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Maggie L. Sadler

December 10, 2018

VIA FedEx Overnight Delivery

Kentucky Public Service Commission  
Attn: Ms. Renee Smith  
Division of Filing  
211 Sower Boulevard  
Frankfort, KY 40602

**RECEIVED**

**DEC 11 2018**

**PUBLIC SERVICE  
COMMISSION**

Senior Counsel  
James C. Clark  
Thomas Michael Quinn

Land Use Consultant  
Elizabeth Bentz Williams, AICP

Raymond J. Grahn (2014)  
Alex M. Clark (1991)  
Peter A. Pappas (1986)  
Thomas M. Quinn (1973)  
Joseph M. Howard (1964)

\*Also admitted in Montana  
\*\* Registered Civil Mediator

RE: Application to Construct Wireless Communications Facility  
Docket No. 2018- 00401  
Site Name: KY 22

Dear Ms. Smith:

On behalf of our client, Cellco Partnership, d/b/a Verizon Wireless we are submitting an original and five copies of an Application for Certificate of Public Convenience and Necessity to Construct a Wireless Communication Facility.

Please contact me or Elizabeth Bentz Williams if you require any future documentation or have any questions concerning this application.

Sincerely,

Russell L. Brown

Attorney for Verizon Wireless

RLB/jdj  
enclosures

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

In the Matter of:

THE APPLICATION OF )  
CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS )  
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC ) CASE NO. 2018-00401  
CONVENIENCE AND NECESSITY TO CONSTRUCT )  
A WIRELESS COMMUNICATIONS FACILITY )  
IN THE COMMONWEALTH OF KENTUCKY )  
IN THE COUNTY OF OWEN )

SITE NAME: KY ZZ

**RECEIVED**

DEC 11 2018

**PUBLIC SERVICE  
COMMISSION**

\*\*\*\*\*

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

Cellco Partnership, d/b/a Verizon Wireless (“Applicant”), 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 Applicant with wireless communications services.

In support of this Application, Applicant respectfully provides and states the following information:

1. The complete name and address of the Applicant: Cellco Partnership, d/b/a Verizon Wireless, having a local address of 2421 Holloway Road, Louisville, KY 40299.

2. Applicant 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**.

3. Applicant proposes construction of an antenna tower for communications services, which is to be located in an area outside the jurisdiction of a planning commission, and Applicant submits 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 Applicant operates on frequencies licensed by the Federal Communications Commission ("FCC") pursuant to applicable FCC requirements. A copy of the Applicant'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 Applicant's services to an area currently not served or not adequately served by the Applicant by increasing coverage or capacity and thereby enhancing the public's access to innovative and competitive wireless communications services. A statement from Applicant's RF Design Engineer outlining said need is attached as **Exhibit P**. The WCF is an integral link in the 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, Applicant proposes to construct a WCF at Highway 22 East, Owenton, KY 40359 (38° 31' 43.55"North latitude, 84° 47'57.84" 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 Danny W and Judith L. Jacobs pursuant to a Deed recorded at Deed Book 245, Page 498 in the office of the County Clerk. The proposed WCF will consist of a 255-foot tall tower, with an approximately 5-foot tall lightning arrestor attached at the top, for a total height of 260-feet. The WCF will also include concrete foundations and a shelter or cabinets to accommodate the placement of the Applicant's radio electronics equipment and appurtenant equipment. The 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 Applicant 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. Applicant has 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 Applicant's antennas on an existing structure. When suitable towers or structures exist, Applicant attempts to co-locate on existing structures such as communications towers or other structures capable of supporting 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 Determination of No Hazard to Air Navigation issued by the Federal Aviation Administration ("FAA") is attached as **Exhibit F**.

12. A request will be submitted to the Kentucky Airport Zoning Commission ("KAZC") Approval to construct the tower. We ask that our approval be granted subject to receiving approval from KAZC.

13. A geotechnical engineering report was performed at the WCF site by Power of Design Group, LLC, Louisville, KY, dated February 22, 2018, and is attached as **Exhibit G**. 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 H**.

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

15. Applicant, pursuant to a written agreement, has acquired the right to use the WCF site and associated property rights. A copy of the agreement or an abbreviated agreement recorded with the County Clerk is attached as **Exhibit I**.

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 Vince Caprino and the identity and qualifications of each person directly responsible for design and construction of the proposed tower are contained in **Exhibits C & D**.

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 21187C0150C, Dated June 2, 2011.

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 B**.

20. Applicant has 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 J** and **Exhibit K**, respectively.

21. Applicant has notified the applicable County Judge/Executive by certified mail, return receipt requested, of the proposed construction. This notice included the PSC docket

number under which the application will be processed and informed the County Judge/Executive of his/her right to request intervention. A copy of this notice is attached as **Exhibit L**.

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 M**. A legal notice advertisement regarding the location of the proposed facility has been published in a newspaper of general circulation in the county in which the WCF is proposed to be located. A copy of the newspaper legal notice advertisement is attached as Exhibit N.

23. The general area where the proposed facility is to be located is undeveloped and removed a significant distance from any residential structures. There are no residential structures within 500' of the proposed tower site.

24. The process that was used by the Applicant's radio frequency engineers in selecting the site for the proposed WCF was consistent with the general process used for selecting all other existing and proposed WCF facilities within the proposed network design area. 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 Applicant when searching for sites for its antennas that would provide the coverage deemed necessary by the 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 O**.

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. 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.

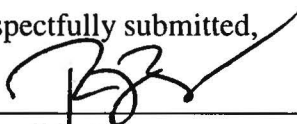
27. All responses and requests associated with this Application may be directed to:

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



WHEREFORE, Applicant 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,



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Russell L. Brown

Clark, Quinn, Moses, Scott & Grahn, LLP

320 North Meridian Street, Suite 1100

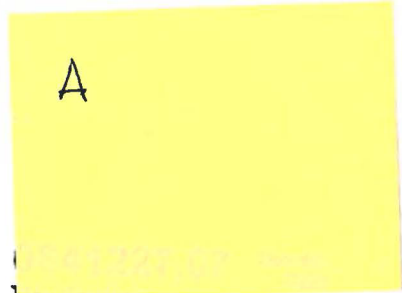
Indianapolis, IN 46204

Phone: (317) 637-1321 / FAX: (317) 687-2344

Email: rbrown@clarkquinnlaw.com

Attorney for Cellco Partnership d/b/a Verizon Wireless

## EXHIBIT A



COMMONWEALTH OF KENTUCKY  
TREY GRAYSON  
SECRETARY OF STATE



Secretary of State  
Received and Filed  
08/21/2008 12:06:08 PM  
Fee Receipt: \$20.00

CERTIFICATE OF ASSUMED NAME

This certifies that the assumed name of  
Verizon Wireless

has been adopted by See Addendum

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

- |  |   |
|--|---|
| <input type="checkbox"/> a Domestic General Partnership                      | <input checked="" type="checkbox"/> a Foreign General Partnership           |
| <input type="checkbox"/> a Domestic Registered Limited Liability Partnership | <input type="checkbox"/> a Foreign Registered Limited Liability Partnership |
| <input type="checkbox"/> a Domestic Limited Partnership                      | <input type="checkbox"/> a Foreign Limited Partnership                      |
| <input type="checkbox"/> a Domestic Business Trust                           | <input type="checkbox"/> a Foreign Business Trust                           |
| <input type="checkbox"/> a Domestic Corporation                              | <input type="checkbox"/> a Foreign Corporation                              |
| <input type="checkbox"/> a Domestic Limited Liability Company                | <input type="checkbox"/> a Foreign Limited Liability Company                |
| <input type="checkbox"/> a Joint Venture                                     |   |

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

One Verizon Way Basking Ridge NJ 07920

The certificate of assumed name is executed by

NYNEX PCS Inc.

Jane A. Schepker  
Jane A. Schepker - Assistant Secretary

June 15, 2006

**0641227.07**      dcornish  
 AMD  
 Allison 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	<b>Amended Certificate of Assumed Name          (Domestic or Foreign Business Entity)</b>	<b>AAN</b>
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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:

- The assumed name is Verizon Wireless  
(The name must be identical to the name on record with the Secretary of State.)
- The certificate of assumed name was filed with the Secretary of State on: 6/21/2008
- The current principal office address (if any) is:  

<u>One Verizon Way</u>	<u>Basking Ridge</u>	<u>NJ</u>	<u>07920</u>
<small>Street Address or Post Office Box Numbers</small>	<small>City</small>	<small>State</small>	<small>Zip</small>
- The principal office address is hereby changed to:  

_____	_____	_____	_____
<small>Street Address or Post Office Box Numbers</small>	<small>City</small>	<small>State</small>	<small>Zip</small>
- 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)
- 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

	<u>Jane A. Schanker</u>	<u>Assistant Secretary</u>	<u>1/21/2012</u>
<small>Signature of Applicant</small>	<small>Printed Name</small>	<small>Title</small>	<small>Date</small>

### **Addendum**

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

<b><i>General Partners of Cellco Partnership</i></b>	<b><i>Address</i></b>
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 999-18 <sup>th</sup> Street, Suite 1750 Denver, CO 80202
JV PartnerCo, LLC	Denver Place South Tower 999-18 <sup>th</sup> Street, Suite 1750 Denver, CO 80202

**EXHIBIT B**

REFERENCE COPY

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



Federal Communications Commission  
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: GELCO PARTNERSHIP

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

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

FCC Registration Number (FRN): 0003290673

<b>Grant Date</b> 11-26-2008	<b>Effective Date</b> 08-28-2018	<b>Expiration Date</b> 06-13-2019	<b>Print Date</b>
<b>Market Number</b> REA004	<b>Channel Block</b> C	<b>Sub-Market Designator</b> 0	
<b>Market Name</b> Mississippi Valley			
<b>1st Build-out Date</b> 06-13-2013	<b>2nd Build-out Date</b> 06-13-2019	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

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.

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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

<b>Call Sign</b> WQGA940	<b>File Number</b>
<b>Radio Service</b> AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

FCC Registration Number (FRN): 0003290673

<b>Grant Date</b> 11-29-2006	<b>Effective Date</b> 11-01-2016	<b>Expiration Date</b> 11-29-2021	<b>Print Date</b>
<b>Market Number</b> BEA047	<b>Channel Block</b> B	<b>Sub-Market Designator</b> 11	
<b>Market Name</b> Lexington, KY-TN-VA-WV			
<b>1st Build-out Date</b>	<b>2nd Build-out Date</b>	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

Waivers/Conditions:

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

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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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

<b>Call Sign</b> WQD1527	<b>File Number</b>
<b>Radio Service</b> CW - PCS Broadband	

FCC Registration Number (FRN): 0003290673

<b>Grant Date</b> 08-17-2015	<b>Effective Date</b> 11-01-2016	<b>Expiration Date</b> 09-06-2025	<b>Print Date</b>
<b>Market Number</b> BTA252	<b>Channel Block</b> C	<b>Sub-Market Designator</b> 7	
<b>Market Name</b> Lexington, KY			
<b>1st Build-out Date</b> 09-06-2010	<b>2nd Build-out Date</b>	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

Waivers/Conditions:

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

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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**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

<b>Call Sign</b> KNKN837	<b>File Number</b>
<b>Radio Service</b> CL - Cellular	
<b>Market Numer</b> CMA449	<b>Channel Block</b> A
<b>Sub-Market Designator</b> 0	

FCC Registration Number (FRN): 0003290673

<b>Market Name</b> Kentucky 7 - Trimble
--

<b>Grant Date</b> 08-30-2011	<b>Effective Date</b> 11-01-2016	<b>Expiration Date</b> 10-01-2021	<b>Five Yr Build-Out Date</b>	<b>Print Date</b>
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**Site Information:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
1	38-10-37.0 N	085-06-25.0 W	360.0	90.8	1036601

Address: Top of Shelbyville Mountain

City: Shelbyville County: SHELBY State: KY Construction Deadline:

**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)	188.400	190.600	203.000	190.500	202.900	218.800	217.100	203.300
Transmitting ERP (watts)	27.480	50.000	19.910	2.510	0.210	0.100	0.440	3.790

**Antenna: 5**

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	188.400	190.600	203.000	190.500	202.900	218.800	217.100	203.300
Transmitting ERP (watts)	0.100	0.100	1.440	2.380	0.480	2.380	1.580	0.100

**Antenna: 6**

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	188.400	190.600	203.000	190.500	202.900	218.800	217.100	203.300
Transmitting ERP (watts)	51.690	14.230	1.140	0.300	0.570	8.130	41.390	69.660

**Conditions:**

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

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN837

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
2	38-12-25.9 N	084-51-45.2 W	211.2	56.9	1051445

Address: 400C Clifton Avenue  
City: FRANKFORT County: FRANKLIN State: KY Construction Deadline:

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) 62.300 35.800 23.200 8.600 71.400 29.500 60.100 36.900  
Transmitting ERP (watts) 55.320 50.990 15.260 1.540 0.340 1.580 15.980 54.030

Antenna: 5  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 62.300 35.800 23.200 8.600 71.400 29.500 60.100 36.900  
Transmitting ERP (watts) 3.530 29.600 58.750 55.210 43.890 7.580 0.410 0.240

Antenna: 6  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 62.300 35.800 23.200 8.600 71.400 29.500 60.100 36.900  
Transmitting ERP (watts) 3.590 0.240 0.490 7.700 44.940 57.490 54.760 29.400

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
3	38-28-54.3 N	085-15-56.5 W	252.9	90.5	1036602

Address: 4920 Fallen Timber Drive  
City: SULPHUR County: HENRY State: KY Construction Deadline:

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) 126.900 85.200 102.800 77.800 84.300 95.500 105.400 97.100  
Transmitting ERP (watts) 0.390 10.470 67.610 87.100 22.910 1.150 0.200 0.200

Antenna: 5  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 126.900 85.200 102.800 77.800 84.300 95.500 105.400 97.100  
Transmitting ERP (watts) 0.370 0.200 0.200 1.260 23.990 87.100 66.070 10.000

Antenna: 6  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 126.900 85.200 102.800 77.800 84.300 95.500 105.400 97.100  
Transmitting ERP (watts) 95.500 43.650 3.550 0.200 0.200 0.200 3.980 44.670

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN837

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
4	38-38-10.0 N	085-05-53.5 W	245.3	90.2	1036425

Address: 312 Whites Run Road  
City: CARROLLTON County: CARROLL 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) 156.300 107.900 120.600 148.800 94.800 91.100 112.600 147.700  
Transmitting ERP (watts) 0.200 11.220 72.440 91.200 25.700 0.370 0.200 0.200

Antenna: 3  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 156.300 107.900 120.600 148.800 94.800 91.100 112.600 147.700  
Transmitting ERP (watts) 0.200 0.200 0.200 0.940 18.570 33.150 30.890 10.840

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) 156.300 107.900 120.600 148.800 94.800 91.100 112.600 147.700  
Transmitting ERP (watts) 33.110 26.080 3.390 0.200 0.200 0.200 4.070 24.940

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
5	38-43-25.0 N	084-51-06.0 W	246.9	90.8	1036424

Address: 120 Boone Trail (off Highway 455)  
City: Sparta County: GALLATIN 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) 127.200 119.000 114.900 96.300 80.600 140.600 110.100 133.300  
Transmitting ERP (watts) 0.200 0.500 11.300 20.180 19.990 13.040 0.740 0.200

Antenna: 3  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 127.200 119.000 114.900 96.300 80.600 140.600 110.100 133.300  
Transmitting ERP (watts) 6.850 0.200 0.200 0.200 1.830 17.930 20.220 19.450

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) 127.200 119.000 114.900 96.300 80.600 140.600 110.100 133.300  
Transmitting ERP (watts) 20.450 20.140 19.650 2.430 0.200 0.200 0.200 5.480

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN837

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
6	38-43-30.0 N	084-38-29.0 W	275.2	90.8	1036179

Address: 3000 Dry Ridge Mount Zion Road  
City: DRY RIDGE County: GRANT 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) 112.100 115.000 114.500 92.600 110.000 136.400 142.300 143.700  
Transmitting ERP (watts) 0.360 9.930 41.040 48.250 18.580 1.120 0.200 0.200

Antenna: 3  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 112.100 115.000 114.500 92.600 110.000 136.400 142.300 143.700  
Transmitting ERP (watts) 0.350 0.200 0.200 1.230 19.460 48.290 40.110 9.480

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) 112.100 115.000 114.500 92.600 110.000 136.400 142.300 143.700  
Transmitting ERP (watts) 51.290 30.370 3.550 0.200 0.200 0.200 3.980 31.080

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
7	38-35-22.1 N	084-34-38.2 W	286.5	91.7	1036600

Address: 8162 Dixie Highway  
City: Williamstown County: GRANT 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) 99.800 117.800 153.400 131.200 103.300 124.100 129.900 133.100  
Transmitting ERP (watts) 0.200 14.790 79.430 87.100 21.880 0.200 0.200 0.200

Antenna: 3  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 99.800 117.800 153.400 131.200 103.300 124.100 129.900 133.100  
Transmitting ERP (watts) 0.200 0.200 0.200 1.660 32.360 95.500 66.070 7.760

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) 99.800 117.800 153.400 131.200 103.300 124.100 129.900 133.100  
Transmitting ERP (watts) 100.000 41.690 1.950 0.200 0.200 0.200 6.030 56.230

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN837

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
8	38-12-03.3 N	085-19-18.8 W	228.6	90.8	1036180

Address: (Simpsonville) 7202 Brunerstown Road  
City: SIMPSONVILLE County: SHELBY State: KY Construction Deadline:

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) 77.800 77.700 82.200 92.900 103.900 101.600 100.000 92.400  
Transmitting ERP (watts) 23.690 197.020 127.210 10.100 0.960 0.960 0.960 1.460

Antenna: 5  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 77.800 77.700 82.200 92.900 103.900 101.600 100.000 92.400  
Transmitting ERP (watts) 0.700 0.700 5.510 77.010 274.490 96.500 7.530 0.740

Antenna: 6  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 77.800 77.700 82.200 92.900 103.900 101.600 100.000 92.400  
Transmitting ERP (watts) 25.970 1.720 0.960 0.960 0.960 8.600 124.310 201.610

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
9	38-41-11.3 N	084-20-37.8 W	244.4	88.4	1036605

Address: RT 1 BOX 510A SNAKE HILL OFF MONROE RD  
City: FALMOUTH County: PENDLETON State: KY Construction Deadline:

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) 146.200 108.800 86.000 113.400 88.700 111.100 81.600 95.800  
Transmitting ERP (watts) 0.200 11.220 72.440 91.200 25.700 0.370 0.200 0.200

Antenna: 5  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 146.200 108.800 86.000 113.400 88.700 111.100 81.600 95.800  
Transmitting ERP (watts) 0.200 0.200 0.200 0.910 26.300 91.200 74.130 12.020

Antenna: 6  
Maximum Transmitting ERP in Watts: 140.820  
Azimuth(from true north) 0 45 90 135 180 225 270 315  
Antenna Height AAT (meters) 146.200 108.800 86.000 113.400 88.700 111.100 81.600 95.800  
Transmitting ERP (watts) 97.720 4.900 0.210 0.200 0.200 0.200 0.200 5.370

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN837

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
10	38-24-39.0 N	084-19-07.0 W	244.0	129.0	1044001

Address: 0.4 KM NE OF SR 36 2.9 KM NE

City: Cynthiana County: HARRISON 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)	106.300	106.200	91.500	96.400	97.000	87.700	83.600	113.900
Transmitting ERP (watts)	0.300	12.030	75.920	91.280	26.320	0.960	0.200	0.200

Antenna: 3

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	106.300	106.200	91.500	96.400	97.000	87.700	83.600	113.900
Transmitting ERP (watts)	0.350	0.200	0.200	1.000	26.940	93.400	74.190	10.720

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)	106.300	106.200	91.500	96.400	97.000	87.700	83.600	113.900
Transmitting ERP (watts)	100.080	50.160	3.980	0.270	0.200	0.200	4.080	50.160

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
11	38-09-19.0 N	084-54-05.0 W	243.8	67.1	1036604

Address: 396 OLD HARRODSBURG RD

City: FRANKFORT County: FRANKLIN 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)	87.400	89.800	61.900	68.700	66.700	57.900	65.300	79.300
Transmitting ERP (watts)	3.550	22.910	39.810	22.390	3.310	0.270	0.100	0.300

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)	87.400	89.700	61.900	68.700	66.700	57.900	65.200	79.300
Transmitting ERP (watts)	49.000	6.310	0.490	0.200	0.980	12.030	64.600	97.770

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
12	38-39-42.6 N	085-11-59.5 W	260.6	64.0	1235824

Address: (Carrollton) 211 Davis Lane

City: CARROLLTON County: CARROLL 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)	99.800	130.700	115.800	93.100	74.200	96.700	62.500	115.500
Transmitting ERP (watts)	13.140	322.530	387.760	42.520	4.060	1.230	1.020	1.020

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN837

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
12	38-39-42.6 N	085-11-59.5 W	260.6	64.0	1235824

Address: (Carrollton) 211 Davis Lane

City: CARROLLTON County: CARROLL State: KY Construction Deadline:

Antenna: 3

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	99.800	130.700	115.800	93.100	74.200	96.700	62.500	115.500
Transmitting ERP (watts)	0.760	2.050	53.790	380.820	138.270	8.330	1.290	0.760

Antenna: 4

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	99.800	130.700	115.800	93.100	74.200	96.700	62.500	115.500
Transmitting ERP (watts)	1.140	1.020	1.020	3.970	144.070	499.530	109.290	5.110

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
13	38-34-31.7 N	085-10-49.7 W	254.8	92.0	1000357

Address: 1299 MILL CREEK RD

City: TURNERS CORNER County: HENRY State: KY Construction Deadline:

Antenna: 2

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	149.700	134.900	138.900	105.800	75.600	92.700	100.700	106.700
Transmitting ERP (watts)	0.390	10.470	67.610	87.100	22.910	1.150	0.200	0.200

Antenna: 3

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	149.700	134.900	138.900	105.800	75.600	92.700	100.700	106.700
Transmitting ERP (watts)	0.370	0.200	0.200	1.260	23.990	87.100	66.070	10.000

Antenna: 4

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	149.700	134.900	138.900	105.800	75.600	92.700	100.700	106.700
Transmitting ERP (watts)	95.500	43.650	3.550	0.200	0.200	0.200	3.980	44.670

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
14	38-40-30.2 N	084-58-18.8 W	245.7	91.1	1000358

Address: 7238 KENTUCKY HWY 47

City: SANDERS County: CARROLL State: KY Construction Deadline:

Antenna: 2

Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	135.500	116.800	113.800	90.000	115.700	134.700	115.100	130.100
Transmitting ERP (watts)	0.200	0.910	26.300	91.200	74.130	12.020	0.200	0.200



Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN837

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
14	38-40-30.2 N	084-58-18.8 W	245.7	91.1	1000358

Address: 7238 KENTUCKY HWY 47

City: SANDERS County: CARROLL 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)	135.500	116.800	113.800	90.000	115.700	134.700	115.100	130.100
Transmitting ERP (watts)	3.390	0.200	0.200	0.200	4.070	24.940	33.110	26.080

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)	135.500	116.800	113.800	90.000	115.700	134.700	115.100	130.100
Transmitting ERP (watts)	30.230	33.150	18.280	0.380	0.200	0.200	0.200	10.140

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
15	38-22-31.0 N	085-10-05.6 W	271.3	126.2	1000277

Address: 474 ELM ST

City: EMINENCE County: HENRY State: KY Construction Deadline:

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)	93.400	115.800	125.100	97.500	110.900	108.400	102.900	96.500
Transmitting ERP (watts)	0.350	3.550	37.150	93.330	77.620	18.620	1.740	0.200

Antenna: 5

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	93.400	115.800	125.100	97.500	110.900	108.400	102.900	96.500
Transmitting ERP (watts)	8.320	0.680	0.200	0.740	8.910	57.540	100.000	56.230

Antenna: 6

Maximum Transmitting ERP in Watts:	140.820							
Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	93.400	115.800	125.100	97.500	110.900	108.400	102.900	96.500
Transmitting ERP (watts)	77.620	93.330	35.480	3.390	0.270	0.200	1.860	19.500

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
16	38-36-14.0 N	085-20-21.9 W	262.7	126.2	1043334

Address: COLBERT LANE

City: BEDFORD County: TRIMBLE 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)	119.700	114.200	128.200	102.700	100.400	180.500	135.200	147.800
Transmitting ERP (watts)	18.090	60.420	1.770	2.060	1.770	1.770	11.150	67.550

Licensee Name: CELLCO PARTNERSHIP

Call Sign: KNKN837

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
16	38-36-14.0 N	085-20-21.9 W	262.7	126.2	1043334

Address: COLBERT LANE

City: BEDFORD County: TRIMBLE 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)	119.700	114.200	128.200	102.700	100.400	180.500	135.200	147.800
Transmitting ERP (watts)	2.500	37.650	400.090	508.440	97.060	4.000	2.110	1.770

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)	119.700	114.200	128.200	102.700	100.400	180.500	135.200	147.800
Transmitting ERP (watts)	3.280	1.770	1.770	3.180	133.980	496.870	390.980	21.150

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
17	38-12-30.4 N	084-50-11.5 W	233.5	54.8	

Address: Hwy 127 East 916 East Main Street

City: Frankfort County: FRANKLIN State: KY Construction Deadline: 02-05-2011

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)	75.600	35.900	31.000	25.800	60.900	56.300	86.000	56.700
Transmitting ERP (watts)	458.530	214.470	17.840	0.910	0.910	0.910	24.060	224.580

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)	75.600	35.900	31.000	25.800	60.900	56.300	86.000	56.700
Transmitting ERP (watts)	0.910	53.690	223.450	268.120	98.870	3.650	0.910	0.910

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)	75.600	35.900	31.000	25.800	60.900	56.300	86.000	56.700
Transmitting ERP (watts)	0.910	0.910	0.910	7.110	61.760	33.430	37.730	41.260

Control Points:

Control Pt. No. 3

Address: 500 W. Dove Rd

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

Waivers/Conditions:

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

**REFERENCE COPY**

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**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: CELLCO PARTNERSHIP

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

<b>Call Sign</b> WQGA718	<b>File Number</b> 0007518718
<b>Radio Service</b> AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

FCC Registration Number (FRN): 0003290673

<b>Grant Date</b> 11-29-2006	<b>Effective Date</b> 12-13-2016	<b>Expiration Date</b> 11-29-2021	<b>Print Date</b> 02-04-2017
<b>Market Number</b> REA004	<b>Channel Block</b> F	<b>Sub-Market Designator</b> 15	
<b>Market Name</b> Mississippi Valley			
<b>1st Build-out Date</b>	<b>2nd Build-out Date</b>	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

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

**Conditions:**

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

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

## EXHIBIT C

CELLCO PARTNERSHIP  
D/B/A



2421 HOLLOWAY ROAD  
LOUISVILLE, KY 40299

LV KY 22

HIGHWAY 22 EAST  
OWENTON, KY 40359  
OWEN COUNTY



CELLCO PARTNERSHIP  
D/B/A



2421 HOLLOWAY ROAD  
LOUISVILLE, KY 40299

**NEW 255' SELF SUPPORT TOWER w/5' LIGHTNING ARRESTOR  
TOTAL TOWER HEIGHT 260'**

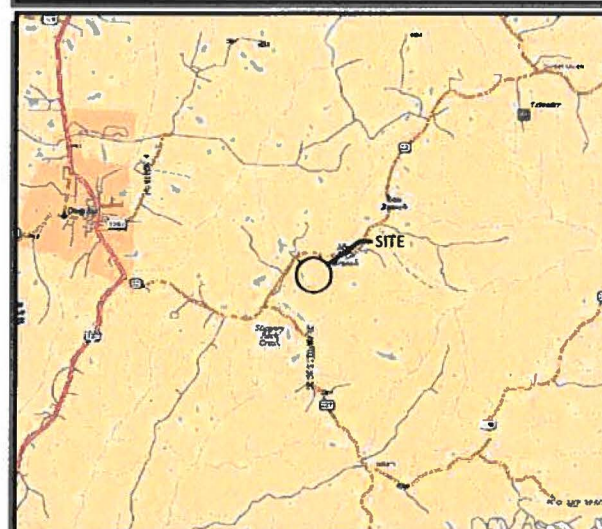
FROM OWEN COUNTY COURT HOUSE: 100 NORTH THOMAS STREET, OWENTON KY 40359: HEAD NORTH ON THOMAS ST TOWARD BRYAN ST (102 FT). TURN RIGHT ONTO BRYAN ST (236 FT). TURN RIGHT AT THE 1ST CROSS STREET ONTO N MAIN (0.6 MI). CONTINUE STRAIGHT ONTO STATE HWY 22 E/MAIN ST (2.7 MI). TURN RIGHT ONTO BRISSEY LN (0.2 MI). SITE WILL BE LOCATED AT THE END OF THE ROAD.

FROM LOUISVILLE MTSO: 2421 HOLLOWAY ROAD LOUISVILLE, KY 40299: HEAD SOUTH ON HOLLOWAY RD TOWARD PLANTSIDE DR (0.1 MI). TURN LEFT AT THE 1ST CROSS STREET ONTO PLANTSIDE DR (0.9 MI). TURN LEFT ONTO BLANKENBAKER PKWY (0.7 MI). USE THE RIGHT LANE TO TAKE THE RAMP ONTO I-64 E (.03 MI). MERGE ONTO I-64 E (35.8 MI). TAKE EXIT 53B TO MERGE ONTO US-127 N TOWARD FRANKFORT (4.9 MI). TURN LEFT ONTO WILKINSON BLVD (1.8 MI). USE THE RIGHT LANE TO TAKE THE US-127 N/KY-2261 RAMP TO FRANKFORT/OWENTON (0.1 MI). SHARP LEFT ONTO US-127 N/HOLMES ST (24.5 MI). TURN RIGHT ONTO STATE HWY 22 E/MAIN ST (2.7 MI). TURN RIGHT ONTO BRISSEY LN (0.2 MI). SITE WILL BE LOCATED AT THE END OF THE ROAD.

PREPARED BY: POWER OF DESIGN GROUP, LLC - (502) 437-5252

<p><b>VERIZON WIRELESS SITE</b></p> <p>LV KY 22 PROJECT#: 20171595361 MARKET ID: TBD LOCATION CODE: 449236</p> <p><b>SITE ADDRESS</b></p> <p>HIGHWAY 22 EAST OWENTON, KY 40359 OWEN COUNTY E911 ADDRESS: TBD</p> <p><b>TOWER OWNER</b></p> <p>VERIZON WIRELESS 2421 HOLLOWAY ROAD LOUISVILLE, KY 40299 CONTACT: AMY HARPER PHONE: (502) 552-0330 E-MAIL: AMY.HARPER@VERIZONWIRELESS.COM</p> <p><b>PROPERTY OWNER</b></p> <p>DANNY W. AND JUDITH L. JACOBS 1915 HIGHWAY 127 NORTH OWENTON, KY 40359 CONTACT: DANNY W. JACOBS PHONE: (502) 750-2334</p>	<p><b>POLICE</b></p> <p>OWEN COUNTY SHERIFF 102 N MADISON ST OWENTON, KY 40359 PHONE: (502) 484-3363</p> <p><b>FIRE</b></p> <p>OWENTON CITY FIRE DEPARTMENT 404 MAIN ST OWENTON, KY 40359 PHONE: (502) 484-2131</p> <p><b>GENERAL INFORMATION</b></p> <p>LATITUDE : 38° 31' 43.55" N LONGITUDE : 84° 47' 57.84" W ELEVATION : 959.00' AMSL 1988 (NAVD88)</p> <p><b>VERIZON WIRELESS LEASE AREA</b></p> <p>100'-0" x 100'-0" (10,000 SF)</p>
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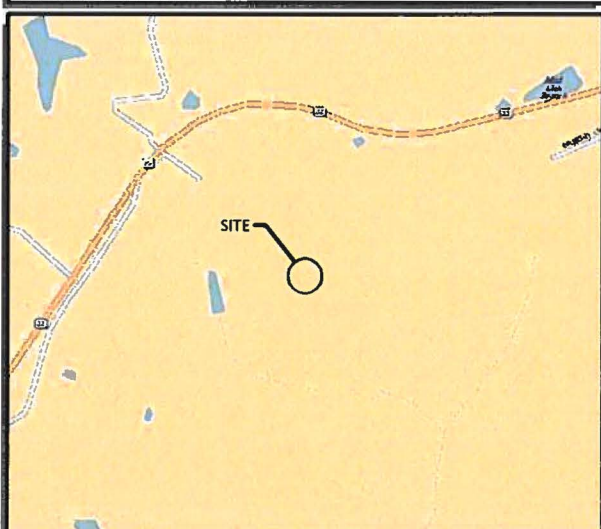
**PROJECT SUMMARY**



VICINITY MAP

<p><b>VERIZON WIRELESS SCOPE:</b></p> <ul style="list-style-type: none"> <li>INSTALL A NEW 255' SELF SUPPORT TOWER w/5' LIGHTNING ROD (TOTAL 260')</li> <li>INSTALL A NEW TOWER FOUNDATION SYSTEM</li> <li>INSTALL A NEW 98'X98' FENCED GRAVEL COMPOUND</li> <li>INSTALL A NEW SITE H-FRAME</li> <li>INSTALL A NEW ELECTRICAL SERVICE RUN TO SITE H-FRAME</li> <li>INSTALL A NEW GRAVEL ACCESS DRIVE</li> <li>NO WATER OR SEWAGE SERVICES RUN TO SITE</li> <li>INSTALL NEW TOWER &amp; SITE GROUNDING SYSTEM</li> <li>INSTALL NEW VZW SUBSURFACE GROUNDING SYSTEM</li> <li>INSTALL A NEW 11'-6"x19'-6" CONCRETE EQUIPMENT/GENERATOR PAD</li> <li>INSTALL ELECTRICAL SERVICE CONDUIT WITH PULL TAPES FROM ILC ENCLOSURE STUB-UP WITHIN VZW EQUIPMENT PAD TO UTILITY H-FRAME</li> <li>INSTALL NEW CONDUITS WITH PULL TAPES FROM VZW ILC ENCLOSURE STUB-UPS TO EQUIPMENT ENCLOSURE STUB-UPS WITHIN VZW EQUIPMENT PAD</li> <li>INSTALL NEW CONDUITS WITH PULL TAPES FROM VZW ILC &amp; EQUIPMENT ENCLOSURES STUB-UP TO GENERATOR LOCATION WITHIN VZW EQUIPMENT PAD</li> <li>INSTALL NEW CONDUITS WITH PULL TAPES FROM DC POWER CABINET AND RF CABINET TO OVP H-FRAME LIT FIBER LOCATION</li> <li>INSTALL (1) NEW "VERIZON WIRELESS ONLY" FIBER OPTIC CONDUIT WITH PULL TAPE AND TRACER WIRE FROM VZW EQUIPMENT TO NEW "VERIZON WIRELESS ONLY" HAND HOLE OUTSIDE COMPOUND THEN TO NEW "VERIZON WIRELESS ONLY" 36" X60" HAND HOLE AT ROW</li> <li>INSTALL (1) NEW "VERIZON WIRELESS ONLY" FIBER OPTIC CONDUIT WITH PULL TAPE FROM NEW "VERIZON WIRELESS ONLY" HAND HOLE AND STUB UP AT FUTURE FIBER PEDESTAL LOCATION</li> <li>INSTALL A NEW 11'-6"x14'-9" PREFABRICATED CANOPY ON EXISTING CONCRETE PAD FOUNDATION</li> <li>INSTALL NEW 20KW DIESEL GENERATOR ON EXISTING CONCRETE FOUNDATION</li> <li>INSTALL VZW ICE BRIDGE AND FOUNDATIONS</li> <li>INSTALL VZW ANTENNA MOUNTING SUPPORT STRUCTURE ON TOWER</li> <li>INSTALL VZW ANTENNAS, LINES, COAX, GPS ANTENNAS AND RADIO EQUIPMENT</li> <li>INSTALL EXISTING SUBSURFACE GROUND LEADS TO VZW EQUIPMENT &amp; FACILITIES</li> <li>INSTALL VZW ELECTRIC SERVICE CONDUCTORS FROM UTILITY H-FRAME TO VZW ILC ENCLOSURE</li> <li>INSTALL VZW GENERATOR CIRCUITS FROM VZW ILC &amp; EQUIPMENT ENCLOSURES TO VZW GENERATOR</li> <li>INSTALL CIRCUITS FROM VZW ILC TO VZW EQUIPMENT ENCLOSURES</li> <li>INSTALL NEW OUTDOOR OVP AND CABLING H-FRAME SUPPORT</li> <li>INSTALL (2) 1-1/4" &amp; (1) 1" INNERDUCTS WITH PULL TAPES AND TRACER WIRE WITHIN OWNER INSTALLED "VERIZON WIRELESS ONLY" FIBER OPTIC CONDUITS</li> </ul>
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**PROJECT DESCRIPTION**



LOCATION MAP

<p>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.</p> <table border="0"> <tr> <td>BUILDING CODE</td> <td>2013 KENTUCKY BUILDING CODE (KBC 2012)</td> </tr> <tr> <td>STRUCTURAL CODE</td> <td>TIA/EIA-222 - REVISION G (INCLUDES ADDENDUM #2)</td> </tr> <tr> <td>MECHANICAL CODE</td> <td>2012 INTERNATIONAL MECHANICAL CODE (IMC 2012)</td> </tr> <tr> <td>PLUMBING CODE</td> <td>KENTUCKY STATE PLUMBING CODE (815 KAR CHAP. 20)</td> </tr> <tr> <td>ELECTRICAL CODE</td> <td>2014 NATIONAL ELECTRICAL CODE (NEC) - NFPA 70</td> </tr> <tr> <td>FIRE/LIFE SAFETY CODE</td> <td>2012 INTERNATIONAL FIRE CODE (2012 IFC)</td> </tr> <tr> <td>ENERGY CODE</td> <td>2012 INTERNATIONAL ENERGY CODE (COMMERCIAL)</td> </tr> <tr> <td>GAS CODE</td> <td>2009 NATIONAL FUEL GAS CODE (NFPA 54)</td> </tr> </table> <p><b>ACCESSIBILITY REQUIREMENTS:</b></p> <p>FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2009 IBC BUILDING CODE.</p>	BUILDING CODE	2013 KENTUCKY BUILDING CODE (KBC 2012)	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	2014 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)	<p><b>APPLICABLE CODES</b></p> <table border="0"> <tr> <td><b>SURVEYOR</b></td> <td><b>ARCHITECTURAL</b></td> </tr> <tr> <td>POWER OF DESIGN GROUP, LLC 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 PHONE: (502) 437-5252</td> <td>POWER OF DESIGN GROUP, LLC 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 PHONE: (502) 437-5252</td> </tr> </table> <p><b>ELECTRICAL</b></p> <p>OWEN ELECTRIC COOPERATIVE, INC. ADDRESS: 8205 HWY 127 NORTH OWENTON, KY 40359 CONTACT: PHILIP KEITH PHONE: (800) 372-7612 EMAIL: PKEITH@OWENELECTRIC.COM</p>	<b>SURVEYOR</b>	<b>ARCHITECTURAL</b>	POWER OF DESIGN GROUP, LLC 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 PHONE: (502) 437-5252	POWER OF DESIGN GROUP, LLC 11490 BLUEGRASS PARKWAY LOUISVILLE, KY 40299 PHONE: (502) 437-5252
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**CONSULTANT TEAM**



AERIAL

<p><b>SHEET NUMBER</b></p> <p>T-1 B-1 TO B-1.5 B-2 R-1</p> <p><b>TOWER ELEVATION</b></p> <p>TE-1</p> <p><b>CIVIL</b></p> <p>C-1 C-1A C-3 C-4</p>	<p><b>DESCRIPTION</b></p> <p>PROJECT INFORMATION, SITE MAPS, SHEET INDEX SITE SURVEY 500' RADIUS AND ABUTTERS MAP REVISION LOG TOWER ELEVATION OVERALL SITE PLAN w/AERIAL OVERLAY OVERALL SITE PLAN DETAILED SITE PLAN DIMENSIONED SITE PLAN</p>
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**PRELIMINARY  
NOT FOR  
CONSTRUCTION**

**ZONING DRAWINGS**

REV.	DATE	DESCRIPTION
A	2.28.18	ISSUED FOR REVIEW
B	8.21.18	REV'D UTILITY EASEMENT

SITE INFORMATION:

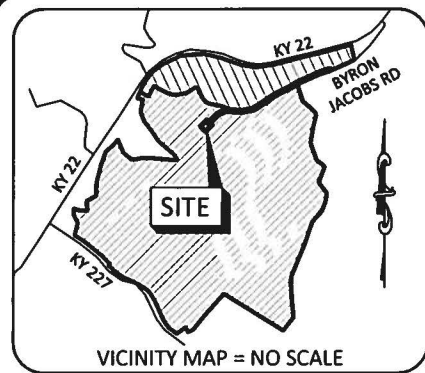
**LV KY 22**

HIGHWAY 22 EAST  
OWENTON, KY 40359  
OWEN COUNTY

POD NUMBER:	18-20992
DRAWN BY:	POD
CHECKED BY:	MEP
DATE:	02.15.18

SHEET TITLE:  
**PROJECT  
INFORMATION, SITE  
MAPS, SHEET INDEX**

SHEET NUMBER:  
**T-1**



TRUE NORTH  
GRID NORTH  
0° 35' 01"  
BASED ON KENTUCKY STATE PLANE SINGLE ZONE AND DETERMINED BY GPS OBSERVATIONS COMPLETED ON OCTOBER 2, 2017.

**GLOBAL POSITIONING SYSTEMS NOTE**

1. THE BOUNDARY CORNERS 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 GEOID12A. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.04' TO 0.06' HORIZONTALLY.
3. SPECTRA PRECISION EPOCH 50 DUAL FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.

PARCEL ID:  
074-00-00-005.01  
D & J STORAGE, LLC  
D.B. 247, PG. 103

PREPARED BY:  
**POD**  
POWER OF DESIGN  
11490 BLUEGRASS PARKWAY  
LOUISVILLE, KY 40299  
502-437-5252

PREPARED FOR:  
**CELLCO PARTNERSHIP**  
D/B/A  
**verizon**

**SITE SURVEY**

REV.	DATE	DESCRIPTION
A	10.10.17	PRELIM ISSUE WITH TITLE
B	11.1.17	ADDITIONAL TITLE
0	11.16.17	ISSUED AS FINAL
1	03.28.18	ADD UTILITY EASEMENT

**SITE INFORMATION:**

**LV KY 22**  
HIGHWAY 22 EAST  
OWENTON, KY 40359  
OWEN COUNTY

**TAX PARCEL NUMBER:**  
074-00-00-004.00 / 14915  
074-00-00-005.00 / 9323

**PROPERTY OWNER:**  
DANNY W. AND JUDITH L. JACOBS  
1915 HIGHWAY 127 NORTH  
OWENTON, KY 40359

**SOURCE OF TITLE:**  
DEED BOOK 245, PAGE 498  
DEED BOOK 126, PAGE 69

**POD NUMBER:** 17-18040  
**DRAWN BY:** TMD  
**CHECKED BY:** MEP  
**SURVEY DATE:** 10.2.17  
**PLAT DATE:** 10.9.17

**SHEET TITLE:**

**SITE SURVEY**

**SHEET NUMBER:**

**B-1**

**FAA COORDINATE POINT**

NAD 83  
LATITUDE: 38°31'43.55"  
LONGITUDE: 84°47'57.84"  
NAVD 88  
ELEVATION: 959'± AMSL  
NORTHING: 4081627.962  
EASTING: 5193187.239

**TEMPORARY BENCHMARK**

NORTHING: 4081689.638  
EASTING: 5193125.570  
ELEVATION: 956.85'  
LOCATION: SET 1/2" REBAR  
W/RED CAP STAMPED "POD TRAV"  
S81°40'W 62.3' ± FROM THE  
NORTHWEST CORNER OF THE  
PROPOSED LEASE AREA.

**PROPOSED LEASE AREA**  
(10,000,000 S.F.)  
DETAIL SHEET B-1.1

PARCEL ID: 074-00-00-005.00 / 9323  
DANNY AND JUDY JACOBS  
D.B. 126, PG. 69 - 106.2 ACRES  
D.B. 146, PG. 464 - 50.44 ACRES (50%)  
D.B. 133, PG. 354 - 50.44 ACRES (50%)

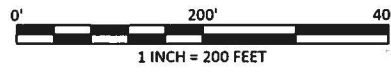
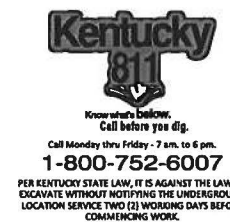
**PROPOSED VARIABLE WIDTH UTILITY EASEMENT "B"**  
(2,193,626 S.F.)  
DETAIL SHEET B-1.2 & B-1.3

**PROPOSED 30' ACCESS & UTILITY EASEMENT**  
(59,644.166 S.F.)  
DETAIL SHEET B-1.1, B-1.2, & B-1.3

**PROPOSED 30' / VARIABLE WIDTH UTILITY EASEMENT "A"**  
(24,933,566 S.F.)  
DETAIL SHEETS B-1.1 & B-1.2

PARCEL ID: 074-00-00-004.00 / 14915  
DANNY W. AND JUDITH L. JACOBS  
D.B. 245, PG. 498

**BYRON JACOBS ROAD (A.K.A. OLD BRISSEY ROAD)**  
PUBLIC RIGHT OF WAY - WIDTH PER KRS 178.025



**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*  
MARK PATTERSON, PLS #3136  
5/22/2018  
DATE

**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 SURVEY IS FOR THE PROPOSED LEASE AREA, THE PROPOSED UTILITY EASEMENTS, AND THE PROPOSED ACCESS & UTILITY EASEMENT ONLY, AND ONLY A PARTIAL BOUNDARY SURVEY OF THE PARENT TRACT HAS BEEN PERFORMED.

A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. UNADJUSTED CLOSURE EQUALS 0.05', FOR A PRECISION OF 1:84,260 AND HAS NOT BEEN ADJUSTED.

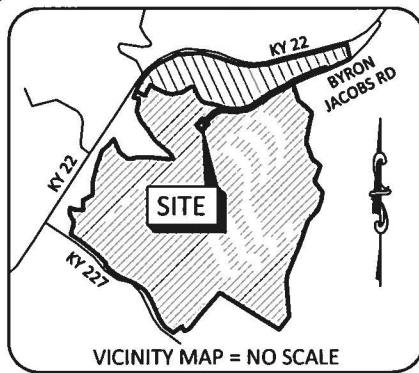
THIS PROPERTY IS SUBJECT TO ANY RECORDED EASEMENTS AND/OR RIGHTS OF WAY SHOWN HEREON OR NOT.

THIS PLAT IS NOT INTENDED FOR LAND TRANSFER.

THE PARENT PARCELS, THE PROPOSED LEASE AREA, THE PROPOSED UTILITY EASEMENTS, AND THE PROPOSED 30' ACCESS & UTILITY EASEMENT SHOWN HEREON ARE NOT LOCATED IN A 100-YEAR FLOOD PLAIN (ZONE X) PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NUMBER 21187C0150C, DATED JUNE 2, 2011.

**LEGEND**

- P.O.C. POINT OF COMMENCEMENT
- P.O.R. POINT OF REFERENCE
- P.O.B. POINT OF BEGINNING
- UTILITY POLE
- GUY ANCHOR
- OHE&T — OHE&T — EX. OVERHEAD ELECTRIC & TELEPHONE
- SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136"
- FOUND MONUMENT AS NOTED
- PROPERTY LINE
- ADJACENT PROPERTY LINE



**FAA COORDINATE POINT**

NAD 83  
 LATITUDE: 38°31'43.55"  
 LONGITUDE: 84°47'57.84"  
 NAVD 88  
 ELEVATION: 959± AMSL  
 NORTHING: 4081627.962  
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- FOUND MONUMENT AS NOTED — FOUND MONUMENT AS NOTED
- PROPERTY LINE — PROPERTY LINE
- ADJACENT PROPERTY LINE — ADJACENT PROPERTY LINE

PARCEL ID: 074-00-00-005.00 / 9323  
 DANNY AND JUDY JACOBS  
 D.B. 126, PG. 69 - 106.2 ACRES  
 D.B. 146, PG. 464 - 50.44 ACRES (50%)  
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0° 35' 01"  
 TRUE NORTH  
 GRID NORTH  
 N  
 BASED ON KENTUCKY STATE  
 PLANE SINGLE ZONE AND  
 DETERMINED BY GPS OBSERVATIONS  
 COMPLETED ON OCTOBER 2, 2017.

PROPOSED 30' ACCESS &  
 UTILITY EASEMENT  
 (59,644.166 S.F.)

PROPOSED 30' / VARIABLE  
 WIDTH UTILITY EASEMENT "A"  
 (24,933.566 S.F.)

PARCEL ID: 074-00-00-004.00 / 14915  
 DANNY W. AND JUDITH L. JACOBS  
 D.B. 245, PG. 498

LINE	BEARING	DISTANCE
L1	N45°00'34"E	30.00'
L2	S44°59'26"E	25.00'
L3	S44°59'26"E	25.00'
L4	S45°00'34"W	30.00'
L5	N45°00'34"E	30.00'
L6	N44°59'26"W	18.36'
L7	N55°05'59"E	11.91'
L8	N79°04'36"E	4.96'
L9	N64°29'30"E	17.90'
L10	S34°54'01"E	25.13'
L11	S54°45'38"W	10.93'
L12	N64°29'30"E	16.56'

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS
C1	S89°59'26"E	14.14'	10.00'
C2	S00°00'34"W	14.14'	10.00'

**GLOBAL POSITIONING SYSTEMS NOTE**

- THE BOUNDARY CORNERS AND A PORTION OF THE TOPOGRAPHY WAS LOCATED USING GPS.
- 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 GEOID12A. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.04' TO 0.06' HORIZONTALLY.
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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 PARCELS, THE PROPOSED LEASE AREA, THE PROPOSED UTILITY EASEMENTS, AND THE PROPOSED 30' ACCESS & UTILITY EASEMENT SHOWN HEREON ARE NOT LOCATED IN A 100-YEAR FLOOD PLAIN (ZONE X) PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NUMBER 21187C0150C, DATED JUNE 2, 2011.



**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*  
 MARK PATTERSON, PLS #3136  
 5/22/2018  
 DATE

PREPARED BY:  
  
 11490 BLUEGRASS PARKWAY  
 LOUISVILLE, KY 40299  
 502-437-5252

PREPARED FOR:  
  
 CELCO PARTNERSHIP  
 D/B/A

**SITE SURVEY**

REV.	DATE	DESCRIPTION
A	10.10.17	PRELIM ISSUE WITH TITLE
B	11.1.17	ADDITIONAL TITLE
0	11.16.17	ISSUED AS FINAL
1	03.28.18	ADD UTILITY EASEMENT

**SITE INFORMATION:**  
 LV KY 22  
 HIGHWAY 22 EAST  
 OWENTON, KY 40359  
 OWEN COUNTY

**TAX PARCEL NUMBER:**  
 074-00-00-004.00 / 14915  
 074-00-00-005.00 / 9323

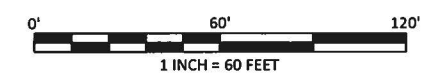
**PROPERTY OWNER:**  
 DANNY W. AND JUDITH L. JACOBS  
 1915 HIGHWAY 127 NORTH  
 OWENTON, KY 40359

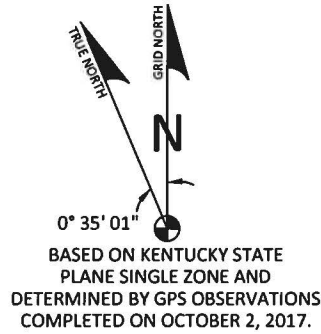
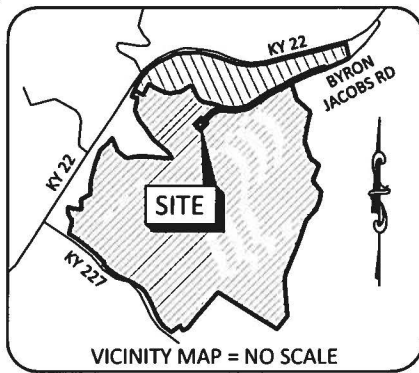
**SOURCE OF TITLE:**  
 DEED BOOK 245, PAGE 498  
 DEED BOOK 126, PAGE 69

POD NUMBER: 17-18040  
 DRAWN BY: TMD  
 CHECKED BY: MEP  
 SURVEY DATE: 10.2.17  
 PLAT DATE: 10.9.17

SHEET TITLE:  
**SITE SURVEY**

SHEET NUMBER:  
**B-1.1**





**GLOBAL POSITIONING SYSTEMS NOTE**

1. THE BOUNDARY CORNERS 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 GEOID12A. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.04' TO 0.06' HORIZONTALLY.
3. SPECTRA PRECISION EPOCH 50 DUAL FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.

**FAA COORDINATE POINT**

NAD 83  
 LATITUDE: 38°31'43.55"  
 LONGITUDE: 84°47'57.84"  
 NAVD 88  
 ELEVATION: 959± AMSL  
 NORTHING: 4081627.962  
 EASTING: 5193187.239

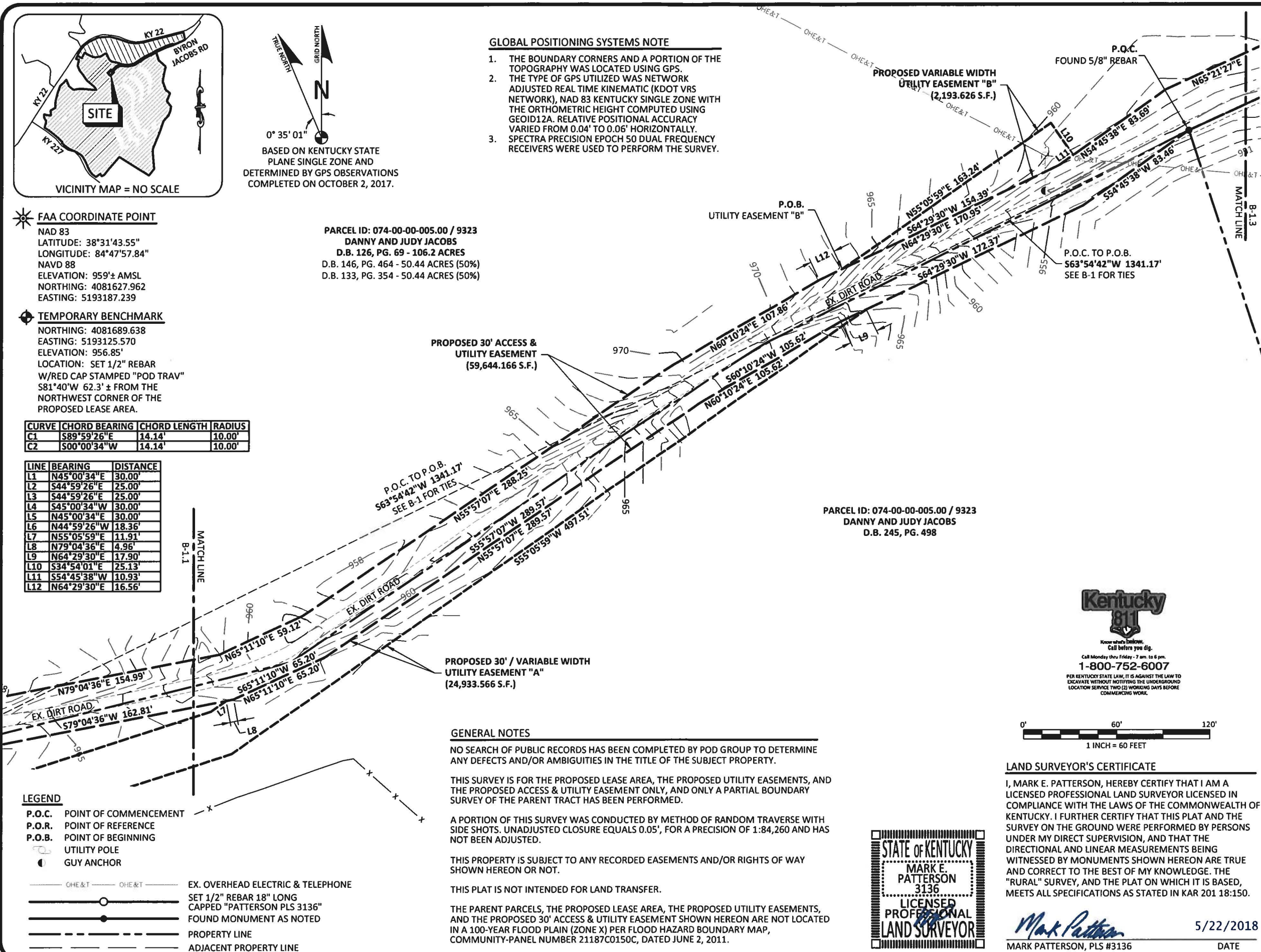
PARCEL ID: 074-00-00-005.00 / 9323  
 DANNY AND JUDY JACOBS  
 D.B. 126, PG. 69 - 106.2 ACRES  
 D.B. 146, PG. 464 - 50.44 ACRES (50%)  
 D.B. 133, PG. 354 - 50.44 ACRES (50%)

**TEMPORARY BENCHMARK**

NORTHING: 4081689.638  
 EASTING: 5193125.570  
 ELEVATION: 956.85'  
 LOCATION: SET 1/2" REBAR W/RED CAP STAMPED "POD TRAV" S81°40'W 62.3' ± FROM THE NORTHWEST CORNER OF THE PROPOSED LEASE AREA.

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS
C1	S89°59'26"E	14.14'	10.00'
C2	S00°00'34"W	14.14'	10.00'

LINE	BEARING	DISTANCE
L1	N45°00'34"E	30.00'
L2	S44°59'26"E	25.00'
L3	S44°59'26"E	25.00'
L4	S45°00'34"W	30.00'
L5	N45°00'34"E	30.00'
L6	N44°59'26"W	18.36'
L7	N55°05'59"E	11.91'
L8	N79°04'36"E	4.96'
L9	N64°29'30"E	17.90'
L10	S34°54'01"E	25.13'
L11	S54°45'38"W	10.93'
L12	N64°29'30"E	16.56'



**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 SURVEY IS FOR THE PROPOSED LEASE AREA, THE PROPOSED UTILITY EASEMENTS, AND THE PROPOSED ACCESS & UTILITY EASEMENT ONLY, AND ONLY A PARTIAL BOUNDARY SURVEY OF THE PARENT TRACT HAS BEEN PERFORMED.

A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. UNADJUSTED CLOSURE EQUALS 0.05', FOR A PRECISION OF 1:84,260 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 PARCELS, THE PROPOSED LEASE AREA, THE PROPOSED UTILITY EASEMENTS, AND THE PROPOSED 30' ACCESS & UTILITY EASEMENT SHOWN HEREON ARE NOT LOCATED IN A 100-YEAR FLOOD PLAIN (ZONE X) PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NUMBER 21187C0150C, DATED JUNE 2, 2011.

**LEGEND**

- P.O.C. POINT OF COMMENCEMENT
- P.O.R. POINT OF REFERENCE
- P.O.B. POINT OF BEGINNING
- UTILITY POLE
- GUY ANCHOR

- EX. OVERHEAD ELECTRIC & TELEPHONE
- SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136" FOUND MONUMENT AS NOTED
- PROPERTY LINE
- ADJACENT PROPERTY LINE

PREPARED BY:  
**POD**  
 POWER OF DESIGN  
 11490 BLUEGRASS PARKWAY  
 LOUISVILLE, KY 40299  
 502-437-5252

PREPARED FOR:  
**verizon**  
 CELCO PARTNERSHIP  
 D/B/A

**SITE SURVEY**

REV.	DATE	DESCRIPTION
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**TAX PARCEL NUMBER:**  
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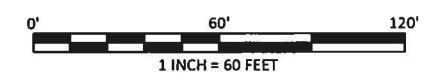
**PROPERTY OWNER:**  
 DANNY W. AND JUDITH L. JACOBS  
 1915 HIGHWAY 127 NORTH  
 OWENTON, KY 40359

**SOURCE OF TITLE:**  
 DEED BOOK 245, PAGE 498  
 DEED BOOK 126, PAGE 69

POD NUMBER: 17-18040  
 DRAWN BY: TMD  
 CHECKED BY: MEP  
 SURVEY DATE: 10.2.17  
 PLAT DATE: 10.9.17

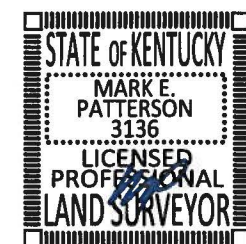
SHEET TITLE:  
**SITE SURVEY**

SHEET NUMBER:  
**B-1.2**



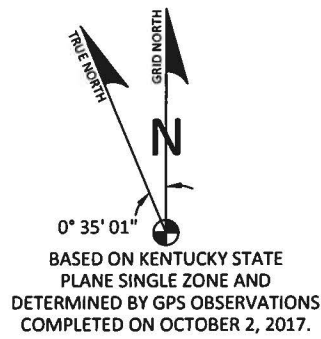
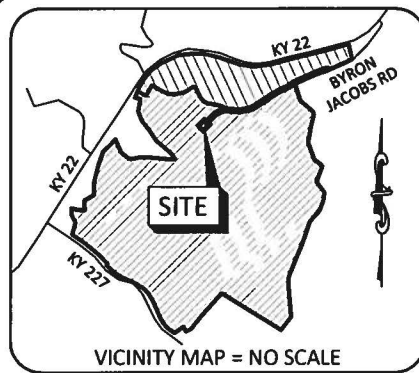
**LAND SURVEYOR'S CERTIFICATE**

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*  
 MARK PATTERSON, PLS #3136  
 DATE: 5/22/2018





**GLOBAL POSITIONING SYSTEMS NOTE**

1. THE BOUNDARY CORNERS 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 GEOID12A. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.04' TO 0.06' HORIZONTALLY.
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 NORTHING: 4081627.962  
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**TEMPORARY BENCHMARK**  
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L6	N44°59'26"W	18.36'
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L9	N64°29'30"E	17.90'
L10	S34°54'01"W	25.13'
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PARCEL ID: 074-00-00-005.00 / 9323  
 DANNY AND JUDY JACOBS  
 D.B. 126, PG. 69 - 106.2 ACRES  
 D.B. 146, PG. 464 - 50.44 ACRES (50%)  
 D.B. 133, PG. 354 - 50.44 ACRES (50%)

PARCEL ID: 074-00-00-008.01  
 MELODY BOURNE  
 PARCEL II OF  
 D.B. 194, PG. 254

PARCEL ID: 074-00-00-005.00 / 9323  
 DANNY AND JUDY JACOBS  
 D.B. 245, PG. 498

**LEGEND**  
 P.O.C. POINT OF COMMENCEMENT  
 P.O.R. POINT OF REFERENCE  
 P.O.B. POINT OF BEGINNING  
 UTILITY POLE  
 GUY ANCHOR

EX. OVERHEAD ELECTRIC & TELEPHONE  
 SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136"  
 FOUND MONUMENT AS NOTED  
 PROPERTY LINE  
 ADJACENT PROPERTY LINE

**GENERAL NOTES**

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A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. UNADJUSTED CLOSURE EQUALS 0.05', FOR A PRECISION OF 1:84,260 AND HAS NOT BEEN ADJUSTED.

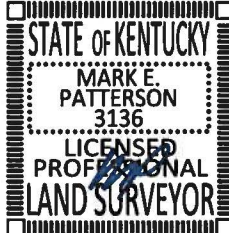
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PER KENTUCKY STATE LAW, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.



**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*  
 MARK PATTERSON, PLS #3136  
 DATE 5/22/2018

PREPARED BY:  
**POD**  
 POWER OF DESIGN  
 11490 BLUEGRASS PARKWAY  
 LOUISVILLE, KY 40299  
 502-437-5252

PREPARED FOR:  
**verizon**  
 CELCO PARTNERSHIP  
 D/B/A

**SITE SURVEY**

REV.	DATE	DESCRIPTION
A	10.10.17	PRELIM ISSUE WITH TITLE
B	11.1.17	ADDITIONAL TITLE
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**SITE INFORMATION:**  
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**TAX PARCEL NUMBER:**  
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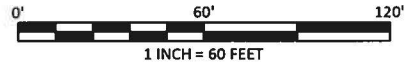
**PROPERTY OWNER:**  
 DANNY W. AND JUDITH L. JACOBS  
 1915 HIGHWAY 127 NORTH  
 OWENTON, KY 40359

**SOURCE OF TITLE:**  
 DEED BOOK 245, PAGE 498  
 DEED BOOK 126, PAGE 69

POD NUMBER: 17-18040  
 DRAWN BY: TMD  
 CHECKED BY: MEP  
 SURVEY DATE: 10.2.17  
 PLAT DATE: 10.9.17

SHEET TITLE:  
**SITE SURVEY**

SHEET NUMBER:  
**B-1.3**



### LEGAL DESCRIPTIONS

#### PROPOSED LEASE AREA

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED LEASE AREA TO BE LEASED FROM THE PROPERTY CONVEYED TO DANNY W. AND JUDITH L. JACOBS AS RECORDED IN DEED BOOK 245, PAGE 498, PARCEL ID: 074-00-00-004.00, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON OCTOBER 2, 2017.

COMMENCING AT FOUND 5/8" REBAR IN THE NORTHEAST CORNER OF THE PARCEL CONVEYED TO DANNY W. AND JUDITH L. JACOBS AS RECORDED IN DEED BOOK 245, PAGE 498, SAID POINT ALSO BEING IN THE SOUTH LINE OF THE PARCEL CONVEYED TO DANNY AND JUDY JACOBS AS RECORDED IN DEED BOOK 126, PAGE 69, SAID POINT ALSO BEING THE NORTHWEST CORNER OF THE PARCEL CONVEYED TO MELODY BOURNE AS RECORDED IN DEED BOOK 194, PAGE 254 (PARCEL II), FOR REFERENCE, SAID COMMENCEMENT POINT IS S65°24'47"W 205.88' FROM A FOUND MAG NAIL, S71°55'17"W 133.91' FROM A FOUND MAG NAIL, S71°21'58"W 77.35' FROM A FOUND MAG NAIL AND S66°18'32"W 230.22'; THENCE LEAVING SAID CORNER AND TRAVERSING THE PARCEL OF JACOBS AFOREMENTIONED, S63°54'42"W 1341.17' TO AS A "SET IPC" IN THE EASTERN MOST CORNER OF THE PROPOSED LEASE AREA AND BEING THE TRUE POINT OF BEGINNING; THENCE S45°00'34"W 100.00' TO A SET IPC; THENCE N44°59'26"W 100.00' TO A SET IPC; THENCE N45°00'34"E 100.00' TO A SET IPC; THENCE S44°59'26"E 100.00' TO THE POINT OF BEGINNING CONTAINING 10,000.000 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED OCTOBER 2, 2017.

#### PROPOSED 30' ACCESS & UTILITY EASEMENT

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 30' ACCESS AND UTILITY EASEMENT TO BE GRANTED FROM THE PROPERTY CONVEYED TO DANNY W. AND JUDITH L. JACOBS AS RECORDED IN DEED BOOK 245, PAGE 498, PARCEL ID: 074-00-00-004.00, AND THE PROPERTY CONVEYED TO DANNY AND JUDY JACOBS AS RECORDED IN DEED BOOK 126, PAGE 69, PARCEL ID: 074-00-00-005.00, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON OCTOBER 2, 2017.

COMMENCING AT FOUND 5/8" REBAR IN THE NORTHEAST CORNER OF THE PARCEL CONVEYED TO DANNY W. AND JUDITH L. JACOBS AS RECORDED IN DEED BOOK 245, PAGE 498, SAID POINT ALSO BEING IN THE SOUTH LINE OF THE PARCEL CONVEYED TO DANNY AND JUDY JACOBS AS RECORDED IN DEED BOOK 126, PAGE 69, SAID POINT ALSO BEING THE NORTHWEST CORNER OF THE PARCEL CONVEYED TO MELODY BOURNE AS RECORDED IN DEED BOOK 194, PAGE 254 (PARCEL II), FOR REFERENCE, SAID COMMENCEMENT POINT IS S65°24'47"W 205.88' FROM A FOUND MAG NAIL, S71°55'17"W 133.91' FROM A FOUND MAG NAIL, S71°21'58"W 77.35' FROM A FOUND MAG NAIL AND S66°18'32"W 230.22'; THENCE LEAVING SAID CORNER AND TRAVERSING THE PARCEL OF JACOBS AFOREMENTIONED, S63°54'42"W 1341.17' TO AS A "SET IPC" IN THE EASTERN MOST CORNER OF THE PROPOSED LEASE AREA AND BEING THE TRUE POINT OF BEGINNING; THENCE N44°59'26"W 100.00' TO A SET IPC; THENCE LEAVING SAID LEASE AREA, N45°00'34"E 30.00'; THENCE S44°59'26"E 25.00'; THENCE WITH THE CHORD OF A CURVE TO THE LEFT HAVING A RADIUS OF 10.00', S89°59'26"E 14.14'; THENCE N45°00'34"E 152.58'; THENCE N62°01'40"E 110.59'; THENCE N87°32'31"E 88.39'; THENCE S85°06'54"E 152.92'; THENCE N79°04'36"E 154.99'; THENCE N65°11'10"E 59.12'; THENCE N55°57'07"E 288.25'; THENCE N60°10'24"E 107.86'; THENCE N64°29'30"E 170.95'; THENCE N54°45'38"E 83.69'; THENCE N65°21'27"E 103.74'; THENCE N66°18'32"E 231.79'; THENCE N71°21'58"E 78.82'; THENCE N71°55'17"E 100.15'; THENCE S18°04'43"E 30.00' TO THE SOUTH LINE OF THE PARCEL CONVEYED TO DANNY AND JUDY JACOBS AS RECORDED IN DEED BOOK 126, PAGE 69 AND THE NORTH LINE OF THE PARCEL CONVEYED TO MELODY ROSE BOURNE AS RECORDED IN DEED BOOK 246, PAGE 151; THENCE ALONG SAID COMMON LINE, S71°55'17"W 100.00' TO A FOUND MAG NAIL, SAID MAG NAIL BEING THE NORTHEAST CORNER OF THE PARCEL CONVEYED TO MELODY BOURNE AS RECORDED IN DEED BOOK 194, PAGE 254; THENCE CONTINUING ALONG SAID COMMON LINE, S71°21'58"W 77.35'; THENCE S66°18'32"W 230.22'; THENCE S65°21'27"W 100.71' TO A FOUND 5/8" REBAR, BEING THE POINT OF COMMENCEMENT HEREIN; THENCE LEAVING SAID COMMON LINE, TRAVERSING THE LANDS OF JACOBS AFOREMENTIONED, S54°45'38"W 83.46'; THENCE S64°29'30"W 172.37'; THENCE S60°10'24"W 105.62'; THENCE S55°57'07"W 289.57'; THENCE S65°11'10"W 65.20'; THENCE S79°04'36"W 162.81'; THENCE N85°06'54"W 155.16'; THENCE S87°32'31"W 79.67'; THENCE S62°01'40"W 99.31'; THENCE S45°00'34"W 148.09'; THENCE WITH THE CHORD OF A CURVE TO THE LEFT HAVING A RADIUS OF 10.00', S00°00'34"W 14.14'; THENCE S44°59'26"E 25.00'; THENCE S45°00'34"W 30.00' TO THE POINT OF BEGINNING CONTAINING 59,644.166 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED OCTOBER 2, 2017.

#### PROPOSED 30' / VARIABLE WIDTH UTILITY EASEMENT "A"

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 30' / VARIABLE WIDTH UTILITY EASEMENT "A" TO BE GRANTED FROM THE PROPERTY CONVEYED TO DANNY AND JUDY JACOBS AS RECORDED IN DEED BOOK 245, PAGE 498, PARCEL ID: 074-00-00-004.00, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON OCTOBER 2, 2017.

COMMENCING AT FOUND 5/8" REBAR IN THE NORTHEAST CORNER OF THE PARCEL CONVEYED TO DANNY W. AND JUDITH L. JACOBS AS RECORDED IN DEED BOOK 245, PAGE 498, SAID POINT ALSO BEING IN THE SOUTH LINE OF THE PARCEL CONVEYED TO DANNY AND JUDY JACOBS AS RECORDED IN DEED BOOK 126, PAGE 69, SAID POINT ALSO BEING THE NORTHWEST CORNER OF THE PARCEL CONVEYED TO MELODY BOURNE AS RECORDED IN DEED BOOK 194, PAGE 254 (PARCEL II), FOR REFERENCE, SAID COMMENCEMENT POINT IS S65°24'47"W 205.88' FROM A FOUND MAG NAIL, S71°55'17"W 133.91' FROM A FOUND MAG NAIL, S71°21'58"W 77.35' FROM A FOUND MAG NAIL AND S66°18'32"W 230.22'; THENCE LEAVING SAID CORNER AND TRAVERSING THE PARCEL OF JACOBS AFOREMENTIONED, S63°54'42"W 1341.17' TO A "SET IPC" IN THE EASTERN MOST CORNER OF THE PROPOSED LEASE AREA AND BEING THE TRUE POINT OF BEGINNING; THENCE WITH THE SOUTH LINE OF THE PROPOSED 30' ACCESS & UTILITY EASEMENT N45°00'34"E 30.00'; THENCE N44°59'26"W 18.36'; THENCE LEAVING SAID PROPOSED ACCESS & UTILITY EASEMENT N72°04'44"E 596.10'; THENCE N55°05'59"E 11.91' TO A POINT IN THE SOUTH LINE OF THE PROPOSED ACCESS & UTILITY EASEMENT; THENCE WITH SAID SOUTH LINE OF THE PROPOSED ACCESS & UTILITY EASEMENT N79°04'36"E 4.96'; THENCE N65°11'10"E 65.20'; THENCE N55°57'07"E 289.57'; THENCE N60°10'24"E 105.62'; THENCE N64°29'30"E 17.90'; THENCE LEAVING SAID SOUTH LINE OF THE PROPOSED ACCESS & UTILITY EASEMENT S55°05'59"W 497.51'; THENCE S72°04'44"W 618.93' TO THE POINT OF BEGINNING CONTAINING 24,933.566 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED OCTOBER 2, 2017.

#### PROPOSED 30' / VARIABLE WIDTH UTILITY EASEMENT "B"

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 30' / VARIABLE WIDTH UTILITY EASEMENT "B" TO BE GRANTED FROM THE PROPERTY CONVEYED TO DANNY AND JUDY JACOBS AS RECORDED IN DEED BOOK 126, PAGE 69, PARCEL ID: 074-00-00-005.00, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON OCTOBER 2, 2017.

COMMENCING AT FOUND 5/8" REBAR IN THE NORTHEAST CORNER OF THE PARCEL CONVEYED TO DANNY W. AND JUDITH L. JACOBS AS RECORDED IN DEED BOOK 245, PAGE 498, SAID POINT ALSO BEING IN THE SOUTH LINE OF THE PARCEL CONVEYED TO DANNY AND JUDY JACOBS AS RECORDED IN DEED BOOK 126, PAGE 69, SAID POINT ALSO BEING THE NORTHWEST CORNER OF THE PARCEL CONVEYED TO MELODY BOURNE AS RECORDED IN DEED BOOK 194, PAGE 254 (PARCEL II), FOR REFERENCE, SAID COMMENCEMENT POINT IS S65°24'47"W 205.88' FROM A FOUND MAG NAIL, S71°55'17"W 133.91' FROM A FOUND MAG NAIL, S71°21'58"W 77.35' FROM A FOUND MAG NAIL AND S66°18'32"W 230.22'; THENCE LEAVING SAID CORNER AND TRAVERSING THE PARCEL OF JACOBS AFOREMENTIONED, S63°54'42"W 1341.17' TO A "SET IPC" IN THE EASTERN MOST CORNER OF THE PROPOSED LEASE AREA; THENCE N44°59'26"W 100.00' TO A "SET IPC"; THENCE LEAVING SAID LEASE AREA WITH THE NORTH LINE OF THE PROPOSED 30' ACCESS & UTILITY EASEMENT, N45°00'34"E 30.00'; THENCE S44°59'26"E 25.00'; THENCE WITH THE CHORD OF A CURVE TO THE LEFT HAVING A RADIUS OF 10.00', S89°59'26"E 14.14'; THENCE N45°00'34"E 152.58'; THENCE N62°01'40"E 110.59'; THENCE N87°32'31"E 88.39'; THENCE S85°06'54"E 152.92'; THENCE N79°04'36"E 154.99'; THENCE N65°11'10"E 59.12'; THENCE N55°57'07"E 288.25'; THENCE N60°10'24"E 107.86'; THENCE N64°29'30"E 16.56' TO THE TRUE POINT OF BEGINNING; THENCE LEAVING THE AFOREMENTIONED ACCESS & UTILITY EASEMENT N55°05'59"E 163.24'; THENCE S34°54'01"E 25.13' TO A POINT IN THE NORTH LINE OF THE AFOREMENTIONED PROPOSED ACCESS & UTILITY EASEMENT; THENCE WITH SAID NORTH LINE OF THE S54°45'38"W 10.93'; THENCE CONTINUING WITH SAID NORTH LINE OF THE PROPOSED ACCESS & UTILITY EASEMENT S64°29'30"W 154.39' TO THE POINT OF BEGINNING CONTAINING 2,193.626 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED OCTOBER 2, 2017.

#### PARENT PARCEL LEGAL DESCRIPTION DEED BOOK 245, PAGE 498 PARCEL ID: 074-00-00-004.00 (NOT FIELD SURVEYED)

#### TRACT I:

LYING AND BEING IN OWEN COUNTY, KENTUCKY ON THE NORTH SIDE OF U.S. 227 AND ON THE EAST SIDE OF KY. 22 AND MORE PARTICULARLY DESCRIBED AS FOLLOWS TO WIT:

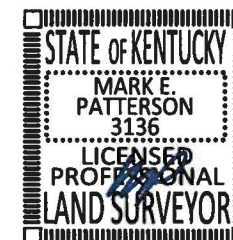
UNLESS STATED OTHERWISE, ANY MONUMENT REFERRED TO HEREIN AS A SET IRON PIN IS A 1/2" IRON REBAR 18" IN LENGTH WITH A YELLOW CAP STAMPED PLS 3316, 3479 & 3811. ALL BEARINGS STATED HEREIN ARE REFERRED TO FROM A SURVEY MADE BY CAHILL SURVEYORS, INC. ON THE 13TH OF OCTOBER 1999 (MELODY BOURNE, DEED BOOK 194, PAGE 254).

BEGINNING AT A SET MAG NAIL IN THE CENTER OF U.S. 227 AT A CORNER TO DARRELL TREECE, JR. (DEED BOOK 218, PAGE 62); THENCE LEAVING SAID CORNER WITH SAID ROAD, N 58° 58' 54N W -70.68 FEET TO A SET MAG NAIL; THENCE N 50° 24' 18" W -68.82 FEET TO A SET MAG NAIL; THENCE N 40° 00' 02" W -79.43 FEET TO A SET MAG NAIL; THENCE N 29° 56' 23" W -80.77 FEET TO A SET MAG NAIL; THENCE N 24° 24' 55" W -94.96 FEET TO A SET MAG NAIL; THENCE N 23° 42' 54" W -154.90 FEET TO A SET MAG NAIL; THENCE N 29° 08' 34" W -72.48 FEET TO A SET MAG NAIL; THENCE N 36° 58' 40" W -68.32 FEET TO A SET MAG NAIL; THENCE N 47° 11' 57" W -68.10 FEET TO A SET MAG NAIL; THENCE N 56° 53' 51" W -64.23 FEET TO A SET MAG NAIL; THENCE N 63° 06' 31" W -74.34 FEET TO A SET MAG NAIL; THENCE N 65° 30' 28" W -172.91 FEET TO A SET MAG NAIL; THENCE N 63° 06' 49" W -80.35 FEET TO A SET MAG NAIL; THENCE N 57° 55' 59" W -70.25 FEET TO A SET MAG NAIL; THENCE N 51° 37' 52" W -76.84 FEET TO A SET MAG NAIL; THENCE N46° 35' 37" W -97.86 FEET TO A SET MAG NAIL; THENCE LEAVING SAID ROAD WITH THE NEWLY ACQUIRED RIGHT OF WAY, N 44° 55' 49" E -23.11 FEET TO R/W MARKER; THENCE N 44° 26' 12" W -157.31 FEET TO A POINT, R/W MARKER FOUND AT S35° 58' 21" E -1.31 FEET; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 1338.58 FEET AND A CHORD BEARING AND DISTANCE, N 51° 59' 37" W -315.81 FEET TO A POINT, R/W MARKER FOUND AT S37° 52' 57" E -1.61 FEET; THENCE N 58° 46' 05" W -172.13 FEET TO A POINT, R/W MARKER FOUND AT S 35° 53' 10" E -1.19 FEET; THENCE N 15° 08' 28" E -177.56 FEET TO A POINT R/W MARKER FOUND AT S 06° 41' 53" E -1.46 FEET; THENCE N 29° 01' 25" W -132.25 FEET TO A FOUND R/W MARKER; THENCE N 00° 54' 16" E -83.69 FEET TO A SET IRON PIN IN THE LINE OF HOWARD BISHOP, JR. (DEED BOOK 210, PAGE 416); THENCE WITH THE LINE OF BISHOP, JR. AND THE EXISTING FENCE, S 73° 11' 49" E -86.64 FEET TO A POST; THENCE S 89° 37' 41" E -106.99 FEET TO A POST; THENCE N 05° 32' 40" W -136.85 FEET TO A POST; THENCE N 60° 53' 33" E -153.92 FEET TO A POST; THENCE N 33° 12' 59" E -4.88 FEET TO A POST; THENCE N 05° 32' 32" E -63.33 FEET TO A POST; THENCE N 55° 26' 40" W -15.44 FEET TO A SET SPIKE IN THE CENTER OF OLD BRISSEY ROAD AT A CORNER TO HAROLD HUGHES, TRUSTEE (DEED BOOK 121, PAGE 382); THENCE WITH THE LINE OF HUGHES AND OLD BRISSEY ROAD, N 00° 12' 04" E -88.04 FEET TO A SET SPIKE; THENCE N 12° 43' 28" E -251.78 FEET TO A SET SPIKE IN THE EAST RIGHT OF WAY OF KY. RT. 22; THENCE WITH SAID RIGHT OF WAY, N 08° 55' 31" E -95.99 FEET TO A SET SPIKE; THENCE N 26° 57' 34" E -126.63 FEET TO A FOUND R/W MARKER; THENCE LEAVING SAID OLD ROAD, N 48° 45' 09" E -120.42 FEET TO A FOUND R/W MARKER; THENCE N 39° 21' 43" E -116.00 FEET TO A FOUND R/W MARKER; THENCE N 02° 59' 54" E -111.72 FEET TO A FOUND R/W MARKER IN OLD BRISSEY ROAD; THENCE WITH SAID OLD ROAD AND SAID RIGHT OF WAY AND THE LINE OF VICTORY BAPTIST CHURCH, N 34° 27' 03" E 270.95 FEET TO A SET SPIKE; THENCE WITH THE LINES OF VICTORY BAPTIST CHURCH, N 30° 52' 00" E -105.17 FEET TO A SET SPIKE; THENCE N 14° 38' 07" E -118.80 FEET TO A SET SPIKE; THENCE N 20° 14' 08" E -140.22 FEET TO A SPIKE AT A CORNER TO LISA RIDDLE (DEED BOOK 219, PAGE 691); THENCE WITH THE LINE OF RIDDLE, S 64° 43' 18" E -139.49 FEET TO A POST; THENCE WITH THE EXISTING FENCE, N 27° 51' 38" E -PASSING THROUGH A POST AT 148.50 FEET FOR A TOTAL OF 167.94 FEET TO A SET SPIKE IN OLD BRISSEY ROAD IN THE LINE OF RICKY JACOBS (DEED BOOK 212, PAGE 11); THENCE WITH THE LINE OF JACOBS AND SAID OLD ROAD AS IT MEANDERS, S 60° 14' 39" E -115.63 FEET TO A SET SPIKE; THENCE S67° 15' 58" E -110.89 FEET TO A SET SPIKE AT A CORNER TO DANNY JACOBS (DEED BOOK 126, PAGE 69); THENCE WITH THE LINE OF JACOBS AND SAID OLD ROAD AS IT MEANDERS, S 74° 25' 18" E -61.86 FEET TO A SET SPIKE; THENCE S 84° 22' 32" E -46.45 FEET TO A SET SPIKE; THENCE N 78° 16' 27" E -125.01 FEET TO A SET SPIKE; THENCE N 70° 18' 06" E -48.07 FEET TO A SET SPIKE; THENCE N 54° 35' 09" E -116.05 FEET TO A SET SPIKE; THENCE S 81° 31' 40" E -37.04 FEET TO A SET SPIKE; THENCE S 28° 28' 46" E -162.42 FEET TO A SET SPIKE; THENCE S37° 56' 28" E -62.29 FEET TO A SET SPIKE; THENCE S 62° 47' 33" E -53.94 FEET TO A SET SPIKE; THENCE S 79° 46' 33" E -175.85 FEET TO A SET SPIKE; THENCE S69° 51' 12" E -54.72 FEET TO A SET SPIKE; THENCE S 60° 36' 09" E -140.32 FEET TO A SET SPIKE; THENCE N 87° 56' 19" E -85.52 FEET TO A SET SPIKE; THENCE N 75° 08' 14" E -226.25 FEET TO A SET SPIKE; THENCE N 54° 44' 50" E -260.52 FEET TO A SET SPIKE; THENCE N 56° 08' 35" E -107.38 FEET TO A SET SPIKE; THENCE N 62° 37' 12" E -204.99 FEET TO A SET SPIKE; THENCE N 62° 04' 36" E -99.04 FEET TO A FOUND IRON PIN PLS 2709, AT A CORNER TO MELODY BOURNE (DEED BOOK 194, PAGE 254); THENCE LEAVING SAID OLD ROAD WITH THE LINE OF BOURNE, S 19° 47' 57" E -253.98 FEET TO A 60" OAK; THENCE S53° 01' 13"E -95.68 FEET TO A 12" WALNUT; THENCE S 48° 32' 32" E -49.19 FEET TO A FOUND IRON PIN, PLS 2709, AT A CORNER TO MELODY BOURNE (DEED BOOK 209, PAGE 342); THENCE WITH THE LINE OF BOURNE, S 20° 25' 52" W -239.62 FEET TO A FOUND IRON PIN, PLS 2709; THENCE S54° 07' 09" E -11.92 FEET TO A FOUND IRON PIN, PLS 2709; THENCE S 37° 22' 00" E -169.17 FEET TO A FOUND IRON PIN, PLS 2700, IN THE LINE OF MELODY BOURNE (DEED BOOK 194, PAGE 254); THENCE WITH THE LINE OF BOURNE, S 07° 53' 31" W -122.41 FEET TO A POST; THENCE S 19° 53' 46" W -148.51 FEET TO A POINT IN THE CENTER OF A DRAIN; THENCE WITH SAID DRAIN AS IT MEANDERS, S 42° 44' 58" W -196.74 FEET TO A POINT; THENCE S01° 44' 57" E -174.43 FEET TO A POINT; THENCE S 21° 25' 42" E -143.36 FEET TO A POINT; THENCE S 12° 17' 49" E -115.31 FEET TO A POINT; THENCE S 22° 11' 35" E -170.40 FEET TO A POINT IN SAID DRAIN IN THE LINE OF JIMMIE WAINSCOTT (DEED BOOK 108, PAGE 276); THENCE LEAVING SAID DRAIN WITH THE LINE OF WAINSCOTT, S 67° 19' 50" W -14.58 FEET TO A SET IRON PIN; THENCE N 51° 40' 10" W -104.00 FEET TO A SET IRON PIN; THENCE S84° 19' 50" W -301.00 FEET TO A SET IRON PIN; THENCE S 78° 49' 50" W -28.37 FEET TO A 30" LOCUST AT A CORNER TO DARRELL TREECE, JR. (DEED BOOK 218, PAGE 62); THENCE WITH THE LINE OF TREECE, JR. AND THE EXISTING FENCE N 45° 11' 25" W -168.19 FEET TO A POST; THENCE N 55° 11' 36" W -109.57 FEET TO A POST; THENCE S 43° 07' 31" W -PASSING THROUGH A POST AT 152.84 FEET FOR A TOTAL OF 170.89 FEET TO THE PLACE OF BEGINNING CONTAINING 164.02 ACRES INCLUDING A 25' RIGHT OF WAY PARCEL CONTAINING 0.80 ACRES MORE OR LESS EXCLUSIVE OF ALL RIGHT OF WAYS AND EASEMENTS OF RECORD AND NOT OF RECORD.

THE ABOVE DESCRIPTION IS IN ACCORDANCE WITH A SURVEY MADE BY HICKS & MANN, INC. ON THE 14TH OF AUGUST 2006.

#### 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*  
MARK PATTERSON, PLS #3136

5/22/2018  
DATE



SITE SURVEY		
REV.	DATE	DESCRIPTION
A	10.10.17	PRELIM ISSUE WITH TITLE
B	11.1.17	ADDITIONAL TITLE
0	11.16.17	ISSUED AS FINAL
1	03.28.18	ADD UTILITY EASEMENT

**SITE INFORMATION:**  
LV KY 22  
HIGHWAY 22 EAST  
OWENTON, KY 40359  
OWEN COUNTY  
  
**TAX PARCEL NUMBER:**  
074-00-00-004.00 / 14915  
074-00-00-005.00 / 9323  
  
**PROPERTY OWNER:**  
DANNY W. AND JUDITH L. JACOBS  
1915 HIGHWAY 127 NORTH  
OWENTON, KY 40359  
  
**SOURCE OF TITLE:**  
DEED BOOK 245, PAGE 498  
DEED BOOK 126, PAGE 69

POD NUMBER: 17-18040  
DRAWN BY: TMD  
CHECKED BY: MEP  
SURVEY DATE: 10.2.17  
PLAT DATE: 10.9.17

SHEET TITLE:  
**SITE SURVEY**  
  
SHEET NUMBER:  
**B-1.4**

**PARENT PARCEL LEGAL DESCRIPTION DEED BOOK 126, PAGE 69 PARCEL ID: 074-00-00-005.00 (NOT FIELD SURVEYED)**

A TRACT OF LAND IN OWEN COUNTY, KY, ON BOTH SIDES OF THE OWENTON-DRY RIDGE ROAD (KENTUCKY STATE HIGHWAY NO. 22) ABOUT THREE MILES EAST OF THE CITY OF OWENTON, AND BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT (1), THE NORTH CORNER POST IN THE REAR LINE OF THE LOT OF LEE AND MARY ELIZABETH WYATT, ALSO CORNER TO D.C. DUNAVENT, THENCE WITH WYATT'S REAR LINE S38-30W 171 FEET TO (2), CORNER OF LOT OF BAILEY F. AND ATHELENE GLORE, THENCE WITH THEIR REAR LINE S36-30W 373 FEET TO (3), S40-00W 132 FEET TO (4), CORNER TO LOT OF JOSEPH W. AND BARBARA P. WYLES, THENCE WITH THEIR REAR LINE AND ON THE SAME COURSE AN ADDITIONAL 126 FEET TO (5), THENCE S25-30W 114 FEET TO (6), CORNER TO LOT OF WALTER W. AND PALMYRA KING, THENCE WITH THEIR REAR LINE ON THE SAME COURSE AN ADDITIONAL 237 FEET TO (7), THENCE WITH ANOTHER LINE OF KING S54-30E 288 FEET TO (8), A POINT IN THE CENTER LINE OF KENTUCKY STATE HIGHWAY NO. 22, AND CORNER TO LAND OF J.B. JACOBS, THENCE WITH THE CENTER LINE OF KENTUCKY STATE HIGHWAY NO. 22 AND THE LINE OF J.B. JACOBS S63-30W 167 FEET TO (9), A POINT IN THE CENTER LINE OF SAID ROAD, CORNER TO J.B. JACOBS, THENCE LEAVING SAID HIGHWAY AND WITH THE LINE OF J.B. JACOBS S41-30E 122 FEET TO (10), A SPIKE IN CENTER LINE OF THE OLD BRISSEY DIRT ROAD, CORNER TO J.B. JACOBS, THENCE WITH THE CENTER LINE OF SAID ROAD AND THE LINE OF J.B. JACOBS S43-30W 431 FEET TO (11), THENCE S66-30W 97 FEET TO (12), CORNER TO RALPH BOURNE, THENCE WITH THE CENTER LINE OF SAID ROAD AND HIS LINE AN ADDITIONAL 361 FEET TO (13), THENCE WITH THE CENTER LINE OF SAID ROAD AND BOURNE'S LINE S64-30W 368 FEET TO (14), CORNER TO LAND OF HOWARD BISHOP, JR., THENCE WITH THE CENTER LINE OF SAID ROAD AND BISHOP'S LINE ON THE SAME COURSE AN ADDITIONAL 342 FEET TO (15), S55-30W 354 FEET TO (16), S80-30W 295 FEET TO (17), N62-30W 164 FEET TO (18), N76-30W 245 FEET TO (19), N36-30W 262 FEET TO (20), S81-30W 435 FEET TO (21), N21-30E 234 FEET TO (22), N73-00W 78 FEET TO (23), N18-30E 45 FEET TO (24), N31-30W 50 FEET TO (25), N25-30E 195 FEET TO (26), A POINT IN THE CENTER LINE OF KENTUCKY STATE HIGHWAY NO. 22, THENCE WITH THE CENTER LINE OF SAID ROAD S59-00W 134 FEET TO (27), CORNER TO LAND OF DON AYRES, THENCE LEAVING THE SAID HIGHWAY AND WITH HIS LINE N70-00W 149 FEET TO (28), A POINT IN THE PROPERTY LINE FENCE OF ATWOOD AYRES, THENCE WITH HIS SAID FENCE N22-30E 1085 FEET TO (29), A 10" CORNER POST, S64-30E 663 FEET TO (30), AN 8" CORNER POST, N36-30E 708 FEET TO (31), A POINT IN THE PROPERTY LINE FENCE OF J.C. THOMAS, THENCE WITH HIS LINE ON THE SAME COURSE AN ADDITIONAL 102 FEET TO (32), A 14" HICKORY, THENCE S67-00E 762 FEET TO (33), N83-00E 473 FEET TO (34), THENCE WITH THE PROPERTY LINE FENCE N15-00E 623 FEET TO (35), A 20" MAPLE, CORNER TO D.C. DUNAVENT, THENCE WITH HIS LINE S76-30E (CROSSING MUD LICK CREEK AT 60 FEET) A TOTAL DISTANCE OF 767 FEET TO THE POINT OF BEGINNING, BUT SUBJECT TO ALL LEGAL HIGHWAYS.

THERE IS EXCEPTED FROM THE ABOVE BOUNDARY A LOT CONVEYED BY A.J. AYRES AND EDNA MAE AYRES, HIS WIFE, TO BLANTON AND NETTIE GIBSON BY DEED DATED JULY 22, 1971, AND RECORDED IN DEED BOOK 119, PAGE 331, WHICH IS BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE CENTER LINE OF KENTUCKY STATE HIGHWAY NO. 22, WHICH POINT IS N71-30E 240 FEET, N88-02E 1040 FEET ALONG THE CENTER LINE OF SAID HIGHWAY FROM A POINT IN THE CENTER LINE OF SAID HIGHWAY REFERRED TO AS POINT (26) IN THE OUTSIDE BOUNDARY OF SUBJECT TRACT, THENCE FOLLOWING THE EAST SIDE OF A FARM LANE S8-00W 160 FEET TO A STAKE, THENCE S69-00E 150 FEET PARALLEL WITH AND EQUAL DISTANCE FROM THE CENTER LINE OF SAID HIGHWAY TO A STAKE, THENCE N8-00E 160 FEET TO THE CENTER LINE OF SAID HIGHWAY, THENCE FOLLOWING THE CENTER LINE OF THE HIGHWAY N69-00W 150 FEET TO THE POINT OF BEGINNING.

THE ACREAGE PASSING UNDER THIS DEED IS 106.2 ACRES.

**PARENT PARCEL LEGAL DESCRIPTION DEED BOOK 146, PAGE 464 & DEED BOOK 133, PAGE 354  
PARCEL ID: 074-00-00-005.00 (NOT FIELD SURVEYED)**

A TRACT OF LAND LOCATED ABOUT THREE MILES EAST OF THE CITY OF OWENTON IN OWEN COUNTY, KENTUCKY, NEAR THE OWENTON AND GRANT COUNTY LINE TURNPIKE, AND DESCRIBED AS FOLLOWS:

BEGINNING AT A 14" HICKORY TREE IN THE CENTER OF BELL CREEK, CORNER TO OTHER LAND OF DANNY JACOBS, THENCE WITH THE CENTER OF BELL CREEK N8°E 587 FEET, N2°30'E 380 FEET, N26°E 262 FEET, N56°30'E 515 FEET, N80°30'E 815 FEET, S65°E 320 FEET TO THE CENTER OF MUD LICK CREEK, THENCE WITH THE CENTER OF MUD LICK CREEK S14°30'W 226 FEET, S23°W 220 FEET, THENCE LEAVING MUD LICK CREEK N68°30'W 183 FEET, S8°W 780 FEET TO A 20" MAPLE TREE IN LINE OF OTHER LAND OF DANNY JACOBS, THENCE WITH THE PROPERTY LINE FENCE OF DANNY JACOBS S15°W 623 FEET, S83°W 473 FEET, AND N67°W 762 FEET TO THE POINT OF BEGINNING, CONTAINING 50.44 ACRES, MORE OR LESS.

**REPORT OF TITLE (PARCEL ID: 074-00-00-004.00)**

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 FIRST AMERICAN TITLE INSURANCE COMPANY, FILE NO. CT-560, ISSUE DATE OF AUGUST 30, 2017 AT 8:00 AM. THE FOLLOWING COMMENTS ARE IN REGARD TO SAID REPORT.

**SCHEDULE B**

- VENDERS LIEN AGAINST DANNY JACOBS, JUDY JACOBS AND KYLE JACOBS IN FAVOR OF CONLEY ANDERSON AND CLEO ANDERSON, FILED NOVEMBER 6, 2007, OF RECORD IN DEED BOOK 223, PAGE 519, IN THE OFFICE AFORESAID. (NOT A LAND SURVEYING MATTER, THEREFORE, POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)
- POSSIBLE JUDGEMENT AGAINST DANNY JACOBS, JUDY JACOBS AND KYLE JACOBS IN FAVOR OF UNIFUND CCR PARTNERS DATED MARCH 27, 2009 OF RECORD IN LIEN BOOK 16, PAGE 347, IN THE OFFICE AFORESAID. (NOT A LAND SURVEYING MATTER, THEREFORE, POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)
- DEED OF EASEMENT BETWEEN HOWARD BISHOP JR AND BESSIE BISHOP, GRANTORS AND DANNY JACOBS AND JUDY JACOBS, GRANTEEES OF RECORD IN DEED BOOK 228, PAGE 439, IN THE OFFICE AFORESAID. (EASEMENT AS DESCRIBED IN DEED BOOK 228, PAGE 439 AFFECTS THE PARENT PARCEL, BUT DOES NOT AFFECT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS AND UTILITY EASEMENT AND THE PROPOSED UTILITY EASEMENT.)

**REPORT OF TITLE (PARCEL ID: 074-00-00-005.00)**

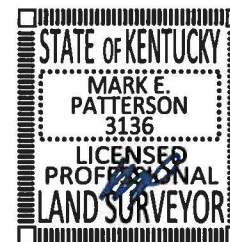
THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY POD GROUP, LLC. AND AS SUCH WE ARE NOT RESPONSIBLE FOR THE INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, UNRECORDED EASEMENTS, AUGMENTING EASEMENTS, IMPLIED OR PRESCRIPTIVE 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 FIRST AMERICAN TITLE INSURANCE COMPANY, FILE NO. CT-563, ISSUE DATE OF OCTOBER 17, 2017 AT 8:00 AM. THE FOLLOWING COMMENTS ARE IN REGARD TO SAID REPORT.

**SCHEDULE B**

- SUBJECT TO THE INTEREST OF BILLY SUSAN JACOBS. NO DIVORCE, WILL OR PROBATE FOUND. (INTEREST WOULD ONLY AFFECT D.B. 146, PG. 464, 50.44 ACRES (NORTHERN PART OF PARENT PARCEL) WHICH IS PART OF PARCEL ID: 074-00-00-005.00, BUT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS & UTILITY EASEMENT AND THE PROPOSED UTILITY EASEMENT ARE ALL ON D.B. 126, PG. 69 (SOUTHERN PART OF PARENT PARCEL).)
- TRANSMISSION LINE EASEMENT BETWEEN AJ AYRES AND EDNA MAE AYRES AND KENTUCKY UTILITIES COMPANY DATED OCTOBER 8, 1970 OF RECORD IN DEED BOOK 118, PAGE 211, IN THE OFFICE AFORESAID. (EASEMENT AS RECORDED IN D.B. 118, PG. 211 AFFECTS THE PARENT PARCEL, BUT DOES NOT AFFECT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS & UTILITY EASEMENT OR THE PROPOSED UTILITY EASEMENT.)
- TRANSMISSION LINE EASEMENT BETWEEN WILLIAM TACKETT AND OLLIE M. TACKETT AND KENTUCKY UTILITIES COMPANY DATED OCTOBER 12, 1970 OF RECORD IN DEED BOOK 118, PAGE 215, IN THE OFFICE AFORESAID. (EASEMENT AS RECORDED IN D.B. 118, PG. 215 AFFECTS THE PARENT PARCEL, BUT DOES NOT AFFECT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS & UTILITY EASEMENT OR THE PROPOSED UTILITY EASEMENT.)
- RIGHT OF WAY TO SOUTH CENTRAL BELL TELEPHONE COMPANY OF RECORD IN DEED BOOK 122, PAGE 66 AND 67, IN THE OFFICE AFORESAID. (EASEMENT AS RECORDED IN D.B. 122, PG. 66 & 67 AFFECTS THE PARENT PARCEL, BUT DOES NOT AFFECT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS & UTILITY EASEMENT OR THE PROPOSED UTILITY EASEMENT.)
- TRANSMISSION LINE EASEMENT BETWEEN DANNY JACOBS AND JUDY JACOBS AND EAST KENTUCKY POWER COOPERATIVE INC. DATED JANUARY 12, 2011 OF RECORD IN DEED BOOK 232, PAGE 359, IN THE OFFICE AFORESAID. (EASEMENT AS RECORDED IN D.B. 232, PG. 359 AFFECTS THE PARENT PARCEL, BUT DOES NOT AFFECT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS & UTILITY EASEMENT OR THE PROPOSED UTILITY EASEMENT.)
- SELL OFF DEED DATED MAY 6, 2016 BETWEEN DANNY AND JUDY JACOBS AND D & J STORAGE LLC OF RECORD IN DEED BOOK 247, PAGE 103, IN THE OFFICE AFORESAID. (DEED AS RECORDED IN D.B. 247, PG. 103 AFFECTS THE PARENT PARCEL, BUT DOES NOT AFFECT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS & UTILITY EASEMENT OR THE PROPOSED UTILITY EASEMENT AND IS SHOWN HEREON.)

**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* 5/22/2018  
MARK PATTERSON, PLS #3136 DATE



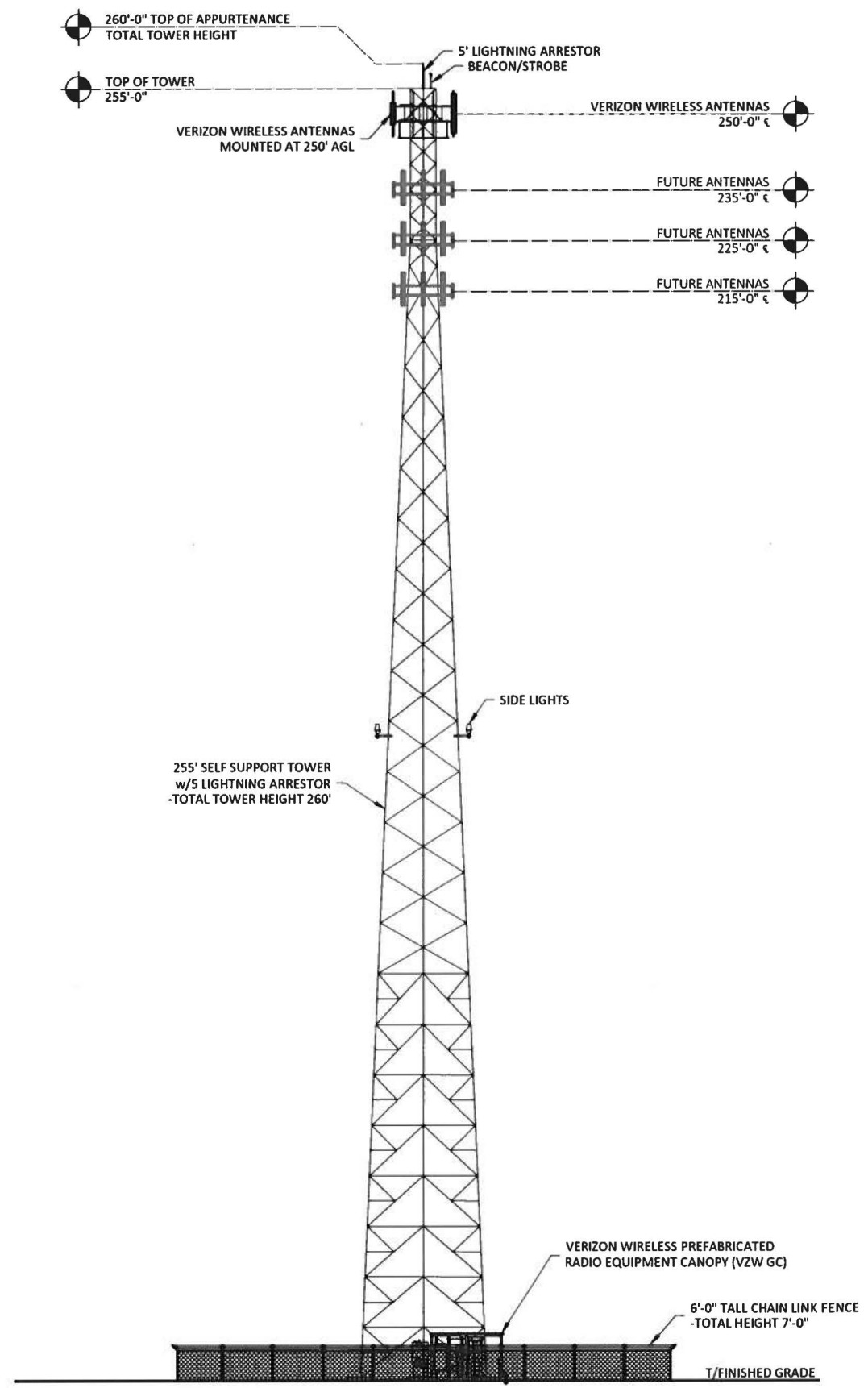
SITE SURVEY		
REV.	DATE	DESCRIPTION
A	10.10.17	PRELIM ISSUE WITH TITLE
B	11.1.17	ADDITIONAL TITLE
0	11.16.17	ISSUED AS FINAL
1	03.28.18	ADD UTILITY EASEMENT

**SITE INFORMATION:**  
**LV KY 22**  
 HIGHWAY 22 EAST  
 OWENTON, KY 40359  
 OWEN COUNTY  
  
**TAX PARCEL NUMBER:**  
 074-00-00-004.00 / 14915  
 074-00-00-005.00 / 9323  
  
**PROPERTY OWNER:**  
 DANNY W. AND JUDITH L. JACOBS  
 1915 HIGHWAY 127 NORTH  
 OWENTON, KY 40359  
  
**SOURCE OF TITLE:**  
 DEED BOOK 245, PAGE 498  
 DEED BOOK 126, PAGE 69

POD NUMBER: 17-18040  
 DRAWN BY: TMD  
 CHECKED BY: MEP  
 SURVEY DATE: 10.2.17  
 PLAT DATE: 10.9.17

SHEET TITLE:  
**SITE SURVEY**

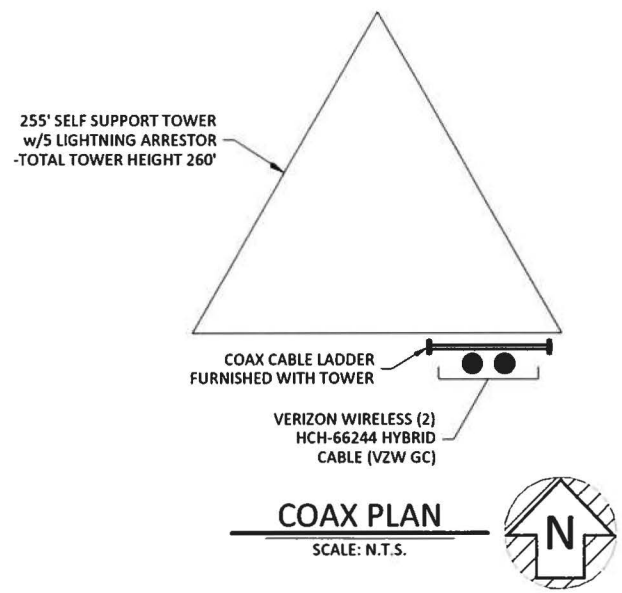
SHEET NUMBER:  
**B-1.5**



**TOWER ELEVATION**  
SCALE: N.T.S. 1  
TE-1

**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 WIRELESS (VZW GC)
2. ALL TOWER LIGHTING SHALL BE INSTALLED AS REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION AND RECOMMENDED BY THE USFWS INTERIM GUIDELINES (2000) FOR LIGHTING OF TOWERS OVER 200' IN HEIGHT.



**POD**  
POWER OF DESIGN  
11490 BLUEGRASS PARKWAY  
LOUISVILLE, KY 40299  
502-437-5252

CELLCO PARTNERSHIP  
D/B/A  
**verizon**  
2421 HOLLOWAY ROAD  
LOUISVILLE, KY 40299

PRELIMINARY  
NOT FOR  
CONSTRUCTION

**ZONING DRAWINGS**

REV.	DATE	DESCRIPTION
A	2.28.18	ISSUED FOR REVIEW
B	8.21.18	REV'D UTILITY EASEMENT

SITE INFORMATION:  
**LV KY 22**  
HIGHWAY 22 EAST  
OWENTON, KY 40359  
OWEN COUNTY

POD NUMBER: 18-20992  
DRAWN BY: POD  
CHECKED BY: MEP  
DATE: 02.15.18

SHEET TITLE:  
**TOWER ELEVATION**

SHEET NUMBER:  
**TE-1**

CELLCO PARTNERSHIP  
 D/B/A



2421 HOLLOWAY ROAD  
 LOUISVILLE, KY 40299

**PRELIMINARY  
 NOT FOR  
 CONSTRUCTION**

**ZONING DRAWINGS**

REV.	DATE	DESCRIPTION
A	2.28.18	ISSUED FOR REVIEW
B	8.21.18	REV'D UTILITY EASEMENT

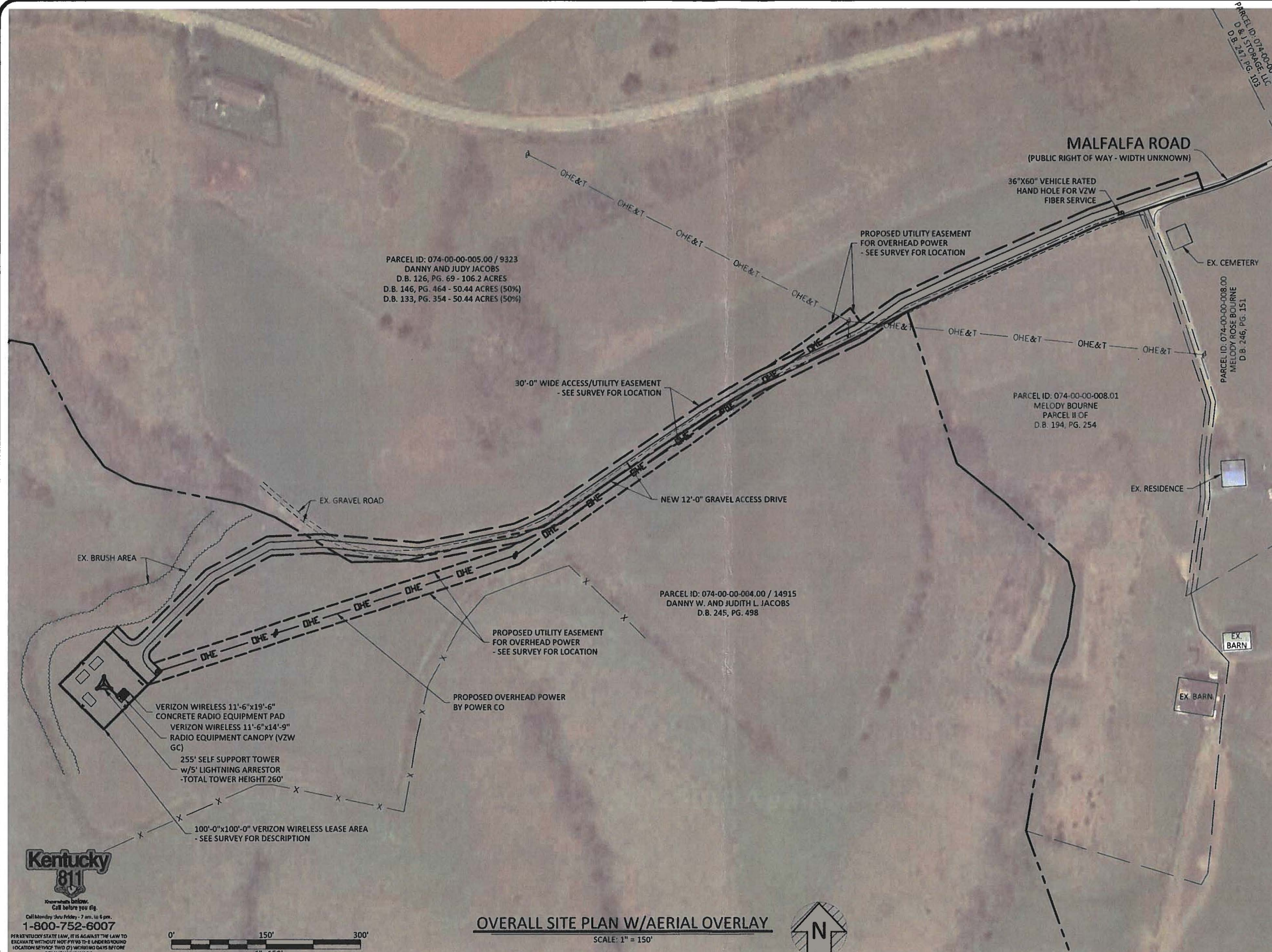
SITE INFORMATION:  
**LV KY 22**

HIGHWAY 22 EAST  
 OWENTON, KY 40359  
 OWEN COUNTY

POD NUMBER: 18-20992  
 DRAWN BY: POD  
 CHECKED BY: MEP  
 DATE: 02.15.18

SHEET TITLE:  
**OVERALL SITE PLAN  
 W/AERIAL OVERLAY**

SHEET NUMBER:  
**C-1**



PARCEL ID: 074-00-00-005.00 / 9323  
 DANNY AND JUDY JACOBS  
 D.B. 126, PG. 69 - 106.2 ACRES  
 D.B. 146, PG. 464 - 50.44 ACRES (50%)  
 D.B. 133, PG. 354 - 50.44 ACRES (50%)

PARCEL ID: 074-00-00-008.01  
 MELODY BOURNE  
 PARCEL II OF  
 D.B. 194, PG. 254

PARCEL ID: 074-00-00-004.00 / 14915  
 DANNY W. AND JUDITH L. JACOBS  
 D.B. 245, PG. 498



**OVERALL SITE PLAN W/AERIAL OVERLAY**



SCALE: 1" = 150'

PER KENTUCKY STATE LAW, IT IS AGAINST THE LAW TO  
 EXCAVATE WITHOUT NOTIFYING THE LANDOWNERS  
 (LOCATION SERVICE TWO (2) WORKING DAYS BEFORE  
 COMMENCING WORK.)

CELLCO PARTNERSHIP  
 D/B/A



2421 HOLLOWAY ROAD  
 LOUISVILLE, KY 40299

**PRELIMINARY  
 NOT FOR  
 CONSTRUCTION**

**ZONING DRAWINGS**

REV.	DATE	DESCRIPTION
A	2.28.18	ISSUED FOR REVIEW
B	8.21.18	REV'D UTILITY EASEMENT

SITE INFORMATION:  
**LV KY 22**

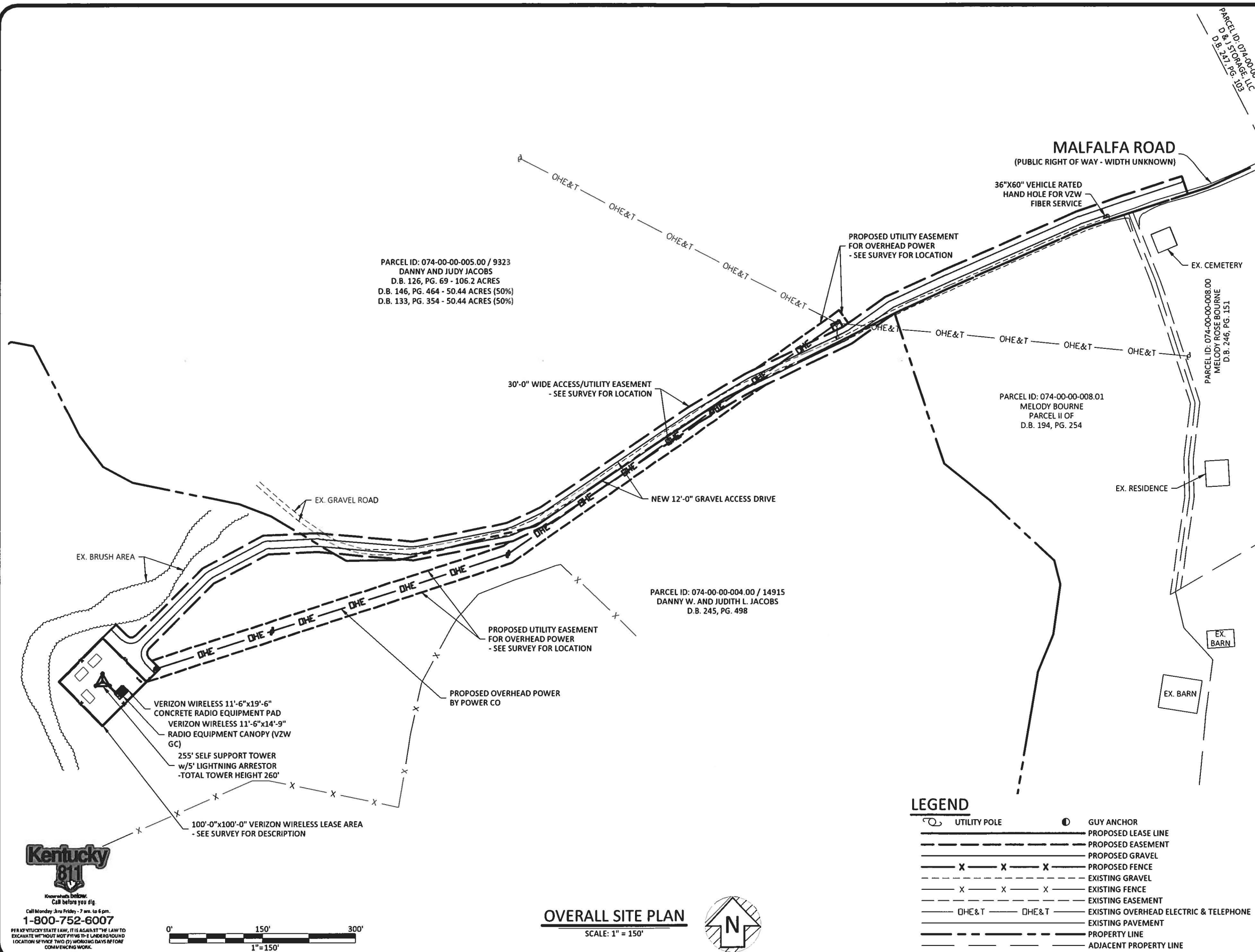
HIGHWAY 22 EAST  
 OWENTON, KY 40359  
 OWEN COUNTY

POD NUMBER: 18-20992  
 DRAWN BY: POD  
 CHECKED BY: MEP  
 DATE: 02.15.18

SHEET TITLE:

**OVERALL SITE PLAN**

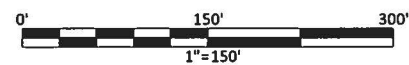
SHEET NUMBER:  
**C-1A**



**LEGEND**

- UTILITY POLE
- GUY ANCHOR
- PROPOSED LEASE LINE
- PROPOSED EASEMENT
- PROPOSED GRAVEL
- PROPOSED FENCE
- EXISTING GRAVEL
- EXISTING FENCE
- EXISTING EASEMENT
- EXISTING OVERHEAD ELECTRIC & TELEPHONE
- EXISTING PAVEMENT
- PROPERTY LINE
- ADJACENT PROPERTY LINE

**OVERALL SITE PLAN**  
 SCALE: 1" = 150'



Call Monday thru Friday - 7 am. to 6 pm.  
**1-800-752-6007**  
FOR BY KENTUCKY STATE LAW, IT IS AGAINST THE LAW TO  
 EXCAVATE WITHOUT NOTIFYING THE LABELING SOUND  
 LOCATION SERVICE TWO (2) WORKING DAYS BEFORE  
 COMMENCING WORK.

PRELIMINARY  
 NOT FOR  
 CONSTRUCTION

ZONING DRAWINGS

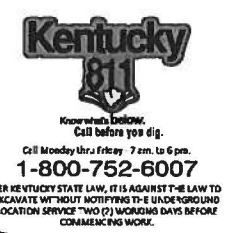
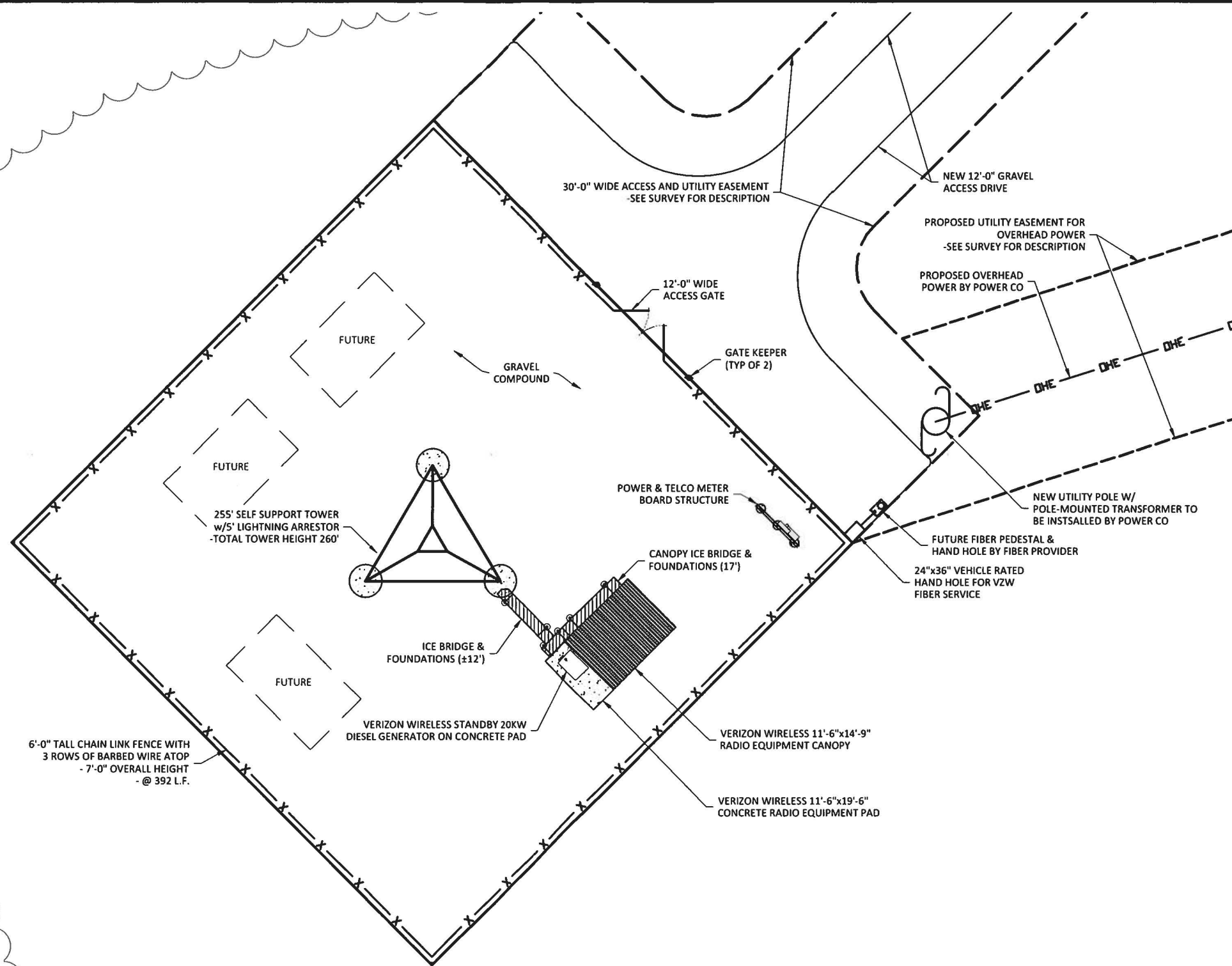
REV.	DATE	DESCRIPTION
A	2.28.18	ISSUED FOR REVIEW
B	8.21.18	REV'D UTILITY EASEMENT

SITE INFORMATION:  
**LV KY 22**  
 HIGHWAY 22 EAST  
 OWENTON, KY 40359  
 OWEN COUNTY

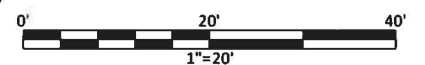
POD NUMBER: 18-20992  
 DRAWN BY: POD  
 CHECKED BY: MEP  
 DATE: 02.15.18

SHEET TITLE:  
**DETAILED SITE PLAN**

SHEET NUMBER:  
**C-3**



\*NOTE:  
 GENERAL CONTRACTOR IS TO ENSURE  
 THERE IS NO DISTURBANCE OF PROPERTY,  
 SOIL, ETC. OUTSIDE OF THE STAKED LEASE  
 AREA WITHOUT APPROVAL FROM  
 VERIZON WIRELESS CONSTRUCTION  
 MANAGER



**DETAILED SITE PLAN**  
 SCALE: 1" = 20'



**LEGEND**

- — — — — PROPOSED LEASE LINE
- - - - - PROPOSED EASEMENT
- — — — — PROPOSED GRAVEL
- X — X — X — PROPOSED FENCE

PRELIMINARY  
 NOT FOR  
 CONSTRUCTION

ZONING DRAWINGS

REV.	DATE	DESCRIPTION
A	2.28.18	ISSUED FOR REVIEW
B	8.21.18	REV'D UTILITY EASEMENT

SITE INFORMATION:  
**LV KY 22**

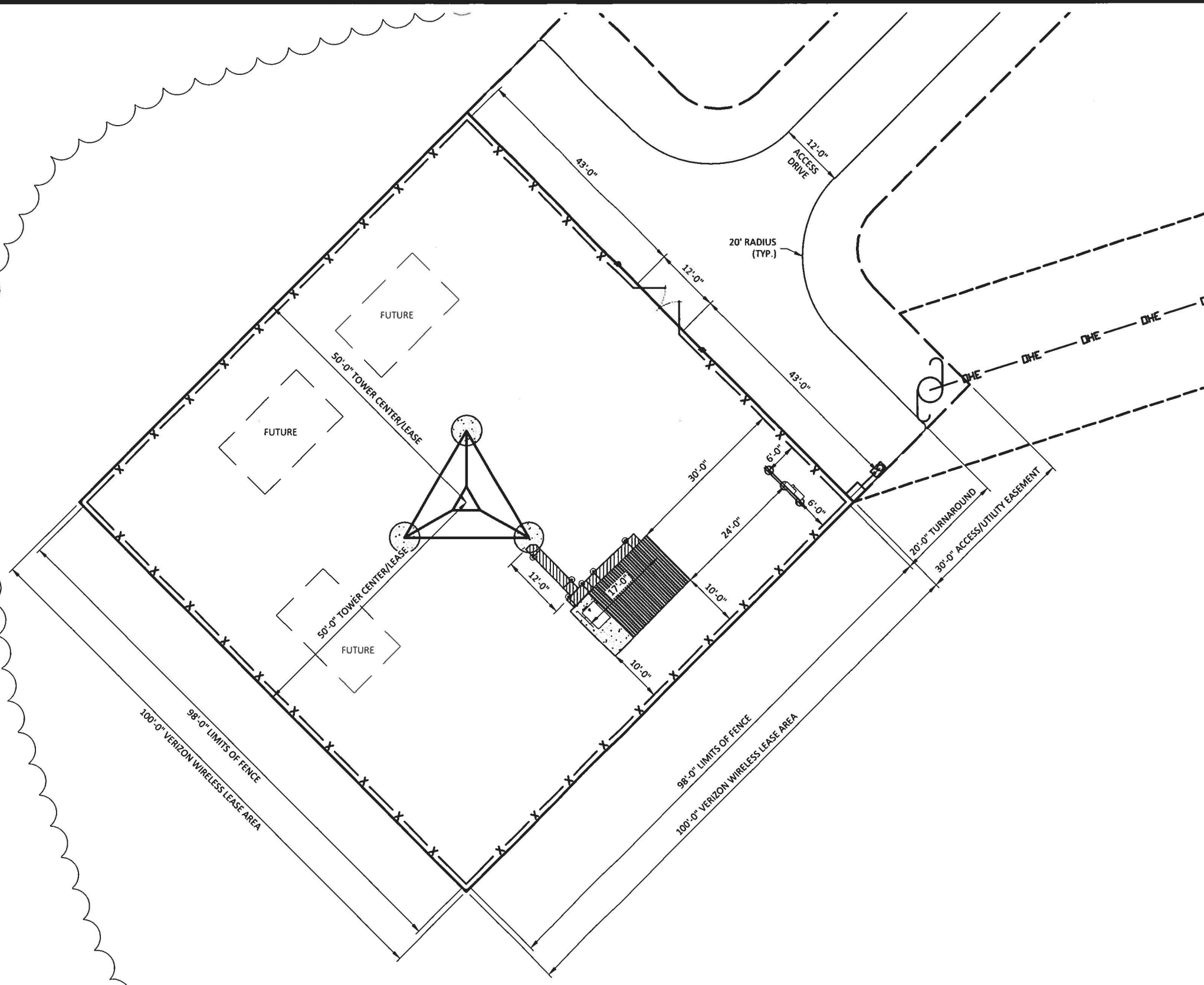
HIGHWAY 22 EAST  
 OWENTON, KY 40359  
 OWEN COUNTY

POD NUMBER: 18-20992  
 DRAWN BY: POD  
 CHECKED BY: MEP  
 DATE: 02.15.18

SHEET TITLE:

**DIMENSIONED SITE PLAN**

SHEET NUMBER:  
**C-4**



**LEGEND**

- PROPOSED LEASE LINE
- - - PROPOSED EASEMENT
- ▨ PROPOSED GRAVEL
- X — X — X — PROPOSED FENCE

**DIMENSIONED SITE PLAN**

SCALE: 1" = 20'



\*NOTE:  
 GENERAL CONTRACTOR IS TO ENSURE  
 THERE IS NO DISTURBANCE OF PROPERTY,  
 SOIL, ETC. OUTSIDE OF THE STAKED LEASE  
 AREA WITHOUT APPROVAL FROM  
 VERIZON WIRELESS CONSTRUCTION  
 MANAGER

**Kentucky 811**  
 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.



## EXHIBIT D



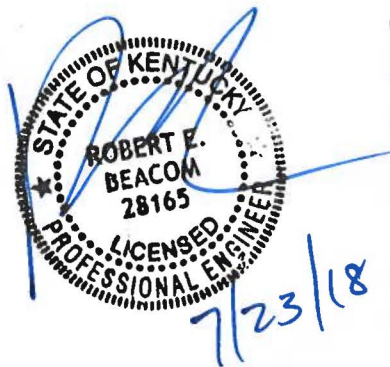
**Structural Design Report**  
255' S3R Series SD Self-Supporting Tower  
Site: KY 22, KY  
Site Number: 233654

Prepared for: VERIZON WIRELESS  
by: Sabre Towers & Poles™

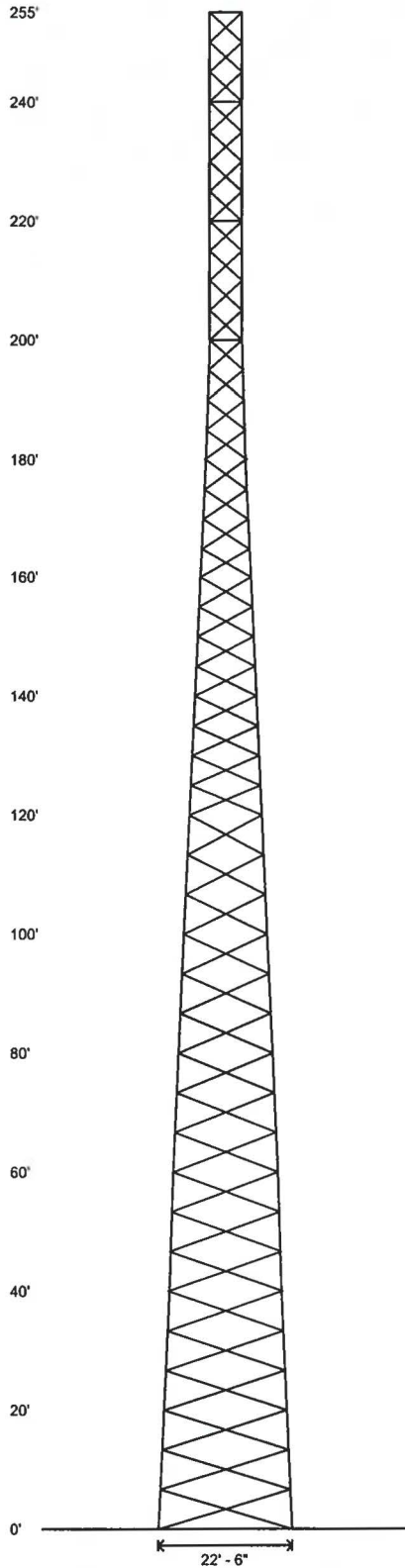
Job Number: 19-1628-TJH

July 23, 2018

Tower Profile.....	1
Foundation Design Summary (Option 1).....	2
Foundation Design Summary (Option 2).....	3
Maximum Leg Loads.....	4
Maximum Diagonal Loads.....	5
Maximum Foundation Loads.....	6
Calculations.....	7-24



Legs	4.25 S.R.	4.0 S.R.	3.75 S.R.	3.25 S.R.	3.0 S.R.	2.75 S.R.	2.5 S.R.	2.0 S.R.	1.75 S.R.
Diagonals	L 3 1/2 X 3 1/2 X 1/4	L 3 X 3 X 1/4	L 3 X 3 X 3/16	L 2 1/2 X 2 1/2 X 3/16	L 2 X 2 X 3/16	L 2 X 2 X 1/8			
Horizontals							A	NONE	A
Brace Bolts		(1) 3/4"	NONE	(1) 5/8"					
Top Face Width	20.75'	17.25'	15.5'	12'	10.25'	8.5'	6.75'	5'	
Panel Count/height	5602	4792	4269	3661	2970	2366	2098	1850	1150
Section Weight	5625	4792	4269	3661	2970	2366	2098	1850	766



### Designed Appurtenance Loading

Elev	Description	Tx-Line
250	3V-Boom - 12ft Face - 3ft Standoff	
250	(1) RRODC-3315-PF-48	
250	(3) 4449 B13 + B5	
250	(3) 8843 B2 + B66A	
250	(3) DBC00337F1V2-x	
250	(6) APXVHCWW24XD-C-I20B	(2) 1 1/4"
240	Leg Dish Mount	
240	(1) 8' Solid Dish W/ Radome	(1) 1 5/8"
225	3V-Boom - 10ft Face - 3ft Standoff	
225	(6) JAHH-65C-R3B	(12) 1 5/8"
210	3V-Boom - 10ft Face - 3ft Standoff	
210	(6) JAHH-65C-R3B	(12) 1 5/8"
195	3V-Boom - 10ft Face - 3ft Standoff	
195	(6) JAHH-65C-R3B	(12) 1 5/8"
180	Leg Dish Mount	
180	(1) 8' Solid Dish W/ Radome	(1) 1 5/8"

### Base Reactions

Total Foundation		Individual Footing	
Shear (kips)	57.65	Shear (kips)	35.02
Axial (kips)	155.23	Compression (kips)	418
Moment (ft-kips)	7721	Uplift (kips)	365
Torsion (ft-kips)	34.44		

### Material List

Display	Value
A	L 2 X 2 X 1/8

### Notes

- 1) All legs are A572 Grade 50.
- 2) All braces are A572 Grade 50.
- 3) All brace bolts are A325-X.
- 4) The tower model is S3R Series SD.
- 5) Transmission lines are to be attached to standard 12 hole waveguide ladders with stackable hangers.
- 6) Azimuths are relative (not based on true north).
- 7) Foundation loads shown are maximums.
- 8) All unequal angles are oriented with the short leg vertical.
- 9) Weights shown are estimates. Final weights may vary.
- 10) This tower was designed for a basic wind speed of 89 mph with 0" of radial ice, and 30 mph with 3/4" of radial ice, in accordance with ANSI/TIA-222-G, Structure Class II, Exposure Category C, Topographic Category 1.
- 11) The foundation loads shown are factored loads.
- 12) The tower design meets the requirements for an Ultimate Wind Speed of 115 mph (Risk Category II), in accordance with the 2012 International Building Code.
- 13) Tower Rating: 99.08%

**Sabre Industries**  
Towers and Poles

Sabre Communications Corporation  
7101 Southbridge Drive  
P.O. Box 658  
Sioux City, IA 51102-0658  
Phone: (712) 259-6690  
Fax: (712) 279-0814

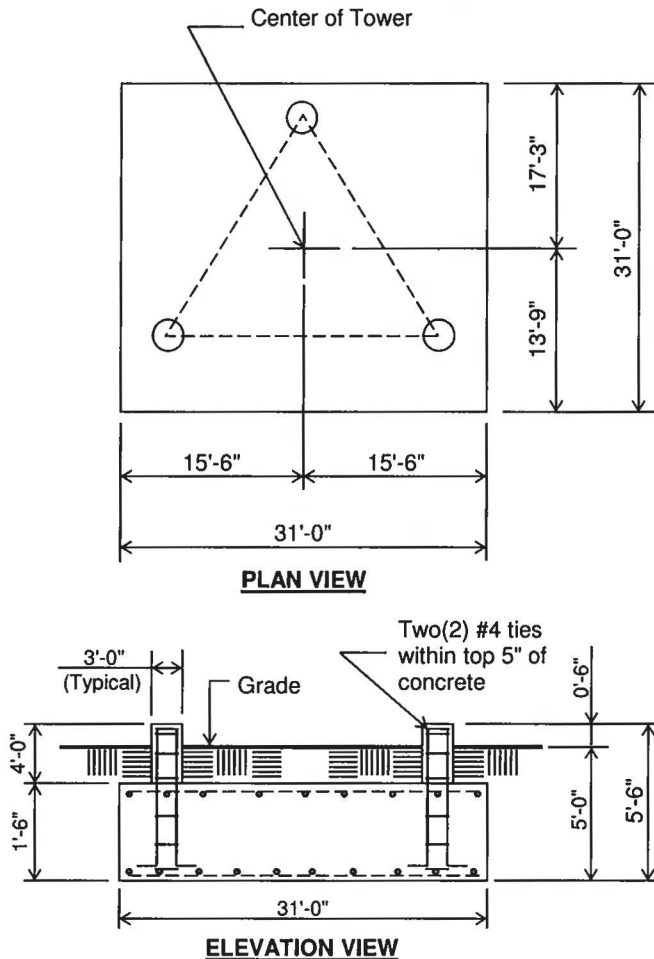
Job:	19-1628-TJH
Customer:	VERIZON WIRELESS
Site Name:	KY 22, KY 233654
Description:	255' S3R
Date:	7/23/2018 By: NM

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**Customer: VERIZON WIRELESS**

**Site: KY 22, KY 233654**

255 ft. Model S3R Series SD Self Supporting Tower At  
89 mph Wind with no ice and 30 mph Wind with 0.75 in. Ice per ANSI/TIA-222-G.



**PLAN VIEW**

**ELEVATION VIEW**

(56.53 Cu. Yds.)  
(1 REQD.; NOT TO SCALE)

CAUTION: Center of tower is not in center of slab.

**Notes:**

- 1). Concrete shall have a minimum 28-day compressive strength of 4500 PSI, in accordance with ACI 318-11.
- 2). Rebar to conform to ASTM specification A615 Grade 60.
- 3). All rebar to have a minimum of 3" concrete cover.
- 4). All exposed concrete corners to be chamfered 3/4".
- 5.) The foundation design is based on the geotechnical report by Power Of Design Group, LLC., Project No. 17-18042 dated: February 22nd, 2018.

- 6). See the geotechnical report for compaction requirements, if specified.
- 7). The foundation is based on the following factored loads:  
Factored download (kips) = 65.80  
Factored overturn (kip-ft) = 7,720.79  
Factored shear (kips) = 57.65

- 8). 3.5 ft of soil cover is required over the entire area of the foundation slab.

Rebar Schedule per Mat and per Pier	
Pier	(14) #8 vertical rebar w/ hooks at bottom w/ #4 Rebar ties, two (2) within top 5" of pier then 12" C/C
Mat	(61) #9 horizontal rebar evenly spaced each way top and bottom. (244 total)

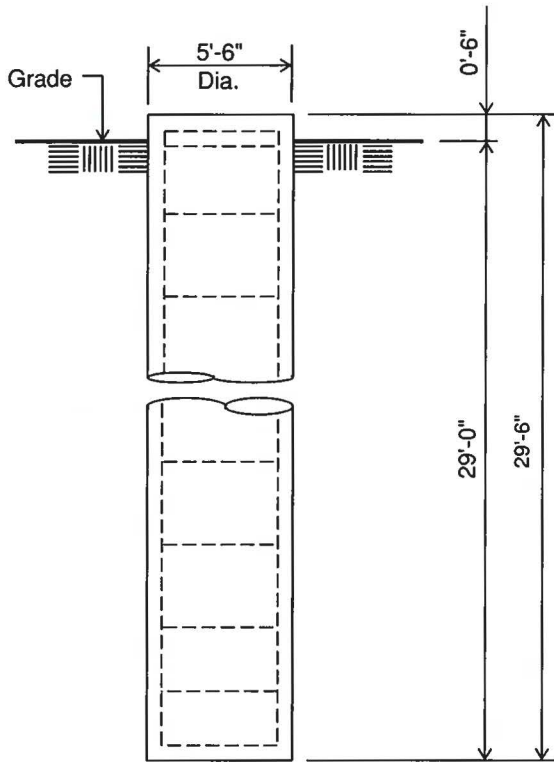
- 9). Use (6) 1.25 in. dia. x 63 in. long F1554 grade 105 anchor bolts per leg on a 8.75 in. bolt circle with a maximum projection of 7.5 in. above concrete.

- 10). The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

**Customer: VERIZON WIRELESS**

**Site: KY 22, KY 233654**

255 ft. Model S3R Series SD Self Supporting Tower At  
89 mph Wind with no ice and 30 mph Wind with 0.75 in. Ice per ANSI/TIA-222-G.



**ELEVATION VIEW**  
(25.96 Cu. Yds. each)  
(3 REQUIRED; NOT TO SCALE)

**Notes:**

- 1). Concrete shall have a minimum 28-day compressive strength of 4500 PSI, in accordance with ACI 318-11.
- 2). Rebars to conform to ASTM specification A615 Grade 60.
- 3). All rebar to have a minimum of 3" concrete cover.
- 4). All exposed concrete corners to be chamfered 3/4".
- 5.) The foundation design is based on the geotechnical report by Power Of Design Group, LLC., Project No. 17-18042 dated: February 22nd, 2018.
- 6). See the geotechnical report for drilled pier installation requirements, if specified.
- 7). The foundation is based on the following factored loads:  
Factored uplift (kips) = 365.00  
Factored download (kips) = 418.00  
Factored shear (kips) = 35.00

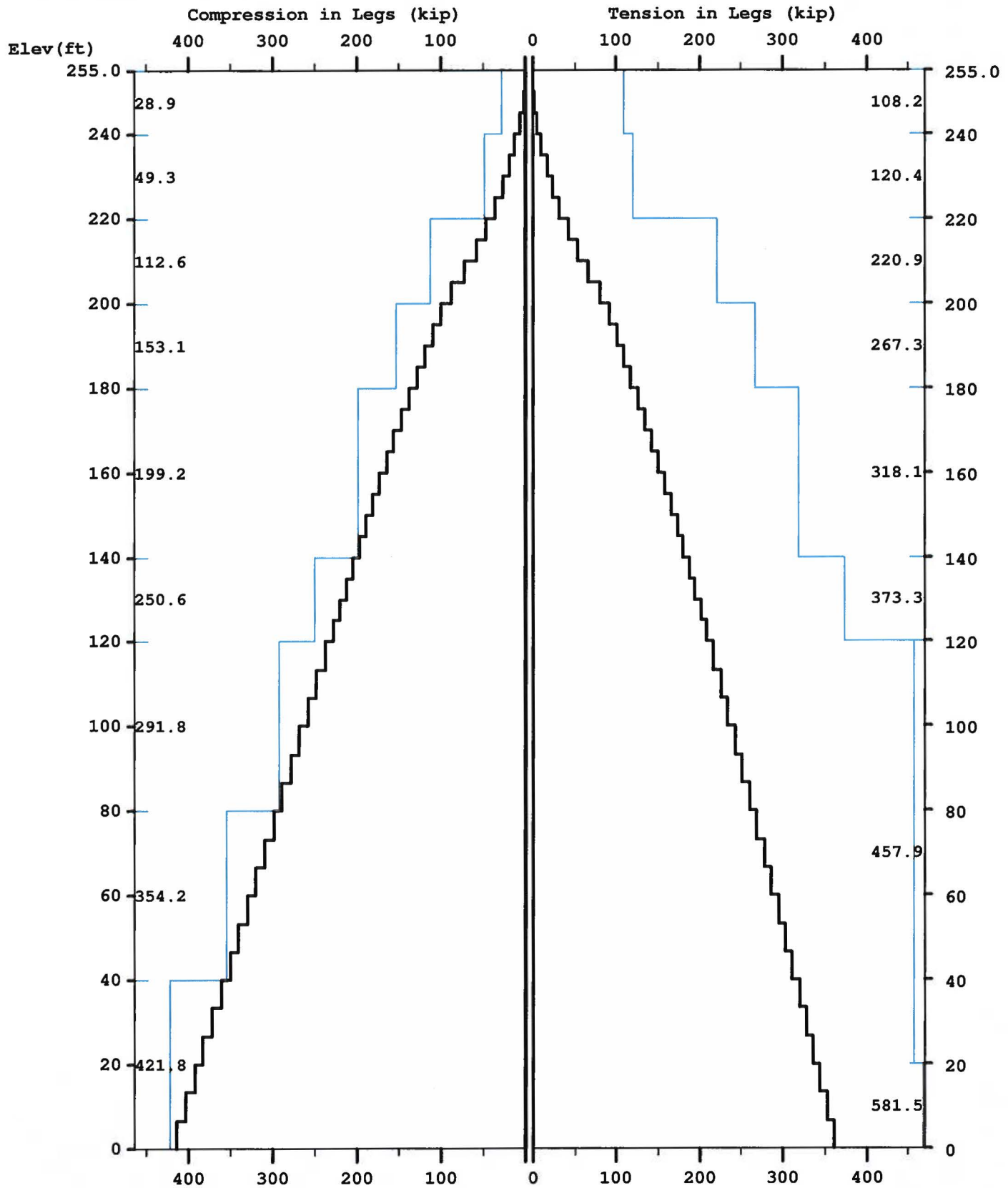
Rebar Schedule per Pier	
Pier	(30) #7 vertical rebar w/#4 ties, two (2) within top 5" of pier then 12" C/C

8). Use (6) 1.25 in. dia. x 63 in. long F1554 grade 105 anchor bolts per leg on a 8.75 in. bolt circle with a maximum projection of 7.5 in. above concrete.

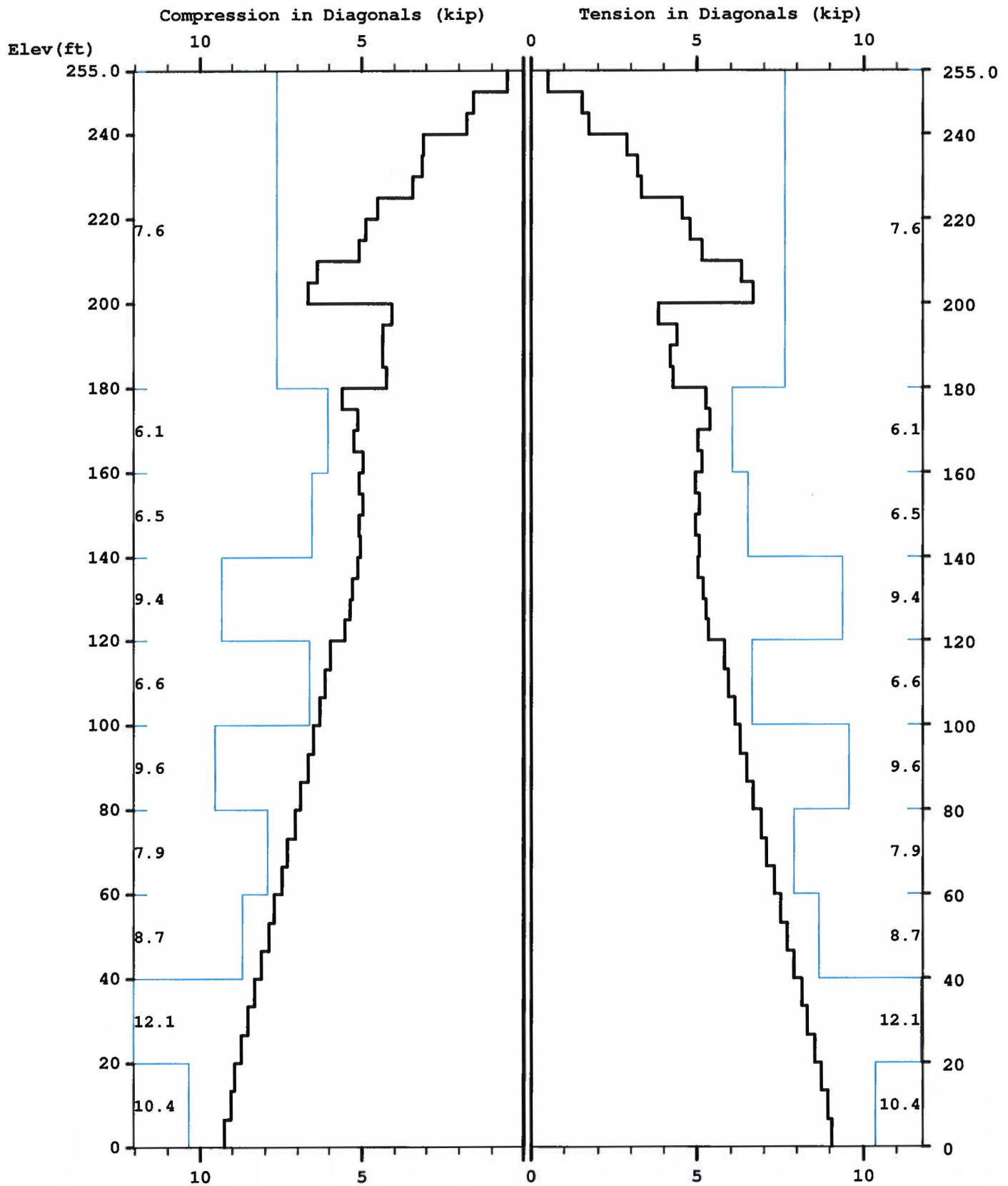
9). The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

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Maximum

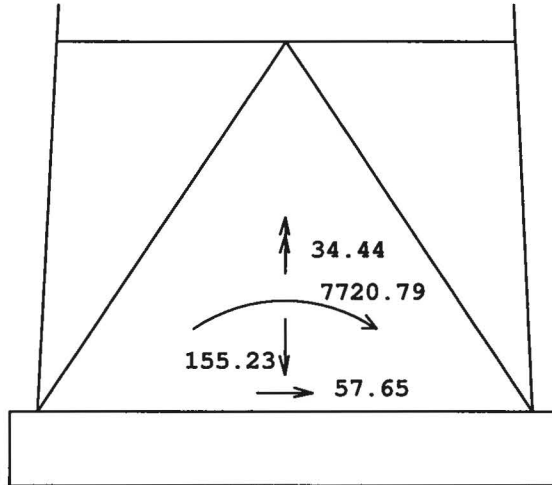


Maximum

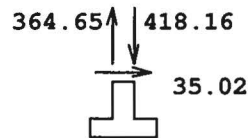
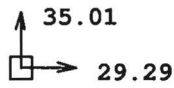


Maximum

TOTAL FOUNDATION LOADS (kip, ft-kip)



INDIVIDUAL FOOTING LOADS (kip)





19-1628-TJH

Latticed Tower Analysis (Unguyed)  
 Processed under license at:

(c)2015 Guymast Inc. 416-736-7453

Sabre Towers and Poles

on: 23 jul 2018 at: 9:16:03

MAST GEOMETRY ( ft )

PANEL TYPE	NO.OF LEGS	ELEV.AT BOTTOM	ELEV.AT TOP	F.W..AT BOTTOM	F.W..AT TOP	TYPICAL PANEL HEIGHT
X	3	250.00	255.00	5.00	5.00	5.00
X	3	240.00	250.00	5.00	5.00	5.00
X	3	235.00	240.00	5.00	5.00	5.00
X	3	220.00	235.00	5.00	5.00	5.00
X	3	215.00	220.00	5.00	5.00	5.00
X	3	200.00	215.00	5.00	5.00	5.00
X	3	195.00	200.00	5.44	5.00	5.00
X	3	180.00	195.00	6.75	5.44	5.00
X	3	160.00	180.00	8.50	6.75	5.00
X	3	140.00	160.00	10.25	8.50	5.00
X	3	120.00	140.00	12.00	10.25	5.00
X	3	100.00	120.00	13.75	12.00	6.67
X	3	80.00	100.00	15.50	13.75	6.67
X	3	60.00	80.00	17.25	15.50	6.67
X	3	40.00	60.00	19.00	17.25	6.67
X	3	20.00	40.00	20.75	19.00	6.67
X	3	0.00	20.00	22.50	20.75	6.67

MEMBER PROPERTIES

MEMBER TYPE	BOTTOM ELEV ft	TOP ELEV ft	X-SECTN AREA in.sq	RADIUS OF GYRAT in	ELASTIC MODULUS ksi	THERMAL EXPANSN /deg
LE	240.00	255.00	2.405	0.438	29000.	0.0000117
LE	220.00	240.00	3.142	0.438	29000.	0.0000117
LE	200.00	220.00	4.909	0.438	29000.	0.0000117
LE	180.00	200.00	5.940	0.438	29000.	0.0000117
LE	140.00	180.00	7.069	0.438	29000.	0.0000117
LE	120.00	140.00	8.296	0.438	29000.	0.0000117
LE	80.00	120.00	11.045	0.438	29000.	0.0000117
LE	40.00	80.00	12.566	0.438	29000.	0.0000117
LE	0.00	40.00	14.186	0.438	29000.	0.0000117
DI	160.00	255.00	0.484	0.626	29000.	0.0000117
DI	140.00	160.00	0.715	0.626	29000.	0.0000117
DI	100.00	140.00	0.902	0.626	29000.	0.0000117
DI	60.00	100.00	1.090	0.626	29000.	0.0000117
DI	40.00	60.00	1.438	0.626	29000.	0.0000117
DI	0.00	40.00	1.688	0.626	29000.	0.0000117
HO	250.00	255.00	0.484	0.626	29000.	0.0000117
HO	235.00	240.00	0.484	0.626	29000.	0.0000117
HO	215.00	220.00	0.484	0.626	29000.	0.0000117
HO	195.00	200.00	0.484	0.626	29000.	0.0000117

FACTORED MEMBER RESISTANCES

BOTTOM ELEV ft	TOP ELEV ft	LEGS		DIAGONALS		HORIZONTALS		INT BRACING	
		COMP kip	TENS kip	COMP kip	TENS kip	COMP kip	TENS kip	COMP kip	TENS kip
250.0	255.0	28.89	108.24	7.62	7.62	5.82	5.82	0.00	0.00
240.0	250.0	28.89	108.24	7.62	7.62	0.00	0.00	0.00	0.00
235.0	240.0	49.29	120.41	7.62	7.62	5.82	5.82	0.00	0.00
220.0	235.0	49.29	120.41	7.62	7.62	0.00	0.00	0.00	0.00
215.0	220.0	112.60	220.89	7.62	7.62	5.82	5.82	0.00	0.00
200.0	215.0	112.60	220.89	7.62	7.62	0.00	0.00	0.00	0.00
195.0	200.0	153.15	267.28	7.62	7.62	5.82	5.82	0.00	0.00
180.0	195.0	153.15	267.28	7.62	7.62	0.00	0.00	0.00	0.00
160.0	180.0	199.21	318.09	6.05	6.05	0.00	0.00	0.00	0.00
140.0	160.0	199.21	318.09	6.53	6.53	0.00	0.00	0.00	0.00

19-1628-TJH									
120.0	140.0	250.56	373.31	9.36	9.36	0.00	0.00	0.00	0.00
100.0	120.0	291.83	457.90	6.63	6.63	0.00	0.00	0.00	0.00
80.0	100.0	291.83	457.90	9.56	9.56	0.00	0.00	0.00	0.00
60.0	80.0	354.16	457.90	7.91	7.91	0.00	0.00	0.00	0.00
40.0	60.0	354.16	457.90	8.68	8.68	0.00	0.00	0.00	0.00
20.0	40.0	421.75	457.90	12.15	12.15	0.00	0.00	0.00	0.00
0.0	20.0	421.75	581.47	10.37	10.37	0.00	0.00	0.00	0.00

=====  
 \* Only 3 condition(s) shown in full  
 \* RRUS/TMAS were assumed to be behind antennas

\* Some wind loads may have been derived from full-scale wind tunnel testing  
 =====

LOADING CONDITION A =====

89 mph wind with no ice. Wind Azimuth: 0°

MAST LOADING  
 =====

LOAD TYPE	ELEV ft	APPLY. RADIUS ft	LOAD. AT AZI	LOAD AZI	.....FORCES.....		.....MOMENTS.....	
					HORIZ kip	DOWN kip	VERTICAL ft-kip	TORSNAL ft-kip
C	250.0	0.00	0.0	0.0	2.71	2.82	0.00	0.00
C	225.0	0.00	0.0	0.0	1.91	2.10	0.00	0.00
C	210.0	0.00	0.0	0.0	1.88	2.10	0.00	0.00
C	195.0	0.00	0.0	0.0	1.86	2.10	0.00	0.00
D	255.0	0.00	180.0	0.0	0.06	0.05	0.00	0.00
D	250.0	0.00	180.0	0.0	0.06	0.05	0.00	0.00
D	250.0	0.00	42.0	0.0	0.07	0.06	0.01	0.03
D	240.0	0.00	42.0	0.0	0.07	0.06	0.01	0.03
D	240.0	0.00	42.0	0.0	0.09	0.07	0.02	0.04
D	235.0	0.00	42.0	0.0	0.09	0.07	0.02	0.04
D	235.0	0.00	42.0	0.0	0.08	0.07	0.02	0.04
D	225.0	0.00	42.0	0.0	0.08	0.07	0.02	0.04
D	225.0	0.00	42.0	0.0	0.12	0.08	0.05	0.09
D	220.0	0.00	42.0	0.0	0.12	0.08	0.05	0.09
D	220.0	0.00	42.0	0.0	0.13	0.11	0.05	0.09
D	210.0	0.00	42.0	0.0	0.12	0.10	0.05	0.09
D	210.0	0.00	56.0	0.0	0.15	0.12	0.06	0.11
D	200.0	0.00	56.0	0.0	0.15	0.12	0.06	0.11
D	200.0	0.00	57.2	0.0	0.16	0.14	0.06	0.11
D	195.0	0.00	57.2	0.0	0.16	0.14	0.06	0.11
D	195.0	0.00	83.4	0.0	0.16	0.15	0.06	0.12
D	180.0	0.00	87.2	0.0	0.17	0.15	0.06	0.11
D	180.0	0.00	79.8	0.0	0.17	0.17	0.07	0.13
D	160.0	0.00	84.0	0.0	0.18	0.17	0.06	0.12
D	160.0	0.00	73.9	0.0	0.17	0.18	0.09	0.14
D	140.0	0.00	77.0	0.0	0.18	0.19	0.08	0.13
D	140.0	0.00	69.6	0.0	0.19	0.21	0.10	0.15
D	120.0	0.00	72.0	0.0	0.20	0.22	0.09	0.14
D	120.0	0.00	66.5	0.0	0.18	0.24	0.11	0.16
D	100.0	0.00	68.1	0.0	0.19	0.25	0.10	0.15
D	100.0	0.00	64.0	0.0	0.20	0.26	0.13	0.16
D	80.0	0.00	65.3	0.0	0.20	0.26	0.12	0.16
D	80.0	0.00	62.0	0.0	0.20	0.28	0.14	0.17
D	60.0	0.00	63.0	0.0	0.20	0.29	0.13	0.16
D	60.0	0.00	60.3	0.0	0.19	0.31	0.16	0.17
D	40.0	0.00	61.2	0.0	0.20	0.32	0.15	0.17
D	40.0	0.00	59.0	0.0	0.20	0.36	0.17	0.17
D	20.0	0.00	59.7	0.0	0.20	0.37	0.16	0.17
D	20.0	0.00	57.8	0.0	0.17	0.37	0.19	0.15
D	0.0	0.00	58.5	0.0	0.18	0.38	0.18	0.15

ANTENNA LOADING  
 =====

..... ANTENNA..... TYPE	ELEV ft	AZI	ATTACHMENT		..... ANTENNA FORCES.....			
			RAD ft	AZI	AXIAL kip	SHEAR kip	GRAVITY kip	TORSION ft-kip
STD+R	240.0	0.0	4.4	0.0	1.55	0.00	0.40	0.00

STD+R 180.0 0.0 5.4 0.0 19-1628-TJH 1.46 0.00 0.40 0.00

LOADING CONDITION M

89 mph wind with no ice. Wind Azimuth: 0°

MAST LOADING

LOAD TYPE	ELEV ft	APPLY. RADIUS ft	LOAD. AT AZI	LOAD AZI	.....FORCES.....		.....MOMENTS.....	
					HORIZ kip	DOWN kip	VERTICAL ft-kip	TORSNAL ft-kip
C	250.0	0.00	0.0	0.0	2.71	2.12	0.00	0.00
C	225.0	0.00	0.0	0.0	1.91	1.58	0.00	0.00
C	210.0	0.00	0.0	0.0	1.88	1.58	0.00	0.00
C	195.0	0.00	0.0	0.0	1.86	1.58	0.00	0.00
D	255.0	0.00	180.0	0.0	0.06	0.04	0.00	0.00
D	250.0	0.00	180.0	0.0	0.06	0.04	0.00	0.00
D	250.0	0.00	42.0	0.0	0.07	0.04	0.01	0.03
D	240.0	0.00	42.0	0.0	0.07	0.04	0.01	0.03
D	240.0	0.00	42.0	0.0	0.09	0.05	0.01	0.04
D	235.0	0.00	42.0	0.0	0.09	0.05	0.01	0.04
D	235.0	0.00	42.0	0.0	0.08	0.05	0.01	0.04
D	225.0	0.00	42.0	0.0	0.08	0.05	0.01	0.04
D	225.0	0.00	42.0	0.0	0.12	0.06	0.03	0.09
D	220.0	0.00	42.0	0.0	0.12	0.06	0.03	0.09
D	220.0	0.00	42.0	0.0	0.13	0.08	0.03	0.09
D	210.0	0.00	42.0	0.0	0.12	0.08	0.03	0.09
D	210.0	0.00	56.0	0.0	0.15	0.09	0.05	0.11
D	200.0	0.00	56.0	0.0	0.15	0.09	0.05	0.11
D	200.0	0.00	57.2	0.0	0.16	0.11	0.05	0.11
D	195.0	0.00	57.2	0.0	0.16	0.11	0.05	0.11
D	195.0	0.00	83.4	0.0	0.16	0.11	0.05	0.12
D	180.0	0.00	87.2	0.0	0.17	0.11	0.04	0.11
D	180.0	0.00	79.8	0.0	0.17	0.13	0.05	0.13
D	160.0	0.00	84.0	0.0	0.18	0.13	0.05	0.12
D	160.0	0.00	73.9	0.0	0.17	0.14	0.06	0.14
D	140.0	0.00	77.0	0.0	0.18	0.14	0.06	0.13
D	140.0	0.00	69.6	0.0	0.19	0.16	0.07	0.15
D	120.0	0.00	72.0	0.0	0.20	0.16	0.07	0.14
D	120.0	0.00	66.5	0.0	0.18	0.18	0.08	0.16
D	100.0	0.00	68.1	0.0	0.19	0.18	0.08	0.15
D	100.0	0.00	64.0	0.0	0.20	0.19	0.10	0.16
D	80.0	0.00	65.3	0.0	0.20	0.20	0.09	0.16
D	80.0	0.00	62.0	0.0	0.20	0.21	0.11	0.17
D	60.0	0.00	63.0	0.0	0.20	0.22	0.10	0.16
D	60.0	0.00	60.3	0.0	0.19	0.24	0.12	0.17
D	40.0	0.00	61.2	0.0	0.20	0.24	0.11	0.17
D	40.0	0.00	59.0	0.0	0.20	0.27	0.13	0.17
D	20.0	0.00	59.7	0.0	0.20	0.28	0.12	0.17
D	20.0	0.00	57.8	0.0	0.17	0.28	0.14	0.15
D	0.0	0.00	58.5	0.0	0.18	0.28	0.13	0.15

ANTENNA LOADING

.....ANTENNA..... TYPE	ATTACHMENT				.....ANTENNA FORCES.....			
	ELEV ft	AZI	RAD ft	AZI	AXIAL kip	SHEAR kip	GRAVITY kip	TORSION ft-kip
STD+R	240.0	0.0	4.4	0.0	1.55	0.00	0.30	0.00
STD+R	180.0	0.0	5.4	0.0	1.46	0.00	0.30	0.00

LOADING CONDITION Y

30 mph wind with 0.75 ice. Wind Azimuth: 0°

MAST LOADING

LOAD TYPE	ELEV	APPLY. RADIUS	LOAD. AT AZI	LOAD AZI	.....FORCES.....		.....MOMENTS.....	
					HORIZ	DOWN	VERTICAL	TORSNAL

19-1628-TJH								
	ft	ft			kip	kip	ft-kip	ft-kip
C	250.0	0.00	0.0	0.0	0.33	5.09	0.00	0.00
C	225.0	0.00	0.0	0.0	0.25	4.64	0.00	0.00
C	210.0	0.00	0.0	0.0	0.25	4.62	0.00	0.00
C	195.0	0.00	0.0	0.0	0.24	4.60	0.00	0.00
D	255.0	0.00	180.0	0.0	0.01	0.19	0.00	0.00
D	250.0	0.00	180.0	0.0	0.01	0.19	0.00	0.00
D	250.0	0.00	42.0	0.0	0.01	0.19	0.07	0.01
D	240.0	0.00	42.0	0.0	0.01	0.19	0.07	0.01
D	240.0	0.00	42.0	0.0	0.01	0.24	0.08	0.01
D	235.0	0.00	42.0	0.0	0.01	0.24	0.08	0.01
D	235.0	0.00	42.0	0.0	0.01	0.20	0.08	0.01
D	225.0	0.00	42.0	0.0	0.01	0.20	0.08	0.01
D	225.0	0.00	42.0	0.0	0.01	0.26	0.20	0.01
D	220.0	0.00	42.0	0.0	0.01	0.26	0.20	0.01
D	220.0	0.00	42.0	0.0	0.01	0.32	0.20	0.01
D	215.0	0.00	42.0	0.0	0.01	0.32	0.20	0.01
D	215.0	0.00	42.0	0.0	0.01	0.28	0.20	0.01
D	210.0	0.00	42.0	0.0	0.01	0.28	0.20	0.01
D	210.0	0.00	62.0	0.0	0.02	0.35	0.21	0.01
D	200.0	0.00	62.1	0.0	0.02	0.35	0.21	0.01
D	200.0	0.00	63.1	0.0	0.02	0.40	0.21	0.01
D	195.0	0.00	63.1	0.0	0.02	0.40	0.21	0.01
D	195.0	0.00	91.2	0.0	0.02	0.42	0.23	0.01
D	185.0	0.00	93.1	0.0	0.02	0.43	0.22	0.01
D	185.0	0.00	95.1	0.0	0.02	0.43	0.21	0.01
D	180.0	0.00	95.1	0.0	0.02	0.43	0.21	0.01
D	180.0	0.00	87.1	0.0	0.02	0.45	0.26	0.01
D	160.0	0.00	90.6	0.0	0.02	0.47	0.23	0.01
D	160.0	0.00	80.6	0.0	0.02	0.48	0.31	0.01
D	140.0	0.00	83.8	0.0	0.02	0.50	0.27	0.01
D	140.0	0.00	76.2	0.0	0.02	0.55	0.35	0.01
D	120.0	0.00	78.7	0.0	0.02	0.57	0.32	0.01
D	120.0	0.00	73.0	0.0	0.02	0.56	0.40	0.01
D	113.3	0.00	73.0	0.0	0.02	0.56	0.40	0.01
D	113.3	0.00	73.9	0.0	0.02	0.57	0.38	0.01
D	100.0	0.00	74.7	0.0	0.02	0.57	0.37	0.01
D	100.0	0.00	70.4	0.0	0.02	0.60	0.44	0.01
D	93.3	0.00	70.4	0.0	0.02	0.60	0.44	0.01
D	93.3	0.00	71.1	0.0	0.02	0.61	0.43	0.01
D	80.0	0.00	71.8	0.0	0.02	0.62	0.41	0.01
D	80.0	0.00	68.2	0.0	0.02	0.64	0.49	0.01
D	60.0	0.00	69.4	0.0	0.02	0.65	0.46	0.01
D	60.0	0.00	66.4	0.0	0.02	0.67	0.53	0.01
D	40.0	0.00	67.5	0.0	0.02	0.69	0.51	0.01
D	40.0	0.00	64.8	0.0	0.02	0.74	0.57	0.01
D	20.0	0.00	65.9	0.0	0.02	0.75	0.55	0.01
D	20.0	0.00	63.5	0.0	0.02	0.76	0.66	0.01
D	13.3	0.00	63.5	0.0	0.02	0.76	0.66	0.01
D	13.3	0.00	64.2	0.0	0.02	0.80	0.78	0.01
D	6.7	0.00	64.2	0.0	0.02	0.80	0.78	0.01
D	6.7	0.00	64.7	0.0	0.02	0.82	0.88	0.01
D	0.0	0.00	64.7	0.0	0.02	0.82	0.88	0.01

ANTENNA LOADING

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.....ANTENNA.....	ATTACHMENT				.....ANTENNA FORCES.....			
TYPE	ELEV ft	AZI	RAD ft	AZI	AXIAL kip	SHEAR kip	GRAVITY kip	TORSION ft-kip
STD+R	240.0	0.0	4.4	0.0	0.12	0.00	1.56	0.00
STD+R	180.0	0.0	5.4	0.0	0.11	0.00	1.52	0.00

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MAXIMUM ANTENNA AND REFLECTOR ROTATIONS:

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ELEV ft	AZI deg	TYPE *	.....BEAM DEFLECTIONS (deg).....			
			PITCH	YAW	ROLL	TOTAL
240.0	0.0	STD+R	-1.306 J	0.516 P	-1.551 G	1.404 J
180.0	0.0	STD+R	0.893 D	0.272 V	-1.072 G	0.934 J

MAXIMUM TENSION IN MAST MEMBERS (kip)

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ELEV Ft	LEGS	DIAG	19-1628-TJH	
			HORIZ	BRACE
255.0	-----		0.32 A	0.00 A
	0.22 S	0.51 G		
250.0	-----		0.05 K	0.00 A
	1.05 Q	1.55 B		
245.0	-----		0.05 E	0.00 A
	5.23 M	1.73 T		
240.0	-----		0.53 R	0.00 A
	9.96 M	2.91 B		
235.0	-----		0.08 E	0.00 A
	16.68 M	3.22 B		
230.0	-----		0.02 M	0.00 A
	23.69 M	3.33 T		
225.0	-----		0.07 A	0.00 A
	31.52 M	4.55 B		
220.0	-----		0.54 A	0.00 A
	42.20 M	4.77 N		
215.0	-----		0.20 A	0.00 A
	53.44 M	5.16 B		
210.0	-----		0.08 S	0.00 A
	65.71 M	6.32 B		
205.0	-----		0.21 A	0.00 A
	80.97 M	6.69 B		
200.0	-----		0.59 S	0.00 A
	91.81 M	3.85 M		
195.0	-----		0.18 A	0.00 A
	100.34 M	4.40 H		
190.0	-----		0.05 A	0.00 A
	108.73 M	4.20 T		
185.0	-----		0.16 J	0.00 A
	117.36 M	4.28 H		
180.0	-----		0.07 R	0.00 A
	125.79 M	5.28 T		
175.0	-----		0.13 J	0.00 A
	133.82 M	5.37 B		
170.0	-----		0.06 A	0.00 A
	142.73 M	5.02 T		
165.0	-----		0.09 E	0.00 A
	150.33 M	5.13 B		
160.0	-----		0.06 A	0.00 A
	158.46 M	4.94 T		
155.0	-----		0.08 E	0.00 A
	165.74 M	5.06 B		
150.0	-----		0.05 A	0.00 A
	173.36 M	4.95 T		
145.0	-----		0.07 E	0.00 A
	180.39 M	5.07 B		
140.0	-----		0.05 A	0.00 A
	187.65 M	5.04 T		
135.0	-----		0.05 E	0.00 A
	194.49 M	5.19 B		
130.0	-----		0.06 A	0.00 A
	201.53 M	5.25 S		
125.0	-----		0.04 E	0.00 A
	208.28 M	5.36 A		
120.0	-----		0.05 A	0.00 A
	216.26 M	5.81 S		
113.3	-----		0.06 A	0.00 A
	225.11 M	5.94 G		
106.7	-----		0.05 A	0.00 A
	234.01 M	6.12 S		
100.0	-----		0.05 A	0.00 A
	242.70 M	6.28 G		
93.3	-----		0.04 A	0.00 A
	251.46 M	6.50 S		
86.7	-----		0.05 A	0.00 A
	260.06 M	6.68 G		
80.0	-----		0.04 A	0.00 A
	268.73 M	6.91 S		
73.3	-----		0.04 A	0.00 A
	277.27 M	7.09 G		
66.7	-----		0.03 A	0.00 A
	285.87 M	7.32 S		
60.0	-----		0.03 A	0.00 A
	294.35 M	7.51 G		
53.3	-----		0.03 A	0.00 A
	302.85 M	7.73 G		
46.7	-----		0.03 A	0.00 A

19-1628-TJH				
40.0	311.26 M	7.90 G	0.03 A	0.00 A
33.3	319.67 M	8.14 G	0.03 A	0.00 A
26.7	327.98 M	8.33 G	0.03 A	0.00 A
20.0	336.32 M	8.56 G	0.03 A	0.00 A
13.3	344.59 M	8.74 G	0.00 A	0.00 A
6.7	352.85 M	8.93 G	0.02 A	0.00 A
0.0	361.00 M	9.06 G	0.00 A	0.00 A

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	-0.31 A	-0.50 A	-0.32 G	0.00 A
250.0	-3.02 K	-1.55 H	-0.05 Q	0.00 A
245.0	-7.45 G	-1.76 B	-0.04 O	0.00 A
240.0	-12.94 G	-3.08 C	-0.69 B	0.00 A
235.0	-19.75 G	-3.12 T	-0.05 W	0.00 A
230.0	-26.74 G	-3.41 B	-0.02 L	0.00 A
225.0	-36.08 G	-4.50 H	-0.05 S	0.00 A
220.0	-46.95 G	-4.87 B	-0.46 S	0.00 A
215.0	-58.81 G	-5.10 N	-0.17 S	0.00 A
210.0	-72.68 G	-6.37 B	-0.08 A	0.00 A
205.0	-88.56 G	-6.69 B	-0.18 S	0.00 A
200.0	-99.80 G	-4.07 G	-0.69 A	0.00 A
195.0	-110.45 G	-4.36 T	-0.15 S	0.00 A
190.0	-119.40 G	-4.34 G	-0.04 M	0.00 A
185.0	-128.75 G	-4.24 B	-0.13 O	0.00 A
180.0	-138.21 G	-5.61 B	-0.10 B	0.00 A
175.0	-147.04 G	-5.13 T	-0.10 W	0.00 A
170.0	-156.15 G	-5.24 B	-0.06 A	0.00 A
165.0	-164.61 G	-4.97 T	-0.08 W	0.00 A
160.0	-173.16 G	-5.10 B	-0.05 S	0.00 A
155.0	-181.31 G	-4.95 T	-0.06 W	0.00 A
150.0	-189.50 G	-5.07 B	-0.04 S	0.00 A
145.0	-197.39 G	-5.04 S	-0.06 W	0.00 A
140.0	-205.35 G	-5.14 B	-0.04 S	0.00 A
135.0	-213.15 G	-5.27 S	-0.04 W	0.00 A
130.0	-221.01 G	-5.35 G	-0.05 S	0.00 A
125.0	-228.77 G	-5.53 S	-0.04 W	0.00 A

19-1628-TJH				
120.0	-----		-0.04 S	0.00 A
	-237.82 G	-5.98 G		
113.3	-----		-0.05 S	0.00 A
	-248.13 G	-6.16 G		
106.7	-----		-0.04 S	0.00 A
	-258.40 G	-6.30 G		
100.0	-----		-0.04 S	0.00 A
	-268.60 G	-6.50 G		
93.3	-----		-0.03 S	0.00 A
	-278.83 G	-6.68 G		
86.7	-----		-0.04 S	0.00 A
	-289.03 G	-6.90 G		
80.0	-----		-0.03 S	0.00 A
	-299.30 G	-7.08 G		
73.3	-----		-0.03 S	0.00 A
	-309.56 G	-7.30 G		
66.7	-----		-0.03 S	0.00 A
	-319.85 G	-7.49 G		
60.0	-----		-0.03 S	0.00 A
	-330.15 G	-7.72 G		
53.3	-----		-0.03 S	0.00 A
	-340.51 G	-7.89 G		
46.7	-----		-0.03 S	0.00 A
	-350.84 G	-8.11 G		
40.0	-----		-0.02 S	0.00 A
	-361.24 G	-8.31 G		
33.3	-----		-0.02 S	0.00 A
	-371.68 G	-8.54 G		
26.7	-----		-0.02 S	0.00 A
	-382.15 G	-8.73 G		
20.0	-----		-0.02 S	0.00 A
	-392.61 G	-8.93 G		
13.3	-----		0.00 S	0.00 A
	-403.07 G	-9.06 G		
6.7	-----		-0.02 S	0.00 A
	-413.44 G	-9.27 G		
0.0	-----		0.00 A	0.00 A

FORCE/RESISTANCE RATIO IN LEGS

MAST ELEV ft	-- LEG COMPRESSION --			---- LEG TENSION ----		
	MAX COMP	COMP RESIST	FORCE/ RESIST RATIO	MAX TENS	TENS RESIST	FORCE/ RESIST RATIO
255.00	0.31	28.89	0.01	0.22	108.24	0.00
250.00	3.02	28.89	0.10	1.05	108.24	0.01
245.00	7.45	28.89	0.26	5.23	108.24	0.05
240.00	12.94	49.29	0.26	9.96	120.41	0.08
235.00	19.75	49.29	0.40	16.68	120.41	0.14
230.00	26.74	49.29	0.54	23.69	120.41	0.20
225.00	36.08	49.29	0.73	31.52	120.41	0.26
220.00	46.95	112.60	0.42	42.20	220.89	0.19
215.00	58.81	112.60	0.52	53.44	220.89	0.24
210.00	72.68	112.60	0.65	65.71	220.89	0.30
205.00	88.56	112.60	0.79	80.97	220.89	0.37
200.00	99.80	153.15	0.65	91.81	267.28	0.34
195.00	110.45	153.15	0.72	100.34	267.28	0.38
190.00	119.40	153.15	0.78	108.73	267.28	0.41
185.00	128.75	153.15	0.84	117.36	267.28	0.44
180.00	138.21	199.21	0.69	125.79	318.09	0.40
175.00						

						19-1628-TJH
170.00	147.04	199.21	0.74	133.82	318.09	0.42
165.00	156.15	199.21	0.78	142.73	318.09	0.45
160.00	164.61	199.21	0.83	150.33	318.09	0.47
155.00	173.16	199.21	0.87	158.46	318.09	0.50
150.00	181.31	199.21	0.91	165.74	318.09	0.52
145.00	189.50	199.21	0.95	173.36	318.09	0.55
140.00	197.39	199.21	0.99	180.39	318.09	0.57
135.00	205.35	250.56	0.82	187.65	373.31	0.50
130.00	213.15	250.56	0.85	194.49	373.31	0.52
125.00	221.01	250.56	0.88	201.53	373.31	0.54
120.00	228.77	250.56	0.91	208.28	373.31	0.56
113.33	237.82	291.83	0.81	216.26	457.90	0.47
106.67	248.13	291.83	0.85	225.11	457.90	0.49
100.00	258.40	291.83	0.89	234.01	457.90	0.51
93.33	268.60	291.83	0.92	242.70	457.90	0.53
86.67	278.83	291.83	0.96	251.46	457.90	0.55
80.00	289.03	291.83	0.99	260.06	457.90	0.57
73.33	299.30	354.16	0.85	268.73	457.90	0.59
66.67	309.56	354.16	0.87	277.27	457.90	0.61
60.00	319.85	354.16	0.90	285.87	457.90	0.62
53.33	330.15	354.16	0.93	294.35	457.90	0.64
46.67	340.51	354.16	0.96	302.85	457.90	0.66
40.00	350.84	354.16	0.99	311.26	457.90	0.68
33.33	361.24	421.75	0.86	319.67	457.90	0.70
26.67	371.68	421.75	0.88	327.98	457.90	0.72
20.00	382.15	421.75	0.91	336.32	457.90	0.73
13.33	392.61	421.75	0.93	344.59	581.47	0.59
6.67	403.07	421.75	0.96	352.85	581.47	0.61
0.00	413.44	421.75	0.98	361.00	581.47	0.62

FORCE/RESISTANCE RATIO IN DIAGONALS

MAST ELEV ft	- DIAG COMPRESSION -			--- DIAG TENSION ---		
	MAX COMP	COMP RESIST	FORCE/ RESIST RATIO	MAX TENS	TENS RESIST	FORCE/ RESIST RATIO
255.00	0.50	7.62	0.07	0.51	7.62	0.07
250.00	1.55	7.62	0.20	1.55	7.62	0.20
245.00	1.76	7.62	0.23	1.73	7.62	0.23
240.00	3.08	7.62	0.40	2.91	7.62	0.38
235.00	3.12	7.62	0.41	3.22	7.62	0.42
230.00	3.41	7.62	0.45	3.33	7.62	0.44
225.00						



	19-1628-TJH					
220.00	4.50	7.62	0.59	4.55	7.62	0.60
215.00	4.87	7.62	0.64	4.77	7.62	0.63
210.00	5.10	7.62	0.67	5.16	7.62	0.68
205.00	6.37	7.62	0.84	6.32	7.62	0.83
200.00	6.69	7.62	0.88	6.69	7.62	0.88
195.00	4.07	7.62	0.53	3.85	7.62	0.50
190.00	4.36	7.62	0.57	4.40	7.62	0.58
185.00	4.34	7.62	0.57	4.20	7.62	0.55
180.00	4.24	7.62	0.56	4.28	7.62	0.56
175.00	5.61	6.05	0.93	5.28	6.05	0.87
170.00	5.13	6.05	0.85	5.37	6.05	0.89
165.00	5.24	6.05	0.87	5.02	6.05	0.83
160.00	4.97	6.05	0.82	5.13	6.05	0.85
155.00	5.10	6.53	0.78	4.94	6.53	0.76
150.00	4.95	6.53	0.76	5.06	6.53	0.77
145.00	5.07	6.53	0.78	4.95	6.53	0.76
140.00	5.04	6.53	0.77	5.07	6.53	0.78
135.00	5.14	9.36	0.55	5.04	9.36	0.54
130.00	5.27	9.36	0.56	5.19	9.36	0.55
125.00	5.35	9.36	0.57	5.25	9.36	0.56
120.00	5.53	9.36	0.59	5.36	9.36	0.57
113.33	5.98	6.63	0.90	5.81	6.63	0.88
106.67	6.16	6.63	0.93	5.94	6.63	0.90
100.00	6.30	6.63	0.95	6.12	6.63	0.92
93.33	6.50	9.56	0.68	6.28	9.56	0.66
86.67	6.68	9.56	0.70	6.50	9.56	0.68
80.00	6.90	9.56	0.72	6.68	9.56	0.70
73.33	7.08	7.91	0.90	6.91	7.91	0.87
66.67	7.30	7.91	0.92	7.09	7.91	0.90
60.00	7.49	7.91	0.95	7.32	7.91	0.92
53.33	7.72	8.68	0.89	7.51	8.68	0.86
46.67	7.89	8.68	0.91	7.73	8.68	0.89
40.00	8.11	8.68	0.93	7.90	8.68	0.91
33.33	8.31	12.15	0.68	8.14	12.15	0.67
26.67	8.54	12.15	0.70	8.33	12.15	0.69
20.00	8.73	12.15	0.72	8.56	12.15	0.70
13.33	8.93	10.37	0.86	8.74	10.37	0.84
6.67	9.06	10.37	0.87	8.93	10.37	0.86
0.00	9.27	10.37	0.89	9.06	10.37	0.87

MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)

19-1628-TJH

LOAD		COMPONENTS		TOTAL
NORTH	EAST	DOWN	UPLIFT	SHEAR
35.01 G	29.29 K	418.16 G	-364.65 M	35.02 G

MAXIMUM TOTAL LOADS ON FOUNDATION : (kip & kip-ft)

HORIZONTAL			DOWN	OVERTURNING			TORSION
NORTH	EAST	TOTAL		NORTH	EAST	TOTAL	
		@ 0.0				@ 0.0	
57.7 G	48.1 W	57.7 G	155.2 Z	7720.8 G	6384.8 J	7720.8 G	34.4 L

Latticed Tower Analysis (Unguyed)  
Processed under license at:

(c)2015 Guymast Inc. 416-736-7453

Sabre Towers and Poles

on: 23 jul 2018 at: 9:16:28

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\*\*\*\*\* Service Load Condition \*\*\*\*\*  
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- \* Only 1 condition(s) shown in full
- \* RRUS/TMAS were assumed to be behind antennas
- \* Some wind loads may have been derived from full-scale wind tunnel testing

LOADING CONDITION A

60 mph wind with no ice. Wind Azimuth: 0

MAST LOADING

LOAD TYPE	ELEV ft	APPLY. RADIUS ft	LOAD .AT AZI	LOAD AZI	FORCES		MOMENTS	
					HORIZ kip	DOWN kip	VERTICAL ft-kip	TORSNAL ft-kip
C	250.0	0.00	0.0	0.0	0.77	2.35	0.00	0.00
C	225.0	0.00	0.0	0.0	0.54	1.75	0.00	0.00
C	210.0	0.00	0.0	0.0	0.54	1.75	0.00	0.00
C	195.0	0.00	0.0	0.0	0.53	1.75	0.00	0.00
D	255.0	0.00	180.0	0.0	0.02	0.05	0.00	0.00
D	240.0	0.00	42.0	0.0	0.02	0.05	0.01	0.01
D	240.0	0.00	42.0	0.0	0.03	0.06	0.01	0.01
D	225.0	0.00	42.0	0.0	0.02	0.05	0.01	0.01
D	225.0	0.00	42.0	0.0	0.03	0.07	0.04	0.03
D	220.0	0.00	42.0	0.0	0.03	0.07	0.04	0.03
D	220.0	0.00	42.0	0.0	0.04	0.09	0.04	0.03
D	210.0	0.00	42.0	0.0	0.04	0.09	0.04	0.03
D	210.0	0.00	56.0	0.0	0.04	0.10	0.05	0.03
D	200.0	0.00	56.0	0.0	0.04	0.10	0.05	0.03
D	200.0	0.00	57.2	0.0	0.05	0.12	0.05	0.03
D	195.0	0.00	57.2	0.0	0.05	0.12	0.05	0.03
D	195.0	0.00	83.4	0.0	0.05	0.13	0.05	0.03
D	180.0	0.00	87.2	0.0	0.05	0.13	0.05	0.03
D	180.0	0.00	79.8	0.0	0.05	0.14	0.06	0.04
D	160.0	0.00	84.0	0.0	0.05	0.14	0.05	0.03
D	160.0	0.00	73.9	0.0	0.05	0.15	0.07	0.04

19-1628-TJH								
D	140.0	0.00	77.0	0.0	0.05	0.16	0.06	0.04
D	140.0	0.00	69.6	0.0	0.05	0.18	0.08	0.04
D	120.0	0.00	72.0	0.0	0.06	0.18	0.07	0.04
D	120.0	0.00	66.5	0.0	0.05	0.20	0.09	0.04
D	100.0	0.00	68.1	0.0	0.05	0.20	0.09	0.04
D	100.0	0.00	64.0	0.0	0.06	0.22	0.11	0.05
D	80.0	0.00	65.3	0.0	0.06	0.22	0.10	0.04
D	80.0	0.00	62.0	0.0	0.06	0.24	0.12	0.05
D	60.0	0.00	63.0	0.0	0.06	0.24	0.11	0.05
D	60.0	0.00	60.3	0.0	0.05	0.26	0.13	0.05
D	40.0	0.00	61.2	0.0	0.06	0.27	0.12	0.05
D	40.0	0.00	59.0	0.0	0.06	0.30	0.14	0.05
D	20.0	0.00	59.7	0.0	0.06	0.31	0.13	0.05
D	20.0	0.00	57.8	0.0	0.05	0.31	0.16	0.04
D	0.0	0.00	58.5	0.0	0.05	0.32	0.15	0.04

ANTENNA LOADING  
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.....ANTENNA.....	ATTACHMENT				.....ANTENNA FORCES.....			
TYPE	ELEV ft	AZI	RAD ft	AZI	AXIAL kip	SHEAR kip	GRAVITY kip	TORSION ft-kip
STD+R	240.0	0.0	4.4	0.0	0.44	0.00	0.34	0.00
STD+R	180.0	0.0	5.4	0.0	0.41	0.00	0.34	0.00

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MAXIMUM MAST DISPLACEMENTS:  
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ELEV ft	-----DEFLECTIONS (ft)-----			--TILTS (DEG)---		TWIST DEG
	NORTH	EAST	DOWN	NORTH	EAST	
255.0	0.965 G	-0.805 D	0.009 G	0.448 G	-0.377 D	0.146 D
250.0	0.926 G	-0.772 D	0.009 G	0.448 G	-0.377 D	0.146 D
245.0	0.887 G	-0.739 D	0.009 G	0.447 G	-0.376 D	0.146 D
240.0	0.847 G	-0.706 D	0.009 G	0.445 G	-0.374 D	0.146 D
235.0	0.808 G	-0.673 D	0.009 G	0.441 G	-0.371 D	0.140 D
230.0	0.770 G	-0.640 D	0.008 G	0.435 G	-0.365 D	0.133 D
225.0	0.731 G	-0.608 D	0.008 G	0.427 G	-0.359 D	0.126 D
220.0	0.694 G	-0.577 D	0.008 G	0.417 G	-0.349 D	0.120 D
215.0	0.657 G	-0.546 D	0.008 G	0.408 G	-0.342 D	0.114 D
210.0	0.621 G	-0.516 D	0.008 G	0.397 G	-0.332 D	0.108 D
205.0	0.585 G	-0.486 D	0.007 G	0.383 G	-0.320 D	0.102 D
200.0	0.552 G	-0.458 D	0.007 G	0.366 G	-0.306 D	0.096 D
195.0	0.520 G	-0.431 D	0.007 G	0.351 G	-0.293 D	0.091 D
190.0	0.489 G	-0.406 D	0.007 G	0.337 G	-0.281 D	0.086 D
185.0	0.460 G	-0.381 D	0.007 G	0.322 G	-0.268 D	0.081 D
180.0	0.431 G	-0.358 D	0.006 L	0.307 G	-0.256 D	0.077 D
175.0	0.404 G	-0.335 D	0.006 G	0.295 G	-0.245 D	0.070 D
170.0	0.378 G	-0.313 D	0.006 L	0.282 G	-0.235 D	0.063 D
165.0	0.353 G	-0.293 D	0.006 G	0.270 G	-0.224 D	0.057 D
160.0	0.329 G	-0.273 D	0.006 L	0.257 G	-0.213 D	0.051 D
155.0	0.307 G	-0.254 D	0.005 G	0.244 G	-0.203 D	0.047 D
150.0	0.286 G	-0.237 D	0.005 L	0.232 G	-0.192 D	0.043 D
145.0	0.265 G	-0.220 D	0.005 G	0.219 G	-0.182 D	0.040 D
140.0	0.246 G	-0.204 D	0.005 L	0.206 G	-0.171 D	0.037 D
135.0	0.228 G	-0.189 D	0.005 G	0.195 G	-0.162 D	0.034 D
130.0	0.211 G	-0.174 D	0.005 L	0.185 G	-0.153 D	0.032 D
125.0	0.194 G	-0.161 D	0.004 G	0.174 G	-0.144 D	0.030 D
120.0	0.179 G	-0.148 D	0.004 L	0.164 G	-0.136 D	0.027 D
113.3	0.160 G	-0.132 D	0.004 G	0.153 G	-0.127 D	-0.025 G
106.7	0.142 G	-0.117 D	0.004 L	0.143 G	-0.118 D	-0.023 G
100.0	0.125 G	-0.103 D	0.004 G	0.132 G	-0.109 D	-0.021 G
93.3	0.109 G	-0.090 D	0.003 L	0.122 G	-0.101 D	-0.019 G
86.7	0.095 G	-0.078 D	0.003 G	0.111 G	-0.092 D	-0.017 G
80.0	0.081 G	-0.067 D	0.003 L	0.101 G	-0.084 D	-0.016 G
73.3	0.069 G	-0.057 D	0.003 G	0.092 G	-0.076 D	-0.014 G
66.7	0.058 G	-0.048 D	0.003 L	0.083 G	-0.069 D	-0.012 G
60.0	0.047 G	-0.039 D	0.002 G	0.074 G	-0.061 D	-0.011 G
53.3	0.038 G	-0.032 D	0.002 L	0.065 G	-0.054 D	-0.009 G
46.7	0.030 G	0.025 K	0.002 G	0.056 G	-0.046 D	0.008 L
40.0	0.023 G	0.019 K	0.002 L	0.047 G	-0.039 D	0.007 L
33.3	0.017 G	0.014 K	0.001 G	0.039 G	-0.032 D	0.006 L
26.7	0.012 G	0.010 K	0.001 A	0.031 G	-0.026 D	0.005 L
20.0	0.008 G	0.007 K	0.001 G	0.024 G	-0.019 D	0.003 L
13.3	0.004 G	0.004 K	0.001 A	0.016 G	-0.013 D	0.002 L
6.7	0.002 G	0.001 K	0.000 G	0.008 G	-0.006 D	0.001 L
0.0	0.000 A	0.000 A	0.000 A	0.000 A	0.000 A	0.000 A

MAXIMUM ANTENNA AND REFLECTOR ROTATIONS:

ELEV ft	AZI deg	TYPE *	.....BEAM DEFLECTIONS (deg).....			
			PITCH	YAW	ROLL	TOTAL
240.0	0.0	STD+R	0.374 D	0.146 D	-0.445 G	0.402 D
180.0	0.0	STD+R	0.256 D	0.077 D	-0.307 G	0.267 D

MAXIMUM TENSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	-----	-----	0.09 E	0.00 A
	0.03 K	0.14 K		
250.0	-----	-----	0.02 K	0.00 A
	0.00 A	0.44 B		
245.0	-----	-----	0.02 E	0.00 A
	0.79 A	0.49 H		
240.0	-----	-----	0.14 H	0.00 A
	1.95 I	0.85 B		
235.0	-----	-----	0.03 I	0.00 A
	3.72 A	0.94 B		
230.0	-----	-----	0.00 A	0.00 A
	5.70 A	0.93 H		
225.0	-----	-----	0.03 A	0.00 A
	7.42 A	1.30 B		
220.0	-----	-----	0.18 A	0.00 A
	10.44 A	1.34 B		
215.0	-----	-----	0.07 A	0.00 A
	13.48 A	1.49 B		
210.0	-----	-----	0.02 G	0.00 A
	16.50 A	1.80 B		
205.0	-----	-----	0.07 A	0.00 A
	20.73 A	1.91 B		
200.0	-----	-----	0.14 G	0.00 A
	23.78 A	1.05 A		
195.0	-----	-----	0.06 A	0.00 A
	25.55 A	1.26 H		
190.0	-----	-----	0.02 A	0.00 A
	27.84 A	1.18 A		
185.0	-----	-----	0.05 J	0.00 A
	30.13 A	1.22 H		
180.0	-----	-----	0.02 A	0.00 A
	32.19 A	1.44 H		
175.0	-----	-----	0.05 J	0.00 A
	34.28 A	1.57 B		
170.0	-----	-----	0.02 A	0.00 A
	36.74 A	1.39 H		
165.0	-----	-----	0.03 E	0.00 A
	38.67 A	1.49 B		
160.0	-----	-----	0.02 A	0.00 A
	40.87 A	1.38 H		
155.0	-----	-----	0.03 E	0.00 A
	42.73 A	1.46 B		
150.0	-----	-----	0.02 A	0.00 A
	44.75 A	1.39 H		
145.0	-----	-----	0.02 E	0.00 A
	46.54 A	1.46 B		
140.0	-----	-----	0.02 A	0.00 A
	48.43 A	1.42 H		
135.0	-----	-----	0.02 E	0.00 A
	50.16 A	1.49 B		
130.0	-----	-----	0.02 A	0.00 A
	51.96 A	1.48 G		
125.0	-----	-----	0.02 E	0.00 A
	53.66 A	1.53 B		
120.0	-----	-----	0.02 A	0.00 A
	55.68 A	1.64 G		
113.3	-----	-----	0.02 A	0.00 A
	57.87 A	1.70 G		
106.7	-----	-----	0.02 A	0.00 A
	60.09 A	1.73 G		
100.0	-----	-----	0.02 A	0.00 A
	62.22 A	1.79 G		
93.3	-----	-----	0.01 A	0.00 A

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86.7	64.38 A	1.84 G	0.02 A	0.00 A
80.0	66.48 A	1.90 G	0.01 A	0.00 A
73.3	68.59 A	1.96 G	0.01 A	0.00 A
66.7	70.64 A	2.02 G	0.01 A	0.00 A
60.0	72.71 A	2.08 G	0.01 A	0.00 A
53.3	74.72 A	2.14 G	0.01 A	0.00 A
46.7	76.73 A	2.20 G	0.01 A	0.00 A
40.0	78.70 A	2.25 G	0.01 A	0.00 A
33.3	80.64 A	2.31 G	0.01 A	0.00 A
26.7	82.52 A	2.37 G	0.01 A	0.00 A
20.0	84.40 A	2.43 G	0.01 A	0.00 A
13.3	86.26 A	2.49 G	0.01 A	0.00 A
6.7	88.12 A	2.54 G	0.01 A	0.00 A
0.0	89.93 A	2.58 G	0.00 A	0.00 A

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	-0.11 E	-0.14 E	-0.09 K	0.00 A
250.0	-1.45 C	-0.44 H	-0.01 E	0.00 A
245.0	-2.76 G	-0.51 B	0.00 K	0.00 A
240.0	-4.57 G	-0.91 C	-0.21 L	0.00 A
235.0	-6.57 G	-0.87 H	0.00 G	0.00 A
230.0	-8.58 G	-0.99 B	-0.01 B	0.00 A
225.0	-11.72 G	-1.29 H	0.00 G	0.00 A
220.0	-14.89 G	-1.42 B	-0.11 C	0.00 A
215.0	-18.44 G	-1.44 B	-0.04 G	0.00 A
210.0	-22.86 G	-1.84 B	-0.02 A	0.00 A
205.0	-27.54 G	-1.92 B	-0.04 G	0.00 A
200.0	-30.82 G	-1.21 G	-0.23 A	0.00 A
195.0	-34.46 G	-1.23 H	-0.03 G	0.00 A
190.0	-37.11 G	-1.25 G	-0.01 A	0.00 A
185.0	-39.93 G	-1.21 B	-0.03 C	0.00 A
180.0	-42.94 G	-1.66 B	-0.03 L	0.00 A
175.0	-45.65 G	-1.42 H	-0.02 G	0.00 A
170.0	-48.32 G	-1.53 B	-0.02 A	0.00 A
165.0	-50.94 G	-1.39 H	-0.02 G	0.00 A
160.0	-53.49 G	-1.49 B	-0.01 L	0.00 A

19-1628-TJH

155.0	-----		-0.01 G	0.00 A
	-56.02 G	-1.40 H		
150.0	-----		-0.01 L	0.00 A
	-58.49 G	-1.47 B		
145.0	-----		-0.01 G	0.00 A
	-60.93 G	-1.42 G		
140.0	-----		-0.01 G	0.00 A
	-63.36 G	-1.49 B		
135.0	-----		-0.01 G	0.00 A
	-65.81 G	-1.50 G		
130.0	-----		-0.01 G	0.00 A
	-68.23 G	-1.54 G		
125.0	-----		-0.01 G	0.00 A
	-70.66 G	-1.57 G		
120.0	-----		-0.01 G	0.00 A
	-73.47 G	-1.72 G		
113.3	-----		-0.01 G	0.00 A
	-76.73 G	-1.75 G		
106.7	-----		-0.01 G	0.00 A
	-79.94 G	-1.81 G		
100.0	-----		-0.01 G	0.00 A
	-83.17 G	-1.86 G		
93.3	-----		-0.01 G	0.00 A
	-86.40 G	-1.92 G		
86.7	-----		-0.01 G	0.00 A
	-89.64 G	-1.97 G		
80.0	-----		-0.01 G	0.00 A
	-92.89 G	-2.03 G		
73.3	-----		-0.01 G	0.00 A
	-96.18 G	-2.09 G		
66.7	-----		-0.01 G	0.00 A
	-99.46 G	-2.15 G		
60.0	-----		-0.01 G	0.00 A
	-102.77 G	-2.21 G		
53.3	-----		-0.01 G	0.00 A
	-106.12 G	-2.26 G		
46.7	-----		-0.01 G	0.00 A
	-109.45 G	-2.32 G		
40.0	-----		0.00 G	0.00 A
	-112.84 G	-2.38 G		
33.3	-----		0.00 G	0.00 A
	-116.27 G	-2.44 G		
26.7	-----		0.00 G	0.00 A
	-119.70 G	-2.50 G		
20.0	-----		0.00 G	0.00 A
	-123.14 G	-2.56 G		
13.3	-----		0.00 L	0.00 A
	-126.59 G	-2.60 G		
6.7	-----		0.00 G	0.00 A
	-130.01 G	-2.66 G		
0.0	-----		0.00 A	0.00 A

MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)

-----	LOAD	COMPONENTS	-----	TOTAL
NORTH	EAST	DOWN	UPLIFT	SHEAR
10.58 G	8.87 K	131.57 G	-90.73 A	10.58 G

MAXIMUM TOTAL LOADS ON FOUNDATION : (kip & kip-ft)

-----HORIZONTAL-----			DOWN	-----OVERTURNING-----			TORSION
NORTH	EAST	TOTAL		NORTH	EAST	TOTAL	
		@				@	
		0.0				0.0	
16.4 G	13.7 K	16.4 G	54.8 B	2207.7 G	-1827.2 D	2207.7 G	9.8 L

**MAT FOUNDATION DESIGN BY SABRE TOWERS & POLES**

Tower Description 255' S3R Series SD  
 Customer VERIZON WIRELESS  
 Project Number 19-1628-TJH  
 Date 7/23/2018  
 Engineer NM

<b>Overall Loads:</b>			
Factored Moment (ft-kips)	7720.79	Anchor Bolt Count (per leg)	6
Factored Axial (kips)	155.23		
Factored Shear (kips)	57.65		
<b>Individual Leg Loads:</b>			
Factored Uplift (kips)	365.00	Tower eccentric from mat (ft)=	1.75
Factored Download (kips)	418.00		
Factored Shear (kips)	35.00		
Width of Tower (ft)	22.5	Allowable Bearing Pressure (ksf)	4.00
Ultimate Bearing Pressure	8.00	Safety Factor	2.00
Bearing $\Phi_s$	0.75		
Bearing Design Strength (ksf)	6	Max. Factored Net Bearing Pressure (ksf)	4.74
Water Table Below Grade (ft)	999		
Width of Mat (ft)	31	Minimum Mat Width (ft)	28.17
Thickness of Mat (ft)	1.5		
Depth to Bottom of Slab (ft)	5		
Bolt Circle Diameter (in)	8.75		
Top of Concrete to Top of Bottom Threads (in)	52.625	Minimum Pier Diameter (ft)	2.06
Diameter of Pier (ft)	3	Equivalent Square b (ft)	2.66
Ht. of Pier Above Ground (ft)	0.5		
Ht. of Pier Below Ground (ft)	3.5		
Quantity of Bars in Mat	61		
Bar Diameter in Mat (in)	1.128		
Area of Bars in Mat (in <sup>2</sup> )	60.96		
Spacing of Bars in Mat (in)	6.08	Recommended Spacing (in)	6 to 12
Quantity of Bars Pier	14		
Bar Diameter in Pier (in)	1		
Tie Bar Diameter in Pier (in)	0.5		
Spacing of Ties (in)	12	Minimum Pier A <sub>s</sub> (in <sup>2</sup> )	5.09
Area of Bars in Pier (in <sup>2</sup> )	11.00	Recommended Spacing (in)	5 to 12
Spacing of Bars in Pier (in)	6.23		
f'c (ksi)	4.5		
fy (ksi)	60		
Unit Wt. of Soil (kcf)	0.12		
Unit Wt. of Concrete (kcf)	0.15		
Volume of Concrete (yd <sup>3</sup> )	56.53		

**MAT FOUNDATION DESIGN BY SABRE TOWERS & POLES (CONTINUED)**

**Two-Way Shear:**

Average d (in)	13.872
$\phi v_c$ (ksi)	0.228
$\phi v_c = \phi(2 + 4/\beta_c)f'_c{}^{1/2}$	0.342
$\phi v_c = \phi(\alpha_s d/b_o + 2)f'_c{}^{1/2}$	0.316
$\phi v_c = \phi 4f'_c{}^{1/2}$	0.228
Shear perimeter, $b_o$ (in)	156.68
$\beta_c$	1

$v_u$  (ksi)

0.208

**Stability:**

Overturning Design Strength (ft-k) **9325.4**

Factored Overturning Moment (ft-k) **8037.9**

**One-Way Shear:**

$\phi V_c$  (kips) **588.5**

$V_u$  (kips) **472.3**

**Pier Design:**

Design Tensile Strength (kips) **593.8**

$T_u$  (kips) **365.0**

$\phi V_n$  (kips) **81.5**

$V_u$  (kips) **35.0**

$\phi V_c = \phi 2(1 + N_u/(500A_g))f'_c{}^{1/2}b_w d$  **33.4**

$V_s$  (kips) **56.5**

\*\*\*  $V_s \text{ max} = 4 f'_c{}^{1/2}b_w d$  (kips) **278.2**

Maximum Spacing (in) 13.01

(Only if Shear Ties are Required)

Actual Hook Development (in) 12.74

Req'd Hook Development  $l_{dh}$  (in) 9.69

\*\*\* Ref. ACI 11.5.5 & 11.5.6.3

**Anchor Bolt Pull-Out:**

$\phi P_c = \phi \lambda (2/3)f'_c{}^{1/2}(2.8A_{SLOPE} + 4A_{FLAT})$  **153.3**

$P_u$  (kips) **365.0**

Pier Rebar Development Length (in) **40.00**

Required Length of Development (in) **27.49**

**Flexure in Slab:**

$\phi M_n$  (ft-kips) **3452.7**

$M_u$  (ft-kips) **3452.4**

a (in) 2.57

Steel Ratio 0.01181

$\beta_1$  0.825

Maximum Steel Ratio ( $\rho_t$ ) 0.0197

Minimum Steel Ratio 0.0018

Rebar Development in Pad (in) **100.01**

Required Development in Pad (in) **18.63**

Condition	1 is OK, 0 Fails
Minimum Mat Width	1
Maximum Soil Bearing Pressure	1
Pier Area of Steel	1
Pier Shear	1
Two-Way Shear	1
Overturning	1
Anchor Bolt Pull-Out	1
Flexure	1
Steel Ratio	1
Length of Development in Pad	1
Interaction Diagram Visual Check	1
One-Way Shear	1
Hook Development	1
Minimum Mat Depth	1



**DRILLED STRAIGHT PIER DESIGN BY SABRE TOWERS & POLES**

Tower Description 255' S3R Series SD  
 Customer Name VERIZON WIRELESS  
 Job Number 19-1628-TJH  
 Date 7/23/2018  
 Engineer NM

Factored Uplift (kips)	365
Factored Download (kips)	418
Factored Shear (kips)	35
Ultimate Bearing Pressure	<b>27.65</b>
Bearing $\Phi$ s	0.75
Bearing Design Strength (ksf)	20.7375
Water Table Below Grade (ft)	<b>999</b>
Bolt Circle Diameter (in)	8.75
Top of Concrete to Top of Bottom Threads (in)	52.625
Pier Diameter (ft)	5.5
Ht. Above Ground (ft)	0.5
Pier Length Below Ground (ft)	29
Quantity of Bars	30
Bar Diameter (in)	0.875
Tie Bar Diameter (in)	0.5
Spacing of Ties (in)	12
Area of Bars (in <sup>2</sup> )	18.04
Spacing of Bars (in)	6.09
f'c (ksi)	4.5
fy (ksi)	60
Unit Wt. of Concrete (kcf)	0.15
Download Friction $\Phi$ s	0.75
Uplift Friction $\Phi$ s	0.75
Volume of Concrete (yd <sup>3</sup> )	25.96
Skin Friction Factor for Uplift	1
Ignore Bottom Length in Download?	<input type="checkbox"/>

Anchor Bolt Count (per leg) **6**

Minimum Pier Diameter (ft) **2.06**

Minimum Area of Steel (in<sup>2</sup>) **17.11**

Length to Ignore Download (ft) **0**

Depth at Bottom of Layer (ft)	Ult. Skin Friction (ksf)	(Ult. Skin Friction)*(Uplift Factor)	$\gamma$ (kcf)
2	0.00	0.00	0.11
5	0.35	0.35	0.11
18	0.60	0.60	0.11
30	1.20	1.20	0.11
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0

**Download:**

Factored Net Weight of Concrete (kips)	35.2
Bearing Design Strength (kips)	492.7
Skin Friction Design Strength (kips)	285.7
Download Design Strength (kips)	<b>778.4</b>

Factored Net Download (kips) **453.2**

**DRILLED STRAIGHT PIER DESIGN BY SABRE TOWERS & POLES (CONTINUED)**

**Uplift:**

Nominal Skin Friction (kips)	381.0
Wc, Weight of Concrete (kips)	105.1
W <sub>R</sub> , Soil Resistance (kips)	1397.9
ΦsWr+0.9Wc (kips)	1143.0

Uplift Design Strength (kips)	380.4	Factored Uplift (kips)	365.0
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**Pier Design:**

Design Tensile Strength (kips)	974.1
ΦV <sub>n</sub> (kips)	312.6

Tu (kips)	365.0
V <sub>u</sub> (kips)	35.0

ΦV <sub>c</sub> =Φ2(1+N <sub>u</sub> /(500A <sub>g</sub> ))f' <sub>c</sub> <sup>1/2</sup> b <sub>w</sub> d (kips)	312.6
---	-------

V <sub>s</sub> (kips)	0.0
-----------------------	-----

*** V <sub>s</sub> max = 4 f' <sub>c</sub> <sup>1/2</sup> b <sub>w</sub> d (kips)	935.1
---	-------

Maximum Spacing (in) 7.10 (Only if Shear Ties are Required)

\*\*\* Ref. ACI 11.5.5 & 11.5.6.3

**Anchor Bolt Pull-Out:**

ΦP <sub>c</sub> =Φλ(2/3)f' <sub>c</sub> <sup>1/2</sup> (2.8A <sub>SLOPE</sub> + 4A <sub>FLAT</sub> )	515.1
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P <sub>u</sub> (kips)	365.0
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Rebar Development Length (in)	24.94	Required Length of Development (in)	N/A
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Condition	1 is OK, 0 Fails
Download	1
Uplift	1
Area of Steel	1
Shear	1
Anchor Bolt Pull-Out	1
Interaction Diagram Visual Check	1

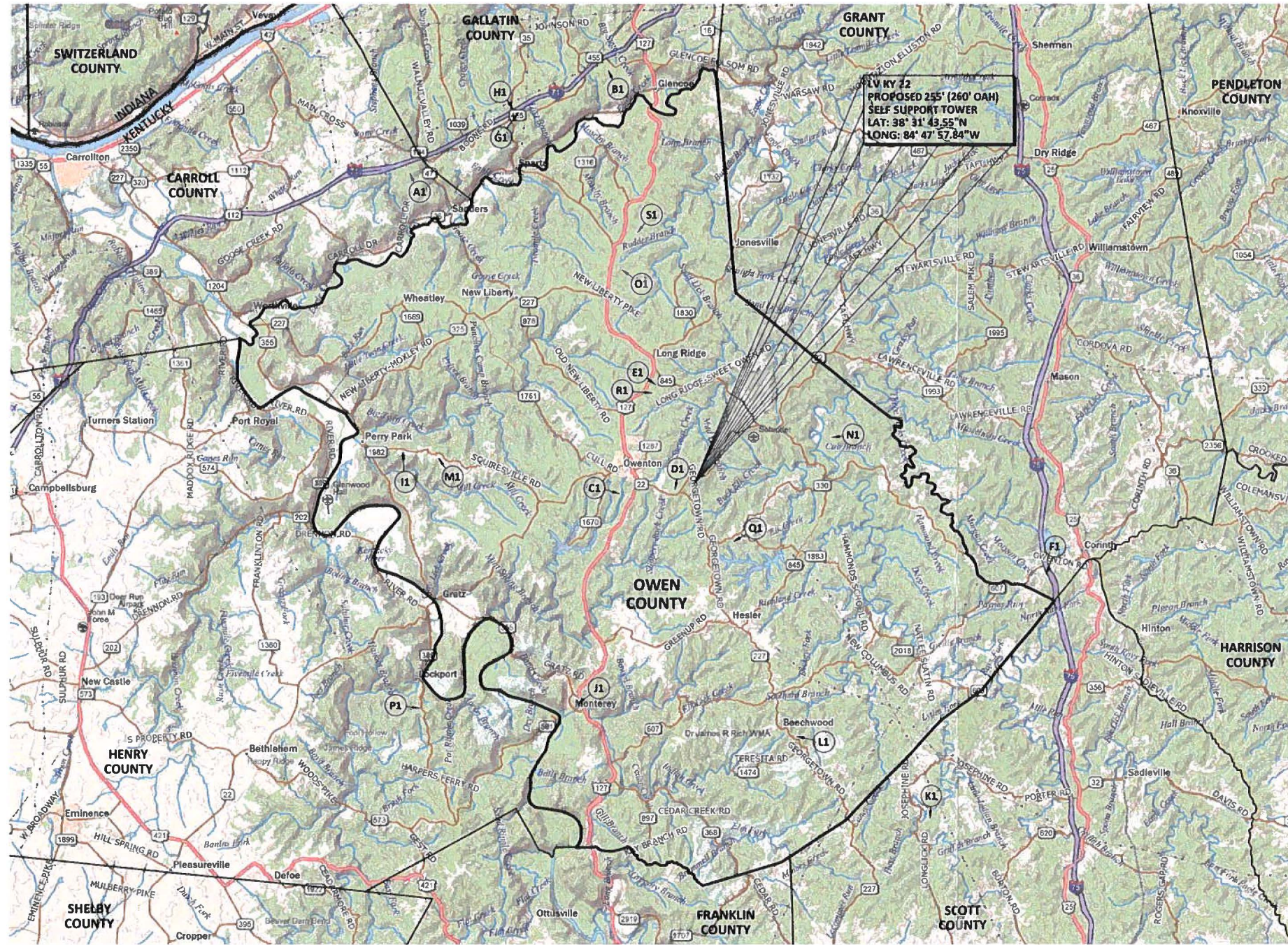
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**EXHIBIT E**

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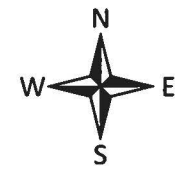
# OWEN COUNTY, KENTUCKY

## CELLCO PARTNERSHIP SITE NAME: LV KY 22



NOTE: TOWERS DEPICTED ARE ALL KNOWN TOWER SITES REGISTERED WITH THE FEDERAL COMMUNICATIONS COMMISSION IN OWEN COUNTY, KENTUCKY.

USGS 7.5 MINUTE QUADRANGLE: OWENTON, KY



### EXISTING TOWER LEGEND

- (A1) FCC REGISTRATION #: 1000358  
CROWN CASTLE GT COMPANY, LLC  
LAT: 38° 40' 30.2\"N  
LONG: 84° 58' 18.8\"W
- (B1) FCC REGISTRATION #: 1036424  
CROWN CASTLE GT COMPANY, LLC  
LAT: 38° 43' 25.0\"N  
LONG: 84° 51' 06.0\"W
- (C1) FCC REGISTRATION #: 1043324  
CROWN CASTLE SOUTH, LLC  
LAT: 38° 31' 26.1\"N  
LONG: 84° 50' 39.9\"W
- (D1) FCC REGISTRATION #: 1048215  
KENTUCKY AUTHORITY FOR  
EDUCATIONAL TELEVISION dba = WKON  
LAT: 38° 31' 32.0\"N  
LONG: 84° 48' 39.0\"W
- (E1) FCC REGISTRATION #: 1050171  
WORLDWIDE COMMUNICATIONS  
ASSOCIATES, INC.  
LAT: 38° 34' 30.8\"N  
LONG: 84° 49' 21.7\"W
- (F1) FCC REGISTRATION #: 1058575  
SBA TOWERS, LLC  
LAT: 38° 29' 09.0\"N  
LONG: 84° 35' 10.2\"W
- (G1) FCC REGISTRATION #: 1058582  
SBA TOWERS, LLC  
LAT: 38° 42' 12.0\"N  
LONG: 84° 54' 22.4\"W
- (H1) FCC REGISTRATION #: 1206875  
STC TWO, LLC  
LAT: 38° 42' 18.0\"N  
LONG: 84° 54' 33.0\"W
- (I1) FCC REGISTRATION #: 1235662  
CELLCO PARTNERSHIP  
LAT: 38° 32' 36.1\"N  
LONG: 84° 58' 31.9\"W
- (J1) FCC REGISTRATION #: 1239816  
CELLCO PARTNERSHIP  
LAT: 38° 25' 28.1\"N  
LONG: 84° 52' 11.1\"W
- (K1) FCC REGISTRATION #: 1299088  
PI TOWER DEVELOPMENT, LLC  
c/o LENDLEASE AMERICAS, INC.  
LAT: 38° 22' 13.6\"N  
LONG: 84° 39' 23.6\"W
- (L1) (GRANTED) a.k.a. RED OAK RD  
FCC REGISTRATION #: 1303987  
TILLMAN INFRASTRUCTURE, LLC  
LAT: 38° 24' 33.4\"N  
LONG: 84° 44' 12.0\"W
- (M1) (GRANTED)  
FCC REGISTRATION #: 1304821  
UNITI TOWERS, LLC  
LAT: 38° 32' 26.4\"N  
LONG: 84° 57' 15.5\"W
- (N1) (GRANTED)  
FCC REGISTRATION #: 1305293  
NEW CINGULAR WIRELESS PCS, LLC  
LAT: 38° 33' 01.3\"N  
LONG: 84° 42' 55.4\"W
- (O1) (GRANTED)  
FCC REGISTRATION #: 1305983  
NEW CINGULAR WIRELESS PCS, LLC  
LAT: 38° 37' 47.0\"N  
LONG: 84° 50' 35.4\"W
- (P1) (GRANTED)  
FCC REGISTRATION #: 1306196  
NEW CINGULAR WIRELESS PCS, LLC  
LAT: 38° 25' 20.1\"N  
LONG: 84° 57' 54.6\"W
- (Q1) (GRANTED) a.k.a. ELK LAKE SHORES  
FCC REGISTRATION #: 1306654  
NEW CINGULAR WIRELESS PCS, LLC  
LAT: 38° 30' 03.7\"N  
LONG: 84° 46' 30.6\"W
- (R1) CLIENT PROVIDED TOWER SITES  
SITE NAME: LV OLD US 127 RD & KY 845  
LAT: 38° 34' 17.32\"N  
LONG: 84° 49' 28.79\"W
- (S1) CLIENT PROVIDED TOWER SITES  
SITE NAME: LV SPARTA  
LAT: 38° 38' 50.60\"N  
LONG: 84° 50' 00.46\"W

PREPARED BY:  
**POD**  
 POWER OF DESIGN  
 11490 BLUEGRASS PARKWAY  
 LOUISVILLE, KY 40299  
 502-437-5252

PREPARED FOR:  
**CELLCO PARTNERSHIP**  
 D/B/A

EXHIBIT		
REV.	DATE	DESCRIPTION
A	2.13.18	ISSUED FOR REVIEW
B	8.29.18	UPDATED

**SITE INFORMATION:**  
**LV KY 22**  
 HIGHWAY 22 EAST  
 OWENTON, KY 40359  
 OWEN COUNTY

**TAX PARCEL NUMBER:**  
 074-00-00-004.00 / 14915  
 074-00-00-005.00 / 9323

**PROPERTY OWNER:**  
 DANNY W. AND JUDITH L. JACOBS  
 1915 HIGHWAY 127 NORTH  
 OWENTON, KY 40359

**SOURCE OF TITLE:**  
 DEED BOOK 245, PAGE 498  
 DEED BOOK 126, PAGE 69

POD NUMBER: 18-20739  
 DRAWN BY: DAP  
 CHECKED BY: MEP  
 SURVEY DATE: 10.2.17  
 PLAT DATE: 1.19.18

SHEET TITLE:  
**TOWER GRID MAP**

SHEET NUMBER:  
**C-1**

---

**EXHIBIT F**

---



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

Aeronautical Study No.  
2018-ASO-14310-OE

Issued Date: 11/30/2018

Network Regulatory  
Cellco Partnership  
5055 North Point Pkwy  
NP2NE Network Engineering  
Alpharetta, GA 30022

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

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

Structure: Antenna Tower LV KY 22 - Candidate Analysis - B (15194367)  
Location: Owenton, KY  
Latitude: 38-31-43.55N NAD 83  
Longitude: 84-47-57.84W  
Heights: 959 feet site elevation (SE)  
260 feet above ground level (AGL)  
1219 feet above mean sea level (AMSL)

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

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

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

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

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

While the structure does not constitute a hazard to air navigation, it would be located within or near a military training area and/or route.

This determination expires on 05/30/2020 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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

This determination does not constitute authority to transmit on the frequency(ies) identified in this study. The proponent is required to obtain a formal frequency transmit license from the Federal Communications Commission (FCC) or National Telecommunications and Information Administration (NTIA), prior to on-air operations of these frequency(ies).

This determination of No Hazard is granted provided the following conditional statement is included in the proponent's construction permit or license to radiate:

Upon receipt of notification from the Federal Communications Commission that harmful interference is being caused by the licensee's (permittee's) transmitter, the licensee (permittee) shall either immediately reduce the power to the point of no interference, cease operation, or take such immediate corrective action as is necessary to eliminate the harmful interference. This condition expires after 1 year of interference-free operation.

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

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

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

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

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

---

If we can be of further assistance, please contact our office at (202) 267-3215, or [kerryaine.yarber@faa.gov](mailto:kerryaine.yarber@faa.gov).  
On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-ASO-14310-OE.

**Signature Control No: 370086566-391299310**

( DNE )

Kerryaine Yarber  
Specialist

Attachment(s)  
Frequency Data  
Map(s)

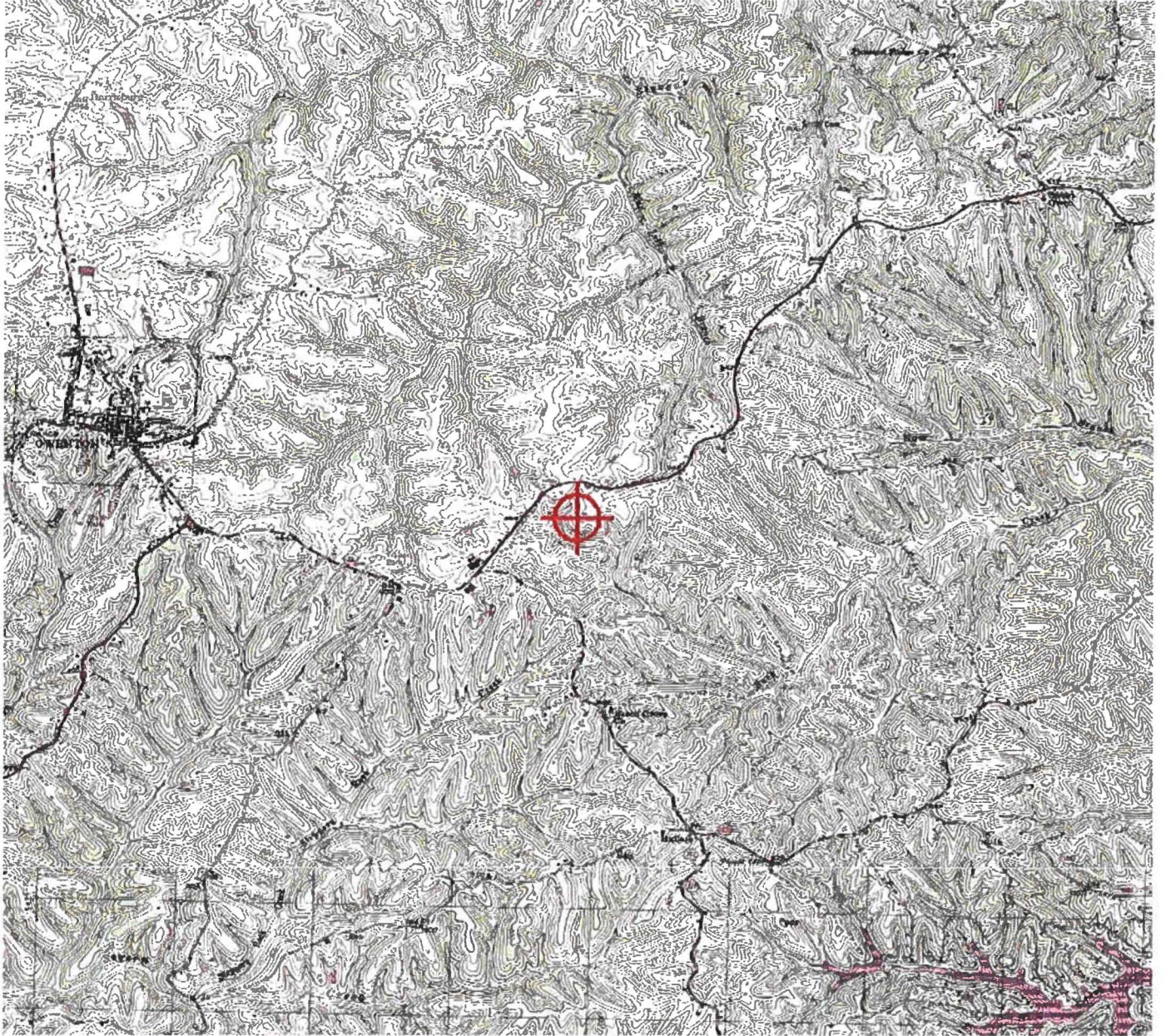
cc: FCC



**Frequency Data for ASN 2018-ASO-14310-OE**

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

TOPO Map for ASN 2018-ASO-14310-OE



Sectional Map for ASN 2018-ASO-14310-OE



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**EXHIBIT G**

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Date: February 22, 2018

POD Job Number: 17-18042

GEOTECHNICAL REPORT

**LV KY 22**

**38° 31' 43.55" N**

**84° 47' 57.84" W**

Hwy 22 East  
Owenton, KY 40359

Prepared For:



Prepared By:





February 22, 2018

Ms. Jennifer Jack  
Verizon Wireless  
2421 Holloway Road  
Louisville, KY 40299

Re: **Geotechnical Report – PROPOSED 255' SELF-SUPPORT TOWER w/ 5' LIGHTNING ARRESTOR**  
Site Name: **LV KY 22**  
Site Address: **KY Hwy 22 East, Owenton, Owen County, Kentucky**  
Coordinates: **N38° 31' 43.55", W84° 47' 57.84"**  
POD Project No. **17-18042**

Dear Ms. Jack:

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,

A handwritten signature in black ink, appearing to read "Mark Patterson".

Mark Patterson, P.E.  
Project Engineer  
License No.: KY 16300



Copies submitted: (3) Ms. Jennifer Jack

**LETTER OF TRANSMITTAL**

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**APPENDIX**

BORING LOCATION PLAN  
BORING LOG  
SOIL SAMPLE CLASSIFICATION

Geotechnical Report  
**PROPOSED 255' SELF-SUPPORT TOWER w/ 5' LIGHTNING ARRESTOR**  
Site Name: LV KY 22  
KY Hwy 22 East, Owenton, Owen County, Kentucky  
N38° 31' 43.55", W84° 47' 57.84"

**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 and equipment support foundations. 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 Wireless is proposing to construct a self-support tower and either an equipment shelter, slab or platform at N38° 31' 43.55", W84° 47' 57.84", KY Hwy 22 East, Owenton, Owen County, Kentucky. The site is located in a hayfield in a rural area just east of Owenton and Owen County High School. The proposed lease area will be 10,000 square feet and will be accessed along a new access road running west along an existing dirt road from Byron Jacobs Road to the proposed lease area. The elevation at the proposed tower location is about EL 959 and there is about 6 feet of change in elevation across the proposed lease area. The development will also include a small equipment support foundation near the base of the tower. 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 Upper Ordovician age Calloway Creek Limestone Formation. This formation consists of limestone with some minor shale and has a medium karst potential. No sinkholes were mapped within about one mile of the site.

The borings encountered about 6 inches of topsoil at the existing ground surface. Below the topsoil, the borings encountered silty clay (CL) of low to medium plasticity. The SPT N-values in the clay were between 12 to over 50 blows per foot (bpf) generally indicating a stiff to hard consistency. Borings 2 and 3 encountered auger refusal between 17 and



17.5 feet in the silty clay. Auger refusal is defined as the depth at which the boring can no longer be advanced using the current drilling method. Boring 1 encountered highly weathered shale at about 18.5 feet to the auger refusal depth of 20 feet.

The refusal material was cored in Boring 1 from 20 to 30 feet below the ground surface. Limestone with interbedded shale that was moderately hard, weathered, light gray to grayish brown with very thin clay seams was encountered. The recovery of the core was about 97 percent with a RQD value of 13 percent. These values generally represent poor 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 2011 Kentucky Building Code, the site class is considered "C". 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 can be supported on drilled piers or on a common mat foundation.

**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 30 feet, a deeper boring should be drilled to determine the nature of the deeper material.

Depth Below Ground Surface, feet	0 - 2	2 - 5	5 - 18	18 - 30
Ultimate Bearing Pressure (psf)		5,500	11,050	27,650
<b>c</b> Undrained Shear Strength, psf	500	1,000	2,000	5,000
$\phi$ Angle of Internal Friction degrees	0	0	0	0
Total Unit Weight, pcf	120	120	120	135
Soil Modulus Parameter <b>k, pci</b>	30	750	1000	2000
Passive Soil Pressure, psf/one foot of depth		650 + 40(D-2)	1,250 + 40(D-5)	3,300 + 45(D-18)
Side Friction, psf		350	600	1200

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 silty clay at a minimum of 4 feet can be designed using an allowable soil pressure of 4,000 pounds per square foot may be used. This value may be increased by 30 percent for the maximum edge pressure under transient loads. A friction value of 0.30 may be used between the concrete and the clay soil. 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.

#### **4.2. Equipment Platform**

An equipment platform may be supported on shallow piers bearing in the natural clay 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 soft natural 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 ( $k_{30}$ ) of 110 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 natural clay soil 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 soft natural soil should be removed beneath footings.

The floor slab for the new equipment building can be supported on firm natural soils or on new compacted structural fill. Existing fill may be left in place below the slab if the owner can accept the possibility of greater than normal settlement and cracking. This risk can be reduced if the underlying subgrade is properly proof-rolled and any unstable areas disclosed by the proof-roll are improved as necessary.

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 ( $k_{30}$ ) of 110 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

The following recommendations are recommended for drilled pier construction:

- All piers must be poured the same day drilling is completed so that any shale is not allowed to swell. 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 the borings were dry prior to rock coring and significant seepage is not anticipated, the drilled pier contractor should have pumps on hand to remove water in the event seepage into the drilled pier is encountered.
- 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 will tend to soften the foundation soils.

### **5.3 Construction Dewatering**

If groundwater is encountered in the shallow foundations, it should be minor and can be handled by conventional dewatering methods such as pumping from sumps.

If groundwater is encountered in the drilled pier excavations, it may be more difficult 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 tremie method. If groundwater sits on the bottom of the foundation for longer than an hour, the bottom should be cleaned again before the pier is poured.

## **6 FIELD INVESTIGATION**

Three soil test boring was drilled near the base of the proposed tower. Split-spoon samples were obtained by the Standard Penetration Test (SPT) procedure (ASTM D1586) in all test borings. The borings encountered auger refusal between about 17 and 20 feet. A sample of the refusal material was cored in Boring 1 from 20 to 30 feet below the ground surface. 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 log is 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 log 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 log. 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.

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## **APPENDIX**

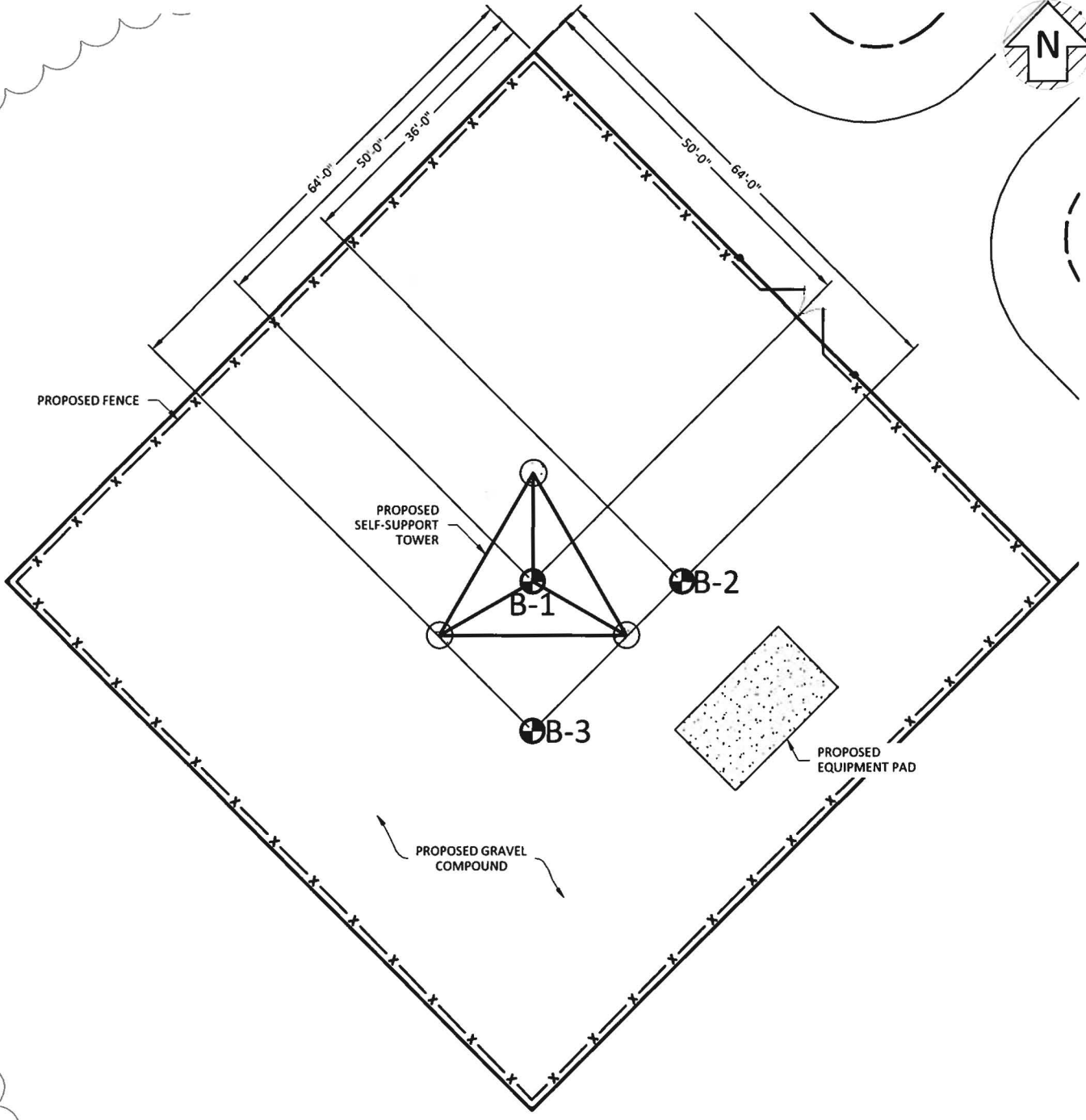
BORING LOCATION PLAN

BORING LOG

SOIL SAMPLE CLASSIFICATION

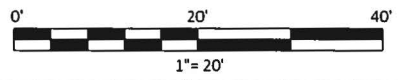
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**LEGEND**

B-1 BORING LOCATION



SHEET TITLE: <b>BORING LOCATION PLAN</b>	LATITUDE: 38° 36' 39.04" N LONGITUDE: 86° 54' 57.83" W	SITE INFORMATION: <b>LV KY 22</b>	 4500 OLD LAGRANGE ROAD BUCKNER, KY 40010 502-437-5252
	PARCEL #: 074-00-00-004.00 / 14915 D.B. 245, PG. 498	HIGHWAY 22 EAST OWENTON, KY 40359 OWEN COUNTY	
SHEET NUMBER: <b>1</b>	POD NUMBER: 17-18042 DRAWN BY: POD CHECKED BY: MEP DATE: 2.22.18	OWNER INFORMATION: DANNY W. AND JUDITH L. JACOBS 1915 HIGHWAY 127 NORTH OWENTON, KY 40359	



# Boring Log

Boring: B-1

Page 1 of 1

**Project:** LV KY 22

**City, State**

Owenton, KY

**Method:** H.S.A.

**Boring Date:** 9-Feb-18

**Location:** Proposed Tower

**Inside Diameter:** 3 1/4"

**Drill Rig Type:** CME - 750 ATV

**Hammer Type:** Auto

**Groundwater:** DRY

**Weather:**

**Driller:** Geotill Drilling

**Note:** About 6 inches of 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,	
0.5	18.5	SITLY CLAY (CL) - very stiff, slightly moist, tan-brown mottled  - orange brown  - with limestone fragments	1-2.5	SS	4, 9, 10		19,						
	3.5		3.5 -5	SS	9, 11, 11		22,					4.6	
			6-7.5	SS	10, 17, 27		44,						3.2
	8.5		8.5-10	SS	20, 27, 50		77,						
			13.5-15	SS	10, 17, 19		36,						6.0
18.5	20.0	SHALE - highly weathered, grayish brown	18.5-20	SS	12, 15, 50		65,						
20.0	30.0	LIMESTONE with interbedded SHALE - moderately hard, weathered, light gray and grayish brown with very thin clay seams	20-30	RC		116		13%					
		Boring Terminated at 30 feet											



# Boring Log

Boring: B-2

Page 1 of 1

**Project:** LV KY 22

**City, State**

Owenton, KY

**Method:** H.S.A.

**Boring Date:** 9-Feb-18

**Location:** Proposed Tower

**Inside Diameter:** 3 1/4"

**Drill Rig Type:** CME - 750 ATV

**Hammer Type:** Auto

**Groundwater:** DRY

**Weather:**

**Driller:** Geotill Drilling

**Note:** About 6 inches of 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,
0.5	17.5	SITLY CLAY (CL) - very stiff, reddish brown  - tan  - with iron nodes	1-2.5	SS	8, 9, 11	18	20,					3.2
			3.5-5	SS	11, 13, 13	16	26,					
	6.0		6-7.5	SS	17, 18, 20	16	38,					4.5
	8.5		8.5-10	SS	14, 16, 18	12	34,					5.4
			13.5-15	SS	7, 14, 15	16	29,					4.5
		Auger Refusal at 17.5 feet										



# Boring Log

Boring: B-3

Page 1 of 1

**Project:** LV KY 22

**City, State**

Owenton, KY

**Method:** H.S.A.

**Boring Date:** 9-Feb-18

**Location:** Proposed Tower

**Inside Diameter:** 3 1/4"

**Drill Rig Type:** CME - 750 ATV

**Hammer Type:** Auto

**Groundwater:** DRY

**Weather:**

**Driller:** Geotill Drilling

**Note:** About 6 inches of 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
0.5	17.0	SITLY CLAY (CL) - stiff, moist, tan-orange brown mottled  - very stiff  - hard	1-2.5	SS	3, 4, 8	12	12,					2.5
	3.5		3.5-5	SS	7, 10, 10	16	20,					
			6-7.5	SS	15, 14, 15	16	29,					6.0
	8.5		8.5-10	SS	14, 17, 14	18	31,					6.0
			13.5-15	SS	10, 15, 19	16	34,					5.5
		Auger Refusal at 17 feet										

## SOIL SAMPLE CLASSIFICATION

### FINE AND COARSE GRAINED SOIL INFORMATION

COARSE GRAINED SOILS (SANDS & GRAVELS)		FINE GRAINED SOILS (SILTS & CLAYS)			PARTICLE SIZE	
N	Relative Density	N	Consistency	Qu, KSF Estimated		
0-4	Very Loose	0-1	Very Soft	0-0.5	Boulders	Greater than 300 mm (12 in)
5-10	Loose	2-4	Soft	0.5-1	Cobbles	75 mm to 300 mm (3 to 12 in)
11-20	Firm	5-8	Firm	1-2	Gravel	4.74 mm to 75 mm (3/16 to 3 in)
21-30	Very Firm	9-15	Stiff	2-4	Coarse Sand	2 mm to 4.75 mm
31-50	Dense	16-30	Very Stiff	4-8	Medium Sand	0.425 mm to 2 mm
Over 50	Very Dense	Over 31	Hard	8+	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)		ROCK HARDNESS	
Percent RQD	Quality		
0-25	Very Poor	Very Hard:	Rock can be broken by heavy hammer blows.
25-50	Poor	Hard:	Rock cannot be broken by thumb pressure, but can be broken by moderate hammer blows.
50-75	Fair	Moderately Hard:	Small pieces can be broken off along sharp edges by considerable hard thumb pressure; can be broken with light hammer blows.
75-90	Good	Soft:	Rock is coherent but breaks very easily with thumb pressure at sharp edges and crumbles with firm hand pressure.
90-100	Excellent	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 NQ 43 RQD	<u>Core Diameter</u> BQ NQ HQ	<u>Inches</u> 1-7/16 1-7/8 2-1/2
RQD =	$\frac{\text{Sum of 4 in. and longer Rock Pieces Recovered}}{\text{Length of Core Run}} \times 100$				

### 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
$\gamma_d$ :	Dry Unit Weight, PCF
F:	Fines Content

#### SAMPLING SYMBOLS

SS	Split Spoon Sample
	Relatively Undisturbed Sample
	Rock Core Sample

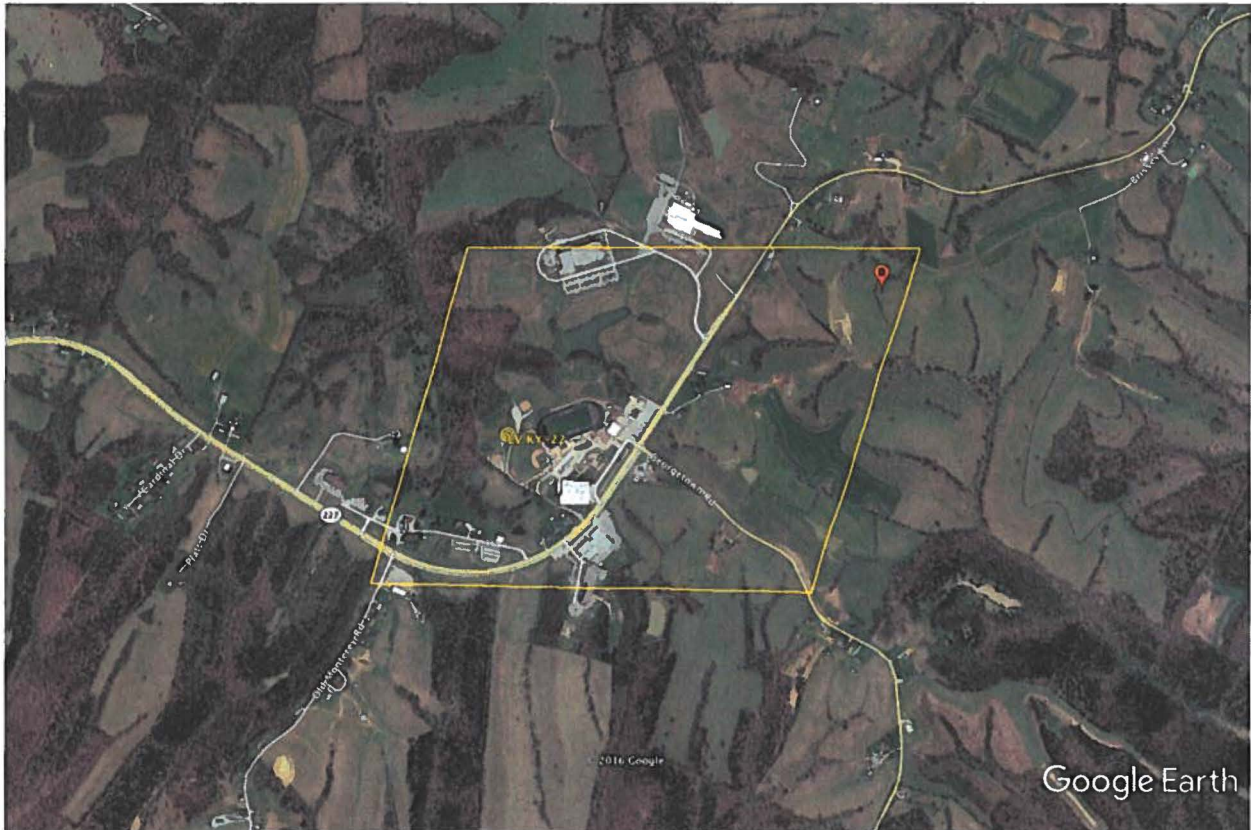
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**EXHIBIT H**

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**DIRECTIONS TO WFC SITE:**

**FROM OWEN COUNTY COURT HOUSE: 100 NORTH THOMAS STREET, OWENTON KY 40359: HEAD NORTH ON THOMAS ST TOWARD BRYAN ST (102 FT). TURN RIGHT ONTO BRYAN ST (236 FT). TURN RIGHT AT THE 1ST CROSS STREET ONTO N MAIN (0.6 MI). CONTINUE STRAIGHT ONTO STATE HWY 22 E/MAIN ST (2.7 MI). TURN RIGHT ONTO BRISSEY LN (0.2 MI). SITE WILL BE LOCATED AT THE END OF THE ROAD.**



**PREPARED BY: POWER OF DESIGN GROUP, LLC - (502) 437-5252**

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**EXHIBIT I**

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SITE NAME: LV KY-22  
SITE NUMBER: 449236  
ATTY/DATE: PLG/1-29-2018

**LAND LEASE AGREEMENT**

This Land Lease Agreement (the "Agreement") made this 10th day of October 2018, between Danny W. Jacobs and Judith Lee Jacobs, with a primary residence located at 1915 Hwy 127 N., Owenton, KY 40359, hereinafter designated LESSOR and Cellco Partnership d/b/a Verizon Wireless with its principal offices at One Verizon Way, Mail Stop 4AW100, Basking Ridge, New Jersey 07920 (telephone number 866-862-4404), hereinafter designated LESSEE. LESSOR and LESSEE are at times collectively referred to hereinafter as the "Parties" or individually as the "Party."

**WITNESSETH**

In consideration of the mutual covenants contained herein and intending to be legally bound hereby, the Parties hereto agree as follows:

1. **GRANT.** In accordance with this Agreement, LESSOR hereby grants to LESSEE the right to install, maintain and operate communications equipment ("Use") upon the Premises (as hereinafter defined), which are a part of that real property owned, leased or controlled by LESSOR at Hwy 22 E, Owenton, Kentucky 40359 (the "Property"). The Property is legally described on Exhibit "A" attached hereto and made a part hereof. The Premises are a portion of the Property and are approximately 10,000 square feet, and are shown in detail on Exhibit "B" attached hereto and made a part hereof. LESSEE may survey the Premises. Upon completion, the survey shall replace Exhibit "B" in its entirety.

2. **INITIAL TERM.** This Agreement shall be effective as of the date of execution by both Parties ("Effective Date"). The initial term of the Agreement shall be for 5 years beginning on the first day of the month following the Commencement Date (as hereinafter defined). The "Commencement Date" shall be the first day of the month after LESSEE begins installation of LESSEE's communications equipment.

3. **EXTENSIONS.** This Agreement shall automatically be extended for 4 additional 5 year terms unless Lessee terminates it at the end of the then current term by giving LESSOR written notice of the intent to terminate at least 3 months prior to the end of the then current term. The initial term and all extensions shall be collectively referred to herein as the "Term".

4. **RENTAL.**

(a). Rental payments shall begin on the Commencement Date and [REDACTED]  
[REDACTED]  
[REDACTED], or place as LESSOR may, from time to time, designate in writing at least 30 days in advance of any rental payment date by notice given in accordance with Paragraph 20 below. LESSOR and LESSEE acknowledge and agree that the initial rental payment shall not be delivered by LESSEE until 60 days after the Commencement Date. Upon agreement of the Parties, LESSEE may pay rent by electronic funds transfer and in such event, LESSOR agrees to provide to LESSEE bank routing information for such purpose upon request of Lessee.

rights or services, incidental, punitive, indirect, special or consequential damages, loss of data, or interruption or loss of use of service, even if advised of the possibility of such damages, whether under theory of contract, tort (including negligence), strict liability or otherwise.

13. INTERFERENCE.

(a). LESSEE agrees that LESSEE will not cause interference that is measurable in accordance with industry standards to LESSOR's equipment. LESSOR agrees that LESSOR and other occupants of the Property will not cause interference that is measurable in accordance with industry standards to the then existing equipment of LESSEE.

(b). Without limiting any other rights or remedies, if interference occurs and continues for a period in excess of 48 hours following notice to the interfering party via telephone to LESSEE'S Network Operations Center (at (800) 224-6620/(800) 621-2622) or to LESSOR (at (502) 750-2334/(502) 484-3713), the interfering party shall or shall require any other user to reduce power or cease operations of the interfering equipment until the interference is cured.

(c). The Parties acknowledge that there will not be an adequate remedy at law for noncompliance with the provisions of this Paragraph and therefore the Parties shall have the right to equitable remedies such as, without limitation, injunctive relief and specific performance.

14. REMOVAL AT END OF TERM. Upon expiration or within 90 days of earlier termination, LESSEE shall remove LESSEE's Communications Equipment (except footings) and restore the Premises to its original condition, reasonable wear and tear and casualty damage excepted. LESSOR agrees and acknowledges that the communications equipment shall remain the personal property of LESSEE and LESSEE shall have the right to remove the same at any time during the Term, whether or not said items are considered fixtures and attachments to real property under applicable laws. If such time for removal causes LESSEE to remain on the Premises after termination of the Agreement, LESSEE shall pay rent at the then existing monthly rate or on the existing monthly pro-rata basis if based upon a longer payment term, until the removal of the communications equipment is completed.

15. HOLDOVER. If upon expiration of the Term the Parties are negotiating a new lease or a lease extension, then this Agreement shall continue during such negotiations on a month to month basis at the rental in effect as of the date of the expiration of the Term. In the event that the Parties are not in the process of negotiating a new lease or lease extension and LESSEE holds over after the expiration or earlier termination of the Term, then Lessee shall pay rent at the then existing monthly rate or on the existing monthly pro-rata basis if based upon a longer payment term, until the removal of the communications equipment is completed rental.

16. RIGHT OF FIRST REFUSAL. If at any time after the Effective Date, LESSOR receives an offer or letter of intent from any person or entity that is in the business of owning, managing or operating communications facilities or is in the business of acquiring landlord interests in agreements relating to communications facilities, to purchase fee title, an easement, a lease, a license, or any other interest in the Premises or any portion thereof or to acquire any interest in this Agreement, or an option for any of the foregoing, LESSOR shall provide written notice to LESSEE of said offer ("LESSOR's Notice"). LESSOR's Notice shall include the prospective buyer's name, the purchase price being offered, any other consideration being offered, the other terms and conditions of the offer, a description of the portion of and interest in the Premises and/or this Agreement which will be conveyed in the proposed transaction,

and a copy of any letters of intent or form agreements presented to LESSOR by the third party offeror. LESSEE shall have the right of first refusal to meet any bona fide offer of sale or transfer on the terms and conditions of such offer or by effectuating a transaction with substantially equivalent financial terms. If LESSEE fails to provide written notice to LESSOR that LESSEE intends to meet such bona fide offer within thirty (30) days after receipt of LESSOR's Notice, LESSOR may proceed with the proposed transaction in accordance with the terms and conditions of such third party offer, in which event this Agreement shall continue in full force and effect and the right of first refusal described in this Paragraph shall survive any such conveyance to a third party. If LESSEE provides LESSOR with notice of LESSEE's intention to meet the third party offer within thirty (30) days after receipt of LESSOR's Notice, then if LESSOR's Notice describes a transaction involving greater space than the Premises, LESSEE may elect to proceed with a transaction covering only the Premises and the purchase price shall be pro-rated on a square footage basis. Further, LESSOR acknowledges and agrees that if LESSEE exercises this right of first refusal, LESSEE may require a reasonable period of time to conduct due diligence and effectuate the closing of a transaction on substantially equivalent financial terms of the third party offer. LESSEE may elect to amend this Agreement to effectuate the proposed financial terms of the third party offer rather than acquiring fee simple title or an easement interest in the Premises. For purposes of this Paragraph, any transfer, bequest or devise of LESSOR's interest in the Property as a result of the death of LESSOR, whether by will or intestate succession, or any conveyance to LESSOR's family members by direct conveyance or by conveyance to a trust for the benefit of family members shall not be considered a sale for which LESSEE has any right of first refusal.

17. RIGHTS UPON SALE. Should LESSOR, at any time during the Term, decide (i) to sell or otherwise transfer all or any part of the Property, or (ii) to grant to a third party by easement or other legal instrument an interest in and to any portion of the Premises, such sale, transfer, or grant of an easement or interest therein shall be under and subject to this Agreement and any such purchaser or transferee shall recognize LESSEE's rights hereunder. In the event that LESSOR completes any such sale, transfer, or grant described in this Paragraph without executing an assignment of the Agreement whereby the third party agrees in writing to assume all obligations of LESSOR under this Agreement, then LESSOR shall not be released from its obligations to LESSEE under this Agreement, and LESSEE shall have the right to look to LESSOR and the third party for the full performance of the Agreement.

18. LESSOR'S TITLE. LESSOR covenants that LESSEE, on paying the rent and performing the covenants herein, shall peaceably and quietly have, hold and enjoy the Premises. LESSOR represents and warrants to LESSEE as of the Effective Date and covenants during the Term that LESSOR has full authority to enter into and execute this Agreement and that there are no liens, judgments, covenants, easement, restrictions or other impediments of title that will adversely affect LESSEE's Use.

19. ASSIGNMENT. Without any approval or consent of the other Party, this Agreement may be sold, assigned or transferred by either Party to (i) any entity in which the Party directly or indirectly holds an equity or similar interest; (ii) any entity which directly or indirectly holds an equity or similar interest in the Party; or (iii) any entity directly or indirectly under common control with the Party. LESSEE may assign this Agreement to any entity which acquires all or substantially all of LESSEE's assets in the market defined by the FCC in which the Property is located by reason of a merger, acquisition or other business reorganization without approval or consent of LESSOR. As to other parties, this Agreement may not be sold, assigned or transferred without the written consent of the other Party, which such consent will not be unreasonably withheld, delayed or conditioned. No change of stock ownership, partnership interest or control of LESSEE or transfer upon partnership or corporate dissolution of either Party shall constitute an assignment hereunder. LESSEE may sublet the Premises in LESSEE's sole discretion.

IN WITNESS WHEREOF, the Parties hereto have set their hands and affixed their respective seals the day and year first above written.

LESSOR:

Danny W Jacobs  
Danny W. Jacobs

6/12/18  
Date

Judith Lee Jacobs  
Judith Lee Jacobs

6/12/18  
Date

LESSEE:

Cellco Partnership d/b/a Verizon Wireless

By: Ed Maher

**Ed Maher**  
**Director - Network Field Engineering**

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: 10/10/18

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**EXHIBIT "A"**  
**DESCRIPTION OF PROPERTY**



**PARENT PARCEL LEGAL DESCRIPTION DEED BOOK 126, PAGE 69 PARCEL ID: 074-00-00-005.00 (NOT FIELD SURVEYED)**

A TRACT OF LAND IN OWEN COUNTY, KY, ON BOTH SIDES OF THE OWENTON-DRY RIDGE ROAD (KENTUCKY STATE HIGHWAY NO. 22) ABOUT THREE MILES EAST OF THE CITY OF OWENTON, AND BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT (1), THE NORTH CORNER POST IN THE REAR LINE OF THE LOT OF LEE AND MARY ELIZABETH WYATT, ALSO CORNER TO D.C. DUNAVENT, THENCE WITH WYATT'S REAR LINE 538-30W 171 FEET TO (2), CORNER OF LOT OF BAILEY F. AND ATHELENE GLORE, THENCE WITH THEIR REAR LINE 536-30W 373 FEET TO (3), 540-00W 132 FEET TO (4), CORNER TO LOT OF JOSEPH W. AND BARBARA P. WYLES, THENCE WITH THEIR REAR LINE AND ON THE SAME COURSE AN ADDITIONAL 126 FEET TO (5), THENCE 525-30W 114 FEET TO (6), CORNER TO LOT OF WALTER W. AND PALMYRA KING, THENCE WITH THEIR REAR LINE ON THE SAME COURSE AN ADDITIONAL 237 FEET TO (7), THENCE WITH ANOTHER LINE OF NINE 554-30E 288 FEET TO (8), A POINT IN THE CENTER LINE OF KENTUCKY STATE HIGHWAY NO. 22, AND CORNER TO LAND OF J.B. JACOBS, THENCE WITH THE CENTER LINE OF KENTUCKY STATE HIGHWAY NO. 22 AND THE LINE OF J.B. JACOBS 563-30W 167 FEET TO (9), A POINT IN THE CENTER LINE OF SAID ROAD, CORNER TO J.B. JACOBS, THENCE LEAVING SAID HIGHWAY AND WITH THE LINE OF J.B. JACOBS 541-30E 122 FEET TO (10), A SPIKE IN CENTER LINE OF THE OLD BRISSEY DIRT ROAD, CORNER TO J.B. JACOBS, THENCE WITH THE CENTER LINE OF SAID ROAD AND THE LINE OF J.B. JACOBS 543-30W 431 FEET TO (11), THENCE 566-30W 97 FEET TO (12), CORNER TO RALPH BOURNE, THENCE WITH THE CENTER LINE OF SAID ROAD AND HIS LINE AN ADDITIONAL 361 FEET TO (13), THENCE WITH THE CENTER LINE OF SAID ROAD AND BOURNE'S LINE 564-30W 368 FEET TO (14), CORNER TO LAND OF HOWARD BISHOP, JR., THENCE WITH THE CENTER LINE OF SAID ROAD AND BISHOP'S LINE ON THE SAME COURSE AN ADDITIONAL 342 FEET TO (15), 555-30W 354 FEET TO (16), 583-30W 295 FEET TO (17), 662-30W 154 FEET TO (18), 676-30W 245 FEET TO (19), 636-30W 262 FEET TO (20), 583-30W 438 FEET TO (21), 621-30E 234 FEET TO (22), 679-00W 78 FEET TO (23), 618-30E 45 FEET TO (24), 631-30W 50 FEET TO (25), 625-30E 195 FEET TO (26), A POINT IN THE CENTER LINE OF KENTUCKY STATE HIGHWAY NO. 22, THENCE WITH THE CENTER LINE OF SAID ROAD 559-00W 134 FEET TO (27), CORNER TO LAND OF DON AYRES, THENCE LEAVING THE SAID HIGHWAY AND WITH HIS LINE 670-00W 149 FEET TO (28), A POINT IN THE PROPERTY LINE FENCE OF ATWOOD AYRES, THENCE WITH HIS SAID FENCE 622-30E 1085 FEET TO (29), A 10' CORNER POST, 564-30E 663 FEET TO (30), AN 8' CORNER POST, 636-30E 708 FEET TO (31), A POINT IN THE PROPERTY LINE FENCE OF J.C. THOMAS, THENCE WITH HIS LINE ON THE SAME COURSE AN ADDITIONAL 102 FEET TO (32), A 14" HICKORY, THENCE 567-00E 762 FEET TO (33), 683-00E 473 FEET TO (34), THENCE WITH THE PROPERTY LINE FENCE N15-00E 623 FEET TO (35), A 20" MAPLE, CORNER TO D.C. DUNAVENT, THENCE WITH HIS LINE 576-30E (CROSSING MUD LICK CREEK AT 60 FEET) A TOTAL DISTANCE OF 767 FEET TO THE POINT OF BEGINNING, BUT SUBJECT TO ALL LEGAL HIGHWAYS.

THERE IS EXCEPTED FROM THE ABOVE BOUNDARY A LOT CONVEYED BY A.J. AYRES AND EDNA MAE AYRES, HIS WIFE, TO BLANTON AND NETTIE GIBSON BY DEED DATED JULY 22, 1971, AND RECORDED IN DEED BOOK 119, PAGE 331, WHICH IS BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE CENTER LINE OF KENTUCKY STATE HIGHWAY NO. 22, WHICH POINT IS N71-30E 240 FEET, N88-02E 1040 FEET ALONG THE CENTER LINE OF SAID HIGHWAY FROM A POINT IN THE CENTER LINE OF SAID HIGHWAY REFERRED TO AS POINT (26) IN THE OUTSIDE BOUNDARY OF SUBJECT TRACT, THENCE FOLLOWING THE EAST SIDE OF A FARM LANE 58-00W 150 FEET TO A STAKE, THENCE 589-00E 150 FEET PARALLEL WITH AND EQUAL DISTANCE FROM THE CENTER LINE OF SAID HIGHWAY TO A STAKE, THENCE 68-00E 150 FEET TO THE CENTER LINE OF SAID HIGHWAY, THENCE FOLLOWING THE CENTER LINE OF THE HIGHWAY 669-00W 150 FEET TO THE POINT OF BEGINNING.

THE ACREAGE PASSING UNDER THIS DEED IS 106.2 ACRES.

**PARENT PARCEL LEGAL DESCRIPTION DEED BOOK 146, PAGE 464 & DEED BOOK 133, PAGE 354 PARCEL ID: 074-00-00-005.00 (NOT FIELD SURVEYED)**

A TRACT OF LAND LOCATED ABOUT THREE MILES EAST OF THE CITY OF OWENTON IN OWEN COUNTY, KENTUCKY, NEAR THE OWENTON AND GRANT COUNTY LINE TURNPIKE, AND DESCRIBED AS FOLLOWS:

BEGINNING AT A 14" HICKORY TREE IN THE CENTER OF BELL CREEK, CORNER TO OTHER LAND OF DANNY JACOBS, THENCE WITH THE CENTER OF BELL CREEK N0°E 587 FEET, N2°30'E 380 FEET, N26°E 282 FEET, N56°30'E 515 FEET, N80°30'E 815 FEET, S65°E 320 FEET TO THE CENTER OF MUD LICK CREEK, THENCE WITH THE CENTER OF MUD LICK CREEK S14°30'W 226 FEET, S23°W 220 FEET, THENCE LEAVING MUD LICK CREEK N68°30'W 183 FEET, S8°W 780 FEET TO A 20" MAPLE TREE IN LINE OF OTHER LAND OF DANNY JACOBS, THENCE WITH THE PROPERTY LINE FENCE OF DANNY JACOBS S15°W 623 FEET, S83°W 473 FEET, AND N67°W 762 FEET TO THE POINT OF BEGINNING, CONTAINING 50.44 ACRES, MORE OR LESS.

**REPORT OF TITLE (PARCEL ID: 074-00-00-004.00)**

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 FIRST AMERICAN TITLE INSURANCE COMPANY, FILE NO. CT-560, ISSUE DATE OF AUGUST 30, 2017 AT 8:00 AM. THE FOLLOWING COMMENTS ARE IN REGARD TO SAID REPORT.

**SCHEDULE B**

- VENDERS LIEN AGAINST DANNY JACOBS, JUDY JACOBS AND KYLE JACOBS IN FAVOR OF CONLEY ANDERSON AND CLEO ANDERSON, FILED NOVEMBER 6, 2007, OF RECORD IN DEED BOOK 223, PAGE 519, IN THE OFFICE AFORESAID. (NOT A LAND SURVEYING MATTER, THEREFORE, POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)
- POSSIBLE JUDGEMENT AGAINST DANNY JACOBS, JUDY JACOBS AND KYLE JACOBS IN FAVOR OF UNIFUND CCR PARTNERS DATED MARCH 27, 2005 OF RECORD IN LIEN BOOK 16, PAGE 347, IN THE OFFICE AFORESAID. (NOT A LAND SURVEYING MATTER, THEREFORE, POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)
- DEED OF EASEMENT BETWEEN HOWARD BISHOP JR AND BESSIE BISHOP, GRANTORS AND DANNY JACOBS AND JUDY JACOBS, GRANTEES OF RECORD IN DEED BOOK 228, PAGE 439, IN THE OFFICE AFORESAID. (EASEMENT AS DESCRIBED IN DEED BOOK 228, PAGE 439 AFFECTS THE PARENT PARCEL, BUT DOES NOT AFFECT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS & UTILITY EASEMENT AND THE PROPOSED UTILITY EASEMENT.)

**REPORT OF TITLE (PARCEL ID: 074-00-00-005.00)**

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 FIRST AMERICAN TITLE INSURANCE COMPANY, FILE NO. CT-563, ISSUE DATE OF OCTOBER 17, 2017 AT 8:00 AM. THE FOLLOWING COMMENTS ARE IN REGARD TO SAID REPORT.

**SCHEDULE B**

- SUBJECT TO THE INTEREST OF BILLY SUSAN JACOBS, NO DIVORCE, WILL OR PROBATE FOUND, (INTEREST WOULD ONLY AFFECT D.B. 146, PG. 464, 50.44 ACRES (NORTHERN PART OF PARENT PARCEL) WHICH IS PART OF PARCEL ID: 074-00-00-005.00, BUT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS & UTILITY EASEMENT AND THE PROPOSED UTILITY EASEMENT ARE ALL ON D.B. 126, PG. 69 (SOUTHERN PART OF PARENT PARCEL).)
- TRANSMISSION LINE EASEMENT BETWEEN AJ AYRES AND EDNA MAE AYRES AND KENTUCKY UTILITIES COMPANY DATED OCTOBER 8, 1970 OF RECORD IN DEED BOOK 118, PAGE 311, IN THE OFFICE AFORESAID. (EASEMENT AS RECORDED IN D.B. 118, PG. 311 AFFECTS THE PARENT PARCEL, BUT DOES NOT AFFECT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS & UTILITY EASEMENT OR THE PROPOSED UTILITY EASEMENT.)
- TRANSMISSION LINE EASEMENT BETWEEN WILLIAM TACKETT AND OLLIE M. TACKETT AND KENTUCKY UTILITIES COMPANY DATED OCTOBER 12, 1970 OF RECORD IN DEED BOOK 118, PAGE 215, IN THE OFFICE AFORESAID. (EASEMENT AS RECORDED IN D.B. 118, PG. 215 AFFECTS THE PARENT PARCEL, BUT DOES NOT AFFECT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS & UTILITY EASEMENT OR THE PROPOSED UTILITY EASEMENT.)

RIGHT OF WAY TO SOUTH CENTRAL BELL TELEPHONE COMPANY OF RECORD IN DEED BOOK 122, PAGE 66 AND 67, IN THE OFFICE AFORESAID. (EASEMENT AS RECORDED IN D.B. 122, PG. 66 & 67 AFFECTS THE PARENT PARCEL, BUT DOES NOT AFFECT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS & UTILITY EASEMENT OR THE PROPOSED UTILITY EASEMENT.)

3. TRANSMISSION LINE EASEMENT BETWEEN DANNY JACOBS AND JUDY JACOBS AND EAST KENTUCKY POWER COOPERATIVE INC. DATED JANUARY 12, 2011 OF RECORD IN DEED BOOK 232, PAGE 359, IN THE OFFICE AFORESAID. (EASEMENT AS RECORDED IN D.B. 232, PG. 359 AFFECTS THE PARENT PARCEL, BUT DOES NOT AFFECT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS & UTILITY EASEMENT OR THE PROPOSED UTILITY EASEMENT.)

4. SELL OFF DEED DATED MAY 6, 2016 BETWEEN DANNY AND JUDY JACOBS AND D & J STORAGE LLC OF RECORD IN DEED BOOK 247, PAGE 103, IN THE OFFICE AFORESAID. (DEED AS RECORDED IN D.B. 247, PG. 103 AFFECTS THE PARENT PARCEL, BUT DOES NOT AFFECT THE PROPOSED LEASE AREA, THE PROPOSED ACCESS & UTILITY EASEMENT OR THE PROPOSED UTILITY EASEMENT AND IS SHOWN HEREON.)

**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*  
MARK PATTERSON, PLS #3136 DATE 5/22/2018



PREPARED FOR:



**SITE SURVEY**

REV.	DATE	DESCRIPTION
A	10.10.17	PRELIM ISSUE WITH TITLE
B	11.1.17	ADDITIONAL TITLE
C	11.16.17	ISSUED AS FINAL
1	03.28.18	ADD UTILITY EASEMENT

**SITE INFORMATION:**

LV KY 22  
HIGHWAY 22 EAST  
OWENTON, KY 40359  
OWEN COUNTY  
  
TAX PARCEL NUMBER:  
074-00-00-004.00 / 14915  
074-00-00-005.00 / 9323  
  
PROPERTY OWNER:  
DANNY W. AND JUDITH L. JACOBS  
1915 HIGHWAY 127 NORTH  
OWENTON, KY 40359  
  
SOURCE OF TITLE:  
DEED BOOK 245, PAGE 498  
DEED BOOK 126, PAGE 69

POD NUMBER: 17-18040  
DRAWN BY: TMD  
CHECKED BY: MEF  
SURVEY DATE: 10.2.17  
PLAT DATE: 10.9.17

SHEET TITLE:

**SITE SURVEY**

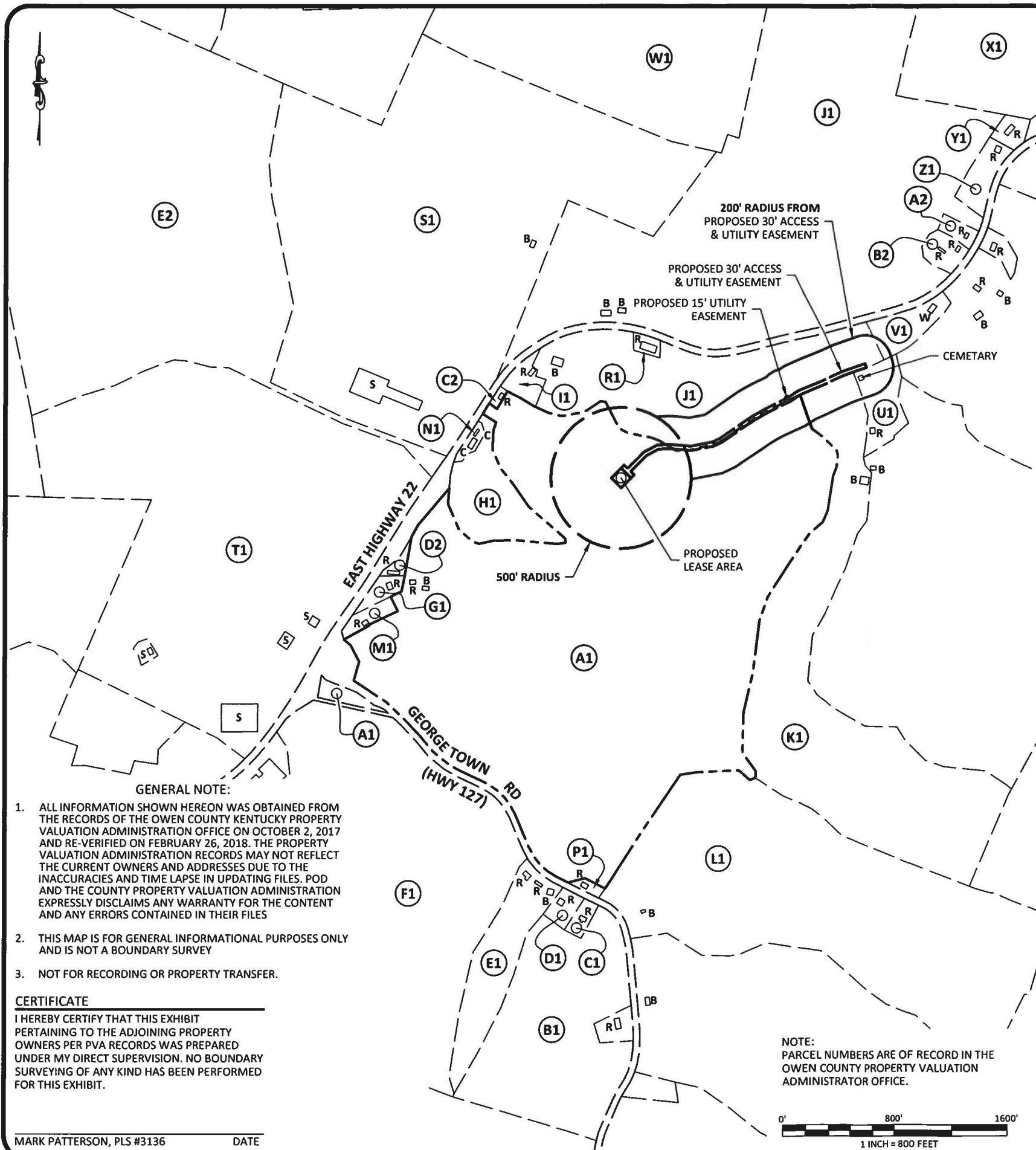
SHEET NUMBER:  
**B-1.5**

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**EXHIBIT J**

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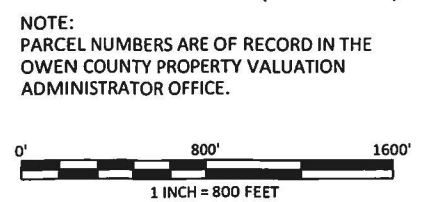
**EXISTING BUILDINGS**  
 R = RESIDENCE  
 B = BARN  
 S = SCHOOL BUILDING  
 W = WAREHOUSE  
 C = CHURCH

- (A1)** PARCEL ID: 074-00-00-004.00  
JACOBS DANNY & JUDY  
1915 HWY 127N  
OWENTON, KY 40359
- (B1)** PARCEL ID: 062-00-00-026.00  
ANDERSON RONNIE  
715 GEORGETOWN RD  
OWENTON, KY 40359
- (C1)** PARCEL ID: 062-00-00-026.02  
GREENE TRAVIS & JAMIE L  
525 GEORGETOWN RD  
OWENTON, KY 40359
- (D1)** PARCEL ID: 062-00-00-026.01  
NEW PATRICK  
2640 OLD FRANKFORT PIKE  
OWENTON, KY 40359
- (E1)** PARCEL ID: 062-00-00-023.00  
CAULLEY JEFFREY & VICKIE  
435 GEORGETOWN RD  
OWENTON, KY 40359
- (F1)** PARCEL ID: 062-00-00-022.00  
JUDY H JONES IRREVOCABLE INTER VIVOS  
c/o VICTORIA K PAGE  
PO BOX 696  
FLORENCE, KY 41022
- (G1)** PARCEL ID: 074-00-00-004.05  
JACOBS DANNY & JUDY and  
KYLE JACOBS  
775 E ADAIR ST, PO BOX 592  
OWENTON, KY 40359
- (H1)** PARCEL ID: 074-00-00-006.00  
VICTORY BAPTIST CHURCH  
2465 HWY 22 E  
OWENTON, KY 40359
- (I1)** PARCEL ID: 074-00-00-002.00  
JACOBS RICKY  
2605 HWY 22E  
OWENTON, KY 40359
- (J1)** PARCEL ID: 074-00-00-005.00  
JACOBS DANNY & JUDY  
1915 HWY 127N  
OWENTON, KY 40359
- (K1)** PARCEL ID: 074-00-00-008.01  
BOURNE MELODY  
2469 EASTWAY DR  
LEXINGTON, KY 40503
- (L1)** PARCEL ID: 074-00-00-018.00  
COLE TODD  
12215 GAINES WAY  
WALTON, KY 41094
- (M1)** PARCEL ID: 074-00-00-004.03  
JACOBS DANNY & JUDY and  
KYLE JACOBS  
775 E ADAIR ST, PO BOX 592  
OWENTON, KY 40359
- (N1)** PARCEL ID: 074-00-00-007.00  
VICTORY BAPTIST CHURCH  
HWY 22  
OWENTON, KY 40359
- (O1)** PARCEL ID: 061-00-00-029.00  
JACOBS FARMS LLC  
537 SEBREE RD  
STAMPING GROUND, KY 40379
- (P1)** PARCEL ID: 074-00-00-004.01  
MILLER DONNA  
490 GEORGETOWN RD  
OWENTON, KY 40359
- (Q1)** PARCEL ID: 062-00-00-026.03  
ANDERSON RONNIE  
715 GEORGETOWN RD  
OWENTON, KY 40359
- (R1)** PARCEL ID: 074-00-00-002.06  
GENTRY TERRY & HILARI  
2785 HWY 22E  
OWENTON, KY 40359
- (S1)** PARCEL ID: 061-00-00-035.00  
OWEN COUNTY BOARD OF EDUCATION  
1600 HWY 22E  
OWENTON, KY 40359
- (T1)** PARCEL ID: 061-00-00-033.00  
OWEN COUNTY BOARD OF EDUCATION  
1600 HWY 22E  
OWENTON, KY 40359
- (U1)** PARCEL ID: 074-00-00-008.00  
BOURNE MELODY ROSE  
2469 EASTWAY DR  
LEXINGTON, KY 40503
- (V1)** PARCEL ID: 074-00-00-005.01  
D & J STORAGE LLC  
c/o DANNY & JUDY JACOBS  
1915 HWY 127N  
OWENTON, KY 40359
- (W1)** PARCEL ID: 073-00-00-026.00  
WRIGHT JEFFREY  
BETTY WRIGHT (LIFE ESTATE)  
1375 OLD SWEET OWEN RD  
OWENTON, KY 40359
- (X1)** PARCEL ID: 073-00-00-025.00  
DUNAVENT JOYCE  
3490 HWY 22E  
OWENTON, KY 40359
- (Y1)** PARCEL ID: 074-00-00-002.01  
BARNES CALVIN  
3430 HWY 22E  
OWENTON, KY 40359
- (Z1)** PARCEL ID: 074-00-00-002.02  
TOLBERT PAULETTE and  
ALLISON TOLBERT  
3400 HWY 22E  
OWENTON, KY 40359
- (A2)** PARCEL ID: 074-00-00-002.04  
JACOBS DANNY & JUDY  
1915 HWY 127N  
OWENTON, KY 40359
- (B2)** PARCEL ID: 074-00-00-002.05  
TURNER PATRICIA ANN  
PO BOX 212  
OWENTON, KY 40359
- (C2)** PARCEL ID: 074-00-00-004.04  
RIDDLE LISA C  
2575 HWY 22E  
OWENTON, KY 40359
- (D2)** PARCEL ID: 074-00-00-004.02  
LOWE LETHA B ETAL  
150 KERNS LN  
JONESVILLE, KY 41052

**GENERAL NOTE:**

- ALL INFORMATION SHOWN HEREON WAS OBTAINED FROM THE RECORDS OF THE OWEN COUNTY KENTUCKY PROPERTY VALUATION ADMINISTRATION OFFICE ON OCTOBER 2, 2017 AND RE-VERIFIED ON FEBRUARY 26, 2018. 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
- THIS MAP IS FOR GENERAL INFORMATIONAL PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY
- 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.



MARK PATTERSON, PLS #3136      DATE

PREPARED BY:  
**POD**  
 POWER OF DESIGN  
 11490 BLUEGRASS PARKWAY  
 LOUISVILLE, KY 40299  
 502-437-5252

PREPARED FOR:  
**verizon**  
 D/B/A  
**CELLCO PARTNERSHIP**

**EXHIBIT**

REV.	DATE	DESCRIPTION
A	02.27.18	ISSUED FOR REVIEW

**SITE INFORMATION:**  
**LV KY 22**  
 HIGHWAY 22 EAST  
 OWENTON, KY 40359  
 OWEN COUNTY

**TAX PARCEL NUMBER:**  
 074-00-00-004.00 / 14915  
 074-00-00-005.00 / 9323

**PROPERTY OWNER:**  
 DANNY W. AND JUDITH L. JACOBS  
 1915 HIGHWAY 127 NORTH  
 OWENTON, KY 40359

**SOURCE OF TITLE:**  
 DEED BOOK 245, PAGE 498  
 DEED BOOK 126, PAGE 69

POD NUMBER: 18-20993  
 DRAWN BY: CPM  
 CHECKED BY: MEP  
 SURVEY DATE: 10.2.17  
 PLAT DATE: 02.27.18

SHEET TITLE:  
**500' RADIUS AND ABUTTERS MAP**

SHEET NUMBER: (1 page)  
**B-2**

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**EXHIBIT K**

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**Notice of Proposed Construction of  
Wireless Communications Facility  
Site Name: KY 22**

Cellco Partnership, d/b/a Verizon Wireless has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at Highway 22 East, Owenton, KY, 40359 (North Latitude: (38° 31' 43.55", West Longitude 84° 47' 57.84"). The proposed facility will include a 255-foot tall antenna tower, plus a 5-foot lightning arrestor and 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 2018-00401 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

enclosure  
[www.clarkquinnlw.com](http://www.clarkquinnlw.com)

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**EXHIBIT L**

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VIA CERTIFIED MAIL

Hon. Casey Ellis  
100 N. Thomas Street  
Owenton, KY 40359

RE: Notice of Proposal to Construct Wireless Communications Facility  
Kentucky Public Service Commission Docket No. 2018- 00401  
Site Name: KY 22

Dear Judge Ellis:

Cellco Partnership, d/b/a Verizon Wireless has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at Highway 22 East, Owenton, KY, 40359 (North Latitude: (38° 31' 43.55", West Longitude 84° 47' 57.84"). The proposed facility will include a 255-foot tall antenna tower, plus a 5-foot lightning arrestor and 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 2018-00401 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 Applicants

enclosure

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**EXHIBIT M**

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## SITE NAME: KY 22 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 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 2018-00401 in your correspondence.

Cellco Partnership, d/b/a Verizon Wireless 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 2018-00401 in your correspondence.

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**EXHIBIT N**

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VIA TELEPHONE: 502-484-3431

Owenton News Herald  
154 West Bryan Street  
Owenton, Ky. 40359

RE: Legal Notice Advertisement  
Site Name: KY 22

Dear Owenton News Herald:

Please publish the following legal notice advertisement in the next edition of the *Owenton News Herald*:

**NOTICE**

**Cellco Partnership, d/b/a Verizon Wireless has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at Highway 22 East, Owenton, KY, 40359 (North Latitude: (38° 31' 43.55", West Longitude 84° 47' 57.84"). 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 2018-00401 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. Please call me or Elizabeth Bentz Williams, in our offices at (317) 637-1321 if you have any questions. Thank you for your assistance.

Sincerely

Russell L. Brown  
Clark, Quinn, Moses, Scott & Grahn, LLC

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**EXHIBIT O**

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**Aerial Map of Proposed Site**



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**EXHIBIT P**

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Monday, February 12, 2018

RE: Proposed Verizon Wireless Communications Facility

Site Name: **KY 22**

Type of Tower: 260' Self Support

Location: near 1915 HWY 127 N, Owenton KY 40359.

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 **KY 22**.

The **KY 22** site is proposed with the below objectives:

1. Offload 4G traffic from busy site to the West.
2. Improve 4G throughput to existing heavy data users.
3. Improve 4G network reliability by increasing the amount of time our customers operate on 4G instead of 3G.

Currently the area is experiencing high demand for wireless high-speed data. Growth forecasts have triggered the need for an additional site in the area. The tower is needed to provide all Verizon customers in the area with the best experience on their 4G wireless devices.

Raw Land – Design plans for a new tower would provide tower height of **260'** with a Verizon Wireless Centerline of **250'**. The new structure height was decided upon to best cover the offload area and interact with the 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 shoot 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 will be placed near the center of the area with high traffic demand and offload the surrounding sites greatly. The new tower design meets stated objectives.

Verizon Wireless cares about the communities as well as the environment and prefers to collocate on existing structures when available. It can be noticed from any map that 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 **KY 22** site.



KET (FCC ID: 1048215) –As mentioned earlier in this letter, having a Centerline that is too tall can overshoot adjacent towers as well as intended coverage area. The available centerline on this tower is too high to meet the intended objectives. Therefore Verizon does not feel this site meets our customer's needs and is not viable.

Kentucky American Water operates a water tank approx. 135' west outside the demand area (N38° 31' 30.29" W84° 48' 51.55"). This tank is approx. 150' tall and therefore would not provide adequate height of 255'. Therefore Verizon does not feel this site meets our customer's needs and is not viable.

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,

Faiz Mohammed.

A handwritten signature in black ink, appearing to read "Faiz Mohammed", written over a rectangular box.

RF Engineer, Verizon Wireless

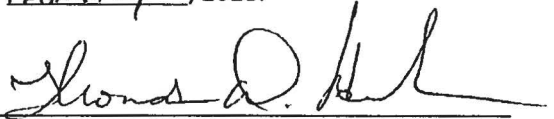


STATE OF INDIANA

COUNTY OF HAMILTON

Subscribed and sworn to before me this 13<sup>th</sup> day of FEBRUARY, 2018.

Notary Public

Signature 

THOMAS D. HERNDON  
Notary Public, State of Indiana  
SEAL  
My Commission Expires 9/2/2023

Printed THOMAS D. HERNDON

County of Residence HAMILTON

My Commission expires:

9-2-2023



Monday, February 12<sup>th</sup>, 2018.

RE: Owen County Zoning Plots

Site Name: KY 22

To Whom It May Concern:

This map is not a guarantee of coverage and may contain areas with no service. This map reflects a depiction of predicted and approximate wireless coverage of the network and is intended to provide a relative comparison of coverage. The depictions of coverage do not guarantee service availability as there are many factors that can influence coverage and service availability. These factors vary from location to location and change over time. The coverage areas may include locations with limited or no coverage. Even within a coverage area shown, there are many factors, including but not limited to, usage volumes, service, outage, and customer's equipment, and terrain, proximity to buildings, foliage, and weather that may impact service.

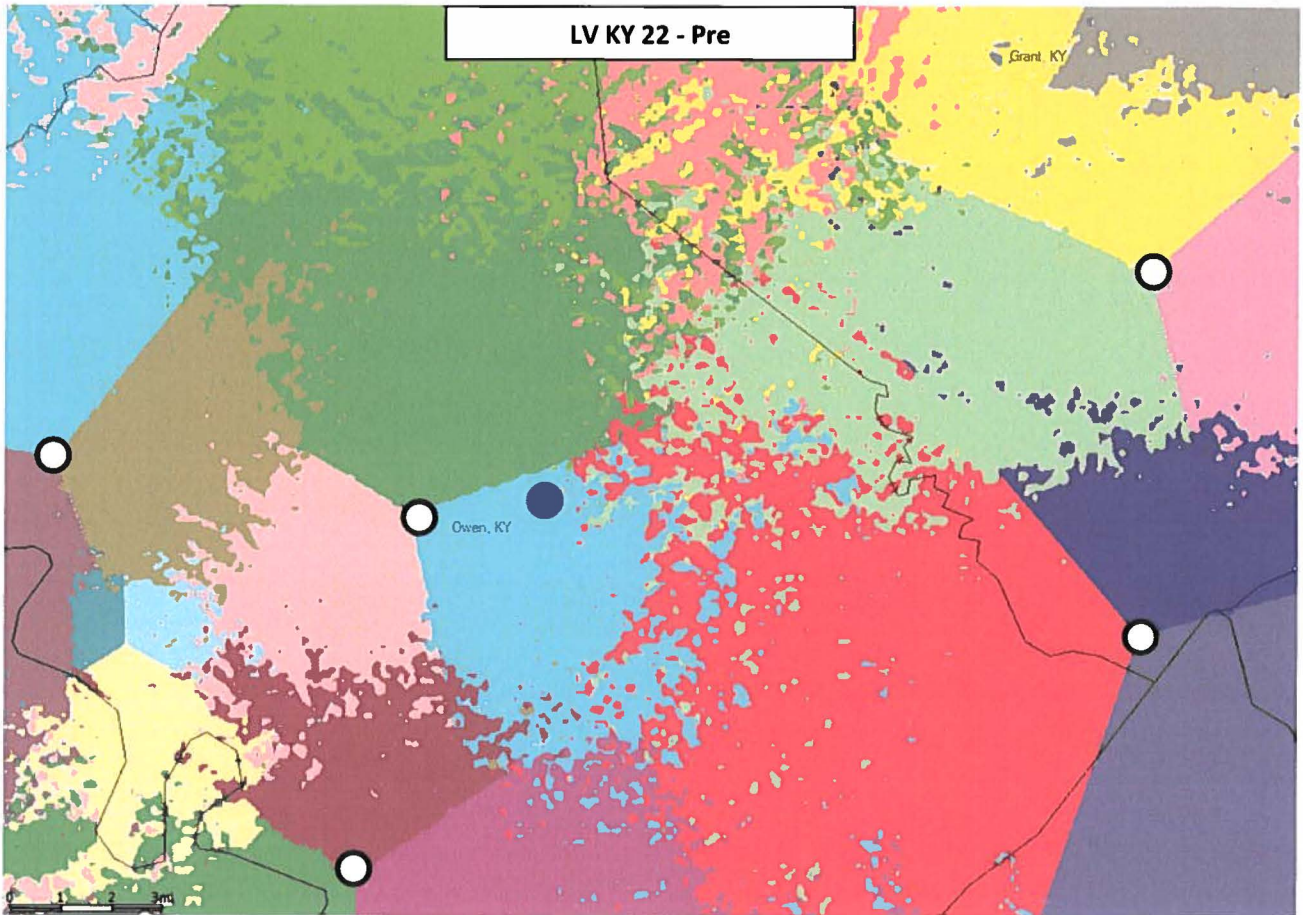
The proposed site is needed to offload capacity from existing sites. This map reflects the predicted coverage area that will be offloaded from existing sites and transferred to the proposed site.

Faiz Mohammed

RF Engineer, Verizon Wireless

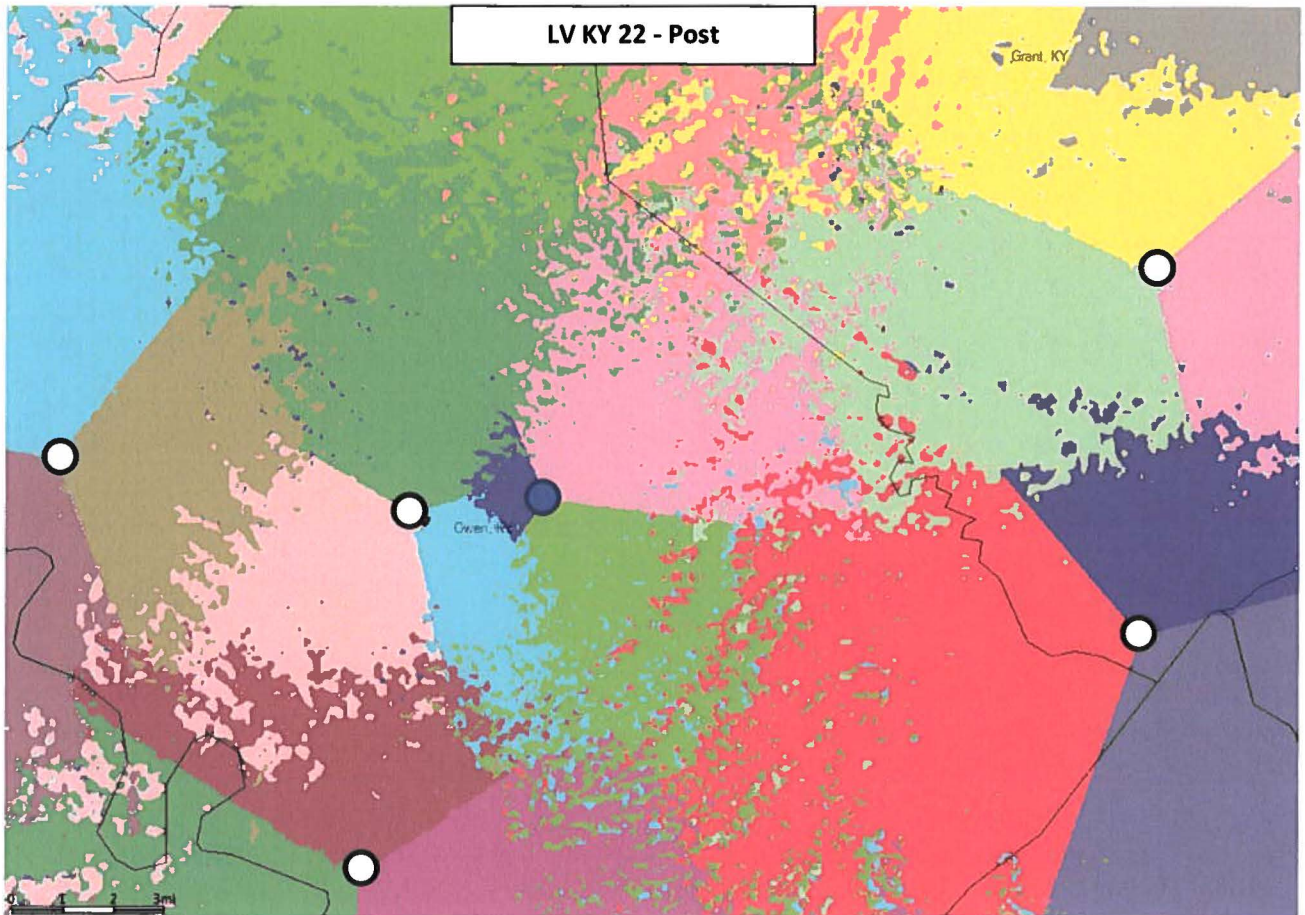
**Note: Confidential**  
**Verizon Wireless**  
**document - For OWEN**  
**County Staff and BZA**  
**only. DO NOT**  
**distribute to public.**





**Note: Confidential Verizon Wireless document - For OWEN County Staff and BZA only. DO NOT distribute to public.**

Legend:	
Existing Verizon Sites	○
Proposed Verizon Site	●
Future Verizon Site	○
County Border	-----



**Note: Confidential**  
**Verizon Wireless**  
**document - For OWEN**  
**County Staff and BZA**  
**only. DO NOT**  
**distribute to public.**

**Legend:**

- Existing Verizon Sites      ○
- Proposed Verizon Site      ●
- Future Verizon Site      ○
- County Border      -----

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## **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
- D Tower and Foundation Design
- E Competing Utilities, Corporations, or Persons List  
And Map of Like Facilities in Vicinity
- F FAA
- G Geotechnical Report
- H Directions to WCF Site
- I Copy of Real Estate Agreement
- J Notification Listing
- K Copy of Property Owner Notification
- L Copy of County Judge/Executive notice
- M Copy of Posted Notices
- N Copy of Newspaper Legal Notice Advertisement
- O Copy of Radio Frequency Design Search Area
- P Copy of RF Design Engineer State of Need