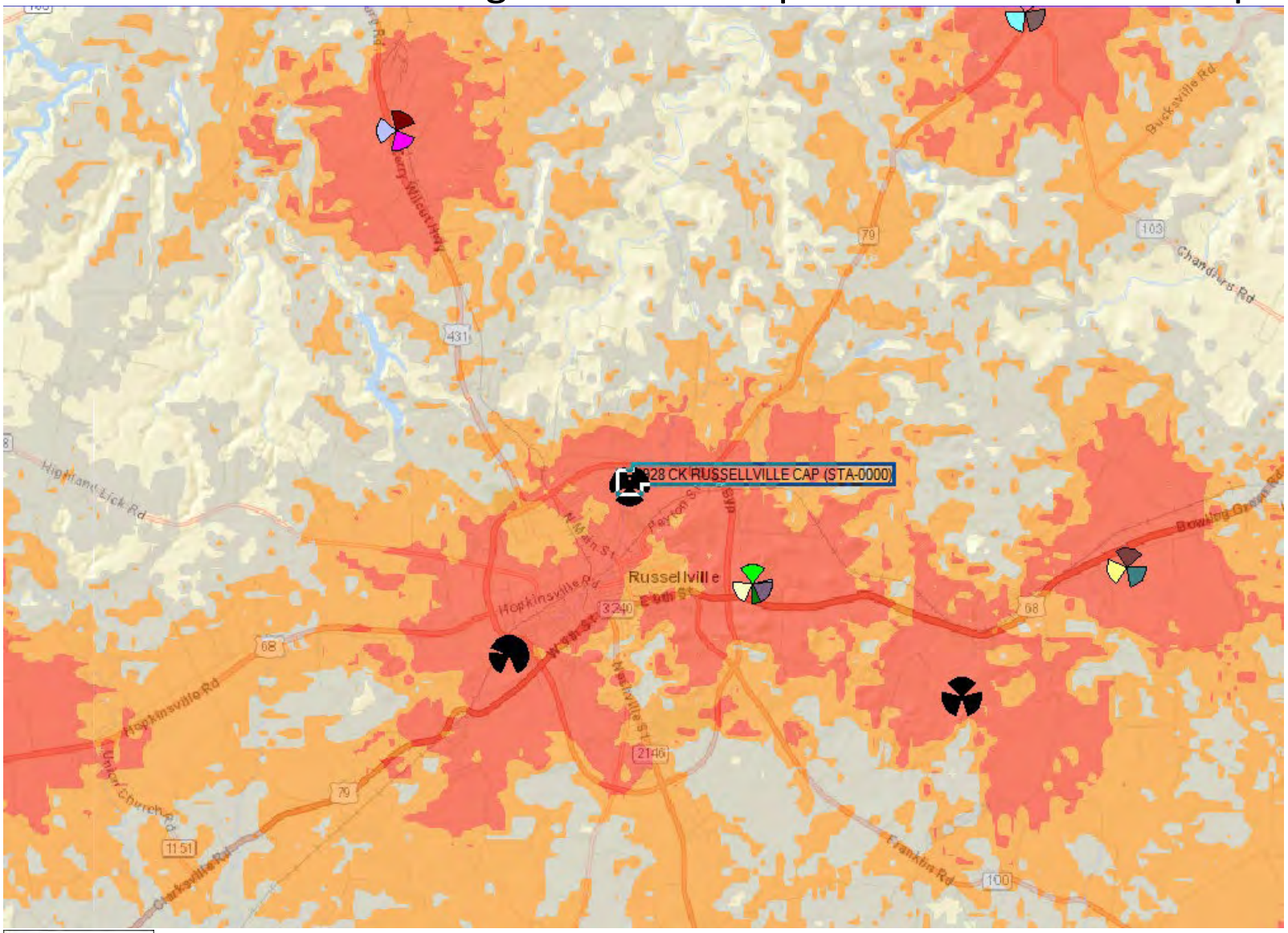
Verizon Wireless

verizon Current Coverage without CK Russellville Cap



Good
Better
Best

verizon Coverage with the Proposed CK Russellville Cap



Good
Better
Best

Exhibit R
List and Identity and Qualifications of Professionals

Mark E. Patterson
Professional Land Surveyor
Kentucky License 3136
Power of Design Group, LLC
11490 Bluegrass Parkway
Louisville, KY 40299

Mark E. Patterson
Professional Engineer
Kentucky License 16300
Power of Design Group, LLC
11490 Bluegrass Parkway
Louisville, KY 40299

Brad P. Milanowski
Professional Engineer
Kentucky License 25311
B & T Group
1717 S. Boulder Ave., Ste 300
Tulsa, OK 74119

Billy Waldridge, Jr.
Construction Manager
Verizon Wireless
2421 Holloway Road
Louisville, KY 40299

Gordan Snyder
RF Engineer
Verizon Wireless
2421 Holloway Road Louisville, KY 40299