

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

**RECEIVED**

**NOV 20 2018**

**PUBLIC SERVICE  
COMMISSION**

In the Matter of:

THE APPLICATION OF )  
NEW CINGULAR WIRELESS PCS, LLC, )  
A DELAWARE LIMITED LIABILITY COMPANY, )  
D/B/A AT&T MOBILITY )  
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC )  
CONVENIENCE AND NECESSITY TO CONSTRUCT )  
A WIRELESS COMMUNICATIONS FACILITY )  
IN THE COMMONWEALTH OF KENTUCKY )  
IN THE COUNTY OF POWELL )

CASE NO.: 2018-00375

SITE NAME: PILOT ROAD

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

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility ("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: New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility, having a local address of Meidinger Tower, 462 S. 4<sup>th</sup> Street, Suite 2400, Louisville, Kentucky 40202.

2. 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.

3. The Certificate of Authority filed with the Kentucky Secretary of State for the Applicant entity was attached to a prior application and is part of the case record for PSC case number 2011-00473 and is hereby incorporated by reference.

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 A**, 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. The WCF will provide a necessary link in the Applicant's communications network that is designed to meet the increasing demands



for wireless services in Kentucky's wireless communications service area. The WCF is an integral link in 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 Pilot Road, Stanton, Kentucky 40380 (37°45'48.43" North latitude, 83°45'59.93" 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 Malena Hall pursuant to a Deed recorded at Deed Book 153, Page 277 in the office of the County Clerk. The proposed WCF will consist of a 305-foot tall tower, with an approximately 15-foot tall lightning arrestor attached at the top, for a total height of 320-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 B** and **Exhibit C**.

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

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 B**.

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 C**.

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 E**.

12. A copy of the Kentucky Airport Zoning Commission ("KAZC") Approval to construct the tower is attached as **Exhibit F**.

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

exhibit.

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 C** bear the signature and stamp of a professional engineer registered in the Commonwealth of Kentucky. All tower designs meet or exceed the minimum requirements of applicable laws and regulations.

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

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

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

illustrated in **Exhibit B**.

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 has been informed of his or her right to request intervention. A list of the notified property owners and a copy of the form of the notice sent by certified mail to each landowner are attached as **Exhibit J** and **Exhibit K**, respectively.

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 part of **Exhibit M**.

23. The general area where the proposed facility is to be located is mountainous and heavily wooded. There are no existing residential structures within 500-feet of the proposed site location.

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 N**.

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. In addition to expanding and improving voice and data service for AT&T mobile customers, this site will also provide wireless local loop ("WLL") broadband internet service in the subject area. As a participant in the FCC's Connect America Fund Phase II (CAF II)

program, AT&T is aggressively deploying WLL service infrastructure to bring expanded internet access to residential and business customers in rural and other underserved areas. WLL will support internet access at the high speeds required to use and enjoy the most current business, education and entertainment technologies. Broadband service via WLL will be delivered from the tower to a dedicated antenna located at the home or business receiving service and will support downloads at 10 Mbps and uploads at 1 Mbps.

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:

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

**WHEREFORE**, 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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David A. Pike  
Pike Legal Group, PLLC  
1578 Highway 44 East, Suite 6  
P. O. Box 369  
Shepherdsville, KY 40165-0369  
Telephone: (502) 955-4400  
Telefax: (502) 543-4410  
Email: dpike@pikelegal.com  
Attorney for New Cingular Wireless PCS, LLC  
d/b/a AT&T Mobility

**EXHIBIT A**  
**FCC LICENSE DOCUMENTATION**



**REFERENCE COPY**

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



**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

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

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 06-02-2015	<b>Effective Date</b> 06-13-2017	<b>Expiration Date</b> 06-23-2025	<b>Print Date</b>
<b>Market Number</b> MTA026	<b>Channel Block</b> A	<b>Sub-Market Designator</b> 15	
<b>Market Name</b> Louisville-Lexington-Evansville			
<b>1st Build-out Date</b> 06-23-2000	<b>2nd Build-out Date</b> 06-23-2005	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

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

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.

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

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

**Call Sign:** KNLF251

**File Number:**

**Print Date:**

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

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

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

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

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**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

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

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 04-14-2017	<b>Effective Date</b> 06-14-2017	<b>Expiration Date</b> 04-28-2027	<b>Print Date</b>
<b>Market Number</b> BTA252	<b>Channel Block</b> D	<b>Sub-Market Designator</b> 0	
<b>Market Name</b> Lexington, KY			
<b>1st Build-out Date</b> 04-28-2002	<b>2nd Build-out Date</b>	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

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

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).

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**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

<b>Call Sign</b> KNKN841	<b>File Number</b>
<b>Radio Service</b> CL - Cellular	
<b>Market Numer</b> CMA452	<b>Channel Block</b> A
<b>Sub-Market Designator</b> 0	

FCC Registration Number (FRN): 0003291192

<b>Market Name</b> Kentucky 10 - Powell
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<b>Grant Date</b> 08-30-2011	<b>Effective Date</b> 06-13-2017	<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.
5	37-04-39.7 N	082-48-27.8 W	856.5	95.4	1061533

Address: 103 TOWER HILL ROAD (76337)

City: WHITESBURG County: LETCHER State: KY Construction Deadline:

<b>Antenna: 1 Azimuth (from true north)</b>	0	45	90	135	180	225	270	315
<b>Antenna Height AAT (meters)</b>	469.200	417.400	315.300	222.000	132.100	356.800	457.700	492.500
<b>Transmitting ERP (watts)</b>	12.022	8.233	13.016	5.482	3.813	0.108	1.481	5.717
<b>Antenna: 2 Azimuth (from true north)</b>	0	45	90	135	180	225	270	315
<b>Antenna Height AAT (meters)</b>	469.200	417.400	315.300	222.000	132.100	356.800	457.700	492.500
<b>Transmitting ERP (watts)</b>	0.497	0.110	0.136	2.162	18.537	40.538	17.478	2.020
<b>Antenna: 3 Azimuth (from true north)</b>	0	45	90	135	180	225	270	315
<b>Antenna Height AAT (meters)</b>	469.200	417.400	315.300	222.000	132.100	356.800	457.700	492.500
<b>Transmitting ERP (watts)</b>	51.423	16.329	8.850	0.158	2.803	14.815	46.596	45.493

**Conditions:**

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
7	37-48-18.3 N	083-50-24.1 W	403.3	106.4	1043803

Address: 3690 Furnace Road (76341)

City: STANTON County: POWELL State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	239.600	224.300	179.900	162.000	195.500	176.800	262.600	283.200
Transmitting ERP (watts)	13.906	21.652	8.665	5.943	0.123	2.628	9.451	19.854
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	239.600	224.300	179.900	162.000	195.500	176.800	262.600	283.200
Transmitting ERP (watts)	0.562	11.483	60.345	87.582	20.025	2.235	0.703	0.268
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	239.600	224.300	179.900	162.000	195.500	176.800	262.600	283.200
Transmitting ERP (watts)	1.261	0.189	0.376	1.717	22.517	83.071	60.872	9.440

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
8	37-25-58.7 N	084-00-12.8 W	422.1	96.6	1043802

Address: 1 MILE NW OF MCKEE (76343)

City: MCKEE County: JACKSON State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	139.700	155.200	150.500	131.100	145.400	147.600	127.600	123.400
Transmitting ERP (watts)	26.126	93.835	72.381	11.143	1.397	0.214	0.430	1.977
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	139.700	155.200	150.500	131.100	145.400	147.600	127.600	123.400
Transmitting ERP (watts)	0.119	1.588	5.852	12.166	8.174	13.032	5.144	3.553
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	139.700	155.200	150.500	131.100	145.400	147.600	127.600	123.400
Transmitting ERP (watts)	17.060	5.344	6.326	3.080	2.938	13.608	19.087	18.277

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
11	37-43-36.1 N	083-56-30.1 W	428.5	105.2	1041588

Address: 1850 Chestnut Stand Road (76344)

City: IRVINE County: ESTILL State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	268.100	191.200	185.400	224.200	235.300	293.800	271.800	266.500
Transmitting ERP (watts)	21.827	35.355	13.530	9.226	0.129	4.117	15.601	31.961
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	268.100	191.200	185.400	224.200	235.300	293.800	271.800	266.500
Transmitting ERP (watts)	0.672	14.167	72.140	103.407	24.559	2.608	0.888	0.327
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	268.100	191.200	185.400	224.200	235.300	293.800	271.800	266.500
Transmitting ERP (watts)	1.492	0.235	0.449	2.041	27.595	98.921	76.583	11.514

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
12	37-22-08.0 N	083-00-10.8 W	529.7	108.2	1043800

Address: 792 AMON FINLEY ROAD (76338)

City: HINDMAN County: KNOTT State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	231.800	219.900	201.700	233.100	202.300	239.000	278.600	245.800
Transmitting ERP (watts)	345.918	142.771	15.858	3.731	0.807	1.018	16.311	138.097
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	231.800	219.900	201.700	233.100	202.300	239.000	278.600	245.800
Transmitting ERP (watts)	1.551	31.288	164.802	238.390	59.476	6.231	2.030	0.777
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	231.800	219.900	201.700	233.100	202.300	239.000	278.600	245.800
Transmitting ERP (watts)	4.316	0.653	1.244	5.580	75.771	271.432	209.105	33.455

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
13	37-44-34.1 N	083-32-43.4 W	360.0	86.6	1043799

Address: 1726 KY 746 (76340)

City: CAMPTON County: WOLFE State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	105.200	129.700	112.600	121.800	158.600	129.600	97.300	142.500
Transmitting ERP (watts)	113.535	44.045	5.001	1.193	0.243	0.337	5.446	43.123
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	105.200	129.700	112.600	121.800	158.600	129.600	97.300	142.500
Transmitting ERP (watts)	0.641	12.645	67.380	97.109	22.543	2.584	0.854	0.294
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	105.200	129.700	112.600	121.800	158.600	129.600	97.300	142.500
Transmitting ERP (watts)	0.787	0.112	0.226	1.022	13.467	50.517	39.258	5.570

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
14	37-45-19.1 N	083-20-19.6 W	362.7	93.9	1058724

Address: 929 LEE CITY ROAD (76347)

City: LEE CITY County: WOLFE State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	160.500	126.900	136.400	100.600	123.400	127.200	118.400	134.900
Transmitting ERP (watts)	105.412	44.973	4.744	1.221	0.238	0.320	5.172	42.213
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	160.500	126.900	136.400	100.600	123.400	127.200	118.400	134.900
Transmitting ERP (watts)	0.595	12.504	63.904	97.920	22.073	2.452	0.810	0.293
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	160.500	126.900	136.400	100.600	123.400	127.200	118.400	134.900
Transmitting ERP (watts)	1.345	0.215	0.399	1.899	24.230	89.305	69.406	10.402



Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
15	37-11-21.8 N	083-10-57.4 W	577.6	156.1	1204858

Address: 2620 FOURSEAM BUFFALO ROAD (76349)

City: Hazard County: PERRY State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	361.100	304.700	308.200	300.700	255.900	299.100	341.500	375.800
Transmitting ERP (watts)	120.607	50.344	5.408	1.326	0.280	0.356	5.726	47.544
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	361.100	304.700	308.200	300.700	255.900	299.100	341.500	375.800
Transmitting ERP (watts)	1.079	22.080	114.046	169.090	41.240	4.315	1.412	0.525
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	361.100	304.700	308.200	300.700	255.900	299.100	341.500	375.800
Transmitting ERP (watts)	1.561	0.241	0.451	2.076	27.836	99.507	76.454	11.774

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
16	37-12-40.4 N	082-36-36.9 W	716.0	128.0	1222747

Address: 699 LINRAN DRIVE (76350)

City: JENKINS County: LETCHER State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	449.600	258.900	252.200	271.800	242.200	295.700	300.600	326.500
Transmitting ERP (watts)	0.562	0.658	0.841	0.365	0.110	0.096	0.097	0.214
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	449.600	258.900	252.200	271.800	242.200	295.700	300.600	326.500
Transmitting ERP (watts)	0.390	0.116	0.125	0.832	9.565	30.462	19.683	2.648
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	449.600	258.900	252.200	271.800	242.200	295.700	300.600	326.500
Transmitting ERP (watts)	48.868	7.353	1.008	0.183	0.318	2.103	23.291	76.831



Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
17	37-25-28.5 N	082-56-07.1 W	514.8	93.0	1246019

Address: 6068 EAST HIGHWAY 80 (80850)

City: Hindman County: KNOTT State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	232.300	300.300	246.700	186.200	173.800	220.100	214.400	203.300
Transmitting ERP (watts)	93.499	72.680	16.930	6.754	0.249	1.848	15.549	67.492
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	232.300	300.300	246.700	186.200	173.800	220.100	214.400	203.300
Transmitting ERP (watts)	2.853	28.250	86.426	109.267	48.855	9.880	5.119	1.857
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	232.300	300.300	246.700	186.200	173.800	220.100	214.400	203.300
Transmitting ERP (watts)	6.962	1.659	2.458	7.317	48.522	94.690	98.650	28.609

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
18	37-24-06.7 N	083-54-56.1 W	400.2	93.0	1252879

Address: 664 STATE ROAD 1071 (86076)

City: MCKEE County: JACKSON State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	182.900	174.200	158.700	146.400	115.600	116.900	95.600	99.100
Transmitting ERP (watts)	59.149	48.638	10.534	4.195	0.155	1.251	10.442	44.296
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	182.900	174.200	158.700	146.400	115.600	116.900	95.600	99.100
Transmitting ERP (watts)	2.874	30.589	89.034	109.683	50.425	10.217	5.307	1.868
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	182.900	174.200	158.700	146.400	115.600	116.900	95.600	99.100
Transmitting ERP (watts)	4.331	3.245	3.900	5.785	17.854	17.299	21.960	12.442

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
19	37-39-54.7 N	083-57-20.9 W	415.1	62.2	1272311

Address: 698 Little Doe Creek Road (109702)

City: Estill County: ESTILL State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	189.600	137.300	216.800	140.600	175.000	209.200	242.000	246.700
Transmitting ERP (watts)	147.672	98.700	12.008	4.052	0.328	0.354	9.692	72.782
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	189.600	137.300	216.800	140.600	175.000	209.200	242.000	246.700
Transmitting ERP (watts)	0.502	21.583	90.846	147.900	51.365	5.484	1.333	0.318
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	189.600	137.300	216.800	140.600	175.000	209.200	242.000	246.700
Transmitting ERP (watts)	8.223	1.146	0.387	4.798	55.608	132.151	134.692	33.348

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
20	37-54-33.3 N	083-55-30.3 W	431.9	78.6	1245218

Address: 2271B BLACK CREEK ROAD (76353)

City: CLAY County: POWELL State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	225.200	233.700	158.700	270.200	295.200	285.300	261.400	231.600
Transmitting ERP (watts)	0.138	2.791	14.890	20.205	4.916	0.538	0.179	0.103

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
21	37-14-49.4 N	083-19-33.9 W	432.8	93.6	1272180

Address: Dogwood Ln (106520)

City: Busy County: PERRY State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	172.100	163.400	158.200	101.100	131.500	140.000	142.300	199.400
Transmitting ERP (watts)	155.239	65.080	4.886	0.516	0.312	0.310	9.765	73.998
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	172.100	163.400	158.200	101.100	131.500	140.000	142.300	199.400
Transmitting ERP (watts)	1.558	22.222	110.717	145.006	30.764	1.939	0.302	0.269

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKN841

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
21	37-14-49.4 N	083-19-33.9 W	432.8	93.6	1272180

Address: Dogwood Ln (106520)

City: Busy County: PERRY State: KY Construction Deadline:

Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	172.100	163.400	158.200	101.100	131.500	140.000	142.300	199.400
Transmitting ERP (watts)	1.049	0.313	0.291	4.476	43.772	139.964	106.333	12.797

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
22	37-10-34.0 N	082-53-47.0 W	576.1	123.4	1252950

Address: 1125 ARTHURS LOOP(85581)

City: Isom County: LETCHER State: KY Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	235.200	224.500	218.400	188.600	210.000	292.300	197.500	250.000
Transmitting ERP (watts)	197.029	81.390	8.984	2.219	0.445	0.571	9.626	76.319
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	235.200	224.500	218.400	188.600	210.000	292.300	197.500	250.000
Transmitting ERP (watts)	0.557	11.226	58.900	88.634	20.717	2.200	0.784	0.268
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	235.200	224.500	218.400	188.600	210.000	292.300	197.500	250.000
Transmitting ERP (watts)	2.584	0.390	0.738	3.418	44.259	159.691	132.673	19.036

**Control Points:**

Control Pt. No. 1

Address: 1650 Lyndon Farms Court

City: LOUISVILLE County: State: KY Telephone Number: (502)329-4700

**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).

WE MAKE NO FINDING IN THESE CASES CONCERNING THE ISSUES RAISED IN FOOTNOTE 3 OF LA STAR CELLULAR TELEPHONE COMPANY, 7 FCC Rcd 3762 (1992). THEREFORE, THESE GRANTS OF TRANSFERS/ASSIGNMENTS ARE CONDITIONED ON ANY SUBSEQUENT ACTION THE COMMISSION MAY TAKE C

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

**Call Sign:** KNKN841

**File Number:**

**Print Date:**

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

Reference Copy

**REFERENCE COPY**

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



**Federal Communications Commission**

**Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

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

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 05-27-2015	<b>Effective Date</b> 06-14-2017	<b>Expiration Date</b> 06-23-2025	<b>Print Date</b>
<b>Market Number</b> MTA026	<b>Channel Block</b> A	<b>Sub-Market Designator</b> 19	
<b>Market Name</b> Louisville-Lexington-Evansvill			
<b>1st Build-out Date</b> 06-23-2000	<b>2nd Build-out Date</b> 06-23-2005	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

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

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.

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

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

**Call Sign:** WPOI255

**File Number:**

**Print Date:**

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

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

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

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

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



**Federal Communications Commission  
Wireless Telecommunications Bureau**

**Spectrum Leasing Arrangement**

ATTN: REGINALD YOUNGBLOOD  
NEW CINGULAR WIRELESS PCS LLC  
3300 E RENNER ROAD, B3132  
RICHARDSON, TX 75082

Date: 02/09/2018  
Reference Number:

This approval allows the Lessee to lease spectrum from the Licensee pursuant to the provisions and requirements of Subpart X of Part 1 of the Commission's Rules, 47 C.F.R. Part 1, and as described in the associated spectrum leasing application or notification.

Type of Lease Arrangement	Lease Term	Lease Identifier
Spectrum Manager Lease	Short Term	L000019467

Lease Grant/Accepted Date	Lease Commencement Date	Lease Expiration Date
06/01/2016	03/30/2016	03/30/2017

Call Sign	Radio Service
WQDI527	CW - PCS Broadband

**Lessee Information**

0003291192  
NEW CINGULAR WIRELESS PCS LLC  
Attn: REGINALD YOUNGBLOOD  
3300 E RENNER ROAD, B3132  
RICHARDSON, TX 75082

**Licensee Information**

0003290673  
CELLCO PARTNERSHIP  
Attn: REGULATORY  
5055 NORTH POINT PKWY, NP2NE NETWORK ENGINEERING  
ALPHARETTA, GA 30022

<b>Geographically-Licensed Services</b>		
Market Number	Market Name	Channel Block
BTA252	Lexington, KY	C

**Condition:**  
 This lease may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum associated with this leasing agreement, 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.

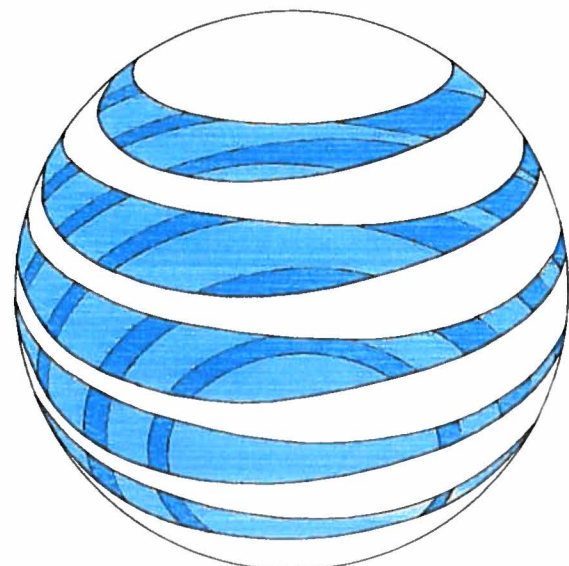
**Conditions:**  
 Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license 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.



**EXHIBIT B**

**SITE DEVELOPMENT PLAN:**

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



# at&t

SITE NAME:  
**PILOT ROAD**

SITE NUMBER:  
**KYL06084**

PROPOSED RAW LAND SITE WITH 305' SELF-SUPPORT TOWER W/  
15' LIGHTNING ARRESTOR AND INSTALLATION OF AN 80" x 80"  
WALK-IN CABINET & DIESEL GENERATOR ON STEEL PLATFORMS

SHEET INDEX	
T-1	TITLE SHEET & PROJECT INFORMATION
<b>SURVEY:</b>	
B-1	SITE SURVEY
B-1.1	SITE SURVEY
B-2	500' RADIUS AND ABUTTERS MAP
<b>CIVIL:</b>	
C-1	OVERALL SITE LAYOUT
C-2	OVERALL SITE LAYOUT - CONT'D
C-3	ENLARGED COMPOUND LAYOUT
C-4	TOWER ELEVATION

**CONTACT INFORMATION**

**FIRE DEPARTMENT**  
CLAY CITY VOLUNTEER FIRE DEPARTMENT  
PHONE: (606) 663-2288

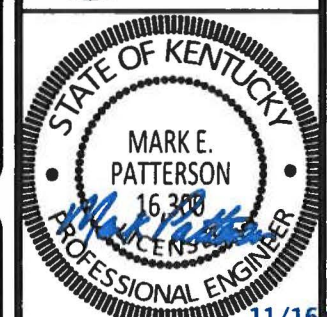
**POLICE DEPARTMENT**  
POWELL COUNTY SHERIFF'S DEPARTMENT  
PHONE: (606) 663-2226

**ELECTRIC COMPANY**  
CLARK ENERGY RECC  
PHONE: (606) 663-4330

**TELEPHONE COMPANY**  
AT&T  
PHONE: (210) 821-4105

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

PREPARED FOR:  
**MasTec**



EN PERMIT: 3594 11/16/2018

**ZONING DRAWINGS**

REV	DATE	DESCRIPTION
A	10.30.18	ISSUED FOR REVIEW
0	11.15.18	ISSUED AS FINAL
1	11.16.18	TDFD's

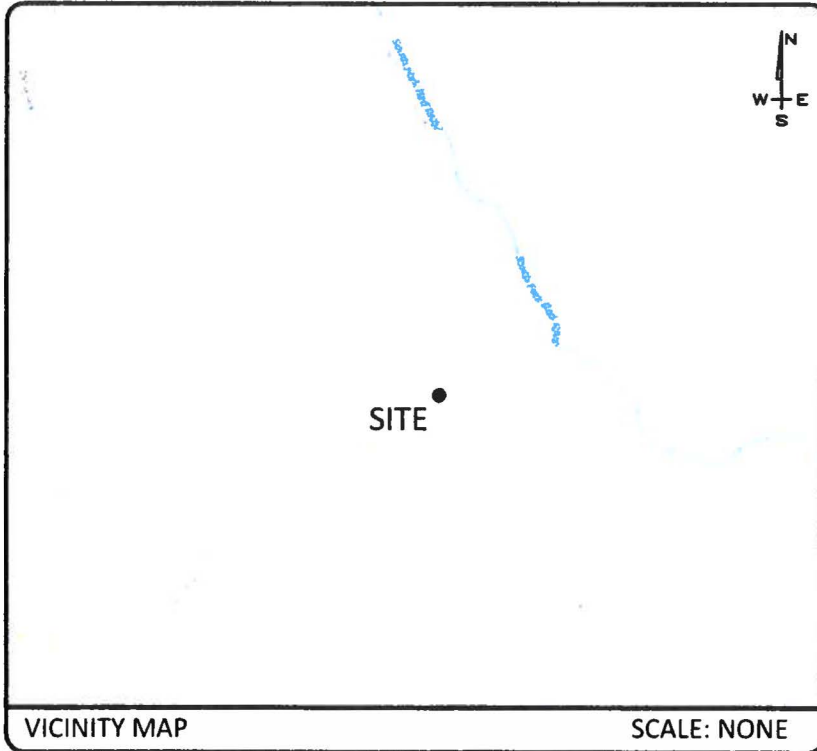
SITE INFORMATION:  
**PILOT ROAD**  
PILOT ROAD  
STANTON, KY 40380  
POWELL COUNTY

SITE NUMBER:  
**KYL06084**

POD NUMBER: 17-12799  
DRAWN BY: KDP  
CHECKED BY: MEP  
DATE: 10.30.18

SHEET TITLE:  
**TITLE SHEET & PROJECT INFORMATION**

SHEET NUMBER:  
**T-1**



**DRIVE DIRECTIONS**

FROM POWELL COUNTY CLERK, 525 WASHINGTON ST, STANTON, KY 40380:

TAKE WASHINGTON ST TO N MAIN ST	0.4 MILES
FOLLOW KY-11 S/KY-15 S TO CAT CREEK RD	3.4 MILES
CONTINUE ON CAT CREEK RD TO STATE HWY 1057	5.4 MILES
TURN RIGHT ONTO STATE HWY 1057	1.1 MILES
TURN LEFT ONTO PILOT RD	1.6 MILES

ARRIVE AT SITE, ON THE RIGHT

**SCOPE OF WORK:**

ZONING DRAWINGS FOR:  
CONSTRUCTION OF A NEW UNMANNED TELECOMMUNICATIONS FACILITY.

SITE WORK: NEW TOWER, UNMANNED WALK-IN CABINET WITH GENERATOR ON STEEL PLATFORMS, AND UTILITY INSTALLATIONS

**PROJECT INFORMATION**

COUNTY: POWELL

SITE ADDRESS: PILOT ROAD  
STANTON, KY 40380

APPLICANT: NEW CINGULAR WIRELESS PCS, LLC,  
A DELAWARE LIMITED LIABILITY COMPANY, D/B/A AT&T MOBILITY  
MEIDINGER TOWER  
462 S. 4TH STREET, SUITE 2400  
LOUISVILLE, KY 40202

LATITUDE: 37° 45' 48.43"  
LONGITUDE: 83° 45' 59.93"

Know what's below.  
Call before you dig.  
Call Monday thru Friday, 7 am to 5 pm  
**1-800-752-6007**

PER KENTUCKY STATE LAW, IT IS AGAINST THE LAW TO BECAUSE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TAG, IZ, WORKING DAYS BEFORE COMMENCING WORK

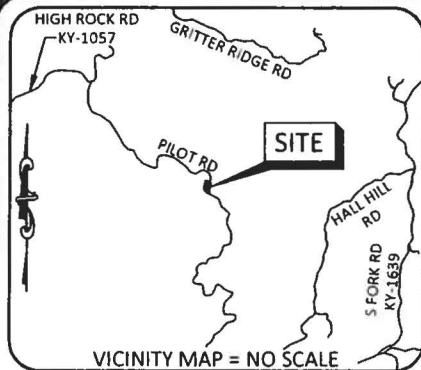
**BUILDING CODES AND STANDARDS**

CONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION FOR THE LOCATION

- CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:
- AMERICAN CONCRETE INSTITUTE 318
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL OF STEEL CONSTRUCTION
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION TIA-222
- STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND SUPPORTING STRUCTURES TIA-601
- COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS
- INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS IEEE-81, IEEE 1100, IEEE C62.41
- ANSI T1.311, FOR TELECOM - DC POWER SYSTEMS - TELECOM, ENVIRONMENTAL PROTECTION
- 2014 KBC
- 2014 NEC

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN.





TRUE NORTH  
GRID NORTH  
1° 13' 03" N  
BASED ON KENTUCKY STATE PLANE SINGLE ZONE AND DETERMINED BY GPS OBSERVATIONS COMPLETED ON FEBRUARY 8, 2017.

**FAA COORDINATE POINT**  
NAD 83  
LATITUDE: 37°45'48.43"  
LONGITUDE: 83°45'59.93"  
NAVD 88  
ELEVATION: 1155'± AMSL  
NORTHING: 3807653.072  
EASTING: 5494514.828

**TEMPORARY BENCHMARK**  
NORTHING: 3807541.934  
EASTING: 5494531.588  
ELEVATION: 1146.18'  
LOCATION: A SET 1/2" REBAR W/RED CAP STAMPED "POD TRV" N00°50'E 55'± FROM THE SOUTH CORNER OF THE PROPOSED LEASE AREA.

PARCEL ID: 040-00-00-024 02  
BARBARA BLISS & RAYMOND HALL  
DB. 152, PG. 626

PARCEL ID: 040-00-00-024.03  
MALENA HALL  
DB. 153, PG. 277

PARCEL ID: 040-00-00-023.00  
RICHARD WHITE & JAMES E. RUTH II  
DB. 189, PG. 496

P.O.R.  
FOUND 1/2" IRON ROD IN THE SOUTHEAST CORNER OF THE PLAT OF SURVEY FOR BARBARA BLISS, AS RECORDED IN PLAT CABINET 3, PAGE 277.  
SPC: KY SINGLE ZONE  
N:3807962.5096  
E:5494648.5110

P.O.C. & P.O.B.  
PROPOSED LEASE AREA  
SPC: KY SINGLE ZONE  
N:3807695.7629  
E:5494679.1234

**GLOBAL POSITIONING SYSTEMS NOTE**

1. THE BOUNDARY CORNERS, CONTROL POINTS AND A PORTION OF THE TOPOGRAPHY WAS LOCATED USING GPS.
2. THE TYPE OF GPS UTILIZED WAS NETWORK ADJUSTED REAL TIME KINEMATIC (KDOT VRS NETWORK), NAD 83 KENTUCKY SINGLE ZONE WITH THE ORTHOMETRIC HEIGHT COMPUTED USING GEOID12A. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.03' TO 0.08' HORIZONTALLY.
3. SPECTRA PRECISION EPOCH 50 DUAL FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS
C1	S05°30'27"W	52.72'	129.76'

LINE	BEARING	DISTANCE
L1	S15°04'47"W	10.07'
L2	S25°03'00"E	21.11'
L3	N15°04'47"E	30.00'

EX. CLIFF LINE (APPROXIMATE)  
PROPERTY LINE ESTABLISHED BY PAROL EVIDENCE PROVIDED BY RAYMOND HALL ON 1/26/17 AND ON 2/08/2017.

PROPERTY LINE ESTABLISHED BY PAROL EVIDENCE PROVIDED BY RAYMOND HALL ON 1/26/17 AND ON 2/08/2017.

**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 AND THE PROPOSED ACCESS & UTILITY EASEMENTS 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 0.07', FOR A PRECISION OF 1:42,763 AND HAS NOT BEEN ADJUSTED.

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

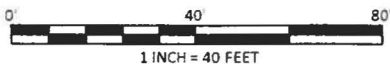
THIS PLAT IS NOT INTENDED FOR LAND TRANSFER.

THE PARENT PARCEL, THE PROPOSED LEASE AREA AND THE PROPOSED 30' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT SHOWN HEREON ARE NOT LOCATED IN A 100-YEAR FLOOD PLAIN (ZONE X) PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NUMBER 21197C0175D, DATED FEBRUARY 17, 2010.

**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  
11/16/2018  
DATE



**LEGEND**

- P.O.C. POINT OF COMMENCEMENT
- P.O.R. POINT OF REFERENCE
- P.O.B. POINT OF BEGINNING
- ROW RIGHT OF WAY
- EOP EDGE OF PAVEMENT
- UTILITY POLE

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



**SITE SURVEY**

REV	DATE	DESCRIPTION
A	3 21 17	PRELIM ISSUE WITH TITLE
0	3 31 17	ISSUED AS FINAL

**SITE INFORMATION:**

**PILOT ROAD**  
PILOT ROAD,  
STANTON, KY 40380  
POWELL COUNTY  
  
TAX PARCEL NUMBER:  
040-00-00-024.03  
  
PROPERTY OWNER:  
MALENA HALL  
P.O. BOX 362,  
STANTON, KY 40380  
  
SOURCE OF TITLE:  
DEED BOOK 153, PAGE 277

SITE NUMBER:  
KYLO6084

POD NUMBER: 17-12801  
DRAWN BY: RAE  
CHECKED BY: MEP  
DATE: 3 21 17

SHEET TITLE:

**SITE SURVEY**

SHEET NUMBER:  
**B-1**



LEGAL DESCRIPTIONS

**PROPOSED LEASE AREA**

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED LEASE AREA TO BE LEASED FROM THE PROPERTY CONVEYED TO MALENA HALL AS RECORDED IN DEED BOOK 153, PAGE 277, PARCEL ID: 040-00-00-024.03, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A CERTAIN TRACT OR PARCEL OF LAND LYING AND BEING IN POWELL COUNTY, KENTUCKY AND 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 FEBRUARY 8, 2017.

**BEGINNING AT A SET 1/2" REBAR WITH CAP STAMPED "PATTERSON PLS 3136",** HEREAFTER REFERRED TO AS A SET IPC, WITH A STATE PLANE COORDINATE, KENTUCKY SINGLE ZONE VALUE OF N:3807695.7629 & E:5494679.1234, BEING THE NORTHWEST CORNER OF THE PROPOSED LEASE AREA AND **THE TRUE POINT OF BEGINNING**, FOR REFERENCE, SAID POINT OF BEGINNING IS S06°32'48"E 268.50' FROM A FOUND 1/2" IRON ROD IN THE SOUTHEAST CORNER OF THE PLAT OF SURVEY FOR BARBARA BLISS, AS RECORDED IN PLAT CABINET 3, PAGE 277, WITH A STATE PLANE COORDINATE, KENTUCKY SINGLE ZONE VALUE OF N:3807962.5096 & E:5494648.5110; THENCE S74°55'13"E 60.00' TO A SET IPC; THENCE S15°04'47"W 100.00' TO A SET IPC; THENCE N74°55'13"W 60.00' TO A SET IPC; THENCE N15°04'47"E 100.00' TO THE POINT OF BEGINNING CONTAINING 6,000.000 SQUARE FEET AS PER SURVEY BY MARK PATTERSON, PLS #3136 WITH POWER OF DESIGN GROUP, LLC DATED FEBRUARY 8, 2017.

**PROPOSED 30' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT**

THE FOLLOWING IS A DESCRIPTION OF THE PROPOSED 30' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT TO BE GRANTED FROM THE PROPERTY CONVEYED TO MALENA HALL AS RECORDED IN DEED BOOK 153, PAGE 277, PARCEL ID: 040-00-00-024.03, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

A CERTAIN TRACT OR PARCEL OF LAND LYING AND BEING IN POWELL COUNTY, KENTUCKY AND 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 FEBRUARY 8, 2017.

COMMENCING AT A SET 1/2" REBAR WITH CAP STAMPED "PATTERSON PLS 3136", HEREAFTER REFERRED TO AS A SET IPC, WITH A STATE PLANE COORDINATE, KENTUCKY SINGLE ZONE VALUE OF N:3807695.7629 & E:5494679.1234, BEING THE NORTHWEST CORNER OF THE PROPOSED LEASE AREA, FOR REFERENCE, SAID POINT OF BEGINNING IS S06°32'48"E 268.50' FROM A FOUND 1/2" IRON ROD IN THE SOUTHEAST CORNER OF THE PLAT OF SURVEY FOR BARBARA BLISS, AS RECORDED IN PLAT CABINET 3, PAGE 277, WITH A STATE PLANE COORDINATE, KENTUCKY SINGLE ZONE VALUE OF N:3807962.5096 & E:5494648.5110; THENCE S15°04'47"W 100.00' TO A SET IPC IN THE SOUTHWEST CORNER OF THE PROPOSED LEASE AREA AND **THE TRUE POINT OF BEGINNING**; THENCE S74°55'13"E 60.00'; THENCE S15°04'47"W 10.07'; THENCE S25°03'00"E 21.11' TO THE APPARENT SOUTH MARGIN OF PILOT ROAD; THENCE ALONG SAID SOUTH MARGIN, WITH THE CHORD OF A NON-TANGENT CURVE TO THE LEFT, HAVING A RADIUS OF 129.76, S05°30'27"W 52.72'; THENCE LEAVING SAID SOUTH MARGIN N44°35'15"W 95.44'; THENCE N15°04'47"E 30.00' TO THE POINT OF BEGINNING CONTAINING 3,656.557 SQUARE FEET AS PER SURVEY BY MARK PATTERSON, PLS #3136 WITH POWER OF DESIGN GROUP, LLC DATED FEBRUARY 8, 2017.

**PARENT PARCEL LEGAL - DESCRIPTION - DEED BOOK 153, PAGE 277 (NOT FIELD SURVEYED)**

A CERTAIN TRACT OR PARCEL OF LAND LYING AND BEING IN POWELL COUNTY, KENTUCKY AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A CORNER FENCE POST IN THE SOUTH MARGIN OF PILOT ROAD AT THE LINE OF WILLIAM LEDFORD; THENCE IN A SOUTHERLY DIRECTION WITH THE FENCE LINE OF WILLIAM LEDFORD APPROXIMATELY 210 FEET TO THE SAND STONE CLIFF LINE; THENCE IN A WESTERLY DIRECTION WITH THE SAND STONE CLIFF 357 FEET TO THE LINE OF PROPERTY BEING RETAINED BY BARBARA BLISS, SINGLE, AND RAYMOND HALL, SINGLE (DB 152, PAGE 626), A CORNER; THENCE IN A NORTHERLY DIRECTION WITH THE LINE RETAINED BY BLISS AND HALL APPROXIMATELY 175 FEET TO THE SOUTH MARGIN OF PILOT ROAD, A CORNER; THENCE IN AN EASTERLY DIRECTION WITH THE SOUTH MARGIN OF PILOT ROAD A DISTANCE OF 352 FEET TO THE LINE OF WILLIAM LEDFORD, THE POINT OF BEGINNING.

BEING PART OF THE SAME PROPERTY CONVEYED FROM BILLY D. HALL AND REVA HALL, HUSBAND AND WIFE, TO BARBARA BLISS, SINGLE (UNDIVIDED 1/2 INTEREST) AND RAYMOND HALL, SINGLE (AN UNDIVIDED 1/2 INTEREST), BY DEED DATED JULY 2, 2003, AND RECORDED AT DEED BOOK 152, PAGE 626, RECORDS OF THE POWELL COUNTY CLERK.

THIS CONVEYANCE IS SUBJECT TO ALL RECORDED AND UNRECORDED EASEMENTS, LEGAL RESTRICTIONS, ZONING LAWS (IF APPLICABLE) AND ALL COVENANTS OF RECORD.

**REPORT OF TITLE (PARCEL 040-00-00-024.03)**

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 US TITLE SOLUTIONS, FOR THE BENEFIT OF MASTEC NETWORK SOLUTIONS, FILE NO. 55636-KY1610-5034, REFERENCE NO. FA13800703, ISSUE DATE OF NOVEMBER 7, 2016. THE FOLLOWING COMMENTS ARE IN REGARD TO SAID REPORT.

**SCHEDULE B**

1 TAXES TAX LIENS TAX SALES WATER RATES SEWER AND ASSESSMENTS SET FORTH IN SCHEDULE HEREIN TAX ID 040-00-00-024 03 - PERIOD 2016 PAYMENT STATUS PAID OTHER INFORMATION CONFIRMED WITH THE COUNTY SHERIFF S OFFICE ON 1/11/2017 THAT 2016 TAXES HAVE BEEN PAID (NOT A SURVEY MATTER, THEREFORE POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)

2 MORTGAGES RETURNED HEREIN (-0-) NONE WITHIN PERIOD SEARCHED

3 ANY STATE OF FACTS WHICH AN ACCURATE SURVEY MIGHT SHOW OR SURVEY EXCEPTIONS SET FORTH HEREIN (POD GROUP, LLC DID NOT PERFORM A BOUNDARY SURVEY, THEREFORE WE DID NOT ADDRESS THIS ITEM.)

4 RIGHTS OF TENANTS OR PERSON IN POSSESSION (NOT A SURVEY MATTER, THEREFORE POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)

(JUDGMENTS, LIENS AND UCC)

5 NONE WITHIN PERIOD SEARCHED

(COVENANTS/RESTRICTIONS)

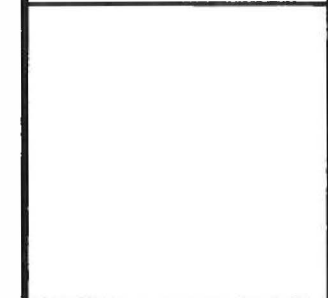
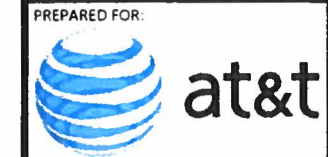
6 NONE WITHIN PERIOD SEARCHED

(EASEMENTS AND RIGHTS OF WAY)

7 NONE WITHIN PERIOD SEARCHED

(OTHER FILED DOCUMENTS)

8 DURABLE POWER OF ATTORNEY FORM BETWEEN RAYMOND R. HALL, PRINCIPAL AND APRIL MALENA HALL, ATTORNEY-IN-FACT RECORDED 6/6/2016 IN BOOK 189 PAGE 645 (NOT A SURVEY MATTER, THEREFORE POD GROUP, LLC DID NOT EXAMINE OR ADDRESS THIS ITEM.)



SITE SURVEY		
REV.	DATE	DESCRIPTION
A	3.21.17	PRELIM ISSUE WITH TITLE
0	3.31.17	ISSUED AS FINAL

**SITE INFORMATION:**  
**PILOT ROAD**  
 PILOT ROAD,  
 STANTON, KY 40380  
 POWELL COUNTY  
**TAX PARCEL NUMBER:**  
 040-00-00-024.03  
**PROPERTY OWNER:**  
 MALENA HALL  
 P.O. BOX 362,  
 STANTON, KY 40380  
**SOURCE OF TITLE:**  
 DEED BOOK 153, PAGE 277

**SITE NUMBER:**  
 KYL06084  
**POD NUMBER:** 17-12801  
**DRAWN BY:** RAE  
**CHECKED BY:** MEP  
**DATE:** 3.21.17

**SHEET TITLE:**  
**SITE SURVEY**

**SHEET NUMBER:**  
**B-1.1**

**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* 11/16/2018  
 MARK PATTERSON, PLS #3136 DATE



NOTE:  
PARCEL NUMBERS ARE OF RECORD IN  
THE POWELL COUNTY PROPERTY  
VALUATION ADMINISTRATOR OFFICE.

PREPARED BY:  
**POD**  
Powell County  
11490 BLUEGRASS PARKWAY  
LOUISVILLE, KY 40299  
502.437.5252

PREPARED FOR  
**MasTec**

PREPARED FOR  
**at&t**

**EXHIBIT**

REV.	DATE	DESCRIPTION
A	10.23.18	ISSUED FOR REVIEW
0	11.15.18	UPDATED PVA INFO / ISSUED AS FINAL

SITE INFORMATION:  
**PILOT ROAD**  
PILOT ROAD,  
STANTON, KY 40380  
POWELL COUNTY

TAX PARCEL NUMBER:  
040-00-00-024.03

PROPERTY OWNER:  
MALENA HALL  
P.O. BOX 362,  
STANTON, KY 40380

SOURCE OF TITLE:  
DEED BOOK 153, PAGE 277

SITE NUMBER:  
KYLO6084

POD NUMBER: 17-12800

DRAWN BY: DAP  
CHECKED BY: MEP  
DATE: 10.23.18

SHEET TITLE:

**500' RADIUS AND  
ABUTTERS MAP**

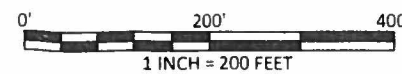
SHEET NUMBER:

**B-2**

- (A1)** PARCEL ID: 040-00-00-024.03  
HALL MALENA  
P.O. BOX 362  
STANTON, KY 40380
- (B1)** PARCEL ID: 040-00-00-023.00  
WHITE RICHARD & JAMES E RUTH II  
3222 FLEMINGSBURG ROAD  
MOREHEAD, KY 40351
- (C1)** PARCEL ID: 040-00-00-022.00  
OERTLI BRUCE & MICHELE  
1220 PILOT ROAD  
STANTON, KY 40380
- (D1)** PARCEL ID: 040-00-00-024.02  
BLISS BARBARA & RAYMOND HALL  
P.O. BOX 1661  
STANTON, KY 40380
- (E1)** PARCEL ID: 040-00-00-022.03  
BLISS BARBARA  
P.O. BOX 1661  
STANTON, KY 40380
- (F1)** PARCEL ID: 040-00-00-030.00  
DEAN FAMILY FARMS LLC  
3612 EPPERLY DRIVE  
DEL CITY, OK 73115-3608
- (G1)** PARCEL ID: 040-00-00-024.00  
HALL BILLY D & REVA  
757 HALL HILL ROAD  
STANTON, KY 40380

**GENERAL NOTE:**

1. ALL INFORMATION SHOWN HEREON WAS OBTAINED FROM THE RECORDS OF THE POWELL COUNTY KENTUCKY PROPERTY VALUATION ADMINISTRATION OFFICE ON FEBRUARY 8, 2017 AND UPDATED ON NOVEMBER 15, 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
2. THIS MAP IS FOR GENERAL INFORMATIONAL PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY
3. NOT FOR RECORDING OR PROPERTY TRANSFER.

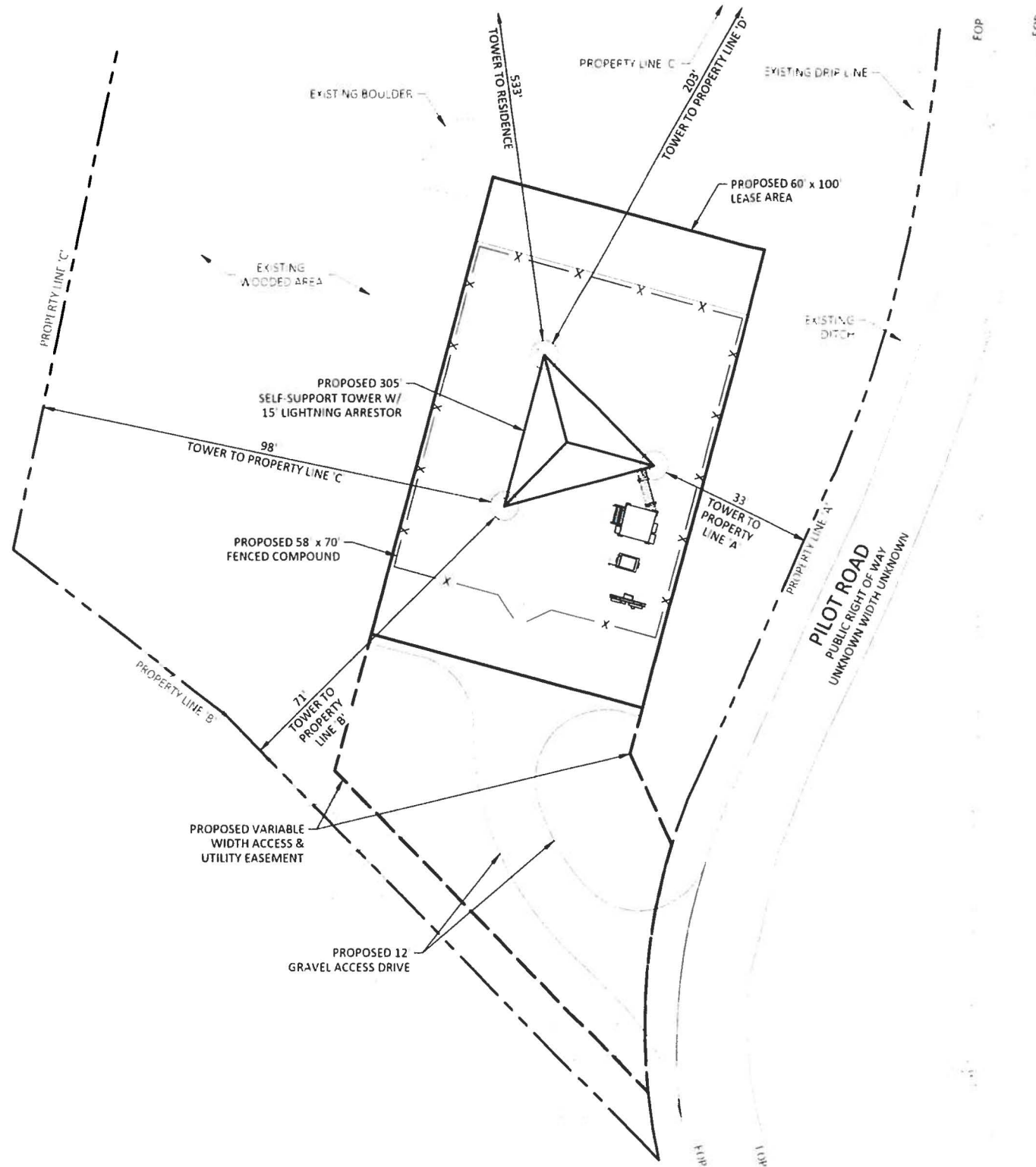


STATE OF KENTUCKY  
MARK E. PATTERSON  
3136  
LICENSED PROFESSIONAL  
LAND SURVEYOR

**CERTIFICATE**

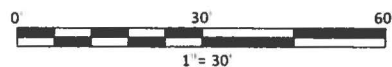
I HEREBY CERTIFY THAT THIS EXHIBIT PERTAINING TO THE ADJOINING PROPERTY OWNERS PER PVA RECORDS WAS PREPARED UNDER MY DIRECT SUPERVISION. NO BOUNDARY SURVEYING OF ANY KIND HAS BEEN PERFORMED FOR THIS EXHIBIT.

*Mark Patterson* 11/16/2018  
MARK PATTERSON, PLS #3136 DATE



**LEGEND**

	UTILITY POLE		ROW RIGHT OF WAY
	WATER METER		EOP EDGE OF PAVEMENT
	EXISTING BOUNDARY		PROPOSED ACCESS & UTILITY EASEMENT
	PROPOSED FENCE LINE		EXISTING RIGHT OF WAY
	EXISTING OVERHEAD ELECTRIC & TELEPHONE		



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

PREPARED FOR:

PREPARED FOR:

STATE OF KENTUCKY  
 MARK E. PATTERSON  
 16,300  
 PROFESSIONAL ENGINEER  
 11/16/2018  
 EN PERMIT: 3594

**ZONING DRAWINGS**

REV	DATE	DESCRIPTION
A	10.30.18	ISSUED FOR REVIEW
0	11.15.18	ISSUED AS FINAL
1	11.16.18	TDFD's

SITE INFORMATION:  
**PILOT ROAD**  
 PILOT ROAD  
 STANTON, KY 40380  
 POWELL COUNTY  
 SITE NUMBER:  
 KYL06084

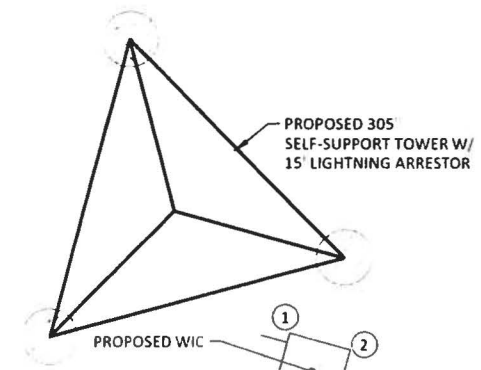
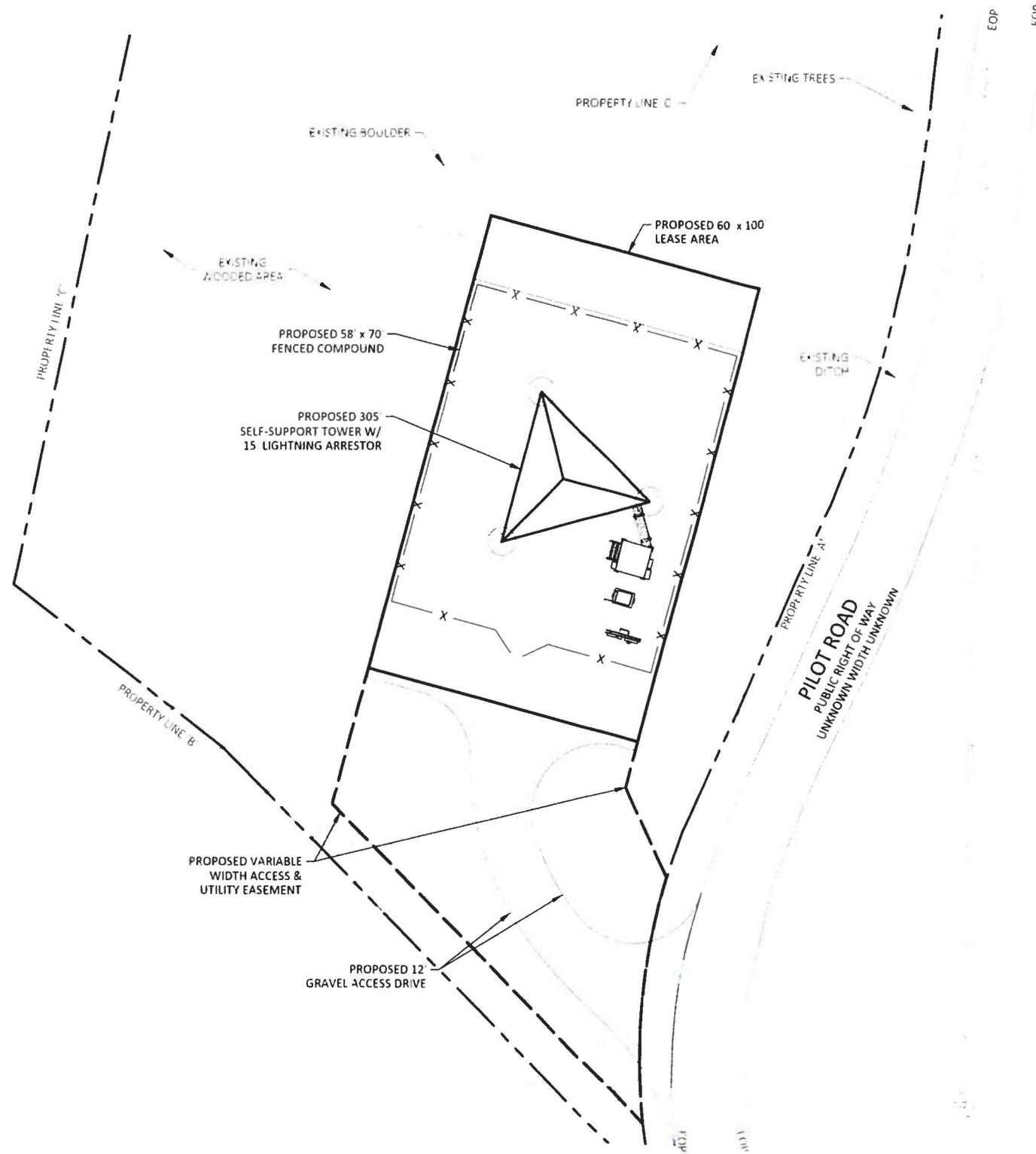
POD NUMBER: 17-12799  
 DRAWN BY: KDP  
 CHECKED BY: MEP  
 DATE: 10.30.18

SHEET TITLE:  
**OVERALL SITE LAYOUT**

SHEET NUMBER:  
**C-1**

**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





PROPERTY LINE	EQUIPMENT	DISTANCE
A	3	30'
B	4	87'
C	4	126'
D	2	226'
A	7	31'
B	8	82'
C	8	127'
D	6	237'

EQUIPMENT ENLARGEMENT  
NOT TO SCALE

PREPARED BY  
**POD**  
11490 BLUEGRASS PARKWAY  
LOUISVILLE, KY 40299  
502 437 5252

PREPARED FOR:  
**MasTec**

PREPARED FOR:  
**at&t**

STATE OF KENTUCKY  
MARK E. PATTERSON  
16,300  
PROFESSIONAL ENGINEER  
16/2018  
EN PERMIT: 3594

**ZONING DRAWINGS**

REV	DATE	DESCRIPTION
A	10.30.18	ISSUED FOR REVIEW
0	11.15.18	ISSUED AS FINAL
1	11.16.18	TDFD's

SITE INFORMATION:  
**PILOT ROAD**  
PILOT ROAD  
STANTON, KY 40380  
POWELL COUNTY  
SITE NUMBER:  
KYLO6084

POD NUMBER: 17-12799  
DRAWN BY: KDP  
CHECKED BY: MEP  
DATE: 10.30.18

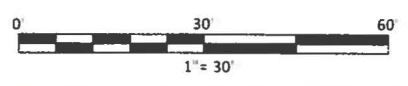
SHEET TITLE:  
**OVERALL SITE LAYOUT -CONT'D**

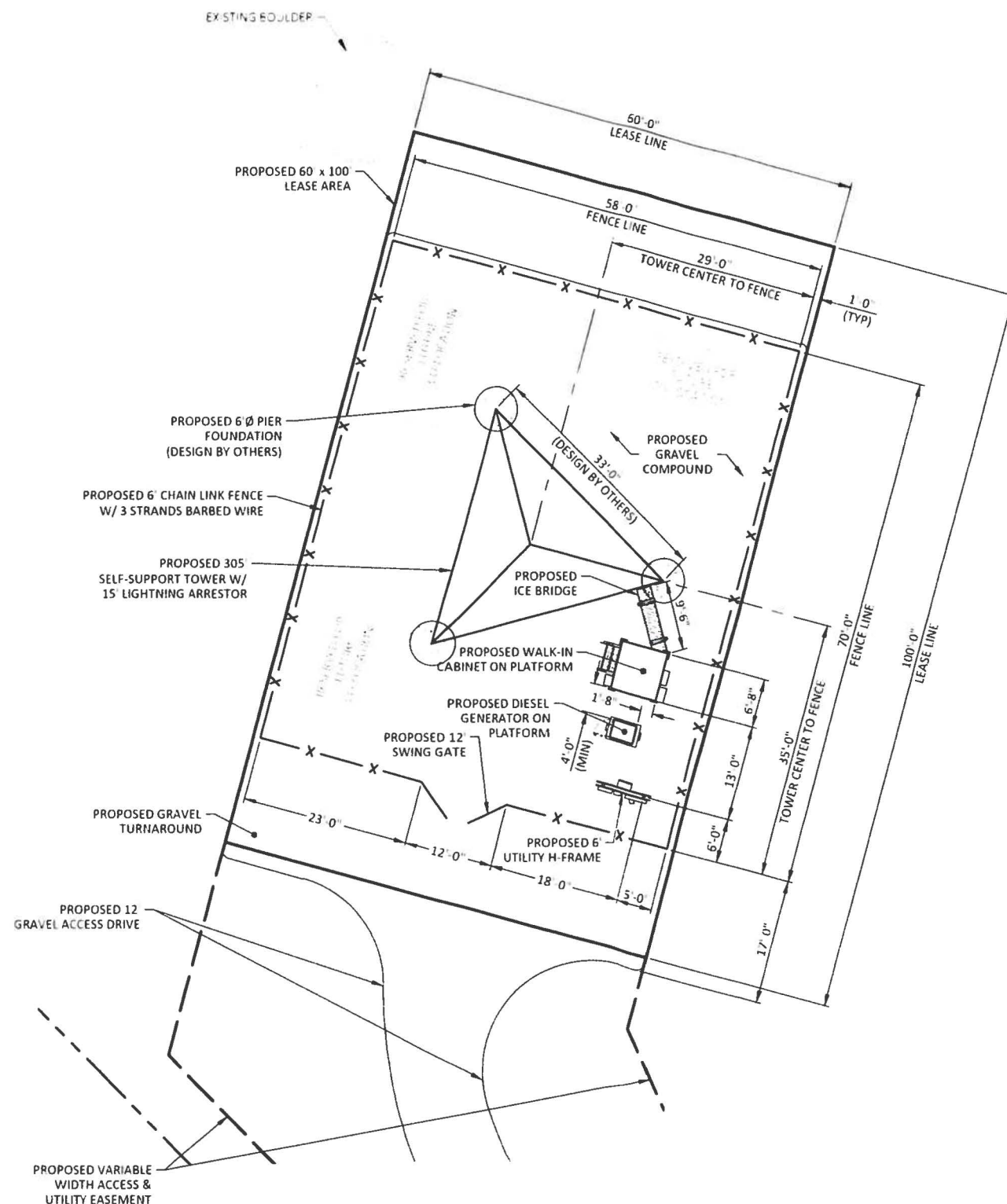
SHEET NUMBER:  
**C-2**

**LEGEND**

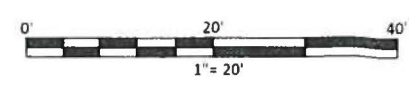
	UTILITY POLE		ROW RIGHT OF WAY
	WATER METER		EOP EDGE OF PAVEMENT
	EXISTING BOUNDARY		PROPOSED ACCESS & UTILITY EASEMENT
	PROPOSED FENCE LINE		EXISTING RIGHT OF WAY
	EXISTING OVERHEAD ELECTRIC & TELEPHONE		


**Kentucky 811**  
Know what's below.  
Call before you dig.  
Call Monday thru Friday 8am to 6pm  
**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.







**LEGEND**  
 --- PROPOSED ACCESS & UTILITY EASEMENT  
 -X-X- PROPOSED FENCE LINE



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

PREPARED FOR:  


PREPARED FOR:  


STATE OF KENTUCKY  
 MARK E. PATTERSON  
 16300  
 PROFESSIONAL ENGINEER  
 12/26/2018  
 EN PERMIT: 3594

**ZONING DRAWINGS**

REV	DATE	DESCRIPTION
A	10 30 18	ISSUED FOR REVIEW
0	11 15 18	ISSUED AS FINAL
1	11 16 18	TDFD's

SITE INFORMATION:  
**PILOT ROAD**  
 PILOT ROAD  
 STANTON, KY 40380  
 POWELL COUNTY  
 SITE NUMBER:  
 KYL06084

POD NUMBER: 17-12799  
 DRAWN BY: KDP  
 CHECKED BY: MEP  
 DATE: 10 30 18

SHEET TITLE:  
**ENLARGED COMPOUND LAYOUT**

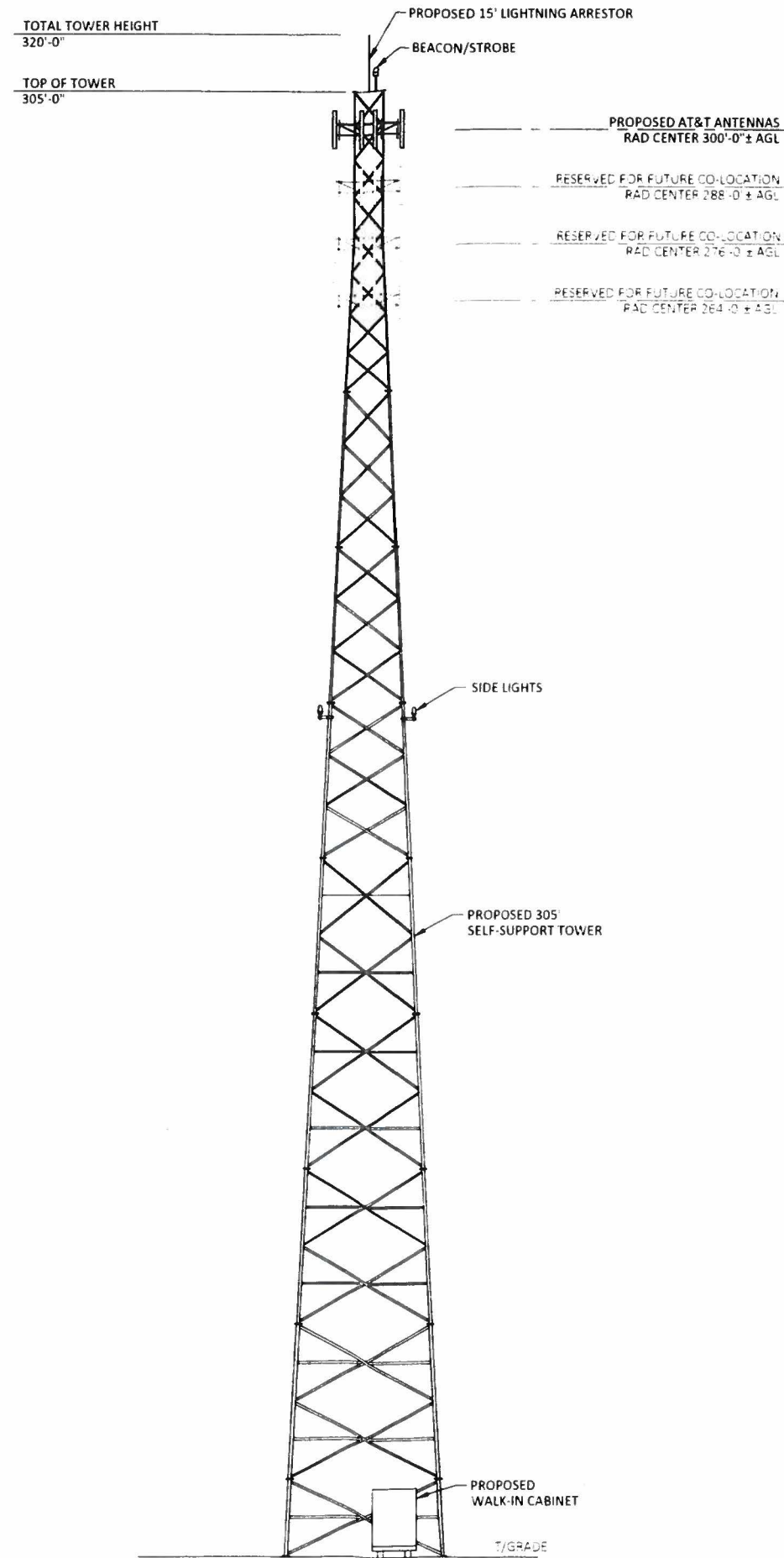
SHEET NUMBER:  
**C-3**

**Kentucky 811**  
 Know what's below. Call before you dig.  
 Monday thru Friday 7am to 6pm  
 1-800-752-6007  
PER KENTUCKY STATE LAW, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND UTILITY SERVICE (811) WORKING DAYS BEFORE COMMENCING WORK.




**TOWER NOTES:**

- 1 THE PROPOSED TOWER, FOUNDATION, ANTENNA MOUNTS, AND ANTENNAS WERE DESIGNED BY OTHERS.
- 2 THE TOWER ELEVATION SHOWN IS FOR REFERENCE ONLY.
- 3 SEE TOWER MANUFACTURER'S DRAWINGS FOR TOWER AND FOUNDATION DETAILS & SPECIFICATIONS
- 4 MANUFACTURER'S DRAWINGS SUPERCEDE A&E DRAWINGS



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

PREPARED FOR:  


PREPARED FOR:  


STATE OF KENTUCKY  
 MARK E. PATTERSON  
 16300  
 PROFESSIONAL ENGINEER  
 16/2018  
 EN PERMIT: 3594

**ZONING DRAWINGS**

REV	DATE	DESCRIPTION
A	10 30 18	ISSUED FOR REVIEW
0	11 15 18	ISSUED AS FINAL
1	11 16 18	TDFD's

SITE INFORMATION:

**PILOT ROAD**  
 PILOT ROAD  
 STANTON, KY 40380  
 POWELL COUNTY

SITE NUMBER:  
 KYL06084

POD NUMBER: 17-12799

DRAWN BY: KDP  
 CHECKED BY: MEP  
 DATE: 10 30 18

SHEET TITLE:

**TOWER ELEVATION**

SHEET NUMBER:

**C-4**

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



**Structural Design Report**

305' S3TL Series HD1 Self-Supporting Tower

Site: Pilot Road, KY

Site Number: KYL06084

Prepared for: AT&T  
by: Sabre Towers & Poles™

Job Number: 422229

November 14, 2018

Tower Profile..... 1-2

Foundation Design Summary (Option 1)..... 3

Foundation Design Summary (Option 2)..... 4

Maximum Leg Loads..... 5

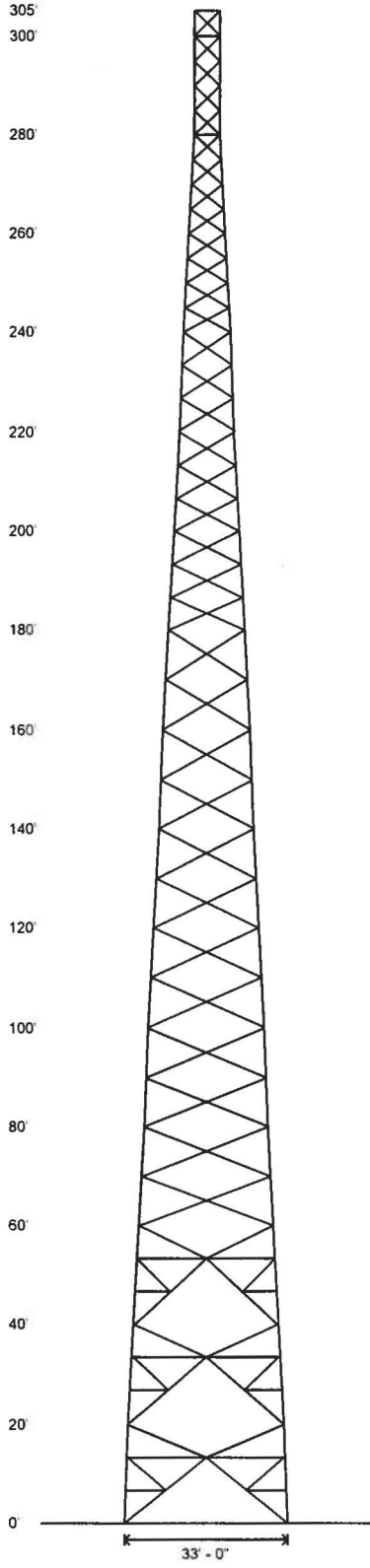
Maximum Diagonal Loads..... 6

Maximum Foundation Loads..... 7

Calculations..... 8-24



Legs	12.75 OD X .375		8.625 OD X .500		5.563 OD X .500		L 2 X 2 X 3/16		L 2 X 2 X 3/16		L 2 X 2 X 3/16			
Diagonals	F	G	H	I	J	K	L	M	N	O	P	Q		
Horizontals	K	L	M	N	O	P	Q	R	S	T	U	V		
Internals	N	O	P	Q	R	S	T	U	V	W	X	Y		
Sub-Diagonals	O	P	Q	R	S	T	U	V	W	X	Y	Z		
Sub-Horizontals	O	P	Q	R	S	T	U	V	W	X	Y	Z		
Brace Bolts	(2) 3/4"		(2) 5/8"		(1) 3/4"		(1) 5/8"							
Top Face Width	31'	29'	27'	25'	23'	21'	19'	17'	15'	13'	11'	9'	7'	5'
Panel Count/Height	Q	R	Q	R	Q	R	Q	R	Q	R	Q	R	Q	R
Section Weight	7436	7283	6788	6030	5877	5322	4654	4518	4195	3211	3017	2601	2227	1561
														1058



**Design Criteria - ANSI/TIA-222-G**

Ultimate Wind Speed (No Ice)	115 mph
Wind Speed (Ice)	30 mph
Design Ice Thickness	0.75 in
Structure Class	II
Risk Category	II
Exposure Category	B
Topographic Category	1

**Base Reactions**

Total Foundation		Individual Footing	
Shear (kips)	94.79	Shear (kips)	58.48
Axial (kips)	300	Compression (kips)	659
Moment (ft-kips)	17681	Uplift (kips)	567
Torsion (ft-kips)	-38.95		

**Material List**

Display	Value
A	8.625 OD X .322
B	5.563 OD X .375
C	4.000 OD X .318
D	2.875 OD X .203
E	2.375 OD X .154
F	L 5 X 3 1/2 X 1/4 (SLV)
G	L 4 X 4 X 5/16
H	L 5 X 3 1/2 X 5/16 (SLV)
I	L 3 X 3 X 1/4
J	L 2 X 2 X 1/8
K	L 4 X 4 X 1/4
L	NONE
M	L 2 X 2 X 3/16
N	L 3 1/2 X 3 1/2 X 1/4
O	L 3 X 3 X 3/16
P	L 2 1/2 X 2 1/2 X 1/4
Q	1 @ 13.333'
R	1 @ 6.667'
S	249

**Notes**


- 1) All legs are A500 (50 ksi Min. Yield).
- 2) All braces are A572 Grade 50.
- 3) All brace bolts are A325-X.
- 4) The tower model is S3TL Series HD1.
- 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 design and, if applicable, the foundation design(s) shown on the following page(s) also meet or exceed the requirements of the 2012 International Building Code.
- 11) Tower Rating: 99.8%

	<b>Sabre Communications Corporation</b> 7101 Southbridge Drive P.O. Box 658 Sioux City, IA 51102-0658 Phone: (712) 258-6690 Fax: (712) 279-0814	Job: <b>422229</b> Customer: <b>AT&amp;T</b> Site Name: <b>Pilot Road, KY KYL06084</b> Description: <b>305' S3TL</b> Date: <b>11/14/2018</b> By <b>REB</b>
	<small>Information contained herein is the sole property of Sabre Communications Corporation, constitutes a trade secret as defined by Iowa Code Ch. 550 and shall not be reproduced, copied or used in whole or part for any purpose whatsoever without the prior written consent of Sabre Communications Corporation.</small>	

**Designed Appurtenance Loading**

Elev	Description	Tx-Line
310	(1) Extendible Lightning Rod	
300	(1) 278 sq. ft. EPA 6000# (no ice)	(18) 1 5/8"
288	(1) 208 sq. ft. EPA 4000# (no ice)	(18) 1 5/8"

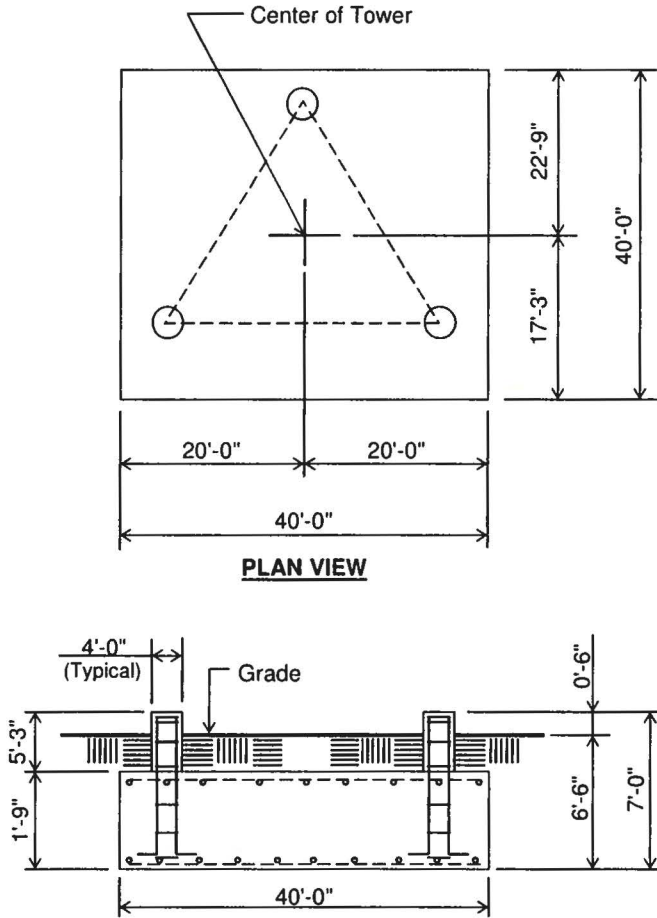
Elev	Description	Tx-Line
276	(1) 208 sq. ft. EPA 4000# (no ice)	(18) 1 5/8"
264	(1) 208 sq. ft. EPA 4000# (no ice)	(18) 1 5/8"

	<b>Sabre Communications Corporation</b> 7101 Southbridge Drive P.O. Box 658 Sioux City, IA 51102-0658 Phone: (712) 258-6600 Fax: (712) 279-0814	Job: <b>422229</b> Customer: <b>AT&amp;T</b> Site Name: <b>Pilot Road, KY KYL06084</b> Description: <b>305' S3TL</b> Date: <b>11/14/2018</b> By <b>REB</b>
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**Customer: AT&T**  
**Site: Pilot Road, KY KYL06084**

305 ft. Model S3TL Series HD1 Self Supporting Tower



**PLAN VIEW**

**ELEVATION VIEW**

(111.0 cu. yds.)  
(1 REQD.; NOT TO SCALE)

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

**Notes:**

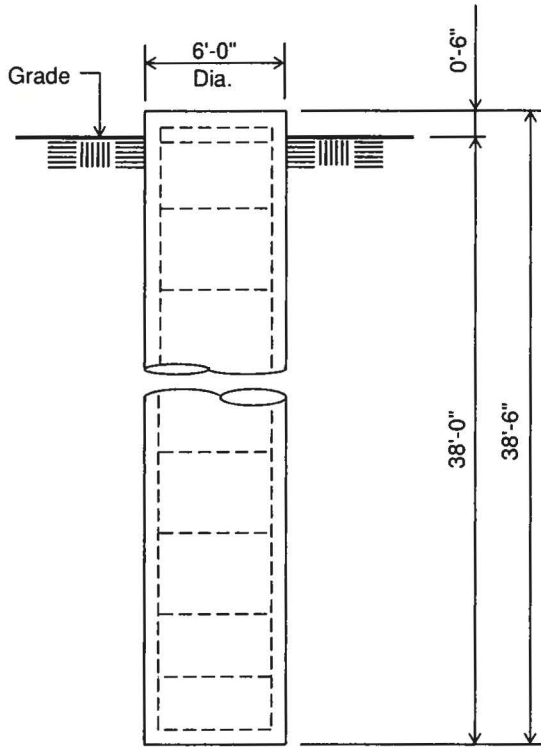
- 1) Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-11.
- 2) Rebar to conform to ASTM specification A615 Grade 60.
- 3) All rebar to have a minimum of 3" concrete cover.
- 4) All exposed concrete corners to be chamfered 3/4".
- 5) The foundation design is based on the geotechnical report by POD project no. 17-12797, dated: 10/30/18
- 6) See the geotechnical report for compaction requirements, if specified.
- 7) The foundation is based on the following factored loads:  
Factored download (kips) = 119.73  
Factored overturn (kip-ft) = 17,680.65  
Factored shear (kips) = 94.79
- 8) 4.75' of soil cover is required over the entire area of the foundation slab.
- 9) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

Rebar Schedule per Mat and per Pier	
<b>Pier</b>	(20) #8 vertical rebar w/ hooks at bottom w/ #4 rebar ties, two (2) within top 5" of pier then 9" C/C
<b>Mat</b>	(66) #10 horizontal rebar evenly spaced each way top and bottom. (264 total)
Anchor Bolts per Leg	
(6) 1.75" dia. x 87" F1554-105 on a 18" B.C. w/ 10.5" max. projection above concrete.	

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**Customer: AT&T**  
**Site: Pilot Road, KY KYL06084**

305 ft. Model S3TL Series HD1 Self Supporting Tower



**Notes:**

- 1) Concrete shall have a minimum 28-day compressive strength of 4,500 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 POD project no. 17-12797, dated: 10/30/18
- 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) = 567.00  
Factored download (kips) = 659.00  
Factored shear (kips) = 58.00
- 8) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

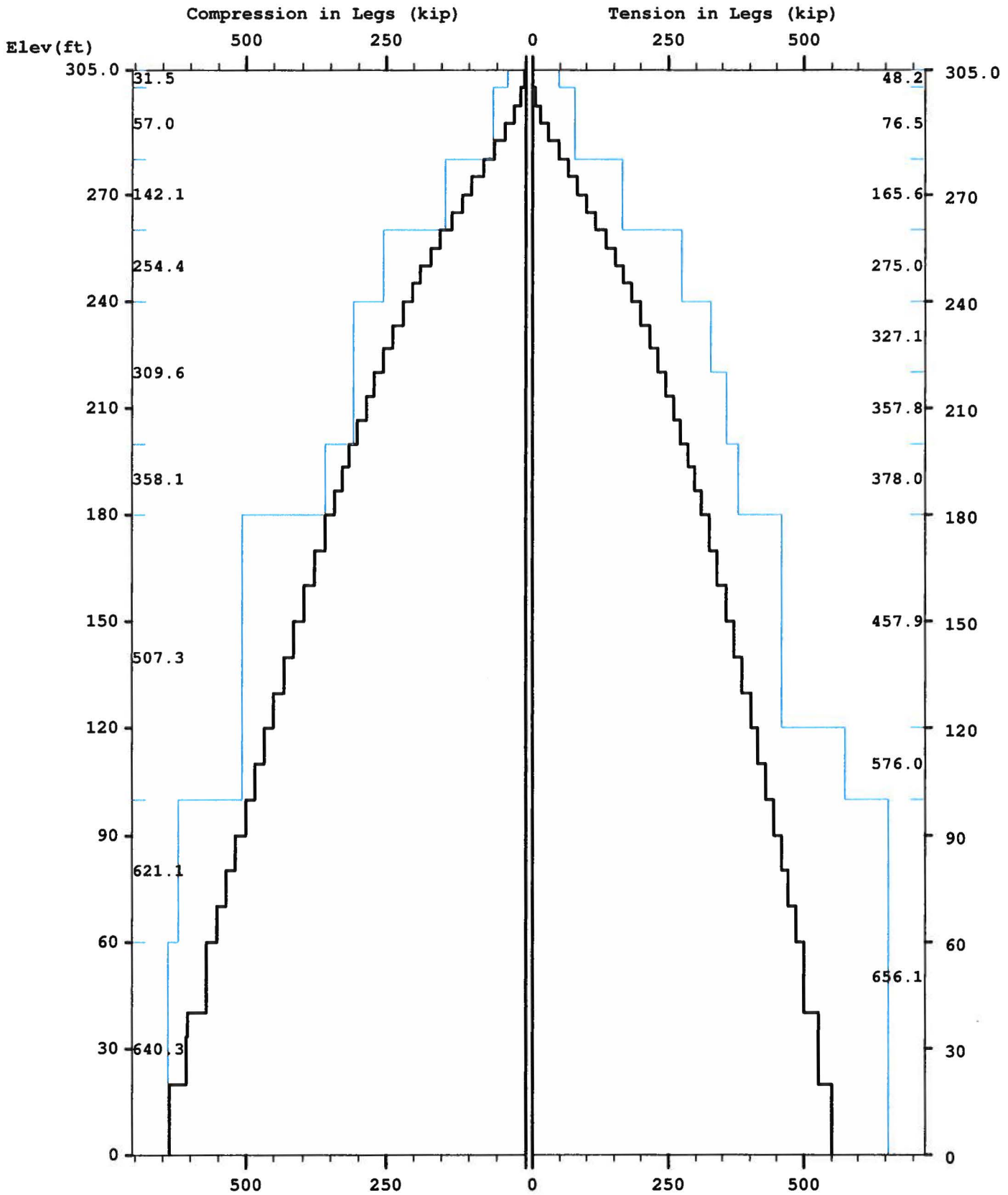
**ELEVATION VIEW**

(40.3 cu. yds.)  
(3 REQUIRED; NOT TO SCALE)

<b>Rebar Schedule per Pier</b>	
<b>Pier</b>	(26) #8 vertical rebar w/ #4 rebar ties, two (2) within top 5" of pier then 12" C/C
<b>Anchor Bolts per Leg</b>	
	(6) 1.75" dia. x 87" F1554-105 on a 18" B.C. w/ 10.5" max. projection above concrete.

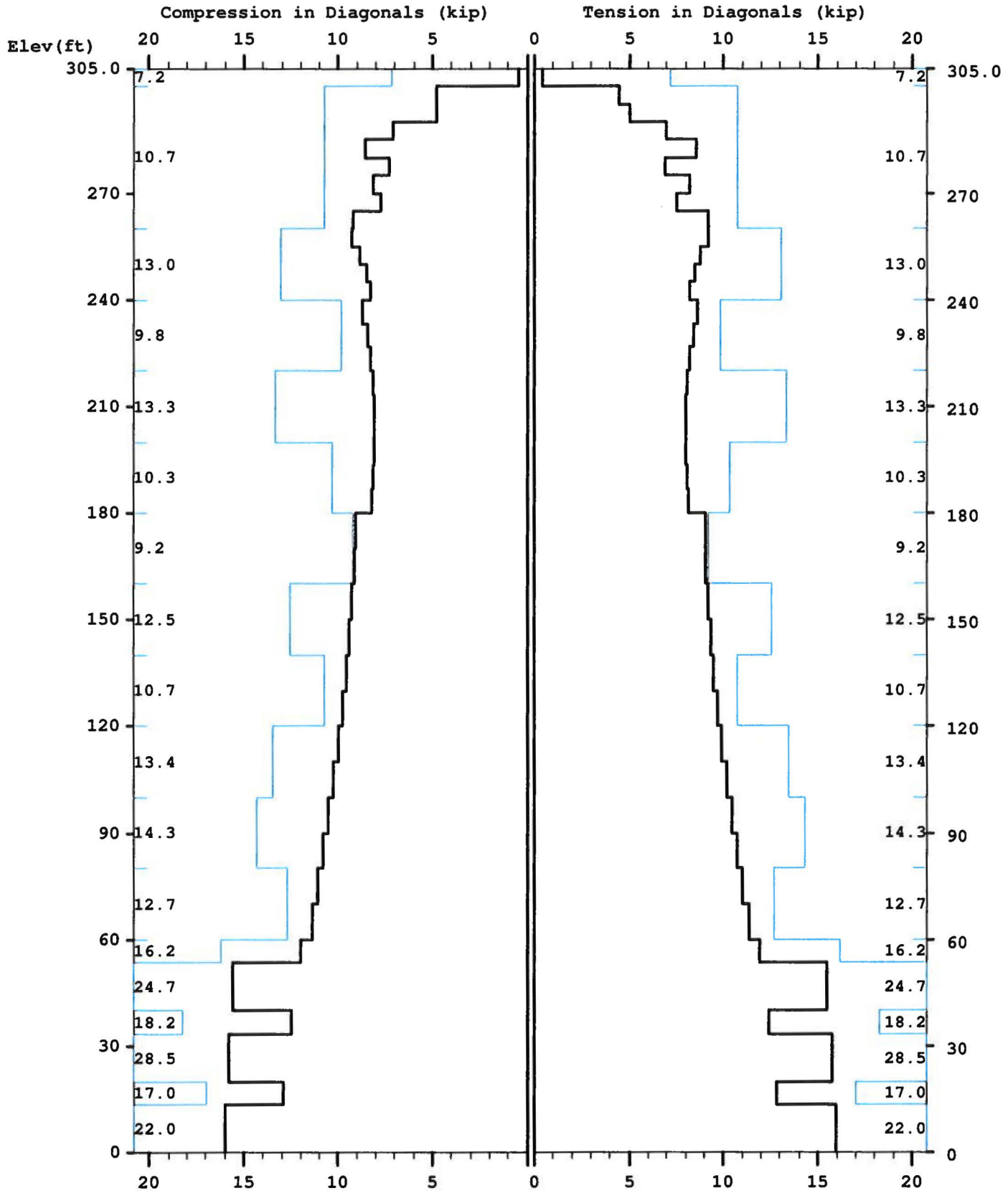
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Maximum



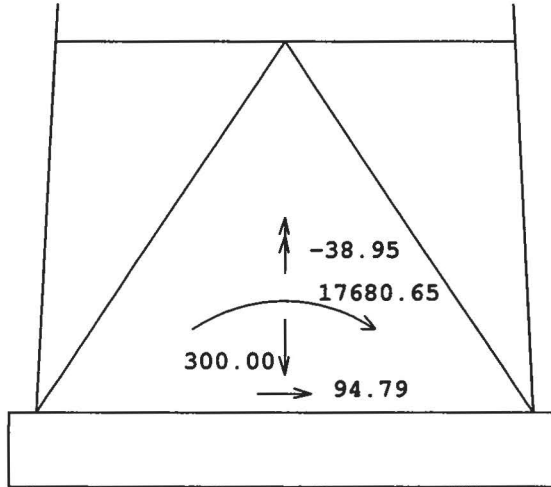


Maximum

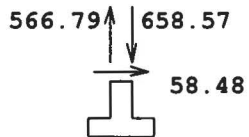
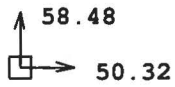


Maximum

TOTAL FOUNDATION LOADS (kip, ft-kip)



INDIVIDUAL FOOTING LOADS (kip)



=====  
 Latticed Tower Analysis (Unguyed)  
 Processed under license at:

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

Sabre Towers and Poles

on: 14 nov 2018 at: 16:06:10  
 =====

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	300.00	305.00	5.00	5.00	5.00
X	3	295.00	300.00	5.00	5.00	5.00
X	3	280.00	295.00	5.00	5.00	5.00
X	3	275.00	280.00	5.50	5.00	5.00
X	3	260.00	275.00	7.00	5.50	5.00
X	3	240.00	260.00	9.00	7.00	5.00
X	3	220.00	240.00	11.00	9.00	6.67
X	3	200.00	220.00	13.00	11.00	6.67
X	3	180.00	200.00	15.00	13.00	6.67
X	3	160.00	180.00	17.00	15.00	10.00
X	3	140.00	160.00	19.00	17.00	10.00
X	3	120.00	140.00	21.00	19.00	10.00
X	3	100.00	120.00	23.00	21.00	10.00
X	3	80.00	100.00	25.00	23.00	10.00
X	3	60.00	80.00	27.00	25.00	10.00
V	3	53.33	60.00	27.67	27.00	6.67
A	3	40.00	53.33	29.00	27.67	13.33
V	3	33.33	40.00	29.67	29.00	6.67
A	3	20.00	33.33	31.00	29.67	13.33
V	3	13.33	20.00	31.67	31.00	6.67
A	3	0.00	13.33	33.00	31.67	13.33

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	300.00	305.00	1.075	0.787	29000.	0.0000117
LE	280.00	300.00	1.704	0.787	29000.	0.0000117
LE	260.00	280.00	3.678	0.787	29000.	0.0000117
LE	240.00	260.00	6.111	0.787	29000.	0.0000117
LE	200.00	240.00	7.952	0.787	29000.	0.0000117
LE	180.00	200.00	8.399	0.787	29000.	0.0000117
LE	100.00	180.00	12.763	0.787	29000.	0.0000117
LE	0.00	100.00	14.579	0.787	29000.	0.0000117
DI	300.00	305.00	0.484	0.626	29000.	0.0000117
DI	260.00	300.00	0.715	0.626	29000.	0.0000117
DI	220.00	260.00	0.902	0.626	29000.	0.0000117
DI	180.00	220.00	1.090	0.626	29000.	0.0000117
DI	160.00	180.00	1.438	0.626	29000.	0.0000117
DI	120.00	160.00	1.688	0.626	29000.	0.0000117
DI	53.33	120.00	1.938	0.626	29000.	0.0000117
DI	40.00	53.33	2.062	0.626	29000.	0.0000117
DI	33.33	40.00	2.402	0.626	29000.	0.0000117
DI	20.00	33.33	2.559	0.626	29000.	0.0000117
DI	13.33	20.00	2.402	0.626	29000.	0.0000117
DI	0.00	13.33	2.062	0.626	29000.	0.0000117
HO	300.00	305.00	0.484	0.626	29000.	0.0000117
HO	295.00	300.00	0.715	0.626	29000.	0.0000117
HO	275.00	280.00	0.715	0.626	29000.	0.0000117
HO	40.00	53.33	1.938	0.626	29000.	0.0000117
HO	20.00	33.33	1.938	0.626	29000.	0.0000117
HO	0.00	13.33	1.938	0.626	29000.	0.0000117
BR	40.00	53.33	1.438	0.000	29000.	0.0000117
BR	20.00	33.33	1.438	0.000	29000.	0.0000117
BR	0.00	13.33	1.688	0.000	29000.	0.0000117

FACTORED MEMBER RESISTANCES  
 =====

422229									
BOTTOM ELEV ft	TOP ELEV ft	LEGS		DIAGONALS		HORIZONTALS		INT COMP kip	BRACING TENS kip
		COMP kip	TENS kip	COMP kip	TENS kip	COMP kip	TENS kip		
300.0	305.0	31.48	48.15	7.16	7.16	5.82	5.82	0.00	0.00
295.0	300.0	57.04	76.50	10.74	10.74	8.46	8.46	0.00	0.00
280.0	295.0	57.04	76.50	10.74	10.74	0.00	0.00	0.00	0.00
275.0	280.0	142.05	165.60	10.74	10.74	8.46	8.46	0.00	0.00
260.0	275.0	142.05	165.60	10.74	10.74	0.00	0.00	0.00	0.00
240.0	260.0	254.38	274.95	13.03	13.03	0.00	0.00	0.00	0.00
220.0	240.0	309.64	327.10	9.84	9.84	0.00	0.00	0.00	0.00
200.0	220.0	309.64	357.75	13.34	13.34	0.00	0.00	0.00	0.00
180.0	200.0	358.08	378.00	10.34	10.34	0.00	0.00	0.00	0.00
160.0	180.0	507.33	457.90	9.19	9.19	0.00	0.00	0.00	0.00
140.0	160.0	507.33	457.90	12.53	12.53	0.00	0.00	0.00	0.00
120.0	140.0	507.33	457.90	10.73	10.73	0.00	0.00	0.00	0.00
100.0	120.0	507.33	576.00	13.43	13.43	0.00	0.00	0.00	0.00
80.0	100.0	621.06	656.10	14.31	14.31	0.00	0.00	0.00	0.00
60.0	80.0	621.06	656.10	12.68	12.68	0.00	0.00	0.00	0.00
53.3	60.0	640.29	656.10	16.16	16.16	0.00	0.00	0.00	0.00
40.0	53.3	640.29	656.10	24.72	24.72	15.60	15.60	7.41	7.41
33.3	40.0	640.29	656.10	18.24	18.24	0.00	0.00	0.00	0.00
20.0	33.3	640.29	656.10	28.50	28.50	13.98	13.98	6.59	6.59
13.3	20.0	640.29	656.10	16.98	16.98	0.00	0.00	0.00	0.00
0.0	13.3	640.29	656.10	22.03	22.03	12.58	12.58	9.00	9.00

=====  
 \* Only 3 condition(s) shown in full  
 \* Some wind loads may have been derived from full-scale wind tunnel testing  
 =====

LOADING CONDITION A =====

115 mph Ultimate 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	310.0	0.00	0.0	0.0	0.25	0.15	0.00	0.00
C	300.0	0.00	0.0	0.0	8.81	7.20	0.00	0.00
C	288.0	0.00	0.0	0.0	6.52	4.80	0.00	0.00
C	276.0	0.00	0.0	0.0	6.44	4.80	0.00	0.00
C	264.0	0.00	0.0	0.0	6.36	4.80	0.00	0.00
D	305.0	0.00	180.0	0.0	0.06	0.04	0.00	0.00
D	300.0	0.00	180.0	0.0	0.06	0.04	0.00	0.00
D	300.0	0.00	42.0	0.0	0.13	0.08	0.06	0.09
D	290.0	0.00	42.0	0.0	0.12	0.08	0.06	0.09
D	290.0	0.00	63.7	0.0	0.13	0.09	0.06	0.10
D	285.0	0.00	63.7	0.0	0.13	0.09	0.06	0.10
D	285.0	0.00	76.5	0.0	0.14	0.10	0.06	0.10
D	280.0	0.00	76.5	0.0	0.14	0.10	0.06	0.10
D	280.0	0.00	80.8	0.0	0.16	0.14	0.06	0.09
D	275.0	0.00	80.8	0.0	0.16	0.14	0.06	0.09
D	275.0	0.00	99.1	0.0	0.18	0.16	0.04	0.06
D	265.0	0.00	101.2	0.0	0.18	0.16	0.04	0.06
D	265.0	0.00	58.7	0.0	0.19	0.18	0.01	0.05
D	260.0	0.00	58.7	0.0	0.19	0.18	0.01	0.05
D	260.0	0.00	330.0	0.0	0.20	0.22	0.01	0.04
D	240.0	0.00	329.1	0.0	0.21	0.23	0.01	0.04
D	240.0	0.00	329.9	0.0	0.20	0.24	0.01	0.04
D	220.0	0.00	329.2	0.0	0.21	0.25	0.01	0.04
D	220.0	0.00	329.9	0.0	0.21	0.26	0.01	0.04
D	200.0	0.00	329.4	0.0	0.22	0.26	0.01	0.04
D	200.0	0.00	330.0	0.0	0.22	0.27	0.01	0.04
D	180.0	0.00	329.6	0.0	0.23	0.27	0.01	0.04
D	180.0	0.00	329.9	0.0	0.21	0.33	0.01	0.04
D	140.0	0.00	329.8	0.0	0.22	0.35	0.01	0.04
D	140.0	0.00	330.0	0.0	0.21	0.35	0.01	0.04
D	100.0	0.00	329.9	0.0	0.22	0.38	0.01	0.04
D	100.0	0.00	330.0	0.0	0.23	0.41	0.01	0.03
D	60.0	0.00	329.9	0.0	0.22	0.42	0.01	0.03

					422229			
D	60.0	0.00	330.0	0.0	0.19	0.39	0.01	0.03
D	53.3	0.00	330.0	0.0	0.19	0.39	0.01	0.03
D	53.3	0.00	329.9	0.0	0.22	0.48	0.01	0.03
D	40.0	0.00	329.9	0.0	0.22	0.48	0.01	0.03
D	40.0	0.00	330.0	0.0	0.18	0.43	0.01	0.03
D	33.3	0.00	330.0	0.0	0.18	0.43	0.01	0.03
D	33.3	0.00	330.0	0.0	0.20	0.51	0.01	0.03
D	20.0	0.00	330.0	0.0	0.20	0.51	0.01	0.03
D	20.0	0.00	330.0	0.0	0.17	0.43	0.01	0.02
D	13.3	0.00	330.0	0.0	0.17	0.43	0.01	0.02
D	13.3	0.00	330.0	0.0	0.20	0.51	0.01	0.02
D	0.0	0.00	330.0	0.0	0.20	0.51	0.01	0.02

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LOADING CONDITION M  
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115 mph Ultimate wind with no ice. wind Azimuth: 0°

MAST LOADING  
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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	310.0	0.00	0.0	0.0	0.25	0.12	0.00	0.00
C	300.0	0.00	0.0	0.0	8.81	5.40	0.00	0.00
C	288.0	0.00	0.0	0.0	6.52	3.60	0.00	0.00
C	276.0	0.00	0.0	0.0	6.44	3.60	0.00	0.00
C	264.0	0.00	0.0	0.0	6.36	3.60	0.00	0.00
D	305.0	0.00	180.0	0.0	0.06	0.03	0.00	0.00
D	300.0	0.00	180.0	0.0	0.06	0.03	0.00	0.00
D	300.0	0.00	42.0	0.0	0.13	0.06	0.04	0.09
D	290.0	0.00	42.0	0.0	0.12	0.06	0.04	0.09
D	290.0	0.00	63.7	0.0	0.13	0.07	0.04	0.10
D	280.0	0.00	76.5	0.0	0.14	0.08	0.05	0.10
D	280.0	0.00	80.8	0.0	0.16	0.11	0.04	0.09
D	275.0	0.00	80.8	0.0	0.16	0.11	0.04	0.09
D	275.0	0.00	99.1	0.0	0.18	0.12	0.03	0.06
D	265.0	0.00	101.2	0.0	0.18	0.12	0.03	0.06
D	265.0	0.00	58.7	0.0	0.19	0.13	0.00	0.05
D	260.0	0.00	58.7	0.0	0.19	0.13	0.00	0.05
D	260.0	0.00	330.0	0.0	0.20	0.17	0.01	0.04
D	240.0	0.00	329.1	0.0	0.21	0.17	0.01	0.04
D	240.0	0.00	329.9	0.0	0.20	0.18	0.01	0.04
D	220.0	0.00	329.2	0.0	0.21	0.18	0.01	0.04
D	220.0	0.00	329.9	0.0	0.21	0.19	0.01	0.04
D	200.0	0.00	329.4	0.0	0.22	0.20	0.01	0.04
D	200.0	0.00	330.0	0.0	0.22	0.20	0.01	0.04
D	180.0	0.00	329.6	0.0	0.23	0.21	0.01	0.04
D	180.0	0.00	329.9	0.0	0.21	0.25	0.01	0.04
D	140.0	0.00	329.8	0.0	0.22	0.26	0.01	0.04
D	140.0	0.00	330.0	0.0	0.21	0.26	0.01	0.04
D	100.0	0.00	329.9	0.0	0.22	0.28	0.01	0.04
D	100.0	0.00	330.0	0.0	0.23	0.30	0.01	0.03
D	60.0	0.00	329.9	0.0	0.22	0.31	0.01	0.03
D	60.0	0.00	330.0	0.0	0.19	0.29	0.01	0.03
D	53.3	0.00	330.0	0.0	0.19	0.29	0.01	0.03
D	53.3	0.00	329.9	0.0	0.22	0.36	0.01	0.03
D	40.0	0.00	329.9	0.0	0.22	0.36	0.01	0.03
D	40.0	0.00	330.0	0.0	0.18	0.32	0.01	0.03
D	33.3	0.00	330.0	0.0	0.18	0.32	0.01	0.03
D	33.3	0.00	330.0	0.0	0.20	0.38	0.01	0.03
D	20.0	0.00	330.0	0.0	0.20	0.38	0.01	0.03
D	20.0	0.00	330.0	0.0	0.17	0.33	0.01	0.02
D	13.3	0.00	330.0	0.0	0.17	0.33	0.01	0.02
D	13.3	0.00	330.0	0.0	0.20	0.38	0.01	0.02
D	0.0	0.00	330.0	0.0	0.20	0.38	0.01	0.02

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LOADING CONDITION Y  
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30 mph wind with 0.75 ice. wind Azimuth: 0°

MAST LOADING

422229

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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	310.0	0.00	0.0	0.0	0.04	0.30	0.00	0.00
C	300.0	0.00	0.0	0.0	1.10	18.42	0.00	0.00
C	288.0	0.00	0.0	0.0	1.33	12.25	0.00	0.00
C	276.0	0.00	0.0	0.0	1.31	12.22	0.00	0.00
C	264.0	0.00	0.0	0.0	1.29	12.19	0.00	0.00
D	305.0	0.00	180.0	0.0	0.01	0.18	0.00	0.00
D	300.0	0.00	180.0	0.0	0.01	0.18	0.00	0.00
D	300.0	0.00	42.0	0.0	0.01	0.31	0.22	0.01
D	295.0	0.00	42.0	0.0	0.01	0.31	0.22	0.01
D	295.0	0.00	42.0	0.0	0.01	0.27	0.22	0.01
D	290.0	0.00	42.0	0.0	0.01	0.27	0.22	0.01
D	290.0	0.00	68.8	0.0	0.01	0.33	0.21	0.01
D	285.0	0.00	68.8	0.0	0.01	0.33	0.21	0.01
D	285.0	0.00	86.2	0.0	0.01	0.37	0.22	0.01
D	280.0	0.00	86.2	0.0	0.01	0.37	0.22	0.01
D	280.0	0.00	88.3	0.0	0.02	0.46	0.20	0.01
D	275.0	0.00	88.3	0.0	0.02	0.46	0.20	0.01
D	275.0	0.00	97.5	0.0	0.02	0.50	0.12	0.00
D	265.0	0.00	99.6	0.0	0.02	0.51	0.12	0.00
D	265.0	0.00	44.4	0.0	0.02	0.57	0.02	0.00
D	260.0	0.00	44.4	0.0	0.02	0.57	0.02	0.00
D	260.0	0.00	330.0	0.0	0.02	0.64	0.02	0.00
D	240.0	0.00	329.1	0.0	0.02	0.67	0.02	0.00
D	240.0	0.00	329.9	0.0	0.02	0.66	0.02	0.00
D	220.0	0.00	329.3	0.0	0.02	0.68	0.02	0.00
D	220.0	0.00	329.9	0.0	0.02	0.71	0.02	0.00
D	200.0	0.00	329.4	0.0	0.02	0.73	0.02	0.00
D	200.0	0.00	330.0	0.0	0.02	0.75	0.02	0.00
D	180.0	0.00	329.6	0.0	0.02	0.77	0.02	0.00
D	180.0	0.00	329.9	0.0	0.02	0.78	0.02	0.00
D	140.0	0.00	329.8	0.0	0.02	0.83	0.02	0.00
D	140.0	0.00	330.0	0.0	0.02	0.84	0.02	0.00
D	100.0	0.00	329.9	0.0	0.02	0.90	0.02	0.00
D	100.0	0.00	329.9	0.0	0.02	0.95	0.02	0.00
D	70.0	0.00	330.0	0.0	0.02	0.96	0.02	0.00
D	70.0	0.00	329.9	0.0	0.02	0.97	0.02	0.00
D	60.0	0.00	329.9	0.0	0.02	0.97	0.02	0.00
D	60.0	0.00	330.0	0.0	0.02	0.89	0.02	0.00
D	53.3	0.00	330.0	0.0	0.02	0.89	0.02	0.00
D	53.3	0.00	329.9	0.0	0.02	1.14	0.02	0.00
D	40.0	0.00	329.9	0.0	0.02	1.14	0.02	0.00
D	40.0	0.00	330.0	0.0	0.02	0.91	0.02	0.00
D	33.3	0.00	330.0	0.0	0.02	0.91	0.02	0.00
D	33.3	0.00	330.0	0.0	0.02	1.16	0.02	0.00
D	20.0	0.00	330.0	0.0	0.02	1.16	0.02	0.00
D	20.0	0.00	330.0	0.0	0.02	0.93	0.02	0.00
D	13.3	0.00	330.0	0.0	0.02	0.93	0.02	0.00
D	13.3	0.00	330.0	0.0	0.02	1.24	0.03	0.00
D	0.0	0.00	330.0	0.0	0.02	1.24	0.03	0.00

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MAXIMUM TENSION IN MAST MEMBERS (kip)

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ELEV ft	LEGS	DIAG	HORIZ	BRACE
305.0	-----	-----	0.09 A	0.00 A
	0.12 Q	0.40 M		
300.0	-----	-----	1.37 K	0.00 A
	4.29 M	4.44 T		
295.0	-----	-----	0.31 A	0.00 A
	15.71 M	4.99 H		
290.0	-----	-----	0.13 S	0.00 A
	28.99 M	6.94 N		
285.0	-----	-----	0.35 A	0.00 A
	47.81 M	8.55 H		
280.0	-----	-----	0.42 M	0.00 A
	64.76 M	6.90 M		
275.0	-----	-----	0.20 A	0.00 A
	82.15 M	8.26 B		
270.0	-----	-----	0.14 A	0.00 A
	99.32 M	7.56 N		

ELEV	MEMBER	MEMBER	MEMBER	MEMBER	MEMBER
265.0	-----			0.13 A	422229 0.00 A
	115.81 M	9.20 N			
260.0	-----			0.14 A	0.00 A
	134.87 M	9.20 N			
255.0	-----			0.08 A	0.00 A
	151.76 M	8.80 N			
250.0	-----			0.16 A	0.00 A
	168.01 M	8.47 N			
245.0	-----			0.07 A	0.00 A
	182.48 M	8.24 N			
240.0	-----			0.14 A	0.00 A
	198.53 M	8.68 N			
233.3	-----			0.11 A	0.00 A
	215.19 M	8.41 N			
226.7	-----			0.12 A	0.00 A
	231.04 M	8.22 N			
220.0	-----			0.10 A	0.00 A
	245.60 M	8.11 N			
213.3	-----			0.10 A	0.00 A
	259.64 M	8.04 N			
206.7	-----			0.09 A	0.00 A
	272.81 M	8.03 N			
200.0	-----			0.09 A	0.00 A
	285.62 M	8.05 N			
193.3	-----			0.11 A	0.00 A
	297.82 M	8.10 N			
186.7	-----			0.08 A	0.00 A
	309.81 M	8.18 N			
180.0	-----			0.10 A	0.00 A
	323.93 M	9.03 N			
170.0	-----			0.10 A	0.00 A
	340.56 M	9.09 N			
160.0	-----			0.09 A	0.00 A
	356.39 M	9.19 N			
150.0	-----			0.09 A	0.00 A
	371.90 M	9.34 N			
140.0	-----			0.08 A	0.00 A
	386.85 M	9.51 N			
130.0	-----			0.08 A	0.00 A
	401.58 M	9.70 N			
120.0	-----			0.06 A	0.00 A
	415.90 M	9.92 P			
110.0	-----			0.07 A	0.00 A
	430.05 M	10.17 V			
100.0	-----			0.06 A	0.00 A
	443.91 M	10.44 P			
90.0	-----			0.05 A	0.00 A
	457.64 M	10.74 V			
80.0	-----			0.03 O	0.00 A
	471.21 M	11.04 P			
70.0	-----			0.07 S	0.00 A
	484.68 M	11.33 V			
60.0	-----			0.26 A	0.00 A
	500.47 M	11.92 P			
53.3	-----			0.80 U	0.00 B
	499.34 M	15.49 P			
40.0	-----			0.23 A	0.00 A
	526.46 M	12.41 V			
33.3	-----			0.71 U	0.00 H
	525.25 M	15.73 V			
20.0	-----			0.12 A	0.00 H
	551.68 M	12.81 P			
13.3	-----			0.70 U	0.00 V
	550.47 M	15.95 V			
0.0	-----			0.00 A	0.00 A

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)  
=====

ELEV	MEMBER	MEMBER	MEMBER	MEMBER
305.0	-----			-0.07 S 0.00 A
	-0.25 C	-0.43 G		
300.0	-----			-1.12 Q 0.00 A

## 422229

295.0	-8.42 G	-4.78 B	-0.21 S	0.00 A
290.0	-20.95 G	-4.79 N	-0.15 A	0.00 A
285.0	-35.84 G	-7.10 H	-0.25 S	0.00 A
280.0	-56.51 G	-8.54 B	-0.47 G	0.00 A
275.0	-74.11 G	-7.32 G	-0.14 S	0.00 A
270.0	-95.02 G	-8.15 N	-0.12 S	0.00 A
265.0	-112.52 G	-7.70 B	-0.09 S	0.00 A
260.0	-132.08 G	-9.23 H	-0.12 S	0.00 A
255.0	-152.48 G	-9.23 B	-0.06 S	0.00 A
250.0	-170.27 G	-8.81 B	-0.13 S	0.00 A
245.0	-187.38 G	-8.51 B	-0.06 S	0.00 A
240.0	-202.79 G	-8.25 N	-0.12 S	0.00 A
233.3	-219.88 G	-8.72 B	-0.09 S	0.00 A
226.7	-237.88 G	-8.43 B	-0.10 S	0.00 A
220.0	-255.02 G	-8.25 B	-0.08 S	0.00 A
213.3	-270.96 G	-8.12 B	-0.09 S	0.00 A
206.7	-286.38 G	-8.07 B	-0.07 S	0.00 A
200.0	-301.00 G	-8.05 B	-0.08 S	0.00 A
193.3	-315.28 G	-8.08 B	-0.09 S	0.00 A
186.7	-328.98 G	-8.13 B	-0.07 S	0.00 A
180.0	-342.49 G	-8.20 B	-0.08 S	0.00 A
170.0	-358.67 G	-9.08 B	-0.09 S	0.00 A
160.0	-377.98 G	-9.13 B	-0.07 S	0.00 A
150.0	-396.52 G	-9.24 B	-0.08 S	0.00 A
140.0	-414.80 G	-9.38 B	-0.07 S	0.00 A
130.0	-432.58 G	-9.56 B	-0.07 S	0.00 A
120.0	-450.21 G	-9.74 B	-0.05 S	0.00 A
110.0	-467.49 G	-9.97 J	-0.06 S	0.00 A
100.0	-484.68 G	-10.21 D	-0.05 S	0.00 A
90.0	-501.71 G	-10.49 J	-0.05 S	0.00 A
80.0	-518.73 G	-10.78 D	-0.03 I	0.00 A
70.0	-535.65 G	-11.07 J	-0.09 A	0.00 A
60.0	-552.49 G	-11.37 D	-0.22 S	0.00 A
53.3	-571.32 G	-12.02 G	-0.96 C	0.00 S
40.0	-572.82 G	-15.55 J	-0.20 S	0.00 A
33.3	-604.57 G	-12.51 D	-0.88 C	0.00 D
20.0	-606.17 G	-15.79 D	-0.10 S	0.00 D
13.3	-637.43 G	-12.89 D	-0.87 C	0.00 L
0.0	-639.04 G	-16.00 D	0.00 A	0.00 A



FORCE/RESISTANCE RATIO IN LEGS

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MAST ELEV ft	-- LEG COMPRESSION --			---- LEG TENSION ----		
	MAX COMP	COMP RESIST	FORCE/ RESIST RATIO	MAX TENS	TENS RESIST	FORCE/ RESIST RATIO
305.00	0.25	31.48	0.01	0.12	48.15	0.00
300.00	8.42	57.04	0.15	4.29	76.50	0.06
295.00	20.95	57.04	0.37	15.71	76.50	0.21
290.00	35.84	57.04	0.63	28.99	76.50	0.38
285.00	56.51	57.04	0.99	47.81	76.50	0.62
280.00	74.11	142.05	0.52	64.76	165.60	0.39
275.00	95.02	142.05	0.67	82.15	165.60	0.50
270.00	112.52	142.05	0.79	99.32	165.60	0.60
265.00	132.08	142.05	0.93	115.81	165.60	0.70
260.00	152.48	254.38	0.60	134.87	274.95	0.49
255.00	170.27	254.38	0.67	151.76	274.95	0.55
250.00	187.38	254.38	0.74	168.01	274.95	0.61
245.00	202.79	254.38	0.80	182.48	274.95	0.66
240.00	219.88	309.64	0.71	198.53	327.10	0.61
233.33	237.88	309.64	0.77	215.19	327.10	0.66
226.67	255.02	309.64	0.82	231.04	327.10	0.71
220.00	270.96	309.64	0.88	245.60	357.75	0.69
213.33	286.38	309.64	0.92	259.64	357.75	0.73
206.67	301.00	309.64	0.97	272.81	357.75	0.76
200.00	315.28	358.08	0.88	285.62	378.00	0.76
193.33	328.98	358.08	0.92	297.82	378.00	0.79
186.67	342.49	358.08	0.96	309.81	378.00	0.82
180.00	358.67	507.33	0.71	323.93	457.90	0.71
170.00	377.98	507.33	0.75	340.56	457.90	0.74
160.00	396.52	507.33	0.78	356.39	457.90	0.78
150.00	414.80	507.33	0.82	371.90	457.90	0.81
140.00	432.58	507.33	0.85	386.85	457.90	0.84
130.00	450.21	507.33	0.89	401.58	457.90	0.88
120.00	467.49	507.33	0.92	415.90	576.00	0.72
110.00	484.68	507.33	0.96	430.05	576.00	0.75
100.00	501.71	621.06	0.81	443.91	656.10	0.68
90.00	518.73	621.06	0.84	457.64	656.10	0.70
80.00	535.65	621.06	0.86	471.21	656.10	0.72
70.00	552.49	621.06	0.89	484.68	656.10	0.74
60.00	571.32	640.29	0.89	500.47	656.10	0.76
53.33	572.82	640.29	0.89	499.34	656.10	0.76

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40.00	604.57	640.29	0.94	526.46	656.10	0.80	
33.33	606.17	640.29	0.95	525.25	656.10	0.80	
20.00	637.43	640.29	1.00	551.68	656.10	0.84	
13.33	639.04	640.29	1.00	550.47	656.10	0.84	
0.00							

FORCE/RESISTANCE RATIO IN DIAGONALS

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MAST ELEV ft	- DIAG COMPRESSION -			--- DIAG TENSION ---		
	MAX COMP	COMP RESIST	FORCE/ RESIST RATIO	MAX TENS	TENS RESIST	FORCE/ RESIST RATIO
305.00	0.43	7.16	0.06	0.40	7.16	0.06
300.00	4.78	10.74	0.45	4.44	10.74	0.41
295.00	4.79	10.74	0.45	4.99	10.74	0.46
290.00	7.10	10.74	0.66	6.94	10.74	0.65
285.00	8.54	10.74	0.79	8.55	10.74	0.80
280.00	7.32	10.74	0.68	6.90	10.74	0.64
275.00	8.15	10.74	0.76	8.26	10.74	0.77
270.00	7.70	10.74	0.72	7.56	10.74	0.70
265.00	9.23	10.74	0.86	9.20	10.74	0.86
260.00	9.23	13.03	0.71	9.20	13.03	0.71
255.00	8.81	13.03	0.68	8.80	13.03	0.68
250.00	8.51	13.03	0.65	8.47	13.03	0.65
245.00	8.25	13.03	0.63	8.24	13.03	0.63
240.00	8.72	9.84	0.89	8.68	9.84	0.88
233.33	8.43	9.84	0.86	8.41	9.84	0.86
226.67	8.25	9.84	0.84	8.22	9.84	0.83
220.00	8.12	13.34	0.61	8.11	13.34	0.61
213.33	8.07	13.34	0.61	8.04	13.34	0.60
206.67	8.05	13.34	0.60	8.03	13.34	0.60
200.00	8.08	10.34	0.78	8.05	10.34	0.78
193.33	8.13	10.34	0.79	8.10	10.34	0.78
186.67	8.20	10.34	0.79	8.18	10.34	0.79
180.00	9.08	9.19	0.99	9.03	9.19	0.98
170.00	9.13	9.19	0.99	9.09	9.19	0.99
160.00	9.24	12.53	0.74	9.19	12.53	0.73
150.00	9.38	12.53	0.75	9.34	12.53	0.75
140.00	9.56	10.73	0.89	9.51	10.73	0.89
130.00	9.74	10.73	0.91	9.70	10.73	0.90
120.00	9.97	13.43	0.74	9.92	13.43	0.74
110.00	10.21	13.43	0.76	10.17	13.43	0.76
100.00	10.49	14.31	0.73	10.44	14.31	0.73

	10.78	14.31	0.75	10.74	14.31	0.75
90.00	11.07	12.68	0.87	11.04	12.68	0.87
80.00	11.37	12.68	0.90	11.33	12.68	0.89
70.00	12.02	16.16	0.74	11.92	16.16	0.74
60.00	15.55	24.72	0.63	15.49	24.72	0.63
53.33	12.51	18.24	0.69	12.41	18.24	0.68
40.00	15.79	28.50	0.55	15.73	28.50	0.55
33.33	12.89	16.98	0.76	12.81	16.98	0.75
20.00	16.00	22.03	0.73	15.95	22.03	0.72
13.33						
0.00						

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MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)

NORTH	LOAD EAST	COMPONENTS DOWN	UPLIFT	TOTAL SHEAR
58.48 G	50.32 K	658.57 G	-566.79 M	58.48 G

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

HORIZONTAL			DOWN	OVERTURNING			TORSION
NORTH	EAST	TOTAL @ 0.0		NORTH	EAST	TOTAL @ 0.0	
94.8 S	-90.3 D	94.8 S	300.0 e	17680.7 G	-16944.4 D	17680.7 G	-38.9 R

Latticed Tower Analysis (Unguyed)  
Processed under license at:

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

Sabre Towers and Poles

on: 14 nov 2018 at: 16:06:54

\*\*\*\*\*  
\*\*\*\*\* Service Load Condition \*\*\*\*\*  
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\* Only 1 condition(s) shown in full  
\* 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	310.0	0.00	0.0	0.0	0.07	0.13	0.00	0.00
C	300.0	0.00	0.0	0.0	2.50	6.00	0.00	0.00
C	288.0	0.00	0.0	0.0	1.85	4.00	0.00	0.00

						422229			
C	276.0	0.00	0.0	0.0	1.83	4.00	0.00	0.00	
C	264.0	0.00	0.0	0.0	1.81	4.00	0.00	0.00	
D	305.0	0.00	180.0	0.0	0.02	0.03	0.00	0.00	
D	300.0	0.00	180.0	0.0	0.02	0.03	0.00	0.00	
D	300.0	0.00	42.0	0.0	0.04	0.07	0.05	0.02	
D	290.0	0.00	42.0	0.0	0.03	0.06	0.05	0.03	
D	290.0	0.00	63.7	0.0	0.04	0.08	0.05	0.03	
D	280.0	0.00	76.5	0.0	0.04	0.09	0.05	0.03	
D	280.0	0.00	80.8	0.0	0.05	0.12	0.05	0.03	
D	275.0	0.00	80.8	0.0	0.05	0.12	0.05	0.03	
D	275.0	0.00	99.1	0.0	0.05	0.13	0.04	0.02	
D	265.0	0.00	101.2	0.0	0.05	0.13	0.03	0.02	
D	265.0	0.00	58.7	0.0	0.05	0.15	0.00	0.01	
D	260.0	0.00	58.7	0.0	0.05	0.15	0.00	0.01	
D	260.0	0.00	330.0	0.0	0.06	0.18	0.01	0.01	
D	240.0	0.00	329.1	0.0	0.06	0.19	0.01	0.01	
D	240.0	0.00	329.9	0.0	0.06	0.20	0.01	0.01	
D	220.0	0.00	329.2	0.0	0.06	0.20	0.01	0.01	
D	220.0	0.00	329.9	0.0	0.06	0.21	0.01	0.01	
D	200.0	0.00	329.4	0.0	0.06	0.22	0.01	0.01	
D	200.0	0.00	330.0	0.0	0.07	0.22	0.01	0.01	
D	180.0	0.00	329.6	0.0	0.07	0.23	0.01	0.01	
D	180.0	0.00	329.9	0.0	0.06	0.27	0.01	0.01	
D	140.0	0.00	329.8	0.0	0.06	0.29	0.01	0.01	
D	140.0	0.00	330.0	0.0	0.06	0.29	0.01	0.01	
D	100.0	0.00	329.9	0.0	0.07	0.32	0.01	0.01	
D	100.0	0.00	330.0	0.0	0.07	0.34	0.01	0.01	
D	60.0	0.00	329.9	0.0	0.06	0.35	0.01	0.01	
D	60.0	0.00	330.0	0.0	0.06	0.33	0.01	0.01	
D	53.3	0.00	330.0	0.0	0.06	0.33	0.01	0.01	
D	53.3	0.00	329.9	0.0	0.06	0.40	0.01	0.01	
D	40.0	0.00	329.9	0.0	0.06	0.40	0.01	0.01	
D	40.0	0.00	330.0	0.0	0.05	0.36	0.01	0.01	
D	33.3	0.00	330.0	0.0	0.05	0.36	0.01	0.01	
D	33.3	0.00	330.0	0.0	0.06	0.42	0.01	0.01	
D	20.0	0.00	330.0	0.0	0.06	0.42	0.01	0.01	
D	20.0	0.00	330.0	0.0	0.05	0.36	0.01	0.01	
D	13.3	0.00	330.0	0.0	0.05	0.36	0.01	0.01	
D	13.3	0.00	330.0	0.0	0.06	0.42	0.01	0.01	
D	0.0	0.00	330.0	0.0	0.06	0.42	0.01	0.01	

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MAXIMUM MAST DISPLACEMENTS:

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ELEV ft	-----DEFLECTIONS (ft)-----			--TILTS (DEG)---		TWIST DEG
	NORTH	EAST	DOWN	NORTH	EAST	
305.0	1.365 G	1.313 J	0.020 G	0.618 G	0.595 J	0.035 L
300.0	1.311 G	1.261 J	0.019 G	0.618 G	0.595 J	0.035 L
295.0	1.256 G	1.209 J	0.019 G	0.615 G	0.592 J	0.035 L
290.0	1.203 G	1.157 J	0.018 G	0.604 G	0.582 J	0.034 L
285.0	1.150 G	1.106 J	0.018 G	0.586 G	0.564 J	0.033 L
280.0	1.099 G	1.057 J	0.017 G	0.556 G	0.535 J	0.031 L
275.0	1.050 G	1.010 J	0.017 G	0.539 G	0.519 J	0.030 L
270.0	1.003 G	0.965 J	0.016 G	0.520 G	0.501 J	0.028 L
265.0	0.958 G	0.921 J	0.016 G	0.499 G	0.480 J	0.027 L
260.0	0.914 G	0.879 J	0.015 G	0.476 G	0.458 J	0.025 L
255.0	0.872 G	0.839 J	0.015 G	0.461 G	0.444 J	0.024 L
250.0	0.832 G	0.800 J	0.015 G	0.445 G	0.428 J	0.023 L
245.0	0.793 G	0.763 J	0.014 G	0.429 G	0.413 J	0.022 L
240.0	0.755 G	0.726 J	0.014 G	0.412 G	0.397 J	0.021 L
233.3	0.707 G	0.680 J	0.014 G	0.395 G	0.380 J	0.020 L
226.7	0.661 G	0.636 J	0.013 G	0.377 G	0.363 J	0.019 L
220.0	0.618 G	0.594 J	0.013 G	0.359 G	0.346 J	0.018 L
213.3	0.576 G	0.554 J	0.012 G	0.341 G	0.328 J	0.017 L
206.7	0.536 G	0.515 J	0.012 G	0.323 G	0.311 J	0.016 L
200.0	0.499 G	0.479 J	0.012 G	0.305 G	0.294 J	0.015 L
193.3	0.463 G	0.445 J	0.011 G	0.288 G	0.277 J	0.014 L
186.7	0.430 G	0.413 J	0.011 G	0.272 G	0.261 J	0.014 L
180.0	0.398 G	0.382 J	0.010 G	0.255 G	0.245 J	0.013 L
170.0	0.354 G	0.340 J	0.010 G	0.239 G	0.229 J	0.012 L
160.0	0.312 G	0.300 J	0.009 G	0.222 G	0.214 J	0.011 L
150.0	0.274 G	0.263 J	0.009 G	0.206 G	0.198 J	0.010 L
140.0	0.238 G	0.229 J	0.008 G	0.190 G	0.183 J	0.009 L
130.0	0.205 G	0.197 J	0.008 G	0.175 G	0.168 J	0.008 L
120.0	0.175 G	0.168 J	0.007 G	0.159 G	0.153 J	0.008 L
110.0	0.147 G	0.141 J	0.007 G	0.144 G	0.138 J	0.007 L
100.0	0.122 G	0.117 J	0.006 G	0.128 G	0.123 J	0.006 L

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90.0	0.100 G	0.096 J	0.006 G	0.115 G	0.111 J	0.005 L
80.0	0.079 G	0.076 J	0.005 G	0.102 G	0.098 J	0.005 L
70.0	0.060 G	0.058 J	0.005 G	0.089 G	0.085 J	0.004 L
60.0	0.042 G	0.040 J	0.004 G	0.076 G	0.073 J	0.003 L
53.3	0.034 G	0.033 J	0.004 G	0.068 G	0.065 J	0.003 L
40.0	0.019 G	0.018 J	0.003 G	0.050 G	0.048 J	0.002 L
33.3	0.014 G	0.013 J	0.002 H	0.042 G	0.040 J	0.002 L
20.0	0.005 G	0.005 J	0.001 H	0.025 G	0.024 J	0.001 L
13.3	0.002 G	0.002 J	0.001 H	0.017 G	0.016 J	0.001 L
0.0	0.000 A	0.000 A	0.000 A	0.000 A	0.000 A	0.000 A

MAXIMUM TENSION IN MAST MEMBERS (kip)

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ELEV ft	LEGS	DIAG	HORIZ	BRACE
305.0	-----	-----	0.03 A	0.00 A
	0.00 A	0.11 A		
300.0	-----	-----	0.47 K	0.00 A
	0.00 A	1.16 B		
295.0	-----	-----	0.12 A	0.00 A
	2.74 A	1.49 H		
290.0	-----	-----	0.03 G	0.00 A
	6.04 A	1.93 H		
285.0	-----	-----	0.13 A	0.00 A
	10.85 A	2.45 H		
280.0	-----	-----	0.10 A	0.00 A
	15.54 A	1.85 A		
275.0	-----	-----	0.08 A	0.00 A
	19.33 A	2.39 B		
270.0	-----	-----	0.04 A	0.00 A
	24.17 A	2.10 H		
265.0	-----	-----	0.05 A	0.00 A
	27.84 A	2.60 B		
260.0	-----	-----	0.05 A	0.00 A
	32.84 A	2.60 H		
255.0	-----	-----	0.03 A	0.00 A
	37.40 A	2.49 B		
250.0	-----	-----	0.05 A	0.00 A
	41.79 A	2.40 H		
245.0	-----	-----	0.03 A	0.00 A
	45.66 A	2.34 B		
240.0	-----	-----	0.05 A	0.00 A
	49.96 A	2.46 H		
233.3	-----	-----	0.04 A	0.00 A
	54.36 A	2.39 B		
226.7	-----	-----	0.04 A	0.00 A
	58.56 A	2.33 H		
220.0	-----	-----	0.03 A	0.00 A
	62.37 A	2.31 H		
213.3	-----	-----	0.03 A	0.00 A
	66.03 A	2.29 H		
206.7	-----	-----	0.03 A	0.00 A
	69.44 A	2.29 B		
200.0	-----	-----	0.03 A	0.00 A
	72.75 A	2.30 H		
193.3	-----	-----	0.04 A	0.00 A
	75.87 A	2.32 B		
186.7	-----	-----	0.03 A	0.00 A
	78.94 A	2.35 H		
180.0	-----	-----	0.03 A	0.00 A
	82.50 A	2.59 B		
170.0	-----	-----	0.03 A	0.00 A
	86.61 A	2.61 B		
160.0	-----	-----	0.03 A	0.00 A
	90.50 A	2.65 B		
150.0	-----	-----	0.03 A	0.00 A
	94.28 A	2.70 B		
140.0	-----	-----	0.03 A	0.00 A
	97.91 A	2.75 B		
130.0	-----	-----	0.03 A	0.00 A
	101.45 A	2.81 B		
120.0	-----	-----	0.02 A	0.00 A
	104.87 A	2.88 J		
110.0	-----	-----	0.02 A	0.00 A
	108.24 A	2.96 J		
100.0	-----	-----	0.02 A	0.00 A
	111.48 A	3.04 J		

ELEV	LEGS	DIAG	HORIZ	BRACE
90.0	114.64 A	3.12 J	0.02 A	0.00 A
80.0	117.75 A	3.20 J	0.01 C	0.00 A
70.0	120.81 A	3.29 J	0.02 G	0.00 A
60.0	124.72 A	3.44 J	0.09 A	0.00 A
53.3	123.47 A	4.48 J	0.20 I	0.00 A
40.0	130.40 A	3.57 J	0.08 A	0.00 A
33.3	129.06 A	4.55 J	0.18 I	0.00 B
20.0	135.73 A	3.70 J	0.04 A	0.00 B
13.3	134.39 A	4.62 J	0.17 I	0.00 J
0.0			0.00 A	0.00 A

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MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
305.0	-0.11 C	-0.13 G	-0.02 G	0.00 A
300.0	-3.68 G	-1.48 B	-0.23 E	0.00 A
295.0	-7.58 G	-1.31 B	-0.03 G	0.00 A
290.0	-12.30 G	-2.08 H	-0.05 A	0.00 A
285.0	-18.72 G	-2.44 B	-0.04 G	0.00 A
280.0	-23.88 G	-2.20 G	-0.15 G	0.00 A
275.0	-30.88 G	-2.28 H	-0.02 G	0.00 A
270.0	-35.90 G	-2.23 B	-0.03 G	0.00 A
265.0	-42.36 G	-2.63 H	-0.01 G	0.00 A
260.0	-48.50 G	-2.63 B	-0.03 G	0.00 A
255.0	-53.77 G	-2.51 H	-0.01 G	0.00 A
250.0	-58.83 G	-2.43 H	-0.03 G	0.00 A
245.0	-63.43 G	-2.35 H	-0.01 G	0.00 A
240.0	-68.53 G	-2.50 B	-0.03 G	0.00 A
233.3	-73.97 G	-2.41 H	-0.02 G	0.00 A
226.7	-79.15 G	-2.37 H	-0.02 G	0.00 A
220.0	-84.02 G	-2.33 B	-0.02 G	0.00 A
213.3	-88.74 G	-2.32 H	-0.02 G	0.00 A
206.7	-93.26 G	-2.31 H	-0.02 G	0.00 A
200.0	-97.67 G	-2.33 H	-0.02 G	0.00 A
193.3	-101.93 G	-2.34 H	-0.02 G	0.00 A
186.7	-106.14 G	-2.37 B	-0.01 G	0.00 A
180.0	-111.25 G	-2.64 H	-0.02 G	0.00 A
170.0	-117.43 G	-2.66 B	-0.02 G	0.00 A
160.0			-0.02 G	0.00 A

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150.0	-123.41 G	-2.69 B	-0.02 G	0.00 A
140.0	-129.33 G	-2.74 B	-0.01 G	0.00 A
130.0	-135.12 G	-2.80 B	-0.01 G	0.00 A
120.0	-140.90 G	-2.86 B	-0.01 G	0.00 A
110.0	-146.59 G	-2.93 J	-0.01 G	0.00 A
100.0	-152.27 G	-3.00 J	-0.01 G	0.00 A
90.0	-157.94 G	-3.08 J	-0.01 G	0.00 A
80.0	-163.64 G	-3.16 J	-0.01 I	0.00 A
70.0	-169.32 G	-3.24 J	-0.03 A	0.00 A
60.0	-174.96 G	-3.32 J	-0.05 G	0.00 A
53.3	-181.02 G	-3.52 J	-0.30 C	0.00 G
40.0	-182.27 G	-4.54 J	-0.04 G	0.00 A
33.3	-192.32 G	-3.67 J	-0.28 C	0.00 I
20.0	-193.66 G	-4.61 J	-0.02 G	0.00 I
13.3	-203.61 G	-3.77 J	-0.28 C	0.00 C
0.0	-204.95 G	-4.67 J	0.00 A	0.00 A

MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)

-----LOAD-----COMPONENTS-----				TOTAL
NORTH	EAST	DOWN	UPLIFT	SHEAR
18.11 G	15.60 K	211.22 G	-138.46 A	18.11 G

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

-----HORIZONTAL-----			DOWN	-----OVERTURNING-----			TORSION
NORTH	EAST	TOTAL		NORTH	EAST	TOTAL	
		@				@	
		0.0				0.0	
27.4 G	26.1 J	27.4 G	99.8 H	5085.8 G	4877.3 J	5085.8 G	11.1 L

## MAT FOUNDATION DESIGN BY SABRE TOWERS & POLES

Tower Description 305' S3TL Series HD1

Customer AT&T

Project Number 422229

Date 11/14/2018

Engineer REB

**Overall Loads:**

Factored Moment (ft-kips)	17680.65
Factored Axial (kips)	300.00
Factored Shear (kips)	94.79

**Individual Leg Loads:**

Factored Uplift (kips)	567.00
Factored Download (kips)	659.00
Factored Shear (kips)	58.00

Tower eccentric from mat (ft) = 2.75

Width of Tower (ft)	33
Ultimate Bearing Pressure	8.00
Bearing $\Phi_s$	0.75

Allowable Bearing Pressure (ksf)	4.00
Safety Factor	2.00

Bearing Design Strength (ksf)	6
Water Table Below Grade (ft)	14
Width of Mat (ft)	40
Thickness of Mat (ft)	1.75
Depth to Bottom of Slab (ft)	6.5
Bolt Circle Diameter (in)	18

Max. Factored Net Bearing Pressure (ksf) 3.24

Minimum Mat Width (ft) 39.67

Top of Concrete to Top of Bottom Threads (in)	72.625
Diameter of Pier (ft)	4

Minimum Pier Diameter (ft)	2.83
Equivalent Square b (ft)	3.54

Ht. of Pier Above Ground (ft)	0.5
Ht. of Pier Below Ground (ft)	4.75
Quantity of Bars in Mat	66
Bar Diameter in Mat (in)	1.27

Area of Bars in Mat (in <sup>2</sup> )	83.61
Spacing of Bars in Mat (in)	7.27
Quantity of Bars Pier	20
Bar Diameter in Pier (in)	1

Recommended Spacing (in) 6 to 12

Tie Bar Diameter in Pier (in)	0.5
Spacing of Ties (in)	9
Area of Bars in Pier (in <sup>2</sup> )	15.71
Spacing of Bars in Pier (in)	6.26

Minimum Pier $A_s$ (in <sup>2</sup> )	9.05
Recommended Spacing (in)	5 to 12

$f'_c$ (ksi)	4.5
$f_y$ (ksi)	60
Unit Wt. of Soil (kcf)	0.11
Unit Wt. of Concrete (kcf)	0.15
Volume of Concrete (yd <sup>3</sup> )	111.03



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

**Two-Way Shear:**

Average d (in)	16.73		
$\phi v_c$ (ksi)	0.228	$v_u$ (ksi)	0.221
$\phi v_c = \phi(2 + 4/\beta_c)f'_c{}^{1/2}$	0.342		
$\phi v_c = \phi(\alpha_s d/b_o + 2)f'_c{}^{1/2}$	0.320		
$\phi v_c = \phi 4f'_c{}^{1/2}$	0.228		
Shear perimeter, $b_o$ (in)	185.68		
$\beta_c$	1		

**Stability:**

Overturning Design Strength (ft-k)	24157.1	Factored Overturning Moment (ft-k)	18344.2
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**One-Way Shear:**

$\phi V_c$ (kips)	915.8	$V_u$ (kips)	671.2
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**Pier Design:**

Design Tensile Strength (kips)	848.2	$T_u$ (kips)	567.0
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$\phi V_n$ (kips)	163.9	$V_u$ (kips)	58.0
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$\phi V_c = \phi 2(1 + N_u/(500A_g))f'_c{}^{1/2}b_w d$	78.5		
--	------	--	--

$V_s$ (kips)	100.5	$V_s \max = 4 f'_c{}^{1/2} b_w d$ (kips)	494.6
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Maximum Spacing (in) 9.76 (Only if Shear Ties are Required)

Actual Hook Development (in)	15.46	Req'd Hook Development $l_{dh}$ (in)	10.55
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\*\*\* Ref. ACI 11.5.5 & 11.5.6.3

**Anchor Bolt Pull-Out:**

$\phi P_c = \phi \lambda (2/3) f'_c{}^{1/2} (2.8A_{SLOPE} + 4A_{FLAT})$	272.8	$P_u$ (kips)	567.0
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Pier Rebar Development Length (in)	58.63	Required Length of Development (in)	29.89
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**Flexure in Slab:**

$\phi M_n$ (ft-kips)	5780.4	$M_u$ (ft-kips)	5752.5
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a (in)	2.73
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Steel Ratio	0.01041
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$\beta_1$	0.825
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Maximum Steel Ratio ( $\rho_l$ )	0.0197
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Minimum Steel Ratio	0.0018
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Rebar Development in Pad (in)	110.95	Required Development in Pad (in)	15.20
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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 305' S3TL Series HD1  
 Customer Name AT&T  
 Job Number 422229  
 Date 11/14/2018  
 Engineer REB

Factored Uplift (kips)	567
Factored Download (kips)	659
Factored Shear (kips)	58
Ultimate Bearing Pressure	55.3
Bearing $\Phi$ s	0.75
Bearing Design Strength (ksf)	41.475
Water Table Below Grade (ft)	14
Bolt Circle Diameter (in)	18
Top of Concrete to Top of Bottom Threads (in)	72.625
Pier Diameter (ft)	6
Ht. Above Ground (ft)	0.5
Pier Length Below Ground (ft)	38
Quantity of Bars	26
Bar Diameter (in)	1
Tie Bar Diameter (in)	0.5
Spacing of Ties (in)	12
Area of Bars (in <sup>2</sup> )	20.42
Spacing of Bars (in)	7.73
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> )	40.32
Skin Friction Factor for Uplift	1

Minimum Pier Diameter (ft) 2.83

Minimum Area of Steel (in<sup>2</sup>) 20.36

Length to Ignore Download (ft)

Ignore Bottom Length in Download?

0

Depth at Bottom of Layer (ft)	Ult. Skin Friction (ksf)	(Ult. Skin Friction)*(Uplift Factor)	$\gamma$ (kcf)
4	0.10	0.10	0.11
8	0.35	0.35	0.11
18	0.75	0.75	0.11
40	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)	54.1
Bearing Design Strength (kips)	1172.7
Skin Friction Design Strength (kips)	470.8
Download Design Strength (kips)	1643.4

Factored Net Download (kips) 713.1

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

**Uplift:**

Nominal Skin Friction (kips)	627.7
W <sub>c</sub> , Weight of Concrete (kips)	120.9
W <sub>R</sub> , Soil Resistance (kips)	2077.6
ΦsWr+0.9Wc (kips)	1667.0

Uplift Design Strength (kips)	579.6	Factored Uplift (kips)	567.0
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**Pier Design:**

Design Tensile Strength (kips)	1102.7
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T <sub>u</sub> (kips)	567.0
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ΦV <sub>n</sub> (kips)	341.2
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V <sub>u</sub> (kips)	58.0
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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)	341.2
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V <sub>s</sub> (kips)	0.0
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*** V <sub>s</sub> max = 4 f' <sub>c</sub> <sup>1/2</sup> b <sub>w</sub> d (kips)	1112.8
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Maximum Spacing (in)	6.50
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(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> )	613.2
--	-------

P <sub>u</sub> (kips)	567.0
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Rebar Development Length (in)	46.63	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

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

# KY Public Service Commission

## Master Utility Search

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

Utility ID	Utility Name	Address/City/Contact	Utility Type	Status
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	Active <input type="text"/>
<input type="button" value="Search"/>				

	Utility ID	Utility Name	Utility Type	Class	City	State
<input type="button" value="View"/>	4107900	365 Wireless, LLC	Cellular	D	Atlanta	GA
<input type="button" value="View"/>	4109300	Access Point, Inc.	Cellular	D	Cary	NC
<input type="button" value="View"/>	4108300	Air Voice Wireless, LLC	Cellular	A	Bloomfield Hill	MI
<input type="button" value="View"/>	4110650	Alliant Technologies of KY, L.L.C.	Cellular	C	Morristown	NJ
<input type="button" value="View"/>	44451184	Alltel Communications, LLC	Cellular	A	Basking Ridge	NJ
<input type="button" value="View"/>	4107800	American Broadband and Telecommunications Company	Cellular	C	Toledo	OH
<input type="button" value="View"/>	4108650	AmeriMex Communications Corp.	Cellular	D	Dunedin	FL
<input type="button" value="View"/>	4105100	AmeriVision Communications, Inc. d/b/a Affinity 4	Cellular	D	Virginia Beach	VA
<input type="button" value="View"/>	4110700	Andrew David Balholm dba Norcell	Cellular	C	Clayton	WA
<input type="button" value="View"/>	4107400	Bandwidth.com, Inc.	Cellular	A	Raleigh	NC
<input type="button" value="View"/>	4108600	BCN Telecom, Inc.	Cellular	D	Morristown	NJ
<input type="button" value="View"/>	4110550	Blue Casa Mobile, LLC	Cellular	D	Santa Barbara	CA
<input type="button" value="View"/>	4108750	Blue Jay Wireless, LLC	Cellular	C	Carrollton	TX
<input type="button" value="View"/>	4202300	Bluegrass Wireless, LLC	Cellular	A	Elizabethtown	KY
<input type="button" value="View"/>	4107600	Boomerang Wireless, LLC	Cellular	B	Hiawatha	IA
<input type="button" value="View"/>	4105500	BullsEye Telecom, Inc.	Cellular	D	Southfield	MI
<input type="button" value="View"/>	4110050	CampusSims, Inc.	Cellular	D	Boston	MA



<a href="#">View</a>	4100700	Cellco Partnership dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4106600	Cintex Wireless, LLC	Cellular	D	Rockville	MD
<a href="#">View</a>	4101900	Consumer Cellular, Incorporated	Cellular	A	Portland	OR
<a href="#">View</a>	4106400	Credo Mobile, Inc.	Cellular	A	San Francisco	CA
<a href="#">View</a>	4108850	Cricket Wireless, LLC	Cellular	A	San Antonio	TX
<a href="#">View</a>	4001900	CTC Communications Corp. d/b/a EarthLink Business I	Cellular	D	Grand Rapids	MI
<a href="#">View</a>	10640	Cumberland Cellular Partnership	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	4101000	East Kentucky Network, LLC dba Appalachian Wireless	Cellular	A	Ivel	KY
<a href="#">View</a>	4002300	Easy Telephone Service Company dba Easy Wireless	Cellular	D	Ocala	FL
<a href="#">View</a>	4109500	Enhanced Communications Group, LLC	Cellular	D	Bartlesville	OK
<a href="#">View</a>	4110450	Excellus Communications, LLC	Cellular	D	Chattanooga	TN
<a href="#">View</a>	4105900	Flash Wireless, LLC	Cellular	C	Concord	NC
<a href="#">View</a>	4104800	France Telecom Corporate Solutions L.L.C.	Cellular	D	Oak Hill	VA
<a href="#">View</a>	4109350	Global Connection Inc. of America	Cellular	D	Norcross	GA
<a href="#">View</a>	4102200	Globalstar USA, LLC	Cellular	B	Covington	LA
<a href="#">View</a>	4109600	Google North America Inc.	Cellular	B	Mountain View	CA
<a href="#">View</a>	33350363	Granite Telecommunications, LLC	Cellular	D	Quincy	MA
<a href="#">View</a>	4106000	GreatCall, Inc. d/b/a Jitterbug	Cellular	A	San Diego	CA
<a href="#">View</a>	10630	GTE Wireless of the Midwest dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4110600	Horizon River Technologies, LLC	Cellular	C	Atlanta	GA
<a href="#">View</a>	4103100	i-Wireless, LLC	Cellular	A	Newport	KY
<a href="#">View</a>	4109800	IM Telecom, LLC d/b/a Infiniti Mobile	Cellular	D	Tulsa	OK
<a href="#">View</a>	22215360	KDDI America, Inc.	Cellular	D	New York	NY
<a href="#">View</a>	10872	Kentucky RSA #1 Partnership	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	10680	Kentucky RSA #3 Cellular General	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	10681	Kentucky RSA #4 Cellular General	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	4109750	Konatel, Inc. dba telecom.mobi	Cellular	D	Johnstown	PA
<a href="#">View</a>	4107300	Lycamobile USA, Inc.	Cellular	D	Newark	NJ
<a href="#">View</a>	4108800	MetroPCS Michigan, LLC	Cellular	A	Bellevue	WA
<a href="#">View</a>	4109650	Mitel Cloud Services, Inc.	Cellular	D	Mesa	AZ
<a href="#">View</a>	4202400	New Cingular Wireless PCS, LLC dba AT&T Mobility, PCS	Cellular	A	San Antonio	TX

<a href="#">View</a>	10900	New Par dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4000800	Nextel West Corporation	Cellular	D	Overland Park	KS
<a href="#">View</a>	4001300	NPCR, Inc. dba Nextel Partners	Cellular	D	Overland Park	KS
<a href="#">View</a>	4001800	OnStar, LLC	Cellular	A	Detroit	MI
<a href="#">View</a>	4110750	Onvoy Spectrum, LLC	Cellular	C	Plymouth	MN
<a href="#">View</a>	4109050	Patriot Mobile LLC	Cellular	D	Southlake	TX
<a href="#">View</a>	4110250	Plintron Technologies USA LLC	Cellular	D	Bellevue	WA
<a href="#">View</a>	33351182	PNG Telecommunications, Inc. dba PowerNet Global Communications	Cellular	D	Cincinnati	OH
<a href="#">View</a>	4202100	Powertel/Memphis, Inc. dba T-Mobile	Cellular	A	Bellevue	WA
<a href="#">View</a>	4107700	Puretalk Holdings, LLC	Cellular	A	Covington	GA
<a href="#">View</a>	4106700	Q Link Wireless, LLC	Cellular	A	Dania	FL
<a href="#">View</a>	4108700	Ready Wireless, LLC	Cellular	B	Hiawatha	IA
<a href="#">View</a>	4110350	Regional Strategic Partners LLC	Cellular	D	Buford	GA
<a href="#">View</a>	4110500	Republic Wireless, Inc.	Cellular	D	Raleigh	NC
<a href="#">View</a>	4106200	Rural Cellular Corporation	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4108550	Sage Telecom Communications, LLC dba TruConnect	Cellular	D	Los Angeles	CA
<a href="#">View</a>	4109150	SelecTel, Inc. d/b/a SelecTel Wireless	Cellular	D	Freemont	NE
<a href="#">View</a>	4106300	SI Wireless, LLC	Cellular	A	Carbondale	IL
<a href="#">View</a>	4110150	Spectrotel, Inc. d/b/a Touch Base Communications	Cellular	D	Neptune	NJ
<a href="#">View</a>	4200100	Sprint Spectrum, L.P.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4200500	SprintCom, Inc.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4109550	Stream Communications, LLC	Cellular	D	Dallas	TX
<a href="#">View</a>	4110200	T C Telephone LLC d/b/a Horizon Cellular	Cellular	D	Red Bluff	CA
<a href="#">View</a>	4202200	T-Mobile Central, LLC dba T-Mobile	Cellular	A	Bellevue	WA
<a href="#">View</a>	4002500	TAG Mobile, LLC	Cellular	D	Carrollton	TX
<a href="#">View</a>	4109700	Telecom Management, Inc. dba Pioneer Telephone	Cellular	D	South Portland	ME
<a href="#">View</a>	4107200	Telefonica USA, Inc.	Cellular	D	Miami	FL
<a href="#">View</a>	4108900	Telrite Corporation dba Life Wireless	Cellular	D	Covington	GA
<a href="#">View</a>	4108450	Tempo Telecom, LLC	Cellular	D	Kansas City	MO
<a href="#">View</a>	4109950	The People's Operator USA, LLC	Cellular	D	New York	NY
<a href="#">View</a>	4109000	Ting, Inc.	Cellular	A	Toronto	ON
<a href="#">View</a>	4110400	Torch Wireless Corp.	Cellular	D	Jacksonville	FL
<a href="#">View</a>	4103300	Touchtone Communications, Inc.	Cellular	D	Whippany	NJ

<a href="#">View</a>	4104200	TracFone Wireless, Inc.	Cellular	D	Miami	FL
<a href="#">View</a>	4002000	Truphone, Inc.	Cellular	D	Durham	NC
<a href="#">View</a>	4110300	UVNV, Inc.	Cellular	D	Costa Mesa	CA
<a href="#">View</a>	4105700	Virgin Mobile USA, L.P.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4110800	Visible Service LLC	Cellular	C	Lone Tree	CO
<a href="#">View</a>	4200600	West Virginia PCS Alliance, L.C.	Cellular	A	Waynesboro	VA
<a href="#">View</a>	4106500	WiMacTel, Inc.	Cellular	D	Palo Alto	CA
<a href="#">View</a>	4110100	Windward Wireless LLC	Cellular	D	Suwanee	GA
<a href="#">View</a>	4109900	Wireless Telecom Cooperative, Inc. dba theWirelessFreeway	Cellular	D	Louisville	KY



**EXHIBIT E**  
**FAA**



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

Aeronautical Study No.  
 2017-ASO-25566-OE

Issued Date: 01/05/2018

Dave Cundiff (ET)  
 AT&T Mobility  
 208 S. Akard St.  
 RM 1012  
 Dallas, TX 75202

**\*\* 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 Pilot Road  
 Location:           Stanton, KY  
 Latitude:           37-45-48.43N NAD 83  
 Longitude:         83-45-59.93W  
 Heights:           1155 feet site elevation (SE)  
                       320 feet above ground level (AGL)  
                       1475 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 1, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(M-Dual),&12.

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

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

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

This determination expires on 07/05/2019 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.

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) 267-0105, or [j.garver@faa.gov](mailto:j.garver@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2017-ASO-25566-OE.

**Signature Control No: 351282883-352426698**

Jay Garver

Specialist

( DNE )

Attachment(s)

Frequency Data

Map(s)

cc: FCC

Frequency Data for ASN 2017-ASO-25566-OE

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



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



## KENTUCKY AIRPORT ZONING COMMISSION

MATTHEW BEVIN  
Governor

421 Buttermilk Pike  
Covington, KY 41017  
www.transportation.ky.gov  
859-341-2700

February 14, 2018

### APPROVAL OF APPLICATION

**APPLICANT:**

John Monday  
John Monday  
3300 E. Renner Rd B3132  
Richardson, TX 75082

**SUBJECT:** AS-099-150-2018-017

**STRUCTURE:** Antenna Tower  
**LOCATION:** Stanton, KY  
**COORDINATES:** 37° 45' 48.43" N / 83° 45' 59.93" W  
**HEIGHT:** 320' AGL/1475' AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 320' AGL/ 1475' AMSL Antenna Tower near Stanton, KY 37° 45' 48.43" N / 83° 45' 59.93" W.

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

A copy of the approved application is enclosed for your files.

Medium Dual Obstruction Lighting is required in accordance with 602 KAR 50:100.

John Houlihan  
Administrator



An Equal Opportunity Employer M/F/D





**KENTUCKY AIRPORT ZONING COMMISSION**

MATTHEW BEVIN  
Governor

421 Buttermilk Pike  
Covington, KY 41017  
www.transportation.ky.gov  
859-341-2700

**CONSTRUCTION/ALTERATION STATUS REPORT**

February 14, 2018

AERONAUTICAL STUDY NUMBER: AS-099-150-2018-017

John Monday  
John Monday  
3300 E. Renner Rd B3132  
Richardson, TX 75082

This concerns the permit which was issued to you by the Kentucky Airport Zoning Commission on February 14, 2018. This permit is valid for a period of 18 Month(s) from its date of issuance. If construction is not completed within the said 18-Month period, this permit shall lapse and be void, and no work shall be performed without the issuance of a new permit. When appropriate, please indicate the status of the project in the place below and return this letter to John Houlihan, Administrator, Kentucky Airport Zoning Commission, 421 Buttermilk Pike, Covington, KY, 41017. 859-341-2700.

STRUCTURE: Antenna Tower  
LOCATION: Stanton, KY  
COORDINATES: 37° 45' 48.43" N / 83° 45' 59.93" W  
HEIGHT: 320' AGL /1475' AMSL

**CONSTRUCTION/ALTERATION STATUS**

1. The project ( ) is abandoned. ( ) is not abandoned.

2. Construction status is as follows:

Structure reached its greatest height of \_\_\_\_\_ ft. AGL  
\_\_\_\_\_ ft. AMSL on \_\_\_\_\_ (date).

Date construction was completed. \_\_\_\_\_

Type of obstruction marking/painting. \_\_\_\_\_

Type of obstruction lighting. \_\_\_\_\_

As built coordinates. \_\_\_\_\_

Miscellaneous Information. \_\_\_\_\_

DATE \_\_\_\_\_

SIGNATURE/TITLE \_\_\_\_\_



2018-017



KENTUCKY TRANSPORTATION CABINET  
KENTUCKY AIRPORT ZONING COMMISSION

TC 55-2  
Rev. 06/2016  
Page 2 of 2

APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE

<b>APPLICANT (name)</b> John Monday		<b>PHONE</b> 855-699-7073	<b>FAX</b> 972-907-1131	<b>KY AERONAUTICAL STUDY #</b> AS-099-150-248-017	
<b>ADDRESS (street)</b> 3300 E. Renner Road, 83132		<b>CITY</b> Richardson		<b>STATE</b> TX	<b>ZIP</b> 75082
<b>APPLICANT'S REPRESENTATIVE (name)</b> Roy Johnson		<b>PHONE</b> 502-445-2475	<b>FAX</b> 502-222-4266		
<b>ADDRESS (street)</b> 3605 Mattingly Road		<b>CITY</b> Buckner		<b>STATE</b> KY	<b>ZIP</b> 40010
<b>APPLICATION FOR</b> <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Alteration <input type="checkbox"/> Existing				<b>WORK SCHEDULE</b>	
<b>DURATION</b> <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary (months days )				Start End TBD	
<b>TYPE</b> <input type="checkbox"/> Crane <input type="checkbox"/> Building		<b>MARKING/PAINTING/LIGHTING PREFERRED</b>			
<input checked="" type="checkbox"/> Antenna Tower		<input type="checkbox"/> Red Lights & Paint <input type="checkbox"/> White- medium intensity <input type="checkbox"/> White- high intensity			
<input type="checkbox"/> Power Line <input type="checkbox"/> Water Tank		<input checked="" type="checkbox"/> Dual- red & medium intensity white <input type="checkbox"/> Dual- red & high intensity white			
<input type="checkbox"/> Landfill <input type="checkbox"/> Other		<input type="checkbox"/> Other			
<b>LATITUDE</b> 37° 45' 48.43 "		<b>LONGITUDE</b> 83° 45' 59.93 "		<b>DATUM</b> <input checked="" type="checkbox"/> NAD83 <input type="checkbox"/> NAD27	
<input type="checkbox"/> Other					
<b>NEAREST KENTUCKY</b> City <sup>Stanton</sup> County Powell		<b>NEAREST KENTUCKY PUBLIC USE OR MILITARY AIRPORT</b> 150 Stanton			
<b>SITE ELEVATION (AMSL, feet)</b> 1155		<b>TOTAL STRUCTURE HEIGHT (AGL, feet)</b> 320		<b>CURRENT (FAA aeronautical study #)</b> 2017-ASO-25566-OE	
<b>OVERALL HEIGHT (site elevation plus total structure height, feet)</b> 1475				<b>PREVIOUS (FAA aeronautical study #)</b>	
<b>DISTANCE (from nearest Kentucky public use or Military airport to structure)</b> 6.4 NM				<b>PREVIOUS (KY aeronautical study #)</b>	
<b>DIRECTION (from nearest Kentucky public use or Military airport to structure)</b> Southeast					
<b>DESCRIPTION OF LOCATION (Attach USGS 7.5 minute quadrangle map or an airport layout drawing with the precise site marked and any certified survey.)</b>  1A and Quad attached					
<b>DESCRIPTION OF PROPOSAL</b> AT&T proposes to construct a 305' cell tower with a 15' lightning rod for an overall height of 320'.					
<b>FAA Form 7460-1 (Has the "Notice of Construction or Alteration" been filed with the Federal Aviation Administration?)</b> <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes, when? 12/14/17					
<b>CERTIFICATION (I hereby certify that all the above entries, made by me, are true, complete, and correct to the best of my knowledge and belief.)</b>					
<b>PENALTIES (Persons failing to comply with KRS 183.861 to 183.990 and 602 KAR 050 are liable for fines and/or imprisonment as set forth in KRS 183.990(3). Noncompliance with FAA regulations may result in further penalties.)</b>					
<b>NAME</b> Michelle Ward	<b>TITLE</b> Sr. Real Estate Mgr.	<b>SIGNATURE</b> 		<b>DATE</b> 1/03/18	
<b>COMMISSION ACTION</b>					
<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved					
<b>SIGNATURE</b> 				<b>DATE</b> 2-14-18	
<input type="checkbox"/> Chairperson, KAZC <input checked="" type="checkbox"/> Administrator, KAZC					

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

Date: October 30, 2018

POD Job Number: 17-12797

GEOTECHNICAL REPORT

**PILOT RD**

**(KYL06084)**

**37° 45' 48.43"N**

**83° 45' 59.93" W**

Pilot Rd  
Stanton, KY 40380

Prepared For:



Prepared By:





October 30, 2018

Ms. Michelle Ward  
AT&T  
534 Armory Place  
4<sup>th</sup> Floor  
Louisville, KY 40202

Re: Geotechnical Report – **PROPOSED 305' SELF-SUPPORT TOWER w/ 15' LIGHTNING ARRESTOR**  
Site Name: **PILOT RD (KYL06084)**  
Site Address: Pilot Road, Stanton, Powell County, Kentucky  
Coordinates: N37° 45' 48.43", W83° 45' 59.93"  
POD Project No. 17-12797

Dear Ms. Ward:

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 blue ink that reads "Mark Patterson".

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



Copies submitted: (3) Ms. Michelle Ward

**LETTER OF TRANSMITTAL**

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**APPENDIX**

BORING LOCATION PLAN  
BORING LOG  
SOIL SAMPLE CLASSIFICATION



Geotechnical Report

PILOT RD  
October 30, 2018

Geotechnical Report  
**PROPOSED 305' SELF-SUPPORT TOWER w/ 15' LIGHTNING ARRESTOR**

Site Name: **PILOT RD (KYL06084)**  
Pilot Road, Stanton, Powell County, Kentucky  
N37° 45' 48.43", W83° 45' 59.93"

**1. PURPOSE AND SCOPE**

The purpose of this study was to determine the general subsurface conditions at the site of the proposed tower by drilling three borings and to evaluate this data with respect to foundation concept and design for the proposed tower. Also included is an evaluation of the site with respect to potential construction problems and recommendations dealing with quality control during construction.

**2. PROJECT CHARACTERISTICS**

AT&T is proposing to construct a self-support tower and either an equipment shelter, slab or platform at N37° 45' 48.43", W83° 45' 59.93", Pilot Road, Stanton, Powell County, Kentucky. The site is located on a wooded hillside adjacent to Pilot Road in the Daniel Boone National Forest in a very rural area of Powell County. The proposed lease area will be 6,000 square feet and will be accessed by a short new easement to Pilot Road adjacent to the east of the site. The proposed elevation at the tower location is about EL 1155 and there is over 23 feet of change in elevation across the proposed lease area. The proposed tower location is shown on the Boring Location Plan in the Appendix.

**3. SUBSURFACE CONDITIONS**

The subsurface conditions were explored by drilling three test borings near the base of the proposed tower. The Geotechnical Soil Test Boring Logs, which are included in the Appendix, describes the materials and conditions encountered. A sheet defining the terms and symbols used on the boring logs is also included in the Appendix. The general subsurface conditions disclosed by the test borings are discussed in the following paragraphs.

According to the Kentucky Geological Survey, Kentucky Geologic Map Information Services, the site is underlain by the Lower Pennsylvanian age Grundy Formation. The formation is made up of mixed clastics of shale, siltstone and sandstone and is non-karst.

The borings encountered about 14 to 15 inches of topsoil at the existing ground surface. Below the topsoil, the borings encountered silty clay (CL) of low to medium plasticity to about 6 to 8.5 feet. The SPT N-values in the silty clay were between 2 and 12 blows per foot (bpf) generally indicating a very soft to stiff consistency. Highly weathered sandstone

Geotechnical Report

PILOT RD  
October 30, 2018

was encountered below the silty clay to scheduled termination depths of 20 feet in B-3. Borings B-1 and B-2 encountered highly weathered shale at about 18 feet and were terminated at the scheduled depths of 20 and 40 feet.

Groundwater was noted on the drilling equipment at about 14 feet in boring B-1 and at 14 feet at completion. Borings B-2 and B-3 were dry at the completion of soil drilling operations. 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 2013 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 tower 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 40 feet, a deeper boring should be drilled to determine the nature of the deeper material.

Depth Below Ground Surface, feet	0 - 4	4 - 8	8 - 18	18 - 40
<b>Ultimate Bearing Pressure (psf)</b>		5,300	13,850	55,300
<b>c</b> <b>Undrained Shear Strength, psf</b>	500	1,000	2,500	10,000
<b>∅</b> <b>Angle of Internal Friction degrees</b>	0	0	0	0
<b>Total Unit Weight, pcf</b>	110	120	135	135
<b>Soil Modulus Parameter</b> <b>k, pci</b>	30	500	750	2000
<b>Passive Soil Pressure,</b> <b>psf/one foot of depth</b>		650 + 40(D-3)	1,650 + 45(D-8)	6,500 + 45(D-18)
<b>Side Friction, psf</b>	100	350	750	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 weathered shale at least 6 feet in depth can be designed using a net allowable bearing 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. The friction value can be increased to 0.40 between the concrete and bedrock. The passive pressures given for the drilled pier foundation may be used to resist lateral forces.

It is important that the mat be designed with an adequate factor of safety with regard to overturning under the maximum design wind load.

**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 2,000 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) of 90 lbs/cu.in. can be used for design of the slab. All existing topsoil or soft natural soil should be removed beneath crushed stone layer.

**4.4. Equipment Building**

If an equipment building support on a slab is chosen in place of the equipment platform, it may be supported on shallow spread footings bearing in the highly weathered shale and designed for a net allowable soil pressure of 2,000 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.

Floor slabs must be supported on at least 4-inch layer of relatively clean granular material such as gravel or crushed stone containing not more than 10 percent material that passes through a No. 4 sieve. This is to help distribute concentrated loads and equalize moisture conditions beneath the slab. Provided that a minimum of 4 in. of granular material is placed below the slab, a modulus of subgrade reaction (k) of 90 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 until about 12 feet. 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:

- ✎ 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. Groundwater was encountered at 12 feet during the soil drilling and some significant seepage may be encountered. The drilled pier contractor should have pumps on hand to remove water from the drilled pier.
- ✎ Specify concrete slumps ranging from 4 to 7 inches for the drilled shaft construction. These slumps are recommended to fill irregularities along the sides and bottom of the drilled hole, displace water as it is placed, and permit placement of reinforcing cages into the fluid concrete.

- ✦ Retain the geotechnical engineer to observe foundation excavations after the bottom of the hole is leveled, cleaned of any mud or extraneous material, and dewatered.
- ✦ Install a temporary protective steel casing to prevent side wall collapse, prevent excessive mud and water intrusion in the drilled shaft.
- ✦ The protective steel casing may be extracted as the concrete is placed provided a sufficient head of concrete is maintained inside the steel casing to prevent soil or water intrusion into the newly placed concrete.
- ✦ Direct the concrete placement into the drilled hole through a centering chute to reduce side flow or segregation.

## 5.2 Fill Compaction

All engineered fill placed adjacent to and above the tower foundation should be compacted to a dry density of at least 95 percent of the standard Proctor maximum dry density (ASTM D-698). This minimum compaction requirement should be increased to 98 percent for any fill placed below the tower foundation bearing elevation. Any fill placed beneath the tower foundation should be limited to well-graded sand and gravel or crushed stone. The compaction should be accomplished by placing the fill in about 8 inch (or less) loose lifts and mechanically compacting each lift to at least the specified minimum dry density. Field density tests should be performed on each lift as necessary to ensure that adequate moisture conditioning and compaction is being achieved.

Compaction by flooding is not considered acceptable. This method will generally not achieve the desired compaction and the large quantities of water will tend to soften the foundation soils.

## 5.3 Construction Dewatering

At the time of this investigation, groundwater was not encountered until 12 feet. Therefore, no special provisions regarding groundwater control are considered necessary for shallow foundations. Any seepage should be able to be pumped with sumps.

If groundwater is encountered in the drilled pier excavations, it may be difficult to dewater since pumping directly from the excavations could cause a deterioration of the bottom of the excavation. If the pier excavations are not dewatered, concrete should be placed by the tremie method.



## **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 were terminated at the scheduled depths of 20 and 40 feet. The split-spoon samples were inspected and visually classified by a geotechnical engineer. Representative portions of the soil samples were sealed in glass jars and returned to our laboratory.

The boring 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.

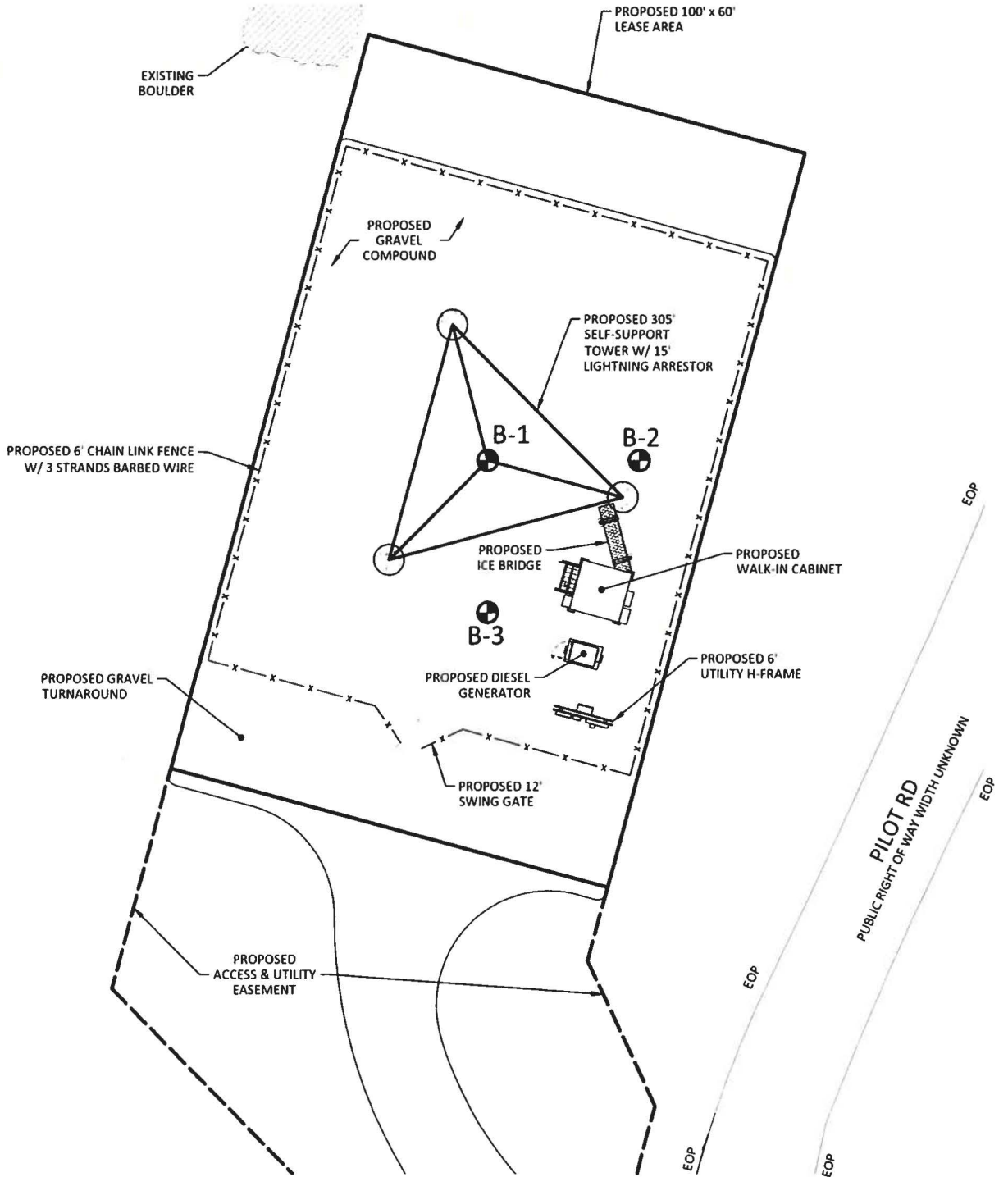
The nature and extent of variation and change in the subsurface conditions at the site may not become evident until the course of construction. Construction monitoring by the geotechnical engineer or a representative is therefore considered necessary to verify the subsurface conditions and to check that 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.

## **APPENDIX**

**BORING LOCATION PLAN**

**BORING LOG**

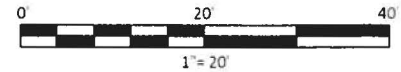
**SOIL SAMPLE CLASSIFICATION**




**LEGEND**



BORING LOCATION



SHEET TITLE: <b>BORING LOCATION PLAN</b>	SITE NUMBER: <b>KYL06084</b>	SITE INFORMATION: <b>PILOT ROAD</b>  PILOT ROAD STANTON, KY 40280  POWELL COUNTY	PREPARED BY:  <b>POD</b> POWER OF DESIGN 11490 BLUEGRASS PKWY LOUISVILLE, KY 40299 502-437-5252
	LATITUDE: 37° 45' 48.43" LONGITUDE: 83° 45' 59.93"		
SHEET NUMBER: <b>1</b>	POD NUMBER: 17-12797 DRAWN BY: LAW CHECKED BY: MEP DATE: 10.29.18		



# Boring Log

Boring: B-1

Page 1 of 1

**Project:** Pilot Road **City, State:** Stanton, KY

**Method:** H.S.A. **Boring Date:** 8-Oct-18 **Location:** Proposed Tower

**Inside Diameter:** 4" **Drill Rig Type:** 66 DT **Hammer Type:** Auto

**Groundwater:** 14' on drill rods and 12' at completion **Weather:**

**Driller:** Commonwealth Drilling **Note:** About 15 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.
1.2	8.5	SILTY CLAY (CL) - soft, moist, orange brown with trace sand from weathered sandstone  - medium stiff with sandstone fragments	1-2.5	SS	1, 2, 2	12	4					2.3
	3.5		3.5 - 5	SS	4, 3, 4	13	7					1.5
			6 - 7.5	SS	4, 5, 7	17	12					
8.5	18.0	SANDSTONE - highly weathered, orange brown - light gray	8.5 - 10	SS	5, 6, 7	16	13					6.0
			13.5-15	SS	50,		50					
			18.5-20	SS	18, 44, 50	18	94					
18.0	40.0	SHALE - highly weathered, black  - less weathered	23.5-25	SS	50,	0	50					
			28.5-30	SS	50,	3	50					
			33.5-35	SS			0					
			38.5-40	SS	50,	0	50					
		Boring Terminated at 40 feet										

	<h2 style="margin:0;">Boring Log</h2>	<b>Boring: B-2</b>  <b>Page 1 of 1</b>
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<b>Project:</b> Pilot Road	<b>City, State</b>	Stanton, KY
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<b>Method:</b> H.S.A.	<b>Boring Date:</b> 8-Oct-18	<b>Location:</b> Proposed Tower
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<b>Inside Diameter:</b> 4"	<b>Drill Rig Type:</b> 66 DT	<b>Hammer Type:</b> Auto
----------------------------	------------------------------	--------------------------

<b>Groundwater:</b> DRY	<b>Weather:</b>
-------------------------	-----------------

<b>Driller:</b> Commonwealth Drilling	<b>Note:</b> About 14 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.
1.2	6.0	SILTY CLAY (CL) - very soft, moist, orange brown with sandstone fragments  - medium stiff	1-2.5	SS	0, 1, 1	15	2,					1.8
	3.5		3.5 - 5	SS	3, 3, 4	18	7,					2.5
6.0	18.5	SANDSTONE - highly weathered, dark brown with trace clay	6 - 7.5	SS	3, 4, 6	14	10,					2.1
			8.5 - 10	SS	4, 4, 6	16	10,					3.5
			13.5-15	SS	3, 4, 7	13	11,					3.8
18.5	20.0	SHALE - highly weathered, light brown-light gray with some clayshale	18.5-20	SS	8, 13, 30	14	43,					6.0
Boring Terminated at 20 feet												

	<h2 style="margin:0;">Boring Log</h2>	<b>Boring: B-3</b>  <b>Page 1 of 1</b>
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<b>Project:</b>	<b>Pilot Road</b>	<b>City, State</b>	<b>Stanton, KY</b>
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<b>Method:</b>	<b>H.S.A.</b>	<b>Boring Date:</b>	<b>8-Oct-18</b>	<b>Location:</b>	<b>Proposed Tower</b>
----------------	---------------	---------------------	-----------------	------------------	-----------------------

<b>Inside Diameter:</b>	<b>4"</b>	<b>Drill Rig Type:</b>	<b>66 DT</b>	<b>Hammer Type:</b>	<b>Auto</b>
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<b>Groundwater:</b>	<b>DRY</b>	<b>Weather:</b>	
---------------------	------------	-----------------	--

<b>Driller:</b>	<b>Commonwealth Drilling</b>	<b>Note:</b>	<b>About 14 inches of topsoil was encountered at the ground surface</b>
-----------------	------------------------------	--------------	---

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
1.2	6.0	SILTY CLAY (CL) - very soft, moist, orange brown with sandstone fragments  - stiff		1-2.5	SS	0, 1, 1	15	2					1.8
	3.5			3.5 - 5	SS	3, 3, 4	18	7					2.5
6.0	18.5	SANDSTONE - highly weathered, orange brown-light gray  - weathered		6 - 7.5	SS	3, 4, 6	14	10					2.1
	8.5			8.5 - 10	SS	4, 4, 6	16	10					3.5
				13.5-15	GS								
				18.5-20	GS								
		Boring Terminated at 20 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	Core Diameter	Inches
		NQ	BQ	1-7/16
		43 RQD	NQ	1-7/8
RQD =	$\frac{\text{Sum of 4 in. and longer Rock Pieces Recovered}}{\text{Length of Core Run}} \times 100$		HQ	2-1/2

**SYMBOLS**

**KEY TO MATERIAL TYPES**

SOILS	
Group Symbols	Typical Names
GW	Well graded gravel - sand mixture, little or no fines
GP	Poorly graded gravels or gravel - sand mixture little or no fines
GM	Silty gravels, gravel - sand silt mixtures
GC	Clayey gravels, gravel - sand - clay mixtures
SW	Well graded sands, gravel, sands, little or no fines
SP	Poorly graded sands or gravel, 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, silt, or clayey, fine sands, or clayey silts
OL	Organic silts and organic silt, 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 sand, or silt, 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

**EXHIBIT H  
DIRECTIONS TO WCF SITE**

## Driving Directions to Proposed Tower Site

1. Beginning at 525 Washington Street, Stanton, KY, head south on Washington Street (towards Boone Street) and travel approximately 0.2 miles.
2. Turn left onto Boone Street and travel 0.2 miles.
3. Turn right onto N. Main Street and travel approximately 0.2 miles.
4. Turn left onto KY-11 S / KY-15 S / E College Avenue and travel approximately 3.2 miles.
5. Turn right onto Cat Creek Road and travel approximately 4.8 miles.
6. Turn right onto Cow Creek Road and travel approximately 0.6 miles.
7. Turn right onto State Hwy 1057 and travel approximately 1.1 miles.
8. Turn left onto Pilot Road and travel approximately 1.6 miles. The site is on the right. The site coordinates are
  - a. North 37 deg 45 min 48.43 sec
  - b. West 83 deg 45 min 59.93 sec



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



Market: Lexington  
Cell Site Number: KYL06084  
Cell Site Name: Pilot Rd  
Fixed Asset Number: 13800703

## OPTION AND LEASE AGREEMENT

THIS OPTION AND LEASE AGREEMENT ("**Agreement**"), dated as of the latter of the signature dates below (the "**Effective Date**"), is entered into by Malena Hall, a single woman, having a mailing address of 5233 South 50 East, Wabash, IN 46992 ("**Landlord**") and New Cingular Wireless PCS, LLC, a Delaware limited liability company, having a mailing address of 575 Morosgo Drive NE, Atlanta, GA 30324 ("**Tenant**").

### BACKGROUND

Landlord owns or controls that certain plot, parcel or tract of land, as described on **Exhibit 1**, together with all rights and privileges arising in connection therewith, located at 1435 Pilot Road, Stanton, in the County of Powell, State of Kentucky (collectively, the "**Property**"). Tenant desires to use a portion of the Property in connection with its federally licensed communications business. Landlord desires to grant to Tenant the right to use a portion of the Property in accordance with this Agreement.

The parties agree as follows:

#### 1. OPTION TO LEASE.

(a) Landlord grants to Tenant an option (the "**Option**") to lease a certain portion of the Property containing approximately 6,000 square feet including the air space above such ground space, as described on attached **Exhibit 1** (the "**Premises**"), for the placement of Tenant's Communication Facility.

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

(c) In consideration of Landlord granting Tenant the Option, Tenant agrees to pay Landlord the sum of [REDACTED] within forty five (45) business days of the Effective Date. The Option will be for an initial term of one (1) year commencing on the Effective Date (the "**Initial Option Term**") and may be renewed by Tenant for an additional one (1) year (the "**Renewal Option Term**") upon written notification to Landlord and the payment of an additional [REDACTED] no later than five (5) days prior to the expiration date of the Initial Option Term. The Initial Option Term and any Renewal Option Term are collectively referred to as the "**Option Term**."

(d) The Option may be sold, assigned or transferred at any time by Tenant to an Affiliate (as that term is hereinafter defined) of Tenant or to any third party agreeing to be subject to the terms hereof. Otherwise, the Option may not be sold, assigned or transferred without the written consent of Landlord, such consent not to

be unreasonably withheld, conditioned or delayed. From and after the date the Option has been sold, assigned or transferred by Tenant to an Affiliate or a third party agreeing to be subject to the terms hereof, Tenant shall immediately be released from any and all liability under this Agreement, including the payment of any rental or other sums due, without any further action.

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

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

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

3. **TERM.**



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

(b) This Agreement will automatically renew for four (4) additional five (5) year term(s) (each five (5) year term shall be defined as an "**Extension Term**"), upon the same terms and conditions unless Tenant notifies Landlord in writing of Tenant's intention not to renew this Agreement at least sixty (60) days prior to the expiration of the Initial Term or then-existing Extension Term.

(c) Unless (i) Landlord or Tenant notifies the other in writing of its intention to terminate this Agreement at least six (6) months prior to the expiration of the final Extension Term, or (ii) the Agreement is terminated as otherwise permitted by this Agreement prior to the end of the final Extension Term, then upon the expiration of the final Extension Term, this Agreement shall continue in force upon the same covenants, terms and conditions for a further term of one (1) year, and for annual terms thereafter ("**Annual Term**") until terminated by either party by giving to the other written notice of its intention to so terminate at least six (6) months prior to the end of any such Annual Term. Monthly rental during such Annual Terms shall be equal to the Rent paid for the last month of the final Extension Term. If Tenant remains in possession of the Premises after the termination of this Agreement, then Tenant will be deemed to be occupying the Premises on a month-to-month basis (the "**Holdover Term**"), subject to the terms and conditions of this Agreement.

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

#### 4. RENT.

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

(b) In year one (1) of each Extension Term, the monthly Rent will increase by [REDACTED] over the Rent paid during the previous five (5) year term.

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

#### 5. APPROVALS.

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

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

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

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

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

(b) by Tenant upon written notice to Landlord, if Tenant is unable to obtain or maintain, any required approval(s) or the issuance of a license or permit by any agency, board, court or other governmental authority necessary for the construction or operation of the Communication Facility as now or hereafter intended by Tenant; or if Tenant determines, in its sole discretion that the cost of or delay in obtaining or retaining the same is commercially unreasonable;

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

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

(e) by Tenant upon sixty (60) days' prior written notice to Landlord for any reason or no reason, so long as Tenant pays Landlord a termination fee equal to three (3) months' Rent, at the then-current rate, provided, however, that no such termination fee will be payable on account of the termination of this Agreement by Tenant under any termination provision contained in any other Section of this Agreement, including the following: 5 Approvals, 6(a) Termination, 6(b) Termination, 6(c) Termination, 6(d) Termination, 11(d) Environmental, 18 Condemnation, or 19 Casualty.

## 7. INSURANCE.

(a) During the Term, Tenant will carry, at its own cost and expense, the following insurance: (i) workers' compensation insurance as required by law; and (ii) commercial general liability (CGL) insurance with respect to its activities on the Property, such insurance to afford protection of up to [REDACTED] general aggregate, based on Insurance Services Office (ISO) Form CG 00 01 or a substitute form providing substantially equivalent coverage. Tenant's CGL insurance shall contain a provision including Landlord as an additional insured. Such additional insured coverage:

(i) shall be limited to bodily injury, property damage or personal and advertising injury caused, in whole or in part, by Tenant, its employees, agents or independent contractors;

(ii) shall not extend to claims for punitive or exemplary damages arising out of the acts or omissions of Landlord, its employees, agents or independent contractors or where such coverage is prohibited by law or to claims arising out of the gross negligence of Landlord, its employees, agents or independent contractors; and

(iii) shall not exceed Tenant's indemnification obligation under this Agreement, if any.

(b) Notwithstanding the foregoing, Tenant shall have the right to self-insure the coverages required in subsection (a). In the event Tenant elects to self-insure its obligation to include Landlord as an additional insured, the following provisions shall apply (in addition to those set forth in subsection (a)):

(i) Landlord shall promptly and no later than thirty (30) days after notice thereof provide Tenant with written notice of any claim, demand, lawsuit, or the like for which it seeks coverage pursuant to this Section and provide Tenant with copies of any demands, notices, summonses, or legal papers received in connection with such claim, demand, lawsuit, or the like;

(ii) Landlord shall not settle any such claim, demand, lawsuit, or the like without the prior written consent of Tenant; and

(iii) Landlord shall fully cooperate with Tenant in the defense of the claim, demand, lawsuit, or the like.

**8. INTERFERENCE.**

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

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

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

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

**9. INDEMNIFICATION.**

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

(b) Landlord agrees to indemnify, defend and hold Tenant harmless from and against any and all injury, loss, damage or liability (or any claims in respect of the foregoing), costs or expenses (including reasonable attorneys' fees and court costs) arising directly from the actions or failure to act of Landlord, its employees or agents, or Landlord's breach of any provision of this Agreement, except to the extent attributable to the negligent or intentional act or omission of Tenant, its employees, agents or independent contractors.

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

**10. WARRANTIES.**

(a) Tenant and Landlord each acknowledge and represent that it is duly organized, validly existing and in good standing and has the right, power and authority to enter into this Agreement and bind itself hereto through the party set forth as signatory for the party below.

(b) Landlord represents, warrants and agrees that: (i) Landlord solely owns the Property as a legal lot in fee simple, or controls the Property by lease or license; (ii) the Property is not and will not be encumbered by any liens, restrictions, mortgages, covenants, conditions, easements, leases, or any other agreements of record or not of record, which would adversely affect Tenant's Permitted Use and enjoyment of the Premises under this

Agreement; (iii) as long as Tenant is not in default then Landlord grants to Tenant sole, actual, quiet and peaceful use, enjoyment and possession of the Premises without hindrance or ejection by any persons lawfully claiming under Landlord; (iv) Landlord's execution and performance of this Agreement will not violate any laws, ordinances, covenants or the provisions of any mortgage, lease or other agreement binding on Landlord; and (v) if the Property is or becomes encumbered by a deed to secure a debt, mortgage or other security interest, Landlord will provide promptly to Tenant a mutually agreeable subordination, non-disturbance and attornment agreement executed by Landlord and the holder of such security interest.

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

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

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

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

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

**12. ACCESS.** At all times throughout the Term of this Agreement, and at no additional charge to Tenant, Tenant and its employees, agents, and subcontractors, will have twenty-four (24) hour per day, seven (7) day per week pedestrian and vehicular access ("**Access**") to and over the Property, from an open and improved public road to the Premises, for the installation, maintenance and operation of the Communication Facility and any utilities serving the Premises. As may be described more fully in **Exhibit 1**, Landlord grants to Tenant an easement for such Access and Landlord agrees to provide to Tenant such codes, keys and other instruments necessary for such Access at no additional cost to Tenant. Upon Tenant's request, Landlord will execute a separate recordable easement evidencing this right. Landlord shall execute a letter granting Tenant Access to the Property substantially in the form attached as **Exhibit 12**; upon Tenant's request, Landlord shall execute additional letters during the Term. Landlord acknowledges that in the event Tenant cannot obtain Access to the

Premises, Tenant shall incur significant damage. If Landlord fails to provide the Access granted by this Section 12, such failure shall be a default under this Agreement. In connection with such default, in addition to any other rights or remedies available to Tenant under this Agreement or at law or equity, Landlord shall pay Tenant, as liquidated damages and not as a penalty, \$500.00 per day in consideration of Tenant's damages until Landlord cures such default. Landlord and Tenant agree that Tenant's damages in the event of a denial of Access are difficult, if not impossible, to ascertain, and the liquidated damages set forth above are a reasonable approximation of such damages.

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

**14. MAINTENANCE/UTILITIES.**

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

(b) Tenant will be responsible for paying on a monthly or quarterly basis all utilities charges for electricity, telephone service or any other utility used or consumed by Tenant on the Premises. In the event Tenant cannot secure its own metered electrical supply, Tenant will have the right, at its own cost and expense, to submeter from Landlord. When submetering is required under this Agreement, Landlord will read the meter and provide Tenant with an invoice and usage data on a monthly basis. Landlord agrees that it will not include a markup on the utility charges. Landlord further agrees to provide the usage data and invoice on forms provided by Tenant and to send such forms to such address and/or agent designated by Tenant. Tenant will remit payment within forty-five (45) days of receipt of the usage data and required forms. As noted in Section 4(c) above, any utility fee recovery by Landlord is limited to a twelve (12) month period. If Tenant submeters electricity from Landlord, Landlord agrees to give Tenant at least twenty-four (24) hours advance notice of any planned interruptions of said electricity. Landlord acknowledges that Tenant provides a communication service which requires electrical power to operate and must operate twenty-four (24) hours per day, seven (7) days per week. If the interruption is for an extended period of time, in Tenant's reasonable determination, Landlord agrees to allow Tenant the right to bring in a temporary source of power for the duration of the interruption. Landlord will not be responsible for interference with, interruption of or failure, beyond the reasonable control of Landlord, of such services to be furnished or supplied by Landlord.

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



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

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

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

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



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

If to Tenant:               New Cingular Wireless PCS, LLC  
Attn: Network Real Estate Administration  
Re: Cell Site #: KYL06084; Cell Site Name: Pilot Rd (KY)  
Fixed Asset No.: 13800703  
575 Morosgo Drive NE  
Atlanta, GA 30324

With a copy to:            New Cingular Wireless PCS, LLC  
Attn: Legal Department  
Re: Cell Site #: KYL06084; Cell Site Name: Pilot Rd (KY)  
Fixed Asset No.: 13800703  
208 S. Akard Street  
Dallas, TX 75202-4206

The copy sent to the Legal Department is an administrative step which alone does not constitute legal notice.

If to Landlord:            Malena Hall  
5233 South 50 East  
Wabash, IN 4692

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

18. **CONDEMNATION.** In the event Landlord receives notification of any condemnation proceedings affecting the Property, Landlord will provide notice of the proceeding to Tenant within forty-eight (48) hours. If a condemning authority takes all of the Property, or a portion sufficient, in Tenant's sole determination, to render the Premises unsuitable for Tenant, this Agreement will terminate as of the date the title vests in the condemning authority. The parties will each be entitled to pursue their own separate awards in the condemnation proceeds, which for Tenant will include, where applicable, the value of its Communication Facility, moving expenses, prepaid Rent, and business dislocation expenses. Tenant will be entitled to reimbursement for any prepaid Rent on a prorata basis.

19. **CASUALTY.** Landlord will provide notice to Tenant of any casualty or other harm affecting the Property within forty-eight (48) hours of the casualty or other harm. If any part of the Communication Facility or Property is damaged by casualty or other harm as to render the Premises unsuitable, in Tenant's sole determination, then Tenant may terminate this Agreement by providing written notice to Landlord, which termination will be effective as of the date of such casualty or other harm. Upon such termination, Tenant will be entitled to collect all insurance proceeds payable to Tenant on account thereof and to be reimbursed for any prepaid Rent on a prorata basis. Landlord agrees to permit Tenant to place temporary transmission and reception facilities on the Property, but only until such time as Tenant is able to activate a replacement transmission facility at another location; notwithstanding the termination of the Agreement, such temporary facilities will be governed by all of the terms and conditions of this Agreement, including Rent. If Landlord or Tenant undertakes to rebuild or restore the Premises and/or the Communication Facility, as applicable, Landlord agrees to permit Tenant to place temporary transmission and reception facilities on the Property at no additional Rent until the reconstruction of the Premises and/or the Communication Facility is completed. If Landlord

determines not to rebuild or restore the Property, Landlord will notify Tenant of such determination within thirty (30) days after the casualty or other harm. If Landlord does not so notify Tenant, and Tenant decides not to terminate under this Section, then Landlord will promptly rebuild or restore any portion of the Property interfering with or required for Tenant's Permitted Use of the Premises to substantially the same condition as existed before the casualty or other harm. Landlord agrees that the Rent shall be abated until the Property and/or the Premises are rebuilt or restored, unless Tenant places temporary transmission and reception facilities on the Property.

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

**21. TAXES.**

(a) Landlord shall be responsible for timely payment of all taxes and assessments levied upon the lands, improvements and other property of Landlord, including any such taxes that may be calculated by the taxing authority using any method, including the income method. Tenant shall be responsible for any taxes and assessments attributable to and levied upon Tenant's leasehold improvements on the Premises if and as set forth in this Section 21. Nothing herein shall require Tenant to pay any inheritance, franchise, income, payroll, excise, privilege, rent, capital stock, stamp, documentary, estate or profit tax, or any tax of similar nature, that is or may be imposed upon Landlord.

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

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

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

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

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

New Cingular Wireless PCS, LLC  
Attn: Network Real Estate Administration -- Taxes  
Re: Cell Site #: KY1.06084; Cell Site Name: Pilot Rd (KY)  
Fixed Asset No: 13800703  
575 Morosgo Drive NE  
Atlanta, GA 30324

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

## **22. SALE OF PROPERTY**

(a) Landlord shall not be prohibited from the selling, leasing or use of any of the Property or the Surrounding Property except as provided below.

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

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

(c) Landlord agrees not to sell, lease or use any areas of the Property or Surrounding Property for the installation, operation or maintenance of other wireless communications facilities if such installation, operation or maintenance would interfere with Tenant's Permitted Use or communications equipment as determined by radio propagation tests performed by Tenant in its sole discretion. Landlord or Landlord's prospective purchaser shall reimburse Tenant for any costs and expenses of such testing. If the radio frequency propagation tests demonstrate levels of interference unacceptable to Tenant, Landlord shall be prohibited from selling, leasing or using any areas of the Property or the Surrounding Property for purposes of any installation, operation or maintenance of any other wireless communications facility or equipment.

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

**23. RENTAL STREAM OFFER.** If at any time after the date of this Agreement, Landlord receives a bona fide written offer from a third party seeking an assignment or transfer of Rent payments associated with this Agreement ("**Rental Stream Offer**"), Landlord shall immediately furnish Tenant with a copy of the Rental Stream Offer. Tenant shall have the right within twenty (20) days after it receives such copy to match the Rental Stream Offer and agree in writing to match the terms of the Rental Stream Offer. Such writing shall be in the form of a contract substantially similar to the Rental Stream Offer. If Tenant chooses not to exercise this right or fails to provide written notice to Landlord within the twenty (20) day period, Landlord may assign the right to receive Rent payments pursuant to the Rental Stream Offer, subject to the terms of this Agreement. If Landlord attempts to assign or transfer Rent payments without complying with this Section, the assignment or transfer shall be void. Tenant shall not be responsible for any failure to make payments under this Agreement and reserves the right to hold payments due under this Agreement until Landlord complies with this Section.

**24. MISCELLANEOUS.**

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

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

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

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

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

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

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

(h) **Interpretation.** Unless otherwise specified, the following rules of construction and interpretation apply: (i) captions are for convenience and reference only and in no way define or limit the construction of the terms and conditions hereof; (ii) use of the term "including" will be interpreted to mean "including but not limited to"; (iii) whenever a party's consent is required under this Agreement, except as otherwise stated in this Agreement or as same may be duplicative, such consent will not be unreasonably

withheld, conditioned or delayed; (iv) exhibits are an integral part of this Agreement and are incorporated by reference into this Agreement; (v) use of the terms "termination" or "expiration" are interchangeable; (vi) reference to a default will take into consideration any applicable notice, grace and cure periods; (vii) to the extent there is any issue with respect to any alleged, perceived or actual ambiguity in this Agreement, the ambiguity shall not be resolved on the basis of who drafted the Agreement; (viii) the singular use of words includes the plural where appropriate and (ix) if any provision of this Agreement is held invalid, illegal or unenforceable, the remaining provisions of this Agreement shall remain in full force if the overall purpose of the Agreement is not rendered impossible and the original purpose, intent or consideration is not materially impaired.

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

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

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

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

(m) **Attorneys' Fees.** In the event that any dispute between the parties related to this Agreement should result in litigation, the prevailing party in such litigation shall be entitled to recover from the other party all reasonable fees and expenses of enforcing any right of the prevailing party, including without limitation, reasonable attorneys' fees and expenses. Prevailing party means the party determined by the court to have most nearly prevailed even if such party did not prevail in all matters. This provision will not be construed to entitle any party other than Landlord, Tenant and their respective Affiliates to recover their fees and expenses.

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

[SIGNATURES APPEAR ON NEXT PAGE]

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

**"LANDLORD"**

Malena Hall

By: *Malena Hall*

Print Name: Malena Hall

Its: Owner

Date: 10/25/16

**LANDLORD ACKNOWLEDGMENT**

STATE OF Oklahoma )

COUNTY OF Wagoner ) ss:

On the 25<sup>th</sup> day of October, 2016 before me, personally appeared Malena Hall, who acknowledged under oath, that he/she/they is/are the person/officer named in the within instrument, and that he/she/they executed the same in his/her/their stated capacity as the voluntary act and deed of the Landlord for the purposes therein contained.

*[Signature]*

Notary Public: 627458

My Commission Expires: 06/26/2019



**"TENANT"**

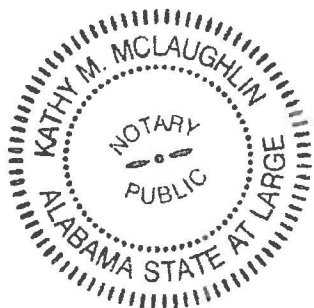
New Cingular Wireless PCS, LLC,  
a Delaware limited liability company  
By: AT&T Mobility Corporation  
Its: Manager

By: [Signature]  
Print Name: Russell Barakat  
Its: AT&T Mobility  
Date: 5/1/12

**TENANT ACKNOWLEDGMENT**

STATE OF ALABAMA )  
 ) ss:  
COUNTY OF JEFFERSON )

On the 1 day of May, 2016, before me personally appeared Russell Barakat, and acknowledged under oath that he is the Area Manager – TN/KY of AT&T Mobility Corporation, the Manager of New Cingular Wireless PCS, LLC, the Tenant named in the attached instrument, and as such was authorized to execute this instrument on behalf of the Tenant.



[Signature]  
Notary Public: Kathy M. McLaughlin  
My Commission Expires: 10-26-2016

## EXHIBIT 1

### DESCRIPTION OF PREMISES

Page 1 of 2

to the Option and Lease Agreement dated 7/1/2016, 2016, by and between Malena Hall, a single woman, as Landlord, and New Cingular Wireless PCS, LLC, a Delaware limited liability company, as Tenant.

The Property is legally described as follows: DB 153, PG 277

A certain tract or parcel of land lying and being in Powell County, Kentucky and more particularly described as follows:

Beginning at a corner fence post in the south margin of Pilot Road at the line of William Ledford; thence in a southerly direction with the fence line of William Ledford approximately 210 feet to the sand stone cliff line; thence in a westerly direction with the sand stone cliff 357 feet to the line of property being retained by Barbara Bliss, single, and Raymond Hall, single (DB 152, page 626), a corner, thence in a northerly direction with the line retained by Bliss and Hall approximately 175 feet to the south margin of Pilot Road, a corner; thence in an easterly direction with the south margin of Pilot Road a distance of 352 feet to the line of William Ledford, the point of beginning.

Being part of the same property conveyed from Billy D. Hall and Reva Hall, husband and wife, to Barbara Bliss, single (undivided 1/2 interest) and Raymond Hall, single (an undivided 1/2 interest), by deed dated July 2, 2003, and recorded at Deed Book 152, page 626, records of the Powell County Clerk.

This conveyance is subject to all recorded and unrecorded easements, legal restrictions, zoning laws (if applicable) and all covenants of record.

**POD**  
**POD**  
**POD**

**Mastec**

**at&t**

4/25/17

SITE SURVEY	
DATE	4/25/17
BY	ASAP
FOR	POD
PROJECT	POD
CLIENT	POD
ADDRESS	POD
CITY	POD
STATE	POD
COUNTY	POD
ZIP	POD
PROJECT NO.	POD
DRAWN BY	POD
CHECKED BY	POD
DATE	POD

BY: [Signature]  
 DATE: 4/25/17

PROPERTY OWNER: [Name]  
 ADDRESS: [Address]  
 CITY: [City]  
 STATE: [State]  
 ZIP: [Zip]

SOURCE OF TITLE: [Source]  
 DEED BOOK: [Book]  
 PAGE: [Page]

BY: [Name]  
 DATE: [Date]

SCALE: 1" = 40'

DATE: [Date]

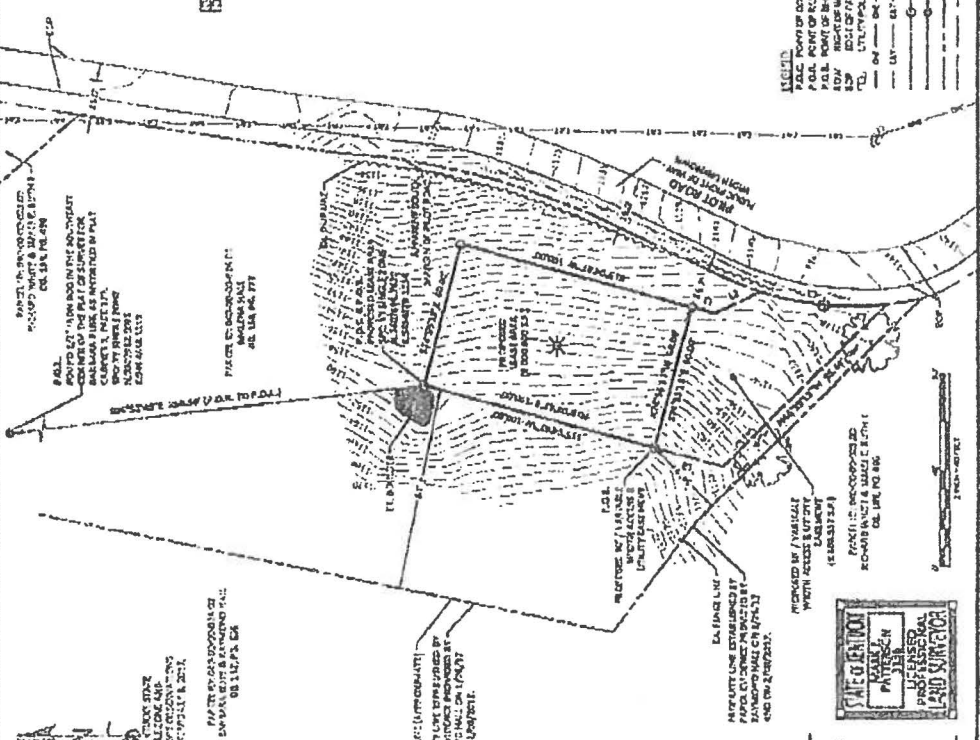
SHEET NO.: 8-1

**GENERAL NOTES:**

1. THE SURVEY IS BASED ON THE DATA PROVIDED BY THE CLIENT AND THE SURVEYOR'S FIELD NOTES.
2. THE SURVEYOR HAS CONDUCTED A VISUAL INSPECTION OF THE PROPERTY AND HAS FOUND NO EVIDENCE OF ANY ENCUMBRANCES OR EASEMENTS.
3. THE SURVEYOR HAS CONDUCTED A VISUAL INSPECTION OF THE PROPERTY AND HAS FOUND NO EVIDENCE OF ANY ENCUMBRANCES OR EASEMENTS.

**LEGEND:**

- PROPERTY LINE
- EASEMENT
- ENCUMBRANCE
- ADJACENT PROPERTY
- ROAD
- RAILROAD
- UTILITY LINE
- WATERWAY
- FENCE
- BOUNDARY
- CORNER
- MONUMENT
- SURVEY POINT
- BEARING
- DISTANCE
- AREA
- VOLUME
- BEARING
- DISTANCE
- AREA
- VOLUME



**STATE OF OHIO**

**PAUL J. PATRICK**

**REGISTERED PROFESSIONAL LAND SURVEYOR**

**NO. 12345**

**DATE: 4/25/17**

**PROPERTY: [Name]**

**ADDRESS: [Address]**

**CITY: [City]**

**STATE: [State]**

**ZIP: [Zip]**

**PROJECT NO.: [Number]**

**DRAWN BY: [Name]**

**CHECKED BY: [Name]**

**DATE: [Date]**

**SCALE: 1" = 40'**

**DATE: [Date]**

**SHEET NO.: 8-1**

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

**NOTIFICATION LISTING**  
**SITE NAME: PILOT ROAD**

HALL MALENA  
P.O. BOX 362  
STANTON, KY 40380

WHITE RICHARD & JAMES E RUTH II  
3222 FLEMINGSBURG ROAD  
MOREHEAD, KY 40351

OERTLI BRUCE & MICHELE  
1220 PILOT ROAD  
STANTON, KY 40380

BLISS BARBARA & RAYMOND HALL  
P.O. BOX 1661  
STANTON, KY 40380

BLISS BARBARA  
P.O. BOX 1661  
STANTON, KY 40380

DEAN FAMILY FARMS LLC  
3612 EPPERLY DRIVE  
DEL CITY, OK 73115-3608

HALL BILLY D & REVA  
757 HALL HILL ROAD  
STANTON, KY 40380

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





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

**Notice of Proposed Construction of  
Wireless Communications Facility  
Site Name: Pilot Road**

Dear Landowner:

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located on Pilot Road, Stanton, Kentucky 40380 (37°45'48.43" North latitude, 83°45'59.93" West longitude). The proposed facility will include a 305-foot tall antenna tower, plus a 15-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 2018-00375 in any correspondence sent in connection with this matter.

In addition to expanding and improving voice and data service for AT&T mobile customers, this site will also provide wireless local loop ("WLL") broadband internet service to homes and businesses in the area. WLL will support internet access at the high speeds required to use and enjoy the most current business, education and entertainment technologies.

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

Sincerely,  
David A. Pike  
Attorney for Applicant

enclosure

## Driving Directions to Proposed Tower Site

1. Beginning at 525 Washington Street, Stanton, KY, head south on Washington Street (towards Boone Street) and travel approximately 0.2 miles.
2. Turn left onto Boone Street and travel 0.2 miles.
3. Turn right onto N. Main Street and travel approximately 0.2 miles.
4. Turn left onto KY-11 S / KY-15 S / E College Avenue and travel approximately 3.2 miles.
5. Turn right onto Cat Creek Road and travel approximately 4.8 miles.
6. Turn right onto Cow Creek Road and travel approximately 0.6 miles.
7. Turn right onto State Hwy 1057 and travel approximately 1.1 miles.
8. Turn left onto Pilot Road and travel approximately 1.6 miles. The site is on the right. The site coordinates are
  - a. North 37 deg 45 min 48.43 sec
  - b. West 83 deg 45 min 59.93 sec



Prepared by:  
Aaron Roof  
Pike Legal Group PLLC  
1578 Highway 44 East, Suite 6  
P.O. Box 369  
Shepherdsville, KY 40165-3069  
Telephone: 502-955-4400 or 800-516-4293



NOTE:  
PARCEL NUMBERS ARE OF RECORD IN  
THE POWELL COUNTY PROPERTY  
VALUATION ADMINISTRATOR OFFICE.

PREPARED BY:  
**POD**  
POWER OF DESIGN  
11400 BLISSGARD PARKWAY  
LOUISVILLE, KY 40299  
502-437-5252

PREPARED FOR:  
**MasTec**

PREPARED FOR:  
**at&t**

**EXHIBIT**

REV	DATE	DESCRIPTION
A	10.23.18	ISSUED FOR REVIEW
O	11.15.18	UPDATED PVA INFO / ISSUED AS FINAL

**SITE INFORMATION:**  
**PILOT ROAD**  
PILOT ROAD,  
STANTON, KY 40380  
POWELL COUNTY

**TAX PARCEL NUMBER:**  
040-00-00-024.03

**PROPERTY OWNER:**  
MALENA HALL  
P.O. BOX 362,  
STANTON, KY 40380

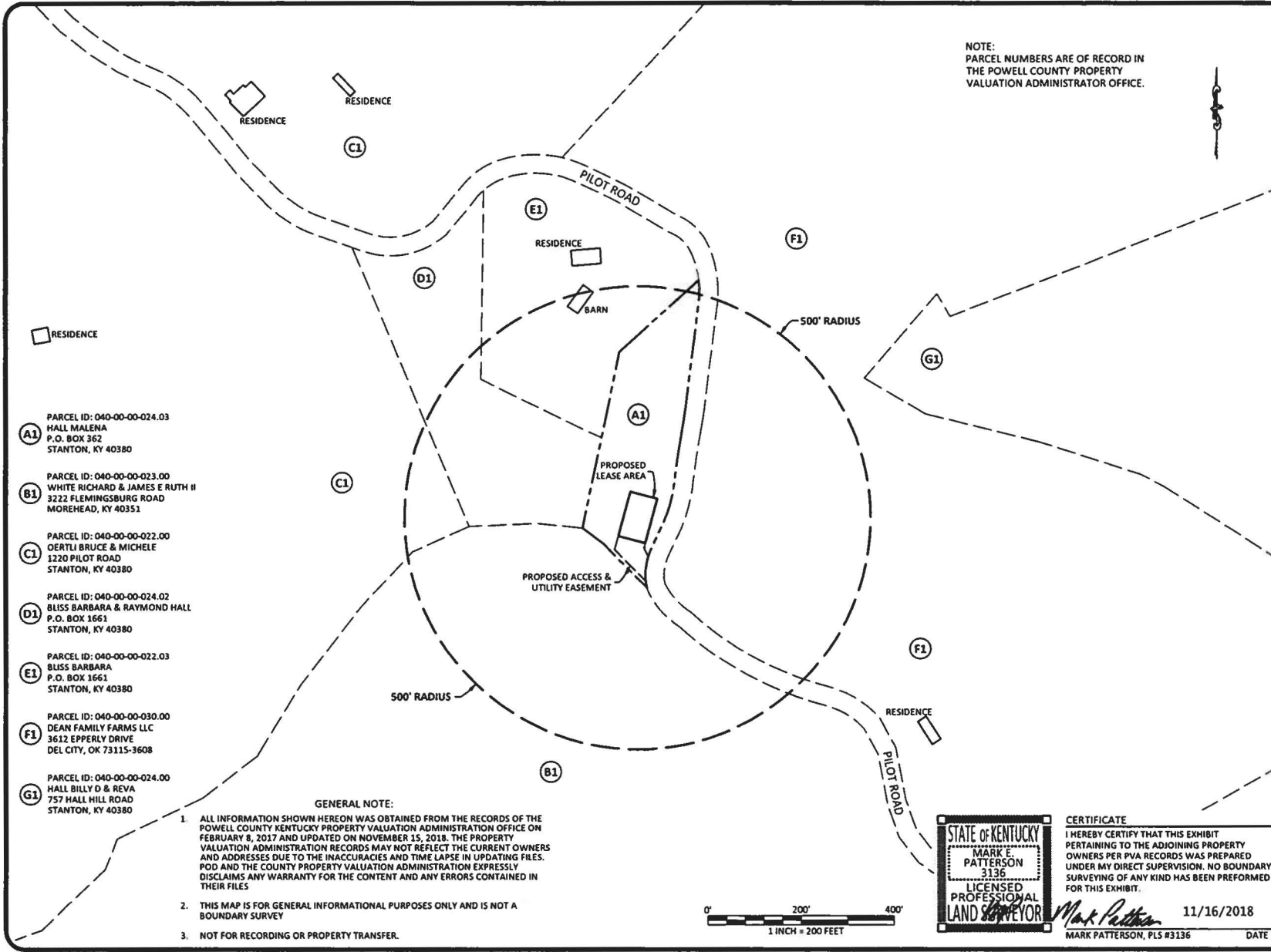
**SOURCE OF TITLE:**  
DEED BOOK 153, PAGE 277

**SITE NUMBER:**  
KY106084

**POD NUMBER:** 17-12800  
**DRAWN BY:** DAP  
**CHECKED BY:** MEP  
**DATE:** 10.23.18

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

**SHEET NUMBER:**  
**B-2**



- (A1)** PARCEL ID: 040-00-00-024.03  
HALL MALENA  
P.O. BOX 362  
STANTON, KY 40380
- (B1)** PARCEL ID: 040-00-00-023.00  
WHITE RICHARD & JAMES E RUTH II  
3222 FLEMINGSBURG ROAD  
MOREHEAD, KY 40351
- (C1)** PARCEL ID: 040-00-00-022.00  
OERTLI BRUCE & MICHELE  
1220 PILOT ROAD  
STANTON, KY 40380
- (D1)** PARCEL ID: 040-00-00-024.02  
BLISS BARBARA & RAYMOND HALL  
P.O. BOX 1661  
STANTON, KY 40380
- (E1)** PARCEL ID: 040-00-00-022.03  
BLISS BARBARA  
P.O. BOX 1661  
STANTON, KY 40380
- (F1)** PARCEL ID: 040-00-00-030.00  
DEAN FAMILY FARMS LLC  
3612 EPPERLY DRIVE  
DEL CITY, OK 73115-3608
- (G1)** PARCEL ID: 040-00-00-024.00  
HALL BILLY D & REVA  
757 HALL HILL ROAD  
STANTON, KY 40380

- GENERAL NOTE:**
1. ALL INFORMATION SHOWN HEREON WAS OBTAINED FROM THE RECORDS OF THE POWELL COUNTY KENTUCKY PROPERTY VALUATION ADMINISTRATION OFFICE ON FEBRUARY 8, 2017 AND UPDATED ON NOVEMBER 15, 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
  2. THIS MAP IS FOR GENERAL INFORMATIONAL PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY
  3. NOT FOR RECORDING OR PROPERTY TRANSFER.



**CERTIFICATE**  
I HEREBY CERTIFY THAT THIS EXHIBIT PERTAINING TO THE ADJOINING PROPERTY OWNERS PER PVA RECORDS WAS PREPARED UNDER MY DIRECT SUPERVISION. NO BOUNDARY SURVEYING OF ANY KIND HAS BEEN PERFORMED FOR THIS EXHIBIT.

*Mark Patterson* 11/16/2018  
MARK PATTERSON, PLS #3136 DATE

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



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

**VIA CERTIFIED MAIL**

Hon. James D. Anderson Jr.  
County Judge Executive  
525 Washington St  
P.O. Box 506  
Stanton, KY 40380

**RE: Notice of Proposal to Construct Wireless Communications Facility  
Kentucky Public Service Commission Docket No. 2018-00375  
Site Name: Pilot Road**

Dear Judge Anderson:

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility has filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located on Pilot Road, Stanton, Kentucky 40380 (37°45'48.43" North latitude, 83°45'59.93" West longitude). The proposed facility will include a 305-foot tall antenna tower, plus a 15-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 2018-00375 in any correspondence sent in connection with this matter.

In addition to expanding and improving voice and data service for AT&T mobile customers, this site will also provide wireless local loop ("WLL") broadband internet service to homes and businesses in the area. WLL will support internet access at the high speeds required to use and enjoy the most current business, education and entertainment technologies.

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

Sincerely,  
David A. Pike  
Attorney for Applicant  
enclosures



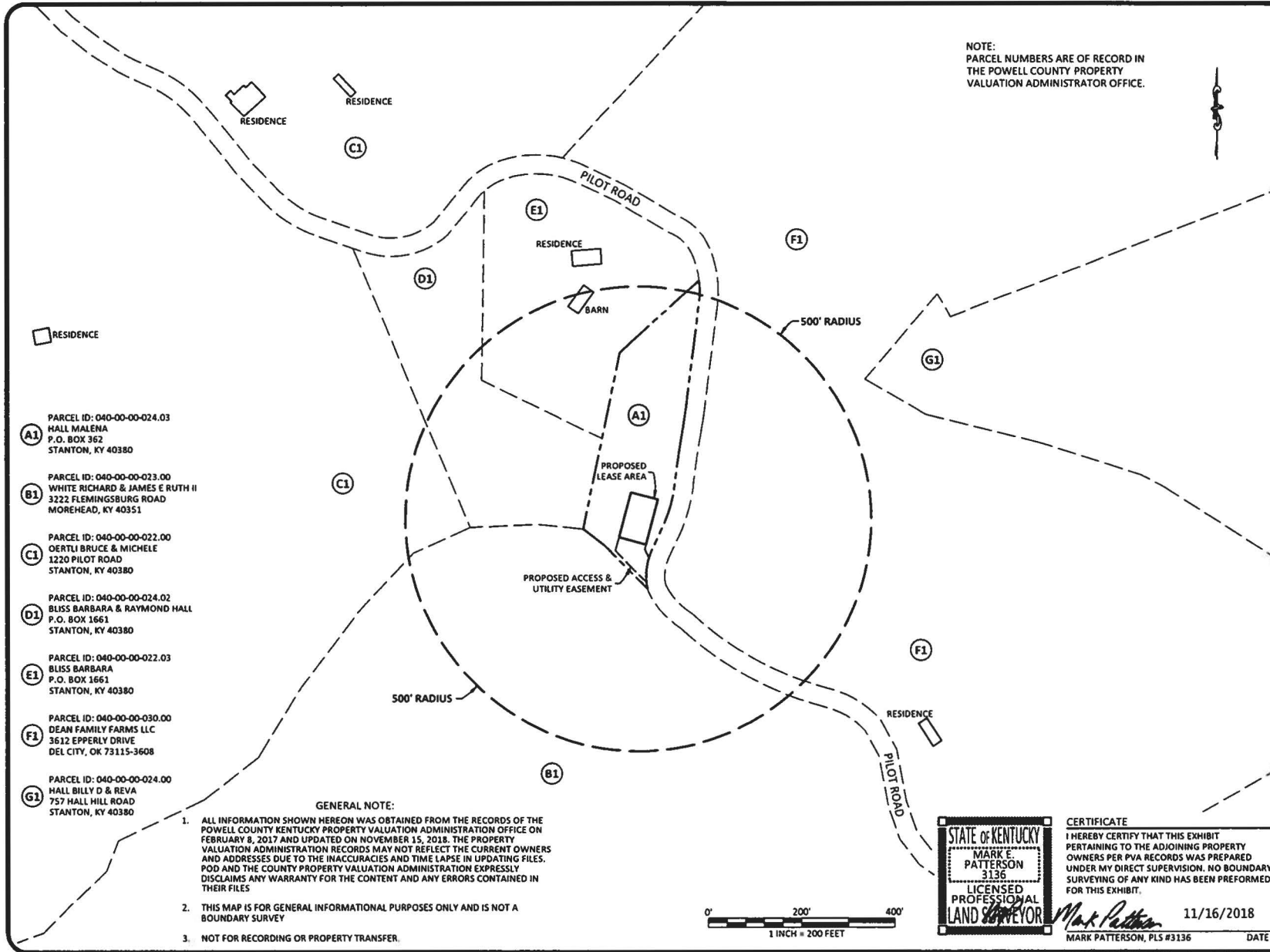
## **Driving Directions to Proposed Tower Site**

1. Beginning at 525 Washington Street, Stanton, KY, head south on Washington Street (towards Boone Street) and travel approximately 0.2 miles.
2. Turn left onto Boone Street and travel 0.2 miles.
3. Turn right onto N. Main Street and travel approximately 0.2 miles.
4. Turn left onto KY-11 S / KY-15 S / E College Avenue and travel approximately 3.2 miles.
5. Turn right onto Cat Creek Road and travel approximately 4.8 miles.
6. Turn right onto Cow Creek Road and travel approximately 0.6 miles.
7. Turn right onto State Hwy 1057 and travel approximately 1.1 miles.
8. Turn left onto Pilot Road and travel approximately 1.6 miles. The site is on the right. The site coordinates are
  - a. North 37 deg 45 min 48.43 sec
  - b. West 83 deg 45 min 59.93 sec



Prepared by:  
Aaron Roof  
Pike Legal Group PLLC  
1578 Highway 44 East, Suite 6  
P.O. Box 369  
Shepherdsville, KY 40165-3069  
Telephone: 502-955-4400 or 800-516-4293





NOTE:  
PARCEL NUMBERS ARE OF RECORD IN  
THE POWELL COUNTY PROPERTY  
VALUATION ADMINISTRATOR OFFICE.

PREPARED BY:  
**POD**  
POWER OF DESIGN  
11400 BULLBERRIES PARKWAY  
LOUISVILLE, KY 40299  
502-437-5252

PREPARED FOR:  
**MasTec**

PREPARED FOR:  
**at&t**

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**EXHIBIT**

REV.	DATE	DESCRIPTION
A	10.23.18	ISSUED FOR REVIEW
D	11.15.18	UPDATED PVA INFO / ISSUED AS FINAL

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**SITE INFORMATION:**  
**PILOT ROAD**  
PILOT ROAD,  
STANTON, KY 40380  
POWELL COUNTY

**TAX PARCEL NUMBER:**  
040-00-00-024.03

**PROPERTY OWNER:**  
MALENA HALL  
P.O. BOX 362,  
STANTON, KY 40380

**SOURCE OF TITLE:**  
DEED BOOK 153, PAGE 277

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**SITE NUMBER:**  
KYL06084

**POD NUMBER:** 17-12800

**DRAWN BY:** DAP  
**CHECKED BY:** MEP  
**DATE:** 10.23.18

---

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

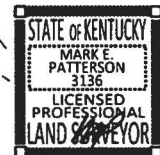
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**B-2**

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- C1** PARCEL ID: 040-00-00-022.00  
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**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* 11/16/2018  
MARK PATTERSON, PLS #3136 DATE

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

**SITE NAME: PILOT ROAD**  
**NOTICE SIGNS**

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

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility proposes to construct a telecommunications **tower** on this site. If you have questions, please contact Pike Legal Group, PLLC, P.O. Box 369, Shepherdsville, KY 40165; telephone: (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2018-00375 in your correspondence.

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility proposes to construct a telecommunications **tower** near this site. If you have questions, please contact Pike Legal Group, PLLC, P.O. Box 369, Shepherdsville, KY 40165; telephone: (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2018-00375 in your correspondence.



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

**VIA TELEPHONE: 606-663-5540**  
**VIA TELEFAX: 606-663-6397**

The Clay City Times  
Attn: Public Notice Ad Placement  
4477 Main Street  
Clay City, KY 40312

RE: Legal Notice Advertisement  
Site Name: Pilot Road

Dear Clay City Times:

Please publish the following legal notice advertisement in the next edition of *The Clay City Times*:

#### **NOTICE**

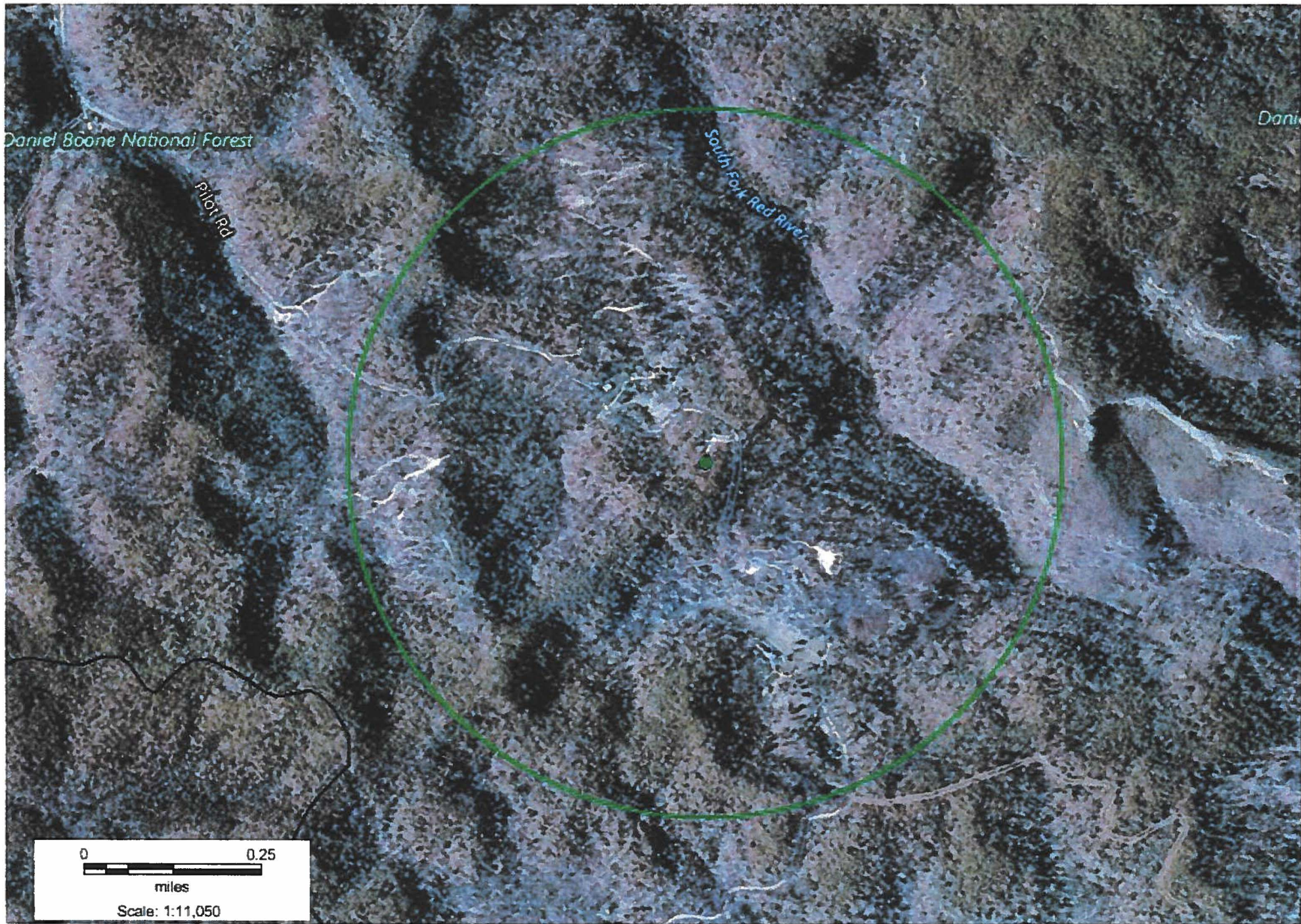
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After this advertisement has been published, please forward a tearsheet copy, affidavit of publication, and invoice to Pike Legal Group, PLLC, P. O. Box 369, Shepherdsville, KY 40165. Please call me at (800) 516-4293 if you have any questions. Thank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

Sincerely,  
Aaron L. Roof  
Pike Legal Group, PLLC

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





**Lat: 37.764499**  
**Lon: -83.766968**  
**Radius: .5 miles**

**Pilot Rd Search Area**