RECEIVED

# COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

JAN 02 2018

In the Matter of:	PUBLIC SERVICE COMMISSION
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 TODD	) ) ) ) CASE NO.: 2018-00001 ) ) )
SITE NAME: MORTON	

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

New Cingular Wireless, PCS, LLC, a Delaware Limited Liablity 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 Liablity Company, d/b/a AT&T Mobility having a local address of Meidinger Tower, 462 S. 4<sup>th</sup> Street, Suite 2400, Louisville, KY 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 Long Mill Road, Pembroke, KY 42266 (36°48'01.26" North latitude, 87°18'10.09" 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 Gayla H. Shanks, Paul Reno Hampton, Jr., Chad Anthony Hampton, Ann H. Osborn, Patrick A. Sholar, Robert G. Sholar, Dustin R. Shanks pursuant to a Deed recorded at Deed Book 125, Page 707 in the office of the County Clerk. The proposed WCF will consist of a 255-foot tall tower, with an approximately 15-foot tall lightning arrestor attached at the top, for a total height of 270-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**. Notice of the location of the proposed facility has also been published in a newspaper of general circulation in the county in which the WCF is proposed to be located.

- 23. The general area where the proposed facility is to be located is rural with large agricultural parcels and very sparse existing structures.
- 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

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,

David A. Pike

Pike Legal Group, PLLC

1578 Highway 44 East, Suite 6

Lewid a Pelse

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

# LIST OF EXHIBITS

A - FCC License Documentation

B - Site Development Plan:

500' Vicinity Map Legal Descriptions Flood Plain Certification

Site Plan

Vertical Tower Profile

C - Tower and Foundation Design

D - Competing Utilities, Corporations, or Persons List

E - FAA

F - Kentucky Airport Zoning Commission

G - Geotechnical Report

H - Directions to WCF Site

Copy of Real Estate Agreement

J - Notification Listing

K - Copy of Property Owner Notification

L - Copy of County Judge/Executive Notice

M - Copy of Posted Notices

N - Copy of Radio Frequency Design Search Area

# EXHIBIT A FCC LICENSE DOCUMENTATION

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



# **Federal Communications Commission**

Wireless Telecommunications Bureau

# RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

Call Sign KNKN748	File Number
Radio CL - C	Service ellular
Market Numer CMA445	Channel Block A
Sub-Market	Designator

FCC Registration Number (FRN): 0003291192

Market Name Kentucky 3 - Meade

Grant Date	Effective Date	<b>Expiration Date</b>	Five Yr Build-Out Date	Print Date
08-30-2011	06-13-2017	10-01-2021		

#### Site Information:

Site information.			Allegan	99A				
Location Latitude Longie	tude		round Elev neters)	ation	Structure Hg (meters)	t to Tip	Antenna St Registratio	
2 36-49-19.8 N 086-40	0-30.2 W	28	33.5		59.4		1043423	
Address: 2070 PILOT KNOB CELL F	ROAD (76	159)						
City: FRANKLIN County: SIMPSO	ON Stat	e: KY	Constructio	n Dead	lline:			
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	149.700	154.000	142.400	134.60	00 134.000	144.000	132.800	132.800
Transmitting ERP (watts)	127.704	122.022	156.166	85.68	30.393	22.550	27.951	41.372
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	149.700	154.000	142.400	134.60	00 134.000	144.000	132.800	132.800
Transmitting ERP (watts)	0.303	19.967	70.900	141.16	64 91.184	151.327	56.166	39.846
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	149.700	154.000	142.400	134.60	00 134.000	144.000	132.800	132.800
Transmitting ERP (watts)	165.855	47.655	35.065	13.08	5 19.027	126.639	254.086	264.756

# **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.

Call Sign: KNKN748	File Number:				Print Date:			
Location Latitude Longit  5 36-47-00.6 N 086-17  Address: 6131 Bowling Green Road ( City: Scottsville County: ALLEN	7-12.4 W	(m 24	round Eleveters) 2.6	(n 10	tructure Hg neters) 09.4	to Tip	Antenna St Registratio 1043428	
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	172,400 29.587	45 151.800 17.631 45 151.800 8.309	90 131.600 2.143 90 131.600 54.332	135 118.100 0.106 135 118.100 71.176	180 137.600 0.120 180 137.600 21.736	225 143.600 0.108 225 143.600 1.489	270 150.000 1.702 270 150.000 0.142	315 172.700 15.717 315 172.700 0.158
Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 172.400 0.270	45 151.800 0.100	90 131.600 0.100	135 118.100 0.719	180 137.600 8.327	225 143.600 27.930	<b>270</b> 150.000 25.164	315 172.700 4.852
Location         Latitude         Longit           9         37-57-06.1 N         086-24           Address: HWY 144 (76157)         City: UNION STAR         County: BREG	1-38.3 W	(m 26	round Eleveters) 0.0	(n 90	tructure Hg neters) 6.3 on Deadline		Antenna St Registratio 1043429	
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	163.100 60.057	45 141.100 209.658 45 141.100 0.727	90 130.700 152.570 90 130.700 12.997	135 148.200 20.969 135 148.200 103.833	2.687 180 162.700	225 183.900 0.418 225 183.900 92.615	0.941 <b>270</b>	315 179.000 4.434 315 179.000 2.404
Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	<b>0</b> 163.100 45.626	<b>45</b> 141.100 4.863	<b>90</b> 130.700 1.713	135 148.200 0.627	180	225 183.900 31.023	270 186.100 156.388	315 179.000 214.520

Print Date:

	riic	vuilibei.				Dute.							
Location Latitude Longit  19 37-14-22.1 N 086-15  Address: 1400 POPLAR SPRINGS RI	-59.7 W	(m 22	ound Eleva eters) 9.8		ucture Hgt eters) 3.4	to Tip	Antenna St Registration 1025100						
City: BROWNSVILLE County: ED	MONSON	N State:	KY Con	struction l	Deadline:								
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315					
Antenna Height AAT (meters)	150.600	151.200	130.600	151.300	175.800	170.100	181.100	173.000					
Transmitting ERP (watts)	52.262	182.266	132.676	18.211	2.334	0.364	0.819	3.844					
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315					
Antenna Height AAT (meters)	150.600	151.200	130.600	151.300	175.800	170.100	181.100	173.000					
Transmitting ERP (watts)	0.425	0.633	11.292	90.388	212.968	80.505	8.178	2.094					
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315					
Antenna Height AAT (meters)	150.600	151.200	130.600	151.300	175.800	170.100	181.100	173.000					
Transmitting ERP (watts)	39.661	4.221	1.487	0.543	1.196	26.979	135.691	186.462					
Location Latitude         Longit           22         37-52-17.8 N         086-16	ude -03.5 W	(m	ound Elev eters) 4.3		ucture Hgt eters)	to Tip	Antenna St Registratio 1043896						
Address: SAM DOWELL ROAD (761	15(6) 16 (10)	4	4.5	132	1		1043070						
City: IRVINGTON County: BRECI		E State:	KY Con	· · · · · · · · · · · · · · · · · · ·									
1.1.1.1.20				isti uction									
Antenna: 1 Azimuth (from true north)	0	- 6	_01(E)(1)	135			270	315					
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters)	<b>0</b> 121.400	45	90	135	180	225							
		- 6	_01(E)(1)										
Antenna Height AAT (meters)	121.400 59.129	<b>45</b> 111.900	<b>90</b> 93.000	135 94.700	180 111.800	225 114.200	143.100	107.600					
Antenna Height AAT (meters) Transmitting ERP (watts)	121.400 59.129	45 111.900 206.186	90 93.000 150.253	135 94.700 20.668	180 111.800 2.640	225 114.200 0.412	143.100 0.928 <b>270</b>	107.600 4.356 <b>315</b>					
Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north)	121.400 59.129 <b>0</b>	45 111.900 206.186 45	90 93.000 150.253 90	135 94.700 20.668 135	180 111.800 2.640 180	225 114.200 0.412 225	143.100 0.928 <b>270</b>	107.600 4.356 <b>315</b>					
Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters)	121.400 59.129 <b>0</b> 121.400 0.482	45 111.900 206.186 45 111.900	90 93.000 150.253 90 93.000	135 94.700 20.668 135 94.700	180 111.800 2.640 180 111.800	225 114.200 0.412 225 114.200	143.100 0.928 <b>270</b> 143.100	107.600 4.356 <b>315</b> 107.600					
Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	121.400 59.129 <b>0</b> 121.400 0.482	45 111.900 206.186 45 111.900 0.716	90 93.000 150.253 90 93.000 12.797	135 94.700 20.668 135 94.700 102.360	180 111.800 2.640 180 111.800 241.122	225 114.200 0.412 225 114.200 91.084	143.100 0.928 <b>270</b> 143.100 9.268 <b>270</b>	107.600 4.356 <b>315</b> 107.600 2.368					

Call Sign: KNKN748	File Number:	Print Date:

	File Number.				Time Date.				
Location Latitude Longit  23 36-42-08.6 N 086-33  Address: 297A TURNER FORD ROA	3-19.0 W	(m 21	ound Elev eters) 7.0	(n	tructure Hgt neters) 14.3	to Tip	Antenna St Registratio 1200032		
City: Franklin County: SIMPSON	State: K		truction D	eadline: 0	07-23-2013				
					100				
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters)	0	45	90	135	180	225	270	315	
Transmitting ERP (watts)	115.100 12.529	113.900	95.200	90.700	79.000	97.800	103.600	98.200	
	otilino.	51.909	43.680	6.792	0.306	0.104	0.104	0.871	
Antenna: 2 Azimuth (from true north)	1000	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	115.100	113.900	95.200	90.700	79.000	97.800	103.600	98.200	
Transmitting ERP (watts)	0.126	0.114	1.788	16.431	30.950	18.425	2.247	0.111	
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	115.100	113.900	95.200	90.700	79.000	97.800	103.600	98.200	
Transmitting ERP (watts)	64.739	3.664	0.447	0.530	1.414	26.223	172.206	223.125	
		DE YEAR							
Location Latitude Longit	1	(m	ound Elev	(n	tructure Hgt neters)	to Tip	Antenna St Registratio		
27 36-50-29.5 N 087-07	7-55.8 W	(m	The state of the s	(n	_	to Tip			
27 36-50-29.5 N 087-07 Address: 360 C STOKES ROAD (761	7-55.8 W 58)	(m 23	eters) 7.7	(n 59	neters) 9.7	to Tip			
27 36-50-29.5 N 087-07  Address: 360 C STOKES ROAD (761  City: ELKTON County: TODD 5	7-55.8 W 58) State: KY	(m 23 Constru	eters) 7.7 uction Dea	(n 59 <b>dline:</b> 07-	neters) 9.7 -23-2013		Registratio	n No.	
27 36-50-29.5 N 087-07 Address: 360 C STOKES ROAD (761 City: ELKTON County: TODD S Antenna: 1 Azimuth (from true north)	7-55.8 W 58) State: KY	Constru	eters) 7.7	(n 59 dline: 07-	neters) 9.7 -23-2013 180	to Tip		315	
27 36-50-29.5 N 087-07 Address: 360 C STOKES ROAD (761 City: ELKTON County: TODD STOKES Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters)	7-55.8 W 58) State: KY 0 88.600	(m 23 Constru 45 106.300	90 98.000	(n 59 dline: 07- 135 103.600	neters) 9.7 -23-2013 180 113.600	<b>225</b> 107.900	270 90.000	315 83.900	
27 36-50-29.5 N 087-07 Address: 360 C STOKES ROAD (761 City: ELKTON County: TODD S Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	7-55.8 W 58) State: KY 0 88.600 59.416	Constru	eters) 7.7 uction Dea	(n 59 dline: 07-	neters) 9.7 -23-2013 180	225	Registratio	315	
27 36-50-29.5 N 087-07 Address: 360 C STOKES ROAD (761 City: ELKTON County: TODD STOKES Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north)	7-55.8 W 58) State: KY 0 88.600 59.416	(m 23 Constru 45 106.300	90 98.000	(n 59 dline: 07- 135 103.600	neters) 9.7 -23-2013 180 113.600	<b>225</b> 107.900	270 90.000	315 83.900	
27 36-50-29.5 N 087-07 Address: 360 C STOKES ROAD (761 City: ELKTON County: TODD S Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters)	7-55.8 W 58) State: KY 0 88.600 59.416	(m 23 Constru 45 106.300 267.210	90 98.000 296.881	(n 59 dline: 07- 135 103.600 53.793	neters) 9.7 -23-2013  180 113.600 5.846 180	225 107.900 1.888	270 90.000 1.202 270	315 83.900 3.110	
27 36-50-29.5 N 087-07 Address: 360 C STOKES ROAD (761 City: ELKTON County: TODD STOKES Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north)	7-55.8 W 58) State: KY 0 88.600 59.416 0	Constru 45 106.300 267.210	90 98.000 296.881	(n 59 dline: 07- 135 103.600 53.793 135	neters) 9.7 -23-2013  180 113.600 5.846 180	225 107.900 1.888 225	270 90.000 1.202 270	315 83.900 3.110 315	
27 36-50-29.5 N 087-07 Address: 360 C STOKES ROAD (761 City: ELKTON County: TODD S Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters)	7-55.8 W 58) State: KY 0 88.600 59.416 0 88.600 0.355	45 106.300 267.210 45 106.300	90 98.000 296.881 90 98.000	(n 59 dline: 07- 135 103.600 53.793 135 103.600	neters) 9.7  -23-2013  180  113.600 5.846  180  113.600	225 107.900 1.888 225 107.900	270 90.000 1.202 270 90.000	315 83.900 3.110 315 83.900	
27 36-50-29.5 N 087-07 Address: 360 C STOKES ROAD (761 City: ELKTON County: TODD S  Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	7-55.8 W 58) State: KY 0 88.600 59.416 0 88.600 0.355	45 106.300 267.210 45 106.300 2.851	90 98.000 296.881 90 98.000 12.889	(n 59 dline: 07- 135 103.600 53.793 135 103.600 51.983	180 113.600 5.846 180 113.600 75.907	225 107.900 1.888 225 107.900 82.466	270 90.000 1.202 270 90.000 21.953 270	315 83.900 3.110 315 83.900 4.744	
27 36-50-29.5 N 087-07 Address: 360 C STOKES ROAD (761 City: ELKTON County: TODD S Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 3 Azimuth (from true north)	7-55.8 W 58) State: KY 0 88.600 59.416 0 88.600 0.355	45 106.300 267.210 45 106.300 2.851 45	90 98.000 296.881 90 98.000 12.889	(n 59 dline: 07- 135 103.600 53.793 135 103.600 51.983	180 113.600 5.846 180 113.600 75.907	225 107.900 1.888 225 107.900 82.466 225	270 90.000 1.202 270 90.000 21.953 270	315 83.900 3.110 315 83.900 4.744 315	

Call Sign: KNKN748	File Number:	Print Date:
--------------------	--------------	-------------

Can Sign. Kivikiv/40	riie ivumber:				Time bace.				
Particular Control of the Control of	9-57.9 W	(m	Ground Elevation (meters) (meters) (meters) 96.9			t to Tip		enna Structure stration No. 687	
Address: 1020 HENRY OATS ROAD	,		_						
City: Graham County: MUHLENB	ERG St	ate: KY	Construc	tion Dead	lline: 07-23-2	2013			
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	91.700	68.800	64.200	74.700	79.100	81.600	85.800	91.900	
Transmitting ERP (watts)	35.026	195.687	216.768	54.685	2.636	0.432	0.445	1.843	
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	91.700	68.800	64.200	74.700	79.100	81.600	85.800	91.900	
Transmitting ERP (watts)	0.121	0.121	2.272	26.014	60.527	29.180	2.862	0.121	
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	91.700	68.800	64.200	74.700	79.100	81.600	85.800	91.900	
Transmitting ERP (watts)	35.896	3.378	0.159	0.237	0.301	5.075	44.704	79.171	
6 ( , , ,	.40	TOTAL PROPERTY.							
Location Latitude Longic		Gı (m	round Elev teters) 98.1	vation S	Structure Hg meters)	t to Tip	Antenna S Registration 1211505		
Location Latitude         Longin           34         37-04-12.2 N         086-05           Address: 622 CRUMP ROAD (37518	tude 5-07.1 W	G1 (m 19	round Elev neters) 98.1	vation S	Structure Hg meters) 99.1	•	Registratio		
Location Latitude Longit	tude 5-07.1 W	Gı (m	round Elev neters) 98.1	vation S	Structure Hg meters)	•	Registratio		
Location Latitude         Longin           34         37-04-12.2 N         086-05           Address: 622 CRUMP ROAD (37518	tude 5-07.1 W ) ) )NSON	G1 (m 19	round Elev neters) 98.1	vation S	Structure Hg meters) 99.1	•	Registratio		
Location Latitude Longit  34 37-04-12.2 N 086-03  Address: 622 CRUMP ROAD (37518  City: Smiths Grove County: EDMC	tude 5-07.1 W ) ) )NSON	Gr (m 19 State: KY	round Elev neters) 98.1 Constr	vation S (1) 9 uction De	Structure Hg meters) 99.1 eadline: 07-2	3-2013	Registration 1211505	on No.	
Location Latitude Longit  34 37-04-12.2 N 086-03  Address: 622 CRUMP ROAD (37518  City: Smiths Grove County: EDMC  Antenna: 1 Azimuth (from true north)	tude 5-07.1 W ) ) ) ) ) ) )	Gi (m 19 State: KY	round Eleverters) 98.1 Constr	vation S (199 uction De	Structure Hg meters) 99.1 eadline: 07-2	225	Registration 1211505 270	315	
Location Latitude Longit  34 37-04-12.2 N 086-05  Address: 622 CRUMP ROAD (37518  City: Smiths Grove County: EDMC  Antenna: 1 Azimuth (from true north)  Antenna Height AAT (meters)	5-07.1 W ) DNSON 0 53.800 27.629	G1 (m) 19 State: KY 45 63.200	round Elevaters) 8.1  Constr 90 49.600	vation S (0 9 uction De 135 57.000	Structure Hg meters) 199.1 eadline: 07-2 180 59.000	3-2013 225 84.600	Registration 1211505 270 86.400	315 61.200	
Location Latitude Longit  34 37-04-12.2 N 086-03  Address: 622 CRUMP ROAD (37518  City: Smiths Grove County: EDMC  Antenna: 1 Azimuth (from true north)  Antenna Height AAT (meters)  Transmitting ERP (watts)	5-07.1 W ) DNSON 0 53.800 27.629	Gi (m 19 State: KY 45 63.200 87.373	round Eleverence (198.1) Constr 90 49.600 66.058	vation S (9 uction Do 135 57.000 8.970	Structure Hg meters) 199.1 eadline: 07-2 180 59.000 0.709	3-2013 225 84.600 0.175	270 86.400 0.179	315 61.200 3.181	
Location Latitude Longit  34 37-04-12.2 N 086-03  Address: 622 CRUMP ROAD (37518  City: Smiths Grove County: EDMC  Antenna: 1 Azimuth (from true north)  Antenna Height AAT (meters)  Transmitting ERP (watts)  Antenna: 2 Azimuth (from true north)	tude 5-07.1 W ) DNSON 0 53.800 27.629 0	G1 (m) 19 State: KY 45 63.200 87.373 45	round Elevaters) 98.1  Constr 90 49.600 66.058 90	vation S (0.99 uction De 135 57.000 8.970 135	Structure Hg meters) 99.1 eadline: 07-2 180 59.000 0.709 180	3-2013 225 84.600 0.175 225	270 86.400 0.179 270	315 61.200 3.181 315	
Location Latitude Longit  34 37-04-12.2 N 086-05  Address: 622 CRUMP ROAD (37518  City: Smiths Grove County: EDMC  Antenna: 1 Azimuth (from true north)  Antenna Height AAT (meters)  Transmitting ERP (watts)  Antenna: 2 Azimuth (from true north)  Antenna Height AAT (meters)	tude 5-07.1 W ) DNSON 0 53.800 27.629 0 53.800 0.101	Gi (m 19 19 19 19 19 19 19 19 19 19 19 19 19	round Elevaters) 98.1  Constr  90 49.600 66.058 90 49.600	vation S (9) uction Do 135 57.000 8.970 135 57.000	5tructure Hg meters) 99.1 eadline: 07-2 180 59.000 0.709 180 59.000	3-2013 225 84.600 0.175 225 84.600	270 86.400 0.179 270 86.400	315 61.200 3.181 315 61.200	
Location Latitude Longit  34 37-04-12.2 N 086-03  Address: 622 CRUMP ROAD (37518  City: Smiths Grove County: EDMC  Antenna: 1 Azimuth (from true north)  Antenna Height AAT (meters)  Transmitting ERP (watts)  Antenna: 2 Azimuth (from true north)  Antenna Height AAT (meters)  Transmitting ERP (watts)	tude 5-07.1 W ) DNSON 0 53.800 27.629 0 53.800 0.101	Gi (m) 19 State: KY 45 63.200 87.373 45 63.200 0.305	90 49.600 66.058 90 49.600 1.436	vation S (9) uction De 135 57.000 8.970 135 57.000 1.860	Structure Hg meters) 99.1 eadline: 07-2 180 59.000 0.709 180 59.000 2.041	3-2013 225 84.600 0.175 225 84.600 0.788	270 86.400 0.179 270 86.400 0.130	315 61.200 3.181 315 61.200 0.100	

Call Sign: KNKN748	File Number:				Print Date:			
Location Latitude Longit  35 37-29-36.0 N 086-12  Address: 694 BRATON ROAD (8146  City: Clarkson County: GRAYSON	1-16.5 W 1)	(m 22	ound Eleveters)		Structure Hg (meters) 83.8 ne: 07-23-2013		Antenna St Registratio 1217206	
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters)	92,400 57.018	45 66.200 192.165 45 66.200 0.276 45 66.200	90 82.600 145.827 90 82.600 8.928 90 82.600	135 83.200 15.733 135 83.200 64.700 135 83.200	1.898 180 92.600 126.176 180	225 111.600 0.385 225 111.600 53.814 225 111.600	270 90.000 0.383 270 90.000 5.506 270 90.000	315 105.400 6.862 315 105.400 0.302 315 105.400
Location Latitude Longit  36 37-56-59.6 N 086-04  Address: 340 HAYES ROAD (37683)  City: Bradenburg County: MEADE	1-57.8 W	(m 20	ound Eleveters)		4.115  Structure Hgr (meters) 77.7 e: 07-23-2013	41.499 t to Tip	Antenna St Registratio 1230213	
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 3 Azimuth (from true north) Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters)	0 85.400 126.151 0 85.400 0.293	45 108.200 53.803 45 108.200 3.183 45	90 75.400 5.511 90 75.400 18.727 90	135 73.700 0.302 135 73.700 24.271	180 40.000 0.252 180 40.000 10.402 180	225 69.400 0.277 225 69.400 0.832 225	270 81.900 8.920 270 81.900 0.126 270	315 112.400 64.703 315 112.400 0.180 315
Transmitting ERP (watts)	0.954	108.200 0.235	75.400 0.241	73.700 4.294	37.262	69.400 117.843	81.900 89.269	112.400 12.068

Call Sign: KNKN748	File Number:				Print Date:					
Location Latitude Longit  39 37-36-06.5 N 087-23  Address: 8720 STATE HIGHWAY 25  City: Calhoun County: MCLEAN	3-53.6 W	(m 19	round Elev neters) 10.2 truction D	7	Structure Hgr meters) 72.8 07-23-2013	t to Tip	Antenna St Registratio 1049228			
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 132.100 8.604 0 132.100 0.100	45 127.700 24.150 45 127.700 0.145	90 130.400 21.298 90 130.400 0.714	135 139.700 3.973 135 139.700 2.721	0.289 <b>180</b>	225 127.700 0.100 225 127.700 2.664	270 123.000 0.110 270 123.000 0.581	315 127.400 0.868 315 127.400 0.100		
Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 132.100 16.740	45 127.700 1.264	90 130.400 0.201	135 139.700 0.172	180 139.200 0.717	225 127.700 9.668	270 123.000 50.766	315 127.400 60.487		
Location Latitude Longit  40 38-00-08.4 N 086-19  Address: 1002 Paynesville Rd (10072  City: PAYNEVILLE County: MEA	9-20.3 W	(m 23	round Elev neters) 17.4 Constructi	1	Structure Hgr meters) 103.9 line: 07-23-20		Antenna St Registratio 1049227			
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	136.200 80.625	45 133.100 243.519 45 133.100 0.882	90 139.800 176.744 90 139.800 16.525	135 109.200 18.512 135 109.200 137.024	1.434 180 119.400	225 125.600 0.489 225 125.600 104.000	0.488 <b>270</b> 140.200	315 137.800 6.707 315 137.800 1.040		
Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)		<b>45</b> 133.100 2.170	90 139.800 0.508	135 109.200 0.496	180	225 125.600 39.546	270	315 137.800 232.753		

Call Sign: KNKN748	File Number:				Print Date:				
Location Latitude Longion 45 36-47-11.0 N 086-0 Address: 3499 OLD GLASCOW RO. City: SCOTTSVILLE County: AL	8-35.3 W AD (76160	(m 25	round Elevaters)	(	Structure Hg (meters) 91.1 Illine: 07-23-2	•	Antenna St Registratio 1043039		
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters)	<b>0</b> 141.000	<b>45</b> 115.500	<b>90</b> 104.500	135 105.100	180 0 65.600	<b>225</b> 99.100	<b>270</b> 114.200	<b>315</b> 122.300	
Transmitting ERP (watts)  Antenna: 2 Azimuth (from true north)  Antenna Height AAT (meters)  Transmitting ERP (watts)	69.057 0 141.000 0.695	33.233 45 115.500 10.164	3.269 <b>90</b> 104.500 66.502	0.138 135 105.100 87.307		0.139 <b>225</b> 99.100 1.827	2.591 <b>270</b> 114.200 0.175	29.564 315 122.300 0.193	
Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 141.000 0.331	45 115.500 0.100	90 104.500 0.100	135 105.100 0.877	180 0 65.600 10.209	99.100 34.235	270 114.200 30.831	315 122.300 5.937	
Address: 14010 Greenville Rd (11415	8-24.4 W	(m 25	round Elev neters) i3.3 ction Dead	(	Structure Hg (meters) 84.7 23-2013	t to Tip	Antenna St Registratio 1052933		
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	140.300 90.933	45 148.600 49.427	90 164.300 5.614	135 137.900 0.231	180 0 115.200 0.294	225 131.900 0.248	<b>270</b> 156.200 4.251	315 154.200 44.027	
Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 140.300 1.696	45 148.600 31.376	90 164.300 206.048	135 137.900 266.81		225 131.900 4.381	270 156.200 0.534	315 154.200 0.634	
Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 140.300 0.365	<b>45</b> 148.600 0.124	90 164.300 0.124	135 137.900 1.043	180 0 115,200 14.987	225 131.900 62.052	270 156.200 52.143	315 154.200 8.124	

Call Sign: KNKN748	File Number:				Print Date:				
70007	0-56.1 W	(m	round Elev neters) 58.9		Structure Hgt (meters) 46.9	to Tip	Antenna St Registratio		
Address: 9141 Russellville Rd (11602 City: Guthrie County: TODD St	ate: KY	Construc	tion Deadl	ine: 07-2	23-2013				
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	30,000	36.200	41.000	46.500	50.000	51.500	45.300	40.200	
Transmitting ERP (watts)	83.826	171.373	91.533	10.341	0.391	0.553	0.470	7.798	
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	30.000	36.200	41.000	46.500	50.000	51.500	45.300	40.200	
Transmitting ERP (watts)	39.359	3.884	0.163	0.164	0.163	3.073	35.149	81.833	
Location Latitude Longi	tude 4-51.9 W	(m	round Elev neters) 53.9	(	Structure Hgt (meters) 87.8	to Tip	Antenna St Registratio 1043422		
Address: 374 SARAH CELL LANE (	ALC: ALC:				07.0		1013122		
City: RUSSELLVILLE County: L	WHICH.	State: KY	Constru	ction De	eadline:				
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	147.800	136.900	122.800	139.50	0 151.400	149.000	137.200	143.600	
Transmitting ERP (watts)	13.191	15.375	20.623	9.724	2.241	0.917	1.606	4.394	
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	147.800	136.900	122.800	139.50	0 151.400	149.000	137.200	143.600	
Transmitting ERP (watts)	0.302	19.944	70.809	141.15	7 91.158	151.443	56.229	39.824	
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	147.800	136.900	122.800	139.50	0 151.400	149.000	137.200	143.600	
Transmitting ERP (watts)	165.961	47.564	35.048	13.108	19.047	126.532	254.037	264.411	
Location         Latitude         Long           50         37-06-13.5 N         086-1	itude 1-31.9 W	(m	round Elev neters) 18.4		Structure Hgt (meters) 94.5	to Tip	Antenna St Registratio 1043426		
Address: HWY 31 W. 15.5 MILES N					10000000000000000000000000000000000000	1			
City: BROWNSVILLE County: E	DMONSO	N State	: KY Co	nstructio	on Deadline:			2017	
Antenna: 1 Azimuth (from true north	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	132.900	119.800	121.900	132.50	00 139.700	156.900		144.700	
Transmitting ERP (watts)	76.433	61.831	10.136	0.490	0.153	0.153	1.751	22.332	

Call Sign: KNKN748	File	Number:	Number: Print Date:					
Location Latitude Longit  50 37-06-13.5 N 086-13  Address: HWY 31 W. 15.5 MILES NO City: BROWNSVILLE County: ED	1-31.9 W ORTH OF	(m 24 BOWLIN		(76162)	structure Hgt meters) 14.5 n Deadline:	to Tip	Antenna St Registration 1043426	
Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 132,900 0.140 0 132,900 0.717	45 119.800 2.140 45 119.800 0.100	90 121.900 18.403 90 121.900 0.100	135 132.500 33.047 135 132.500 0.363	18.411 <b>180</b>	225 156.900 2.087 225 156.900 26.904	0.101 <b>270</b>	315 144.700 0.132 315 144.700 9.981
Location Latitude Longit 51 37-59-01.3 N 086-09 Address: 754 HIGHWAY 448 (76175 City: BRANDENBURG County: M	9-28.7 W	(m	cound Eleverers) 1.5 Construction	(1	structure Hgt meters) 11.1 eadline:	to Tip	Antenna St Registratio 1061285	
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	92.900 127.297 <b>0</b> 92.900 0.549	45 81.400 121.679 45 81.400 6.006 45 81.400 47.446	90 121.600 155.422 90 121.600 49.925 90 121.600 34.954	135 71.000 85.508 135 71.000 208.129 135 71.000 13.065	180 57.800 30.247 180 57.800 273.538 180 57.800 18.961	225 78.400 22.406 225 78.400 212.776 225 78.400 125.826	<b>270</b> 81.600	315 124.800 41.126 315 124.800 17.704 315 124.800 262.909
Location         Latitude         Longi           52         37-32-55.4 N         087-16           Address: 235 WEST KY 136 (76190)           City: CALHOUN         County: MCLEAR	6-05.4 W	(m 14	round Elev neters) 40.2 onstructio	(	Structure Hgg meters) 03.0 ne:	to Tip	Antenna St Registratio 1244911	
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	<b>0</b> 93.700 12.048	<b>45</b> 104.200 14.042	90 101.700 18.841	135 109.900 8.872	180 107.300 2.043	225 112.600 0.838	270 113.000 1.462	315 103.500 4.009

Call Sign: KNKN748	File	Number:		Print Date:				Print Date:				
Address: 235 WEST KY 136 (76190)	5-05.4 W	(meters) (		Structure Hgt (meters) 93.0	to Tip	Antenna Structure Registration No. 1244911						
City: CALHOUN / County: MCLEA	N State	e: KY C	onstruction	1 Deadli	ne:							
Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	<b>0</b> 93,700 0.263	<b>45</b> 104.200 1.499	90 101.700 8.907	135 109.900 25.402	180 0 107.300 25.096	225 112.600 29.869	<b>270</b> 113.000 6.908	315 103.500 2.214				
Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	93.700 13.485	45 104.200 2.840	90 101.700 1.968	135 109.900 1.182	180 0 107.300 1.861	225 112.600 9.279	<b>270</b> 113.000 14.950	315 103.500 16.111				
Location Latitude Longit  53 37-23-57.3 N 087-14  Address: 1266 Coffman School House  City: Sacramento County: MCLEA	1-11.0 W Road (11	(m 14 4157)	round Elev neters) 12.6 onstruction	(	Structure Hgt (meters) 66.4 ne:	to Tip	Antenna St Registratio 1043462					
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315				
Antenna Height AAT (meters) Transmitting ERP (watts)	78.900 167.796	71.400 70.666	72.900 5.756	65.300 0.746	58.100 0.337	76.700 0.392	81.000 10.993	71.700 84.493				
Antenna: 2 Azimuth (from true north)		45	90	135	180	225	270	315				
Antenna Height AAT (meters) Transmitting ERP (watts)	78.900 2.293	71.400 23.373	72.900 125.220	65.300 157.18	58.100 1 33.002	76.700 3.023	81.000 0.420	71.700 0.529				
Antenna: 3 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	<b>0</b> 78.900 1.557	<b>45</b> 71.400 0.314	90 72.900 0.315	135 65.300 5.633	180 58.100 46.706	225 76.700 157.098	270 81.000 119.251	315 71.700 12.856				
Location Latitude Longit 54 36-44-32.4 N 087-03 Address: 12442 Clarksville Rd (11916 City: Olmstead County: LOGAN	3-22.0 W	(m 17	round Elev neters) 77.4 truction De		Structure Hgt (meters) 60.7	to Tip	Antenna St Registratio					
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 38.700 213.908	<b>45</b> 51.200 284.249	90 58.700 320.934	135 61.000 124.08	Villa Villa	225 65.600 16.187	270 54.200 21.717	315 43.800 47.543				

Call Sign: KNKN748	File Number:				Print Date:				
Delical	3-22.0 W	(m	ound Elev eters) 7.4	ation	Structure Hgt (meters) 60.7	to Tip	Antenna St Registratio		
Address: 12442 Clarksville Rd (11916 City: Olmstead County: LOGAN	State: KY	Y Const	ruction De	adline:					
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	38.700	51.200	58.700	61.000	61.600	65.600	54.200	43.800	
Transmitting ERP (watts)	0.398	2.494	20.501	62.455	72.666	71.877	14.509	4.740	
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	38,700	51.200	58.700	61.000	61.600	65.600	54.200	43.800	
Transmitting ERP (watts)	70.857	7.567	2.665	0.972	2.148	48.281	243.184	333.088	
Location Latitude Longin	tude 0-05.7 W	(m	round Elev leters)	ation	Structure Hgt (meters)	to Tip	Antenna St Registratio		
Address: 680 Phillips Lane (37504)	J-03.7 W	20	J.T		74.7		103/21/		
City: Franklin County: SIMPSON	State: K	Y Cons	truction D	eadline	:				
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	86.700	76.200	AESS						
Transmitting ERP (watts)	114.881	151.450	71.800 45.595	57.600 2.950	57.100 0.302	67.700 0.353	72.000 1.123	80.500 17.809	
Antenna: 2 Azimuth (from true north)		45	90	135	180	225	270	315	
Antenna Height AAT (meters)	86.700		(ESS)	1988			72.000	80.500	
Transmitting ERP (watts)	0.274	76.200 0.273	71.800 1.936	57.600 29.962		67.700 135.788		1.424	
Antenna: 3 Azimuth (from true north)			- ANTHER						
Antenna Height AAT (meters)		45	90	135	180	225	270	315	
Transmitting ERP (watts)	86.700 36.885	76.200 2.023	71.800	57.600	ESV .	67.700 23.079	72.000 126.851	80.500 143.582	
Location Latitude Longi		Gi (m	round Elevaters)	4000	Structure Hgt (meters) 64.6		Antenna St Registratio 1043552	ructure	
Address: 5020 HWY 431 (114800)						A. C. C.			
City: North Calhoun County: MCL	EAN St	ate: KY	Construc	tion De	adline:	or thin.			
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	73.000	67.700	60.800	71.600		81.300	63.900	67.300	
Transmitting ERP (watts)	158.393	151.166	193.708	106.19		27.960	34.683	51.309	
						- A	40000		

Call Sign: KNKN748	File	Number:			Print Date:				
A STATE OF THE STA	oude 5-34.0 W	(m	round Eleveters)		Structure Hgt (meters) 64.6	to Tip	Antenna St Registratio 1043552		
Address: 5020 HWY 431 (114800) City: North Calhoun County: MCL	EAN St	ate: KY	Construc	tion Dea	dline:				
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	73,000	67.700	60.800	71.600	77.400	81.300	63.900	67.300	
Transmitting ERP (watts)	0.579	17.567	97.454	288.73	1 259.116	288.697	84.790	47.492	
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	73.000	67.700	60.800	71.600		81.300	63.900	67.300	
Transmitting ERP (watts)	225.807		98.488	33.766		203.385		256.109	
Address: OLD LEWISPORT OWENS	9-51.0 W BORO R	(m 16 D (118228	,		Structure Hgt (meters) 65.6	t to Tip	Antenna St Registratio 1043711		
City: HAWESVILLE County: HAM	NCOCK	State: KY	Consti	uction 1	Deadline:				
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	89.400	84.300	98.800	62.900	81.500	94.100	95.600	100.200	
Transmitting ERP (watts)	145.138	138.457	177.189	97.486	34.591	25.653	31.702	46.927	
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	89.400	84.300	98.800	62.900	81.500	94.100	95.600	100.200	
Transmitting ERP (watts)	0.626	6.840	56.877	237.29	6 312.736	242.992	49.505	20.160	
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	89.400	84.300	98.800	62.900		94.100	95.600	100.200	
Transmitting ERP (watts)	206.536		90.088	30.991		186.420		234.243	
Location Latitude Longin  58 37-56-52.0 N 085-59  Address: 115 Timber Court (37606)  City: Muldraugh County: MEADE	tude 9-37.8 W State: 1	(m 22	round Elevaters)		Structure Hg (meters) 59.4	t to Tip	Antenna St Registratio 1204254		
County: MEADE	State: 1	XI Con	struction I		• • • • • • • • • • • • • • • • • • • •				
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	00 000					100			
Transmitting ERP (watts)	82.000	113.300	99.300	64.300	63.500	56.300	78.500	87.900	

Call Sign: KNKN748 File Number: Print Date:

Location Latitude	Longitude		round Ele leters)	vation	Structure Hg (meters)	gt to Tip	Antenna S Registratio	
58 37-56-52.0 N	085-59-37.8 W	22	21.0		59.4		1204254	
Address: 115 Timber Court (37	606)							
City: Muldraugh County: MI	EADE State: I	KY Con	struction	Deadlin	e:			
Antenna: 2 Azimuth (from true	north) 0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	82.000	113.300	99.300	64.30	0 63.500	56.300	78.500	87.900
Transmitting ERP (watts)	0.100	0.100	0.790	17.08	5 30.505	3.551	0.100	0.100
Antenna: 3 Azimuth (from true	north) 0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	82.000	113.300	99.300	64.30	0 63.500	56.300	78.500	87.900
Transmitting ERP (watts)	0.100	0.100	0.100	0.309	10.332	36.527	6.709	0.159

# 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).

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).



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



# **Federal Communications Commission**

## Wireless Telecommunications Bureau

# RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

Call Sign KNLG230	File Number
Radio	Service
CW - PCS	Broadband

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 04-11-2017	Effective Date 06-13-2017	Expiration Date 04-28-2027	Print Date
Market Number BTA083	Chann I	el Block	Sub-Market Designator
	<b>Market</b> Clarksville, TN		
st Build-out Date 04-28-2002	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

#### Waivers/Conditions:

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

This authorization is conditioned upon the full and timely payment of all monies due pursuant to Sections 1.2110 and 24.716 of the Commission's Rules and the terms of the Commission's installment plan as set forth in the Note and Security Agreement executed by the licensee. Failure to comply with this condition will result in the automatic cancellation of this authorization.

#### **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.

Call Sign: KNLG230 File Number: Print Date:

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).

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> KNLH416	File Number
Radio	Service
CW - PCS	Broadband

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 04-10-2017	Effective Date 06-14-2017	Expiration Date 04-28-2027			
Market Number BTA083	Chan	nel Block D	Sub-Market Designator		
		t Name N-Hopkinsville,			
st Build-out Date 04-28-2002	2nd Build-out Date	3rd Build-out Date	4th Build-out Date		

#### Waivers/Conditions:

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

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.

Call Sign: KNLH416 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 is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



# **Federal Communications Commission**

# Wireless Telecommunications Bureau

## RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

Call Sign KNLH417	File Number
Radio	Service
CW - PCS	Broadband

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 04-13-2017	Effective Date 06-14-2017	Expiration Date 04-28-2027	Print Date
Market Number BTA083	Chann	el Block E	Sub-Market Designator
	<b>Market</b> Clarksville, TN		***************************************
st Build-out Date 04-28-2002	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

# Waivers/Conditions:

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

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.

Call Sign: KNLH417 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 is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



# **Federal Communications Commission**

# Wireless Telecommunications Bureau

## RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

Call Sign WPOI256	File Number
	Service
CW - PCS	Broadband

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 06-02-2015	Effective Date 06-14-2017	Expiration Date 06-23-2025	Print Date
Market Number MTA043	Cha	nnel Block B	Sub-Market Designator 2
	4500	shville	
1st Build-out Date 06-23-2000	2nd Build-out Date 06-23-2005	3rd Build-out Date	4th Build-out Date

## Waivers/Conditions:

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

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.

Call Sign: WPOI256 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).

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).

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



# **Federal Communications Commission**

#### Wireless Telecommunications Bureau

# RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

Call Sign WQGD546	File Number
Radio AW - AWS (171	Service 0-1755 MHz and
2110-21:	

FCC Registration Number (FRN): 0003291192

Grant Date 12-18-2006	Effective Date 06-14-2017	Expiration Date 12-18-2021	Print Date
Market Number CMA445	Chann A	el Block	Sub-Market Designator
	Market Kentucky 3	F	
st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Dat

## Waivers/Conditions:

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

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

## **Conditions:**

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

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



# **Federal Communications Commission**

## Wireless Telecommunications Bureau

# RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

Call Sign WQGD758	File Number
	Service
AW - AWS (17)	10-1755 MHz and
2110-21	55 MHz)

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 12-18-2006	Effective Date 06-14-2017	Expiration Date 12-18-2021	Print Date
Market Number BEA071	Chann	nel Block	Sub-Market Designator
	<b>Marke</b> t Nashville		
1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

#### Waivers/Conditions:

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

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

## **Conditions:**

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

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



# **Federal Communications Commission**

#### Wireless Telecommunications Bureau

## RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

Call Sign WQQQ250	File Number
Radio	Service
CW - PCS	Broadband

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 04-26-2017	Effective Date 06-14-2017	Expiration Date 04-28-2027	Print Date
Market Number BTA083	Chan	nel Block F	Sub-Market Designator 2
	<b>Marke</b> Clarksville, TN	t Name N-Hopkinsville,	
st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

# Waivers/Conditions:

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

This authorization is conditioned upon the full and timely payment of all monies due pursuant to Sections 1.2110 and 24.716 of the Commission's Rules and the terms of the Commission's installment plan as set forth in the Note and Security Agreement executed by the licensee. Failure to comply with this condition will result in the automatic cancellation of this authorization.

## **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: WQQQ250 File Number: Print Date:

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

#### REFERENCE COPY

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



#### **Federal Communications Commission**

#### Wireless Telecommunications Bureau

#### RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

Call Sign WQZA691	File Number
Radio	Service
CW - PCS	Broadband

FCC Registration Number (FRN): 0003291192

<b>Grant Date</b> 02-28-2017	Effective Date 06-14-2017	Expiration Date 09-29-2019	Print Date
Market Number BTA083	Chánn	el Block	Sub-Market Designator
	<b>Market</b> Clarksville, TN		
st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

#### Waivers/Conditions:

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

This 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).

#### **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: WQZA691 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).

# **EXHIBIT B**

# **SITE DEVELOPMENT PLAN:**

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



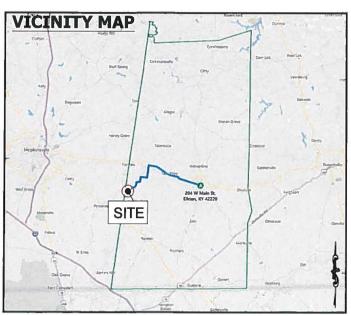
SITE NAME:

**MORTON** 

SITE NUMBER:

**KYL03678** 

# PROPOSED RAW LAND SITE WITH PROPOSED 255' SELF-SUPPORT **TOWER WITH A 15' LIGHTNING ARRESTOR AND INSTALLATION** OF A 80" x 80" WALK IN CABINET AND GENERATOR



#### **DIRECTIONS**

FROM 204 W MAIN ST, ELKTON, KY 42220 DEPART US-68 BR / W MAIN ST TOWARD S STREETS AVE 2.7 MI TURN LEFT ONTO US-68 W / HOPKINSVILLE RD 3.7 MI TURN LEFT ONTO MORTON LN 1.4 MI TURN RIGHT TO STAY ON MORTON LN 3.2 MI ARRIVE AT MORTON LN / FULCHER SCHOOL RD ON THE RIGHT

# PROJECT SCOPE OF WORK

ZONING DRAWINGS FOR: CONSTRUCTION OF A PROPOSED UNMANNED TELECOMMUNICATIONS FACILITY SITE WORK: PROPOSED TOWER, UNMANNED EQUIPMENT CABINET AND GENERATOR ON CONCRETE FOUNDATIONS OR PLATFORMS, AND

COUNTY:

PEMBROKE, KY 42266

A DELAWARE LIMITED LIABILITY COMPANY, D/B/A AT&T MOBILITY

MEIDINGER TOWER

36' 48' 01 26' -87' 18' 10.09"

#### **DRAWING INDEX**

T-1 TITLE SHEET & PROJECT INFORMATION

**CONTACT INFORMATION** 

**BUILDING CODES AND STANDARDS** 

CONTRACTOR'S WORK SHALL COMPLY WITH ALL APPICABLE NATIONAL,

STATE AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING

CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE

AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL OF STEEL

COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR

Know what's below.

Call before you dig.

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS IEEE-81.

ANSI T1.311, FOR TELECOM - DC POWER SYSTEMS - TELECOM,

TELECOMMUNICATIONS INDUSTRY ASSOCIATION TIA-222 STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND

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

\*\*\*CAUTION\*\*\*

E UTUTIES SHOWN HEREON ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY.

REE MAY BE OTHER UTUTIES NOT SHOWN ON THESE PLANS. THE ENGINEER

SUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL BE

NITRACTOR'S RESPONSIBILITY TO VERIFY ALL UTUTIES WITHIN THE LIMITS OF

E WORK. ALL DAMAGE MADE TO EXISTING UTUTIES BY THE CONTRACTOR

ALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

FOR EMERGENCIES CALL: 911

FIRE DEPARTMENT: ELKTON VOLUNTEER FIRE DEPARTMENT

TODD COUNTY SHERIFFS OFFICE PHONE: 270-265-9966

PHONE: 270-265-1501

POLICE DEPARTMENT

LECTRIC COMPANY:

PHONE: 270-265-2545

TELEPHONE COMPANY:

HONE: 888-944-0447

FOLLOWING STANDARDS:

TELECOMMUNICATIONS

IEEE 1100, IEEE C62,41

ENVIRONMENTAL PROTECTION

CONSTRUCTION

JURISDICTION FOR THE LOCATION.

SUPPORTING STRUCTURES TIA-601

2014 KENTUCKY BUILDING CODE

AMERICAN CONCRETE INSTITUTE 318

- B-1 SITE SURVEY
- B-2 500' RADIUS & ABUTTER'S MAP
- C-1 ENLARGED COMPOUND LAYOUT
- C-2 TOWER ELEVATION

# at&t





4603 Bermuda Drive, Sugar Land, TX 77479 Volce: (281) 798-2651 I Fax: (868) 598-3136

**ZONING DRAWINGS** NOT FOR CONSTRUCTION

DRAWN BY:

CHECKED BY:

REV DATE DESCRIPTION 0 06/01/17 ISSUED FOR ZONING 12/27/17 ZONING-TOWER DRWGS



ENG. PERMIT # 4363

13800708 SITE# KYL03678 SITE NAME: MORTON SITE ADDRESS: LONG MILL RD PEMBROKE, KY 42266

> SHEET TITLE **TITLE SHEET & PROJECT INFORMATION**

> > SHEET NUMBER

T-1

## PROJECT INFORMATION

TODD

SITE ADDRESS:

LONG MILL RD

APPLICANT:

NEW CINGULAR WIRELESS PCS, LLC,

462 S. 4TH ST. SUITE 2400 LOUISVILLE, KY 40202

LATITUDE: LONGITUDE:

PROPOSED LEASE AREA
ALL THAT TRACT OR PARCEL OF LAND LYING IN THE COUNTY OF TODD, STATE OF KENTUCKY,
CONSISTING OF A 100 FEET BY 100 FEET LEASE AREA, COMMENCING AT A FOUND IRON FENCE POST,
THAT IS 5,840 FEET SOUTHWESTERLY OF THE INTERSECTION OF FULCHNER SCHOOL ROAD AND
MORTON ROAD, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THENCE NORTH 40 DEGREES 58 MINUTES 13 SECONDS EAST. A DISTANCE OF 842.48 FEET TO THE

THENCE NORTH 30 DEGREES 40 MINUTES 10 SECONDS WEST A DISTANCE OF 100 00 FEET THENCE NORTH 50 DEGREES 40 MINUTES 10 SECONDS WEST, A DISTANCE OF 100,00 FEET,
THENCE SOUTH 50 DEGREES 19 MINUTES 10 SECONDS EAST, A DISTANCE OF 100,00 FEET,
THENCE SOUTH 50 DEGREES 19 MINUTES 10 SECONDS WEST, A DISTANCE OF 100,00 FEET,
THENCE SOUTH 50 DEGREES 19 MINUTES 50 SECONDS WEST, A DISTANCE OF 100,00 FEET TO THE

10 000 SQUARE FEET OR 0 2295 ACRES, MORE OR LESS

PROPOSED ACCESS & UTILITY EASEMENT

ALL THAT TRACT OR PARCEL OF LAND LYING IN THE COUNTY OF TODD. STATE OF KENTUCKY,
CONSISTING OF A 25 FEET WIDE ACCESS AND UTILITY EASEMENT COMMENCING AT A FOUND IRON
FENCE POST. THAT IS 5.40 FEET SOUTHWESTERLY OF THE INTERSECTION OF FULCHNER SCHOOL
ROAD AND MORTON ROAD, MORE PARTICULARLY DESCRIBED AS FOLLOWS

THENCE NORTH 40 DEGREES 58 MINUTES 13 SECONDS EAST, A DISTANCE OF 842,46 FEET. THENCE NORTH 30 DEGREES 40 MINUTES 10 SECONDS WEST, A DISTANCE OF 100 00 FEET THENCE NORTH 59 DEGREES 19 MINUTES 10 SECURIUS WEST, A DISTANCE OF 100,00 FEET. THENCE NORTH 59 DEGREES 19 MINUTES 50 SECONDS EAST. A DISTANCE OF 100 00 FEET. THENCE CONTINUE NORTHEASTERLY ALONG SAID LINE. A DISTANCE OF 12.50 FEET TO THE POINT OF BEGINNING OF A 25 FEET WIDE ACCESS AND UTILITY EASEMENT LYING 12.50 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE:

THENCE SOUTH 30 DEGREES 40 MINUTES 10 SECONDS EAST, A DISTANCE OF 100.00 FEET, THENCE SOUTH 51 DEGREES 23 MINUTES 48 SECONDS EAST, A DISTANCE OF 39 31 FEET. THENCE SOUTH 24 DEGREES 45 MINUTES 21 SECONDS EAST. A DISTANCE OF 103.90 FEET THENCE SOUTH 20 DEGREES 03 MINUTES 17 SECONDS EAST A DISTANCE OF 65 66 FFF THENCE SOUTH 24 DEGREES 45 MINUTES 08 SECONDS EAST, A DISTANCE OF 56 00 FEET TO THE

-3" 22" MAG-N

POWER POLE

CENTER OF SELF SUPPORT TOWER POSITION OF GEODETIC COORDINATES



BENCHMARK

ELEVATION ESTABLISHED FROM GPS OBSERVATIONS CONSTRAINED TO OPUS SOLUTIONS, APPLYING GEOID 12A SEPARATIONS NAVD88 DATUM,

#### BASIS OF BEARINGS

BEARINGS SHOWED HEREON ARE BASED UPON U.S. STATE PLANE NADB3 COORDINATE SYSTEM KENTUCKY SINGLE ZONE US FOOT, DETERMINED BY GPS OBSERVATIONS, COMPLETED ON 3.10.17

#### **UTILITY NOTES**

SURVEYOR DOES NOT GUARANTEE THAT ALL UTILITIES ARE SHOWN OR THEIR LOCATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND DEVELOPER TO CONTACT LOCAL B11 AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.

#### SURVEYOR NOTES

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE PARENT PARCEL.

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

SURVEYOR HAS NOT PERFORMED A SEARCH OF PUBLIC RECORDS TO DETERMINE ANY DEFECT IN TITLE ISSUED.
THE BOUNDARY SHOWN HEREON IS PLOTTED FROM RECORD. INFORMATION AND DOES NOT CONSTITUTE A BOUNDARY

THIS SURVEY PLAN WAS PERFORMED UNDER THE AUTHORITY OF KENTUCKY REVISED STATUTES (201 KAR 18, 150), AND IS NOT TO BE CONSIDERED A GENERAL PROPERTY BOUNDARY SURVEY AS DEFINED WITH KENTUCKY REVISED STATUES. DIMENSIONS (IF SHOWN) ALONG THE PERIMETER OF THE LANDOWNER'S PROPERTY ARE PROVIDED UNDER THIS LANDOWNER'S PROPERTY ARE PROVIDED UNDER THIS SURVEYOR'S SCOPE OF SERVICES WITH ATAY AND ARE TO BE CONSIDERED FOR REFERENCE ONLY. THE EXACT LOCATION OF THE LANDOWNER'S PROPERTY MAY DIFFER UPON THE PREPARATION OF A FULL BOUNDARY SURVEY IN ACCORDANCE WITH THE REQUIREMENTS ESTABLISHED BY THE STATE OF

SYSTEM ROVER AND BASE STATION H/W B16130147501133 & B16130147501126 SERIAL NUMBERS. REDUNDANT AND REPETITIVE MEASUREMENTS WERE TAKENTO INSURE CORRECT POSITIONS OF ALL DATA POINTS ... A TOLERANCE OF 0.04'

SITE MAP: NOT TO SCALI

REMOVAL, RELOCATION AND/ OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

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

THIS SURVEY IS NOT INTENDED FOR LAND TRANSFER.

THIS SURVEY WAS PERFORMED WITH A CARLSON BRX5+ DUAL FREQUENCY, REAL TIME KINEMATIC GLOBAL POSITIONING FOR POSITIONAL ACCURACY.

#### FLOOD INFORMATION

THE PROPOSED LEASE AREA SHOWN HEREON IS NOT LOCATED IN A 100-YEAR FLOOD PLAIN PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NO. 21219C0175C, DATED 7.22.2010. THE PROPOSED LEASE AREA IS LOCATED IN ZONE "X".

#### **LEGEND**

POINT OF REGINNING POINT OF TERMINUS PUBLIC UTILITY EASEMENT ROW RIGHT OF WAY

DRIVEWAY SIDEWALK

SET ½"x24" IR CAPPED: #3219 OR FOUND AS NOTED

WATER CONTROL VALVE FIRE HYDRANT 9 (B) 6 POWER POLE ELECTRIC MANHOLE TELCO MANHOLE

OVERHEAD ELECTRIC PROPERTY LINE BARBED WIRE FENCE

SPOT ELEVATION

POSITION OF GEODETIC COORDINATES







4603 Bermuda Drive, Sugar Land, TX 77479 /olce: (281) 796-2651 | Fax: (868) 598-3136

JC/ACF HECKED BY:

REV	DATE	DESCRIPTION	
Α	03.26 17	REVIEW	
$\dashv$			
$\dashv$			
$\Box$			



13800708 KYL03678 MORTON LONG MILL RD

**TOPOGRAPHIC** SITE **SURVEY** 

PEMBROKE, KY 42266 TODD COUNTY

SHEET NUMBER B-

#### SITE INFO TAX PARCEL NO: 014-01

PROPERTY OWNER: HAMPTON HEIRS C/O PAUL HAMPTON

SOURCE OF TITLE: 125/707

#### LAND SURVEYOR'S CERTIFICATE

I, A. CLAY ROBINSON, 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 SPECIFICATION AS STATES IN KAR 201–18:150.

5.12.17

FOUND IRON FENCE POST

#### TITLE REPORT INFO

GRID N:3453967.359 GRID E:4466013.512 LATITUDE: 36°47'54.197" LONGITUDE: -87"18'16.947"

REFERENCE IS MADE TO THE TITLE REPORT ORDER #56957-ky1704-5030, ISSUED BY US TITLE INSURANCE COMPANY, DATED 04.27.2017.
ALL EASEMENTS CONTAINED WITHIN SAID TITLE REPORT AFFECTING THE IMMEDIATE AREA SURROUNDING THE LEASE HAVE BEEN PLOTTED (EXCEPT FOR ROOFTOPS).

POB ACCESS & UTILITY -

GRID N:3454603.781 GRID E:4466585,519 LATITUDE: 36"48'00,580" LONGITUDE: -87"18'(0.292"

EXISTING STRUCTURE -

GRID N:3454740.799 GRID E:4486600.518 LATITUDE: 36\*48'01.940\* ONGITUDE: -87\*18'09.889\*

POB LEASE

GRID N 3454689,790 GRID E:4466514,506 LATITUDE: 36"48"01,421"

LONGITUDE: -87"18'10.936"

GRID N:3454672.234

GRID E 4486583.019 LATITUDE: 36"48"01,259" LONGITUDE: -87"18"10.091"

SCHEDULE B ITEMS:

NONE WITHIN PERIOD SEARCHED.



1-A ACCURACY CERTIFICATION

ELEVATION 633.8'

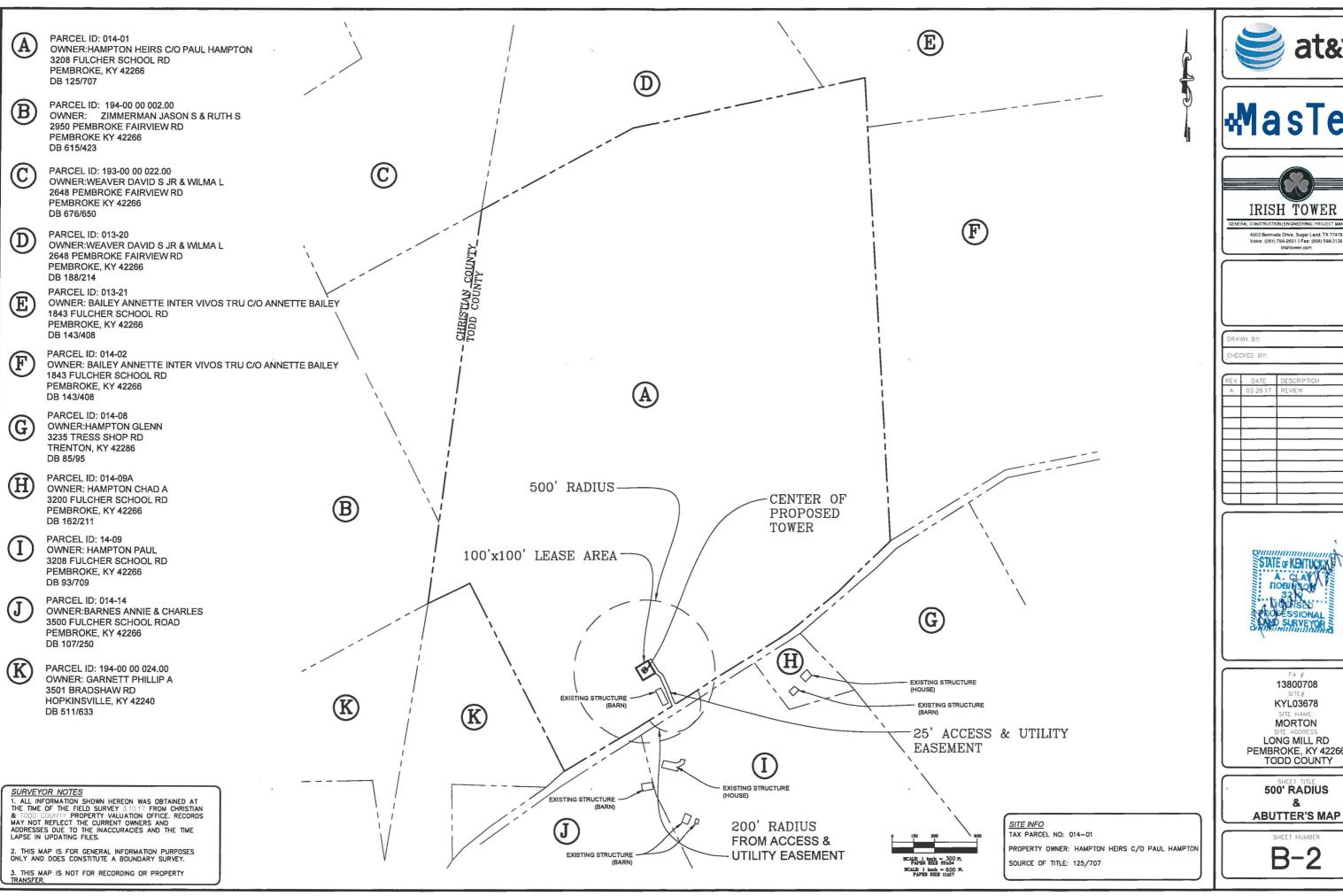
THE HORIZONTAL ACCURACY OF THE LATITUDE COORDINATES FALL WITHIN TWENTY (20) FEET. THE ELEVATIONS (NAVDBB) OF THE GROUND AND FIXTURES FALL WITHIN THREE (3) FEET.

PAPER SIZE 22x34

SCALE: 1 inch = 80 ft. PAPER SIZE 11x17

LATITUDE 36' 48' 01.26" NORTH LONGITUDE 87' 18' 10.09" WEST

FAA COORDINATE POINT CENTER OF SELF SUPPORT TOWER (NAD83)









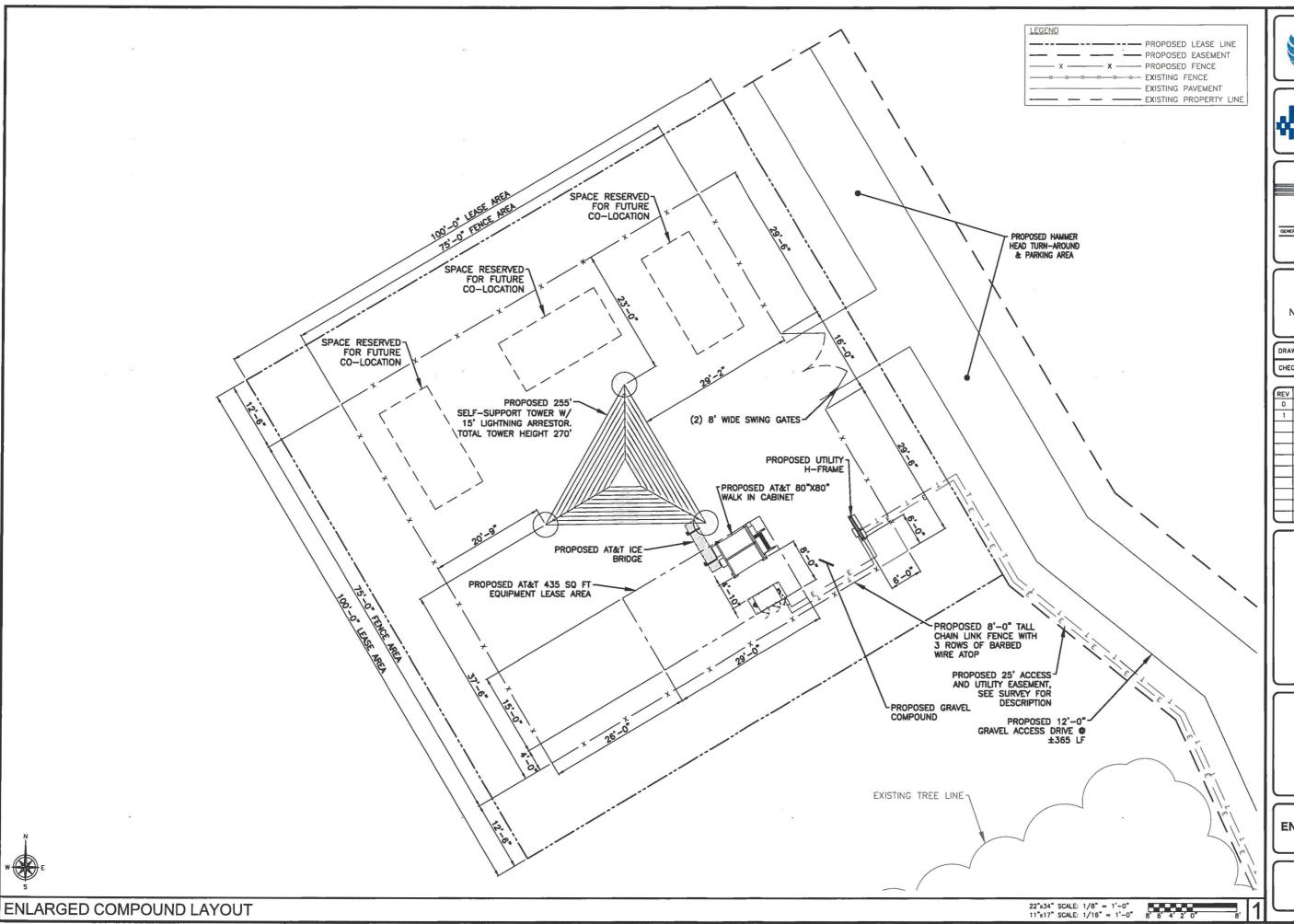
DRAWN BY:	MD
CHECKED BY:	IC/ACR

REV	DATE	DESCRIPTION
А	03.26.17	REVIEW
H		
H		
$\vdash$		
$\vdash$		



13800708 KYL03678 MORTON LONG MILL RD PEMBROKE, KY 42266

500' RADIUS







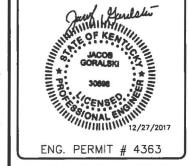


4603 Bermuda Drive, Sugar Land, TX 77479 Volce: (281) 798-2651 | Fax: (866) 598-3136 Irishtower.com

**ZONING DRAWINGS** NOT FOR CONSTRUCTION

DRAWN BY: CHECKED BY:

REV	DATE	DESCRIPTION
0	06/01/17	ISSUED FOR ZONING
1	12/27/17	ZONING-TOWER DRWGS
$\dashv$	_	
_	-	
-		
$\neg$		

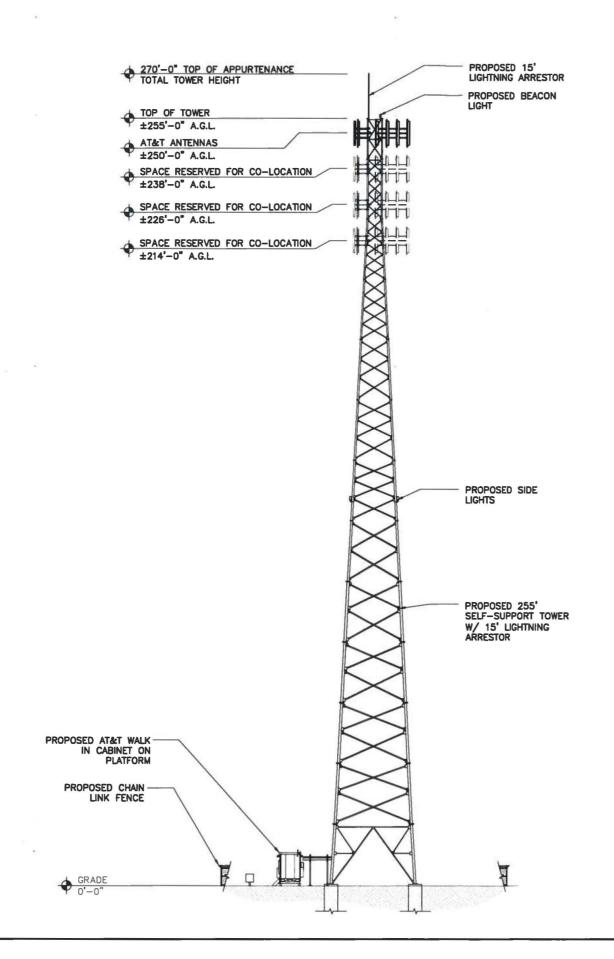


FA # 13800708 SITE# KYL03678 SITE NAME: MORTON SITE ADDRESS: LONG MILL RD PEMBROKE, KY 42266

SHEET TITLE

**ENLARGED COMPOUND** LAYOUT

SHEET NUMBER









IRISH TOWER

GENERAL CONSTRUCTION | ENGINEERING | PROJECT MANAGE

4603 Bermuda Drive, Sugar Land, TX 77478 Voice: (281) 796-2651 I Fax: (866) 598-3138 Irishtower.com

**ZONING DRAWINGS** NOT FOR CONSTRUCTION

DRAWN BY:

CHECKED BY:

REV	DATE	DESCRIPTION
0	06/01/17	ISSUED FOR ZONING
1	12/27/17	ZONING-TOWER DRWGS
_		
_		<del>-</del>
_		



FA # 13800708 SITE# KYL03678 SITE NAME: MORTON SITE ADDRESS: LONG MILL RD PEMBROKE, KY 42266

SHEET TITLE

**TOWER ELEVATION** 

SHEET NUMBER

# EXHIBIT C TOWER AND FOUNDATION DESIGN



December 1<sup>st</sup>, 2017 Kentucky Public Service Commission 211 Sower Blvd. P.O. Box 615 Frankfort, KY 40602-0615

RE: Site Name – Morton
Proposed Cell Tower
36 48 01.26 North Latitude, 87 18 10.09 West Longitude

#### Dear Commissioners:

The Project / Construction Manager for the proposed new communications facility will be Don Murdock. His contact information is (615) 207-8280 or <a href="mailto:Don.Murdock@mastec.com">Don.Murdock@mastec.com</a>

Don has been in the industry completing civil construction and constructing towers since 2009. He has worked at Mastec Network Solutions since 2009 completing project and construction management on new site build projects.

Thank you,

Don Murdock, Sr. Project Manager – Tennessee/Kentucky Market

MasTec Network Solutions

(615) 207-8280



December 21, 2017

Mr. Roy Johnson AT&T 3605 Mattingly Road Buckner, KY 40010-8803

RE: Proposed 255' Self-Supporting Tower for Morton, KY (Sabre #176719)

Dear Mr. Johnson.

As shown in our Structural Design Report #176719 dated December 21, 2017, the above referenced tower has been designed for a Basic Wind Speed of 89 mph with no ice and 30 mph with 3/4" radial ice, Structure Class II, Exposure Category C, and Topographic Category 1, in accordance with the Telecommunications Industry Association Standard ANSI/TIA-222-G, "Structural Standard for Antenna Supporting Structures and Antennas".

When designed according to this standard, the wind pressures and steel strength capacities include several safety factors, resulting in an overall minimum safety factor of 25%. Therefore, it is highly unlikely that the tower will fail structurally in a wind event where the design wind speed is exceeded within the range of the built-in safety factors.

Should the wind speed increase beyond the capacity of the built-in safety factors, to the point of failure of one or more structural elements, the most likely location of the failure would be within one or more of the tower members in the upper portion. This would result in a buckling failure mode, where the loaded member would bend beyond its elastic limit (beyond the point where the member would return to its original shape upon removal of the wind load).

Therefore, it is likely that the overall effect of such an extreme wind event would be localized buckling of a tower section. Assuming that the wind pressure profile is similar to that used to design the tower, the tower is most likely to buckle at the location of the highest combined stress ratio in the upper portion of the tower. This would result in the portion of the tower above the failure location "folding over" onto the portion of the tower below the failure location. This would effectively result in a "zero radius fall zone" at ground level. *Please note that this letter only applies to the above referenced tower designed and manufactured by Sabre Towers & Poles*.

Sincerely,

Keith J. Tindall, P.E. Vice President of Engineering



# Structural Design Report

255' S3TL Series HD1 Self-Supporting Tower Site: Morton, KY Site Number: KYL03678

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

> > Job Number: 176719

## December 21, 2017

Tower Profile	1-2
Foundation Design Summary	3
Maximum Leg Loads	4
Maximum Diagonal Loads	5
Maximum Foundation Loads	6
Calculations	7-19



9	×	X							35	255'			
U		M NONE							565	240'			
ш	L2X2X3/16	2					5.	11@5'	1375	220'			
В	7					(1) 5/8"	.7.		1900	200'			
O	=						.6		2421				
O	(3/16						11.	9 @ 6.6667'	3017	180'			
В	L 3 X 3 X 3/16						13'		3211	160'			
	12 X 1/4	NONE	NONE	NONE	NONE	(1) 3/4"			NONE	15'		4394	140'
8.625 OD X .500	L 3 1/2 X 3 1/2 X 1/4	Z					17.		4518	120'			
8.6										19,	5173	100'	
A	L4X4X1/4						21'	12 @ 10'	6207	80'			
	٦						23'		5877	60'			
.375	10					(2) 5/8"				40'			
12.75 OD X .375	L4X4X5/16						25'		9259	20'			
	Н	٦	z	0	7	(2) 3/4"	27'	Q	7129				
	als F	tals	-	gonals	rizontals	3olts (	ce Width	count/Height F	Weight	0, K 29, - 0,,			

#### **Base Reactions**

Total For	ındation	Individual Footing			
Shear (kips)	96.75	Shear (kips)	58.93		
Axial (kips)	248.28	Compression (kips)	641		
Moment (ft-kips)	15247	Uplift (kips)	562		
Torsion (ft-kips)	39.55				

#### **Material List**

Display	Value	
Α	10.75 OD X .500	
В	8.625 OD X .322	
С	5.563 OD X .500	
D	5.563 OD X .375	
E	4.500 OD X .337	
F	3.500 OD X .300	
G	2.375 OD X .154	
Н	L 5 X 3 1/2 X 5/16 (SLV)	
1	L 2 1/2 X 2 1/2 X 1/4	
J	L 2 1/2 X 2 1/2 X 3/16	
K	L 2 X 2 X 1/8	
L	L 3 1/2 X 3 1/2 X 1/4	
М	L 2 X 2 X 3/16	
N	L 3 X 3 X 1/4	1
0	L 3 X 3 X 3/16	
Р	1 @ 13.333'	
Q	1 @ 6.667'	

#### 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.
- (6) 1 3/4" dia. F1554 grade 105 anchor bolts per leg. Minimum 65.5" embedment from top of concrete to top of nut.
- 9) All unequal angles are oriented with the short leg vertical.
- 10) Weights shown are estimates. Final weights may vary.
- 11) This tower was designed for a basic wind speed of 89 mph with 0" of radial ice, and 30 mph with 3/4" of radial ice, in accordance with ANSI/TIA-222-G, Structure Class II, Exposure Category C, Topographic Category 1.
- 12) The foundation loads shown are factored loads.
- 13) The tower design meets the requirements for an Ultimate Wind Speed of 115 mph (Risk Category II), in accordance with the 2012 International Building Code.
- 14) Tower Rating: 98.79%



Sabre Communications Corporation 7101 Southbridge Drive P.O. Box 658 Sioux City, IA 51102-0658 Phone, C172 JS8-6690 Fac (712) 279-0814

information contained herein is the sole property of Sabre Communications Corporation, constitutes rade secret as defined by lowa Code Ch. 550 and shall not be reproduced, copied or used in whole y part for any purpose whatsomer without the prior written consent of Sabre Communications.

Job:	176719			
Customer:	AT&T			
Site Name:	Morton, KY KYL	03678		
Description:	255' S3TL			
Date:	12/21/2017	Ву:	NM	

#### **Designed Appurtenance Loading**

Elev	Description	Tx-Line
260	(1) Extendible Lightning Rod	
250	(1) 278 Sq. FT. EPA 6000# (No Ice)	(18) 1 5/8"
238	(1) 208 sq. ft. EPA 4000# (no ice)	(18) 1 5/8"

Elev	Description	Tx-Line
226	(1) 208 sq. ft. EPA 4000# (no ice)	(18) 1 5/8"
214	(1) 208 sq. ft. EPA 4000# (no ice)	(18) 1 5/8"



Job:	176719			
Customer:	AT&T			
Site Name:	Morton, KY KYL	03678		
Description:	255' S3TL			
Date:	12/21/2017	By:	NM	



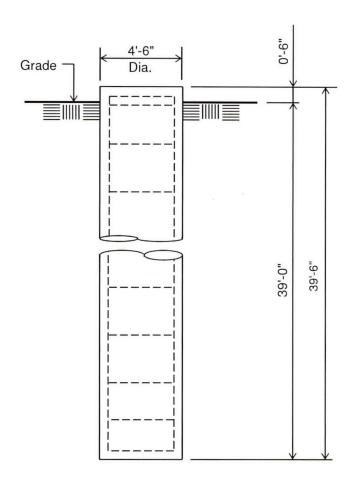
No.: 176719

Date: 12/21/17

By: NM

#### Customer: AT&T Site: Morton, KY KYL03678

255 ft. Model S3TL Series HD1 Self Supporting Tower At
89 mph Wind with no ice and 30 mph Wind with 0.75 in. Ice per ANSI/TIA-222-G.
Antenna Loading per Page 1



## **ELEVATION VIEW**

(23.27 Cu. Yds. each) (3 REQUIRED; NOT TO SCALE)

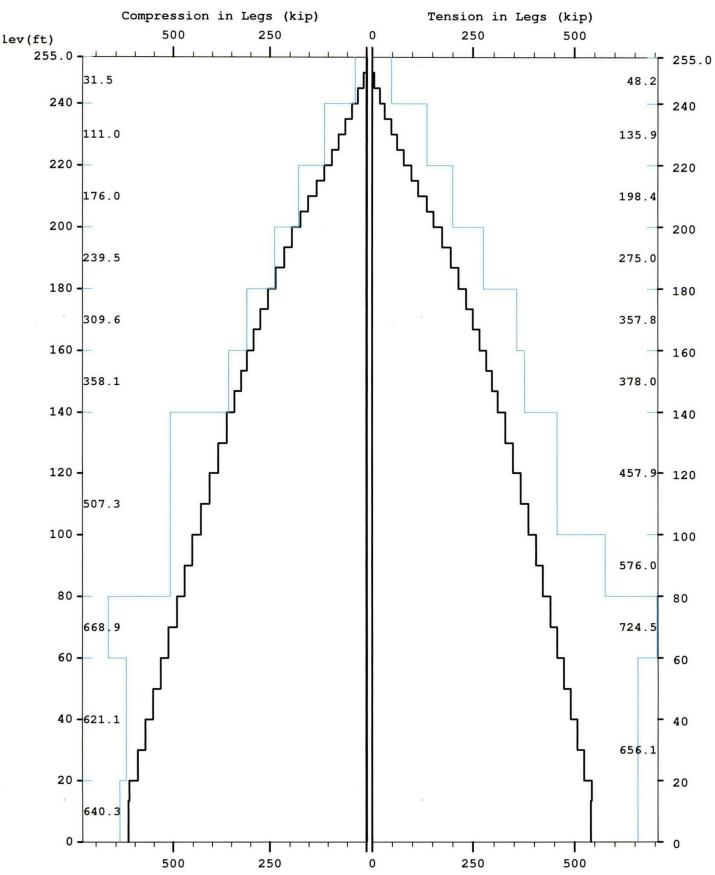
#### Notes:

- 1). Concrete shall have a minimum 28-day compressive strength of 4500 PSI, in accordance with ACI 318-11.
- 2). Rebars to conform to ASTM specification A615 Grade 60.
- 3). All rebar to have a minimum of 3" concrete cover.
- 4). All exposed concrete corners to be chamfered 3/4".
- 5). The foundation design is based on the geotechnical report by ECS Southeast, LLP., Project No. 26:3125-01 dated: November 30th, 2017.
- 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) = 562
  Factored download (kips) = 641
  Factored shear (kips) = 59

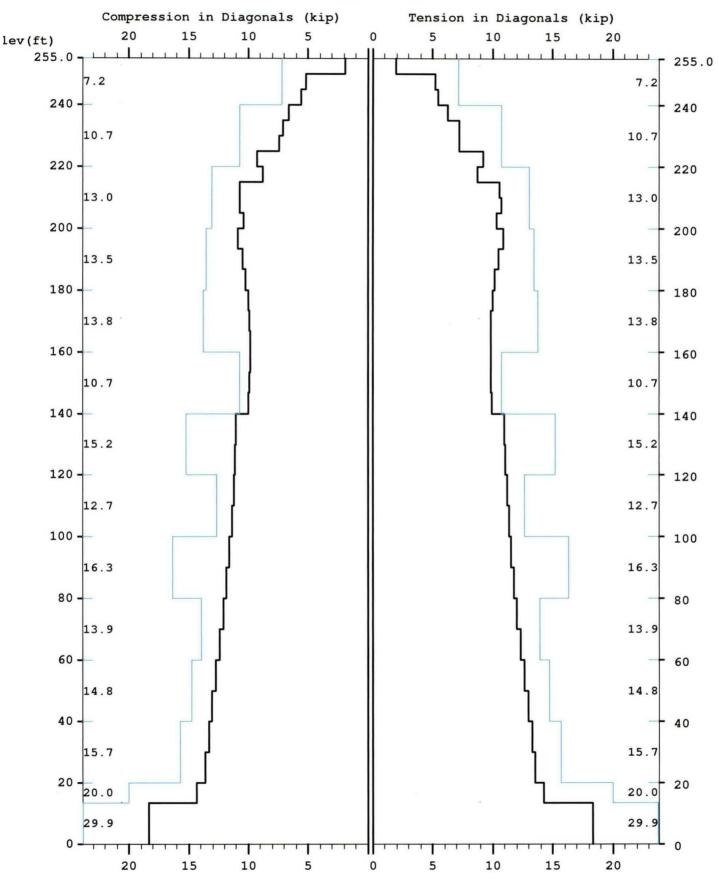
	Rebar Schedule per Pier
Pier	(24) #8 vertical rebar w/#4 ties, two (2) within top 5" of pier then 12" C/C

Information contained herein is the sole property of Sabre Towers & Poles, 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 Towers & Poles.

Maximum



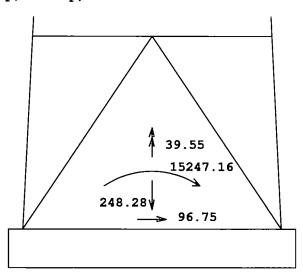




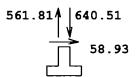
icensed to: Sabre Towers and Poles 15:23:33

Maximum

TOTAL FOUNDATION LOADS (kip, ft-kip)



INDIVIDUAL FOOTING LOADS (kip)



Latticed Tower Analysis (Unguyed) Processed under license at:

(c)2013 Guymast Inc. 416-736-7453

Sabre Towers and Poles

on: 21 dec 2017 at: 15:23:33

PANEL TYPE	NO.OF LEGS	ELEV.AT BOTTOM	ELEV.AT TOP	F.WAT BOTTOM	F.WAT TOP	TYPICAL PANEL HEIGHT
× × × × × × × × × ×		250.00 240.00 235.00 220.00 200.00 180.00 140.00 120.00 100.00 80.00 60.00 40.00 20.00	255.00 250.00 240.00 235.00 220.00 180.00 160.00 140.00 120.00 100.00 80.00 40.00	5.00 5.00 5.50 7.00 9.00 11.00 15.00 17.00 19.00 21.00 23.00 25.00	5.00 5.00 5.50 7.00 9.00 11.00 13.00 17.00 19.00 21.00 23.00	5.00 5.00 5.00 5.00 6.67 6.67 6.67 10.00 10.00 10.00
ŷ A	3 3	13.33 0.00	20.00 13.33	27.67 29.00	27.00 27.67	6.67 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 LE LE LE DI DI DI DI DI HO HO	240.00 220.00 200.00 180.00 140.00 80.00 60.00 0.00 240.00 220.00 200.00 140.00 140.00 13.33 0.00 250.00 250.00	255.00 240.00 220.00 200.00 180.00 140.00 80.00 60.00 255.00 240.00 220.00 200.00 140.00 140.00 13.33 255.00 240.00	1.075 3.016 4.407 6.111 7.952 8.399 12.763 16.101 14.579 0.481 0.715 1.188 1.090 1.688 1.938 2.402 2.559 0.481 0.715 1.688	0.787 0.787 0.787 0.787 0.787 0.787 0.787 0.626 0.626 0.626 0.626 0.626 0.626 0.626	29000. 29000. 29000. 29000. 29000. 29000. 29000. 29000. 29000. 29000. 29000. 29000. 29000. 29000. 29000. 29000.	0.0000117 0.0000117 0.0000117 0.0000117 0.0000117 0.0000117 0.0000117 0.0000117 0.0000117 0.0000117 0.0000117 0.0000117 0.0000117 0.0000117 0.0000117 0.0000117 0.0000117 0.0000117

#### FACTORED MEMBER RESISTANCES

BOTTOM	TOP	L	EGS	DIAC	GONALS	HORIZ	ONTALS	INT	BRACING
ELEV	ELEV	COMP	TENS	COMP	TENS	COMP	TENS	COMP	TENS
ft	ft	kip	kip	kip	kip	kip	kip	kip	kip
250.0	255.0	31.48	48.15	7.16	7.16	5.73	5.73	0.00	0.00
240.0	250.0	31.48	48.15	7.16	7.16	0.00	0.00	0.00	0.00
235.0	240.0	110.98	135.90	10.74	10.74	8.38	8.38	0.00	0.00
220.0	235.0	110.98	135,90	10.74	10.74	0.00	0.00	0.00	0.00
200.0	220.0	175.98	198.45	13.03	13.03	0.00	0.00	0.00	0.00
180.0	200.0	239.46	274.95	13.49	13.49	0.00	0.00	0.00	0.00
160.0	180.0	309.64	357.75	13.79	13.79	0.00	0.00	0.00	0.00
140.0	160.0	358.08	378.00	10.69	10.69	0.00	0.00	0.00	0.00

						176719			
120.0	140.0	507.33	457.90	15.18	15.18	0.00	0.00	0.00	0.00
100.0	120.0	507.33	457.90	12.68	12.68	0.00	0.00	0.00	0.00
80.0	100.0	507.33	576.00	16.34	16.34	0.00	0.00	0.00	0.00
60.0	80.0	668.86	724.50	13.92	13.92	0.00	0.00	0.00	0.00
40.0	60.0	621.06	656.10	14.76	14.76	0.00	0.00	0.00	0.00
20.0	40.0	621.06	656.10	15.70	15.70	0.00	0.00	0.00	0.00
13.3	20.0	640.29	656.10	20.02	20.02	0.00	0.00	0.00	0.00
0.0	13.3	640.29	656.10	29.94	29.94	11.30	11.30	7.55	7.55

LOADING CONDITION A

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

#### MAST LOADING

LOAD TYPE	ELEV ft	APPLYLO RADIUS ft	ADAT AZI	LOAD AZI	FORCE HORIZ kip	S DOWN kip	MOME VERTICAL ft-kip	ENTS TORSNAL ft-kip
C C C C	260.0 250.0 238.0 226.0 214.0	0.00 0.00 0.00 0.00 0.00	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.28 10.00 7.41 7.33 7.24	0.15 7.20 4.80 4.80 4.80	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
000000000000000000000000000000000000000	255.0 250.0 240.0 240.0 235.0 235.0 235.0 225.0 225.0 225.0 2210.0 215.0 210.0 210.0 210.0 210.0 210.0 210.0 210.0 210.0 200.0 140.0 140.0 140.0 140.0 10.0 20.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	180.0 42.0 42.0 442.0 64.4 79.5 832.0 92.0 22.1 13.3 22.1 93.3 32.2 1.9 33.3 33.3 33.3 33.3 33.3 33.3 33.3		0.07 0.13 0.13 0.16 0.17 0.17 0.18 0.20 0.22 0.23 0.23 0.23 0.23 0.24 0.24 0.25 0.25 0.25 0.26 0.27 0.25 0.20 0.22	0.04 0.06 0.06 0.12 0.12 0.13 0.15 0.18 0.20 0.224 0.224 0.227 0.335 0.42 0.45 0.445 0.449	0.00 0.00 0.06 0.06 0.06 0.06 0.05 0.05 0.05 0.02	0.00 0.00 0.10 0.11 0.11 0.11 0.11 0.10 0.06 0.06

#### SUPPRESS PRINTING

FOR THIS LOADING						MAX	IMUMS	
LOADS	DISPL	MEMBER	FOUNDN	- 1	ALL	DISPL	MEMBER	FOUNDN
INPUT		FORCES	LOADS				FORCES	LOADS

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

no yes yes yes no no no no

LOADING CONDITION M

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

#### MAST LOADING

LOAD TYPE	ELEV ft	APPLYLO RADIUS ft	ADAT AZI	LOAD AZI	FORCE HORIZ kip	S DOWN kip	MOME VERTICAL ft-kip	ENTS TORSNAL ft-kip
C C C C	260.0 250.0 238.0 226.0 214.0	0.00 0.00 0.00 0.00 0.00	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.28 10.00 7.41 7.33 7.24	0.12 5.40 3.60 3.60 3.60	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
0.0000000000000000000000000000000000000	255.0 250.0 240.0 240.0 235.0 235.0 230.0 225.0 220.0 215.0 200.0 215.0 200.0 140.0 140.0 140.0 110.0 80.0 40.0 20.0 20.0 20.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	180.0 42.0 42.0 64.4 79.5 83.3 92.0 89.2 351.6 7322.4 322.3 322.3 322.3 322.3 322.4 322.4 322.4 322.4 322.4 322.4 322.4 322.4		0.07 0.13 0.13 0.16 0.17 0.17 0.18 0.20 0.22 0.22 0.22 0.22 0.23 0.24 0.24 0.25 0.26 0.25 0.26 0.25 0.26 0.27 0.25 0.20 0.22	0.03 0.04 0.04 0.09 0.09 0.10 0.11 0.13 0.15 0.15 0.17 0.18 0.220 0.226 0.226 0.31 0.334 0.336 0.336	0.00 0.04 0.04 0.04 0.04 0.04 0.03 0.03	0.00 0.00 0.10 0.11 0.11 0.11 0.11 0.10 0.06 0.06

#### SUPPRESS PRINTING

FOR THIS LOADING				MAXIMUMS			
LOADS INPUT	DISPL	MEMBER FORCES		ALL	DISPL	MEMBER	
INPUT		FURCES	LUADS			FORCES	LOADS
no	yes	yes	yes	no	no	no	no

LOADING CONDITION Y

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

MAST LOADING

176719

LOAD TYPE	ELEV ft	APPLYLO RADIUS ft	ADAT AZI	LOAD AZI	FORC HORIZ kip	ES DOWN kip	MOME VERTICAL ft-kip	NTS TORSNAL ft-kip
C C C C	260.0 250.0 238.0 226.0 214.0	0.00 0.00 0.00 0.00 0.00	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.05 1.24 1.49 1.47 1.44	0.30 18.22 12.11 12.07 12.03	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
000000000000000000000000000000000000000	255.0 250.0 240.0 240.0 235.0 235.0 235.0 225.0 225.0 225.0 215.0 210.0 210.0 160.0 140.0 110.0 110.0 80.0 20.0 20.0 20.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	180.0 42.0 42.0 69.8 89.5 91.0 91.0 86.8 84.3 345.5 345.5 322.3 322.3 322.3 322.3 322.4 322.4 322.4		0.01 0.01 0.01 0.02 0.02 0.02 0.02 0.02	0.18 0.25 0.39 0.39 0.42 0.50 0.55 0.61 0.63 0.72 0.74 0.74 0.780 0.81 0.90 0.90 0.91	0.00 0.00 0.22 0.22 0.20 0.21 0.18 0.12 0.12 0.13 0.05 0.08 0.08 0.08 0.08 0.08 0.08 0.08	0.00 0.00 0.01 0.01 0.01 0.01 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

#### SUPPRESS PRINTING

LOADS INPUT		MEMBER	ADING FOUNDN LOADS	ALL	MAX DISPL	IMUMS MEMBER FORCES	
по	yes	yes	yes	no	no	no	no

#### MAXIMUM MAST DISPLACEMENTS:

ELEV	DEF	LECTIONS (f	t)	TILTS (	DEG)	TWIST
ft	NORTH	EAST	DOWN		EAST	DEG
255.0 250.0 245.0 240.0 235.0 230.0 225.0 220.0 215.0 210.0 200.0 193.3 186.7 180.0 173.3	3.597 G 3.437 G 3.273 G 3.115 G 2.960 G 2.810 G 2.521 G 2.388 G 2.255 G 2.130 G 2.130 G 2.130 G 1.715 G 1.582 G 1.455 G 1.336 G	3.458 J 3.305 J 3.146 J 2.994 J 2.846 J 2.701 J 2.561 J 2.424 J 2.295 J 2.167 J 1.930 J 1.786 J 1.520 J 1.520 J 1.520 J	0.048 G 0.045 G 0.045 G 0.039 G 0.037 G 0.035 e 0.034 e 0.033 e 0.032 e 0.031 e 0.039 i 0.029 i 0.028 i 0.025 i	1.832 G 1.835 G 1.813 G 1.748 G 1.714 G 1.6611 G 1.543 G 1.492 G 1.433 G 1.370 G 1.370 G 1.232 G 1.158 G 1.082 G 1.083 G	1.763 J 1.766 J 1.745 J 1.681 J 1.648 J 1.603 J 1.549 J 1.484 J 1.435 J 1.318 J 1.252 J 1.185 J 1.114 J 1.041 J 0.984 J	-0.102 F -0.102 F -0.100 F -0.096 F -0.088 F -0.088 F -0.076 F -0.073 F -0.069 R -0.066 R -0.063 R -0.065 R

				176719		
160.0	1.222 G	1.174 J	0.024 i	0.902 G	0.867 J	0.048 T
153.3	1.117 G	1.072 J	0.023 i	0.844 G	0.812 J	0.045 T
146.7	1.018 G	0.977 J	0.022 i	0.786 G	0.756 J	0.042 T
140.0	0.925 G	0.888 J	0.021 i	0.728 G	0.700 J	0.039 T
130.0	0.798 G	0.766 J	0.020 i	0.670 G	0.644 J	0.036 T
120.0	0.683 G	0.655 J	0.018 i	0.612 G	0.589 J	0.033 T
110.0	0.576 G	0.553 J	0.017 i	0.555 G	0.533 J	0.030 T
100.0	0.480 G	0.461 J	0.016 i	0.497 G	0.478 J	0.027 T
90.0	0.394 G	0.377 J	0.014 i	0.440 G	0.422 J	0.024 T
80.0	0.318 G	0.305 J	0.013 e	0.383 G	0.368 J	0.022 T
70.0	0.250 G	0.239 J	0.012 e	0.338 G	0.325 J	0.019 T
60.0	0.190 G	0.182 J	0.010 e	0.294 G	0.282 J	0.016 T
50.0	0.137 G	0.131 J	0.009 e	0.245 G	0.235 J	0.013 T
40.0	0.092 G	0.089 ປ	0.007 e	0.196 G	0.188 J	0.009 T
30.0	0.052 G	0.050 J	0.006 h	0.146 G	0.140 j	0.007 T
20.0	0.019 G	-0.018 D	0.004 h	0.096 G	0.092 ງ	0.004 T
13.3	0.008 G	-0.007 D	0.003 a	0.065 G	0.062 J	0.003 T
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)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	0.84 S	1.92 G	1.20 A	0.00 A
250.0			0.20 G	0.00 A
245.0	4.83 M	5.18 н 	0.26 I	0.00 A
240.0	18.39 M	5.45 N	0.55 K	0.00 A
235.0	31.02 M	6.26 M	0.16 A	0.00 A
230.0	46.94 M	7.23 H	0.12 A	0.00 A
225.0	62.27 M	7.23 T	0.06 Y	0.00 A
220.0	78.60 M	9.24 н	0.22 A	0.00 A
215.0	97.53 M	8.76 N	0.22 A	0.00 A
	114.08 M	10.60 N		
210.0	134.98 M	10.77 в	0.24 A	0.00 A
205.0	152.72 M	10.37 т	0.05 A	0.00 A
200.0	173.61 M	10.88 T	0.20 A	0.00 A
193.3	193.99 M	10.46 N	0.07 A	0.00 A
186.7	214.28 M	10.18 R	0.18 A	0.00 A
180.0	232.06 M	9.99 X	0.07 A	0.00 A
173.3	249.75 M	9.89 X	0.12 A	0.00 A
166.7			0.07 A	0.00 A
160.0	265.76 M	9.83 X	0.10 A	0.00 A
153.3	281.74 M	9.83 R	0.10 A	0.00 A
146.7	296.52 M	9.87 P	0.09 A	0.00 A
140.0	311.33 M	9.95 V	0.09 A	0.00 A
130.0	328.41 M	10.98 P	0.11 A	0.00 A
120.0	348.85 M	11.06 V	0.08 A	0.00 A
110.0	368.01 M	11.17 P	0.10 A	0.00 A
	387.00 M	11.34 V		
100.0	405.07 M	11.53 P	0.06 A	0.00 A
90.0	423.03 M	11.78 V	0.09 A	0.00 A
80.0	440.32 M	12.04 P	0.06 A	0.00 A

						176719	
70.0				0.06	Α	0.00	Α
co o	457.51 M	12.34	P	0 00	_	0.00	
60.0	474.26 M	12.65	V	0.06	Α	0.00	Α
50.0	474.20 M	12.03	٧	0.06	Δ	0.00	Δ
	490.99 M	12.97	P	0.00	•	0.00	
40.0				0.05	0	0.00	Α
30.0	507.35 M	13.28	Р	0.08	_	0.00	
30.0	523.54 M	13.57	P	0.08	2	0.00	А
20.0	~~~~~		•	0.15	Α	0.00	Α
	542.38 M	14.22	V				
13.3	F 41 22 W	10 22	_	0.83	U	0.00	R
0.0	541.22 M	18.32	Р	0.00	Λ	0.00	^
0.0				0.00	~	0.00	М

# MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	-1.02 A	-1.90 A	-1.21 G	0.00 A
250.0			-0.19 M	0.00 A
245.0	-9.37 G	-5.20 в	-0.18 o	0.00 A
240.0	-23.14 G	-5.55 Н 	-0.50 Q	0.00 A
235.0	-37.61 G	-6.61 G	-0.10 s	0.00 A
	-55.74 G	-7.11 N		
230.0	-71.84 G	-7.38 н	-0.11 S	0.00 A
225.0	-91.19 G	-9.26 в	-0.02 S	0.00 A
220.0	-110.81 G	 -8.79 в	-0.20 s	0.00 A
215.0	-130.32 G	-10.73 G	-0.01 U	0.00 A
210.0	-152.72 G	-10.75 T	-0.21 s	0.00 A
205.0			-0.03 s	0.00 A
200.0	-171.26 G	-10.42 в	-0.18 s	0.00 A
193.3	-193.28 G	-10.89 в 	-0.05 s	0.00 A
186.7	-214.91 G	-10.50 в	-0.16 s	0.00 A
180.0	-236.55 G	-10.20 L	-0.05 s	0.00 A
	-255.70 G	-10.03 F		
173.3	-274.86 G	-9.91 L	-0.10 S	0.00 A
166.7	-292.34 G	-9.86 F	-0.06 S	0.00 A
160.0	-309.86 G	 -9.85 L	-0.09 s	0.00 A
153.3	-326.19 G	-9.90 J	-0.08 s	0.00 A
146.7		-9.97 D	-0.08 s	0.00 A
140.0	-342.61 G		-0.08 s	0.00 A
130.0	-361.85 G	-11.04 J	-0.10 s	0.00 A
120.0	-385.16 G	-11.10 J	-0.07 s	0.00 A
110.0	-407.18 G	-11.23 D	-0.08 s	0.00 A
100.0	-429.12 G	-11.37 D	-0.05 S	0.00 A
•	-450.20 G	-11.58 D		
90.0	-471.27 G	-11.82 J	-0.08 S	0.00 A
80.0			-0.05 S	0.00 A

				176719
70.0 60.0 50.0 40.0 30.0 20.0	-592.80 G -615.03 G	-12.39 J -12.70 D -13.02 D -13.32 D -13.60 D -14.29 D	-0.05 S -0.05 S -0.06 I -0.09 A -0.13 S -1.00 G	0.00 A 0.00 A 0.00 A 0.00 A
0.0	-616.58 G		0.00 A	0.00 A

#### MAXIMU

	TOTAL			
NORTH	EAST	DOWN	UPLIFT	SHEAR
58.93 G	50.67 κ	640.51 G	-561.81 M	58.93 G

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

	HORIZONTA	L	DOWN		OVERTURNING	; T	ORSION
NORTH	EAST	TOTAL		NORTH	EAST	TOTAL	
	Q.	0.0				<b>4</b> 0.0	
96.8 G	-92.3 D	96.8 G	248.3 b	15247.2 G	14618.6 J	15247.2 G	39.6 T

Latticed Tower Analysis (Unguyed)
Processed under license at: (c)2013 Guymast Inc. 416-736-7453 Sabre Towers and Poles on: 21 dec 2017 at: 15:24:05

\* 

LOADING CONDITION A ===

60 mph wind with no ice. Wind Azimuth: 0♦

#### MAST LOADING

LÒAD	ELEV	APPLYLOA	DAT	LOAD	FORCE	S	мом	ENTS
TYPE	ft	RADIUS ft	AZI	AZI			VERTICAL ft-kip	
c	260.0	0.00	0.0	0.0	0.08	0.13	0.00	0.00

<sup>\*</sup> Only 1 condition(s) shown in full
\* Some wind loads may have been derived from full-scale wind tunnel testing

с с с	250.0 238.0 226.0 214.0	0.00 0.00 0.00 0.00	0.0 0.0 0.0	0.0 0.0 0.0 0.0	2.84 2.10 2.08 2.06	176719 6.00 4.00 4.00 4.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
	214.0 255.0 250.0 240.0 240.0 235.0 225.0 225.0 220.0 215.0 210.0 210.0 210.0 210.0 180.0 180.0 140.0 140.0 140.0 140.0 140.0 140.0 20.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.0 180.0 42.0 42.0 64.4 79.5 89.2 92.0 92.0 89.2 353.1 322.4 321.9 322.3 322.3 322.3 322.3 322.3 322.3 322.3 322.3 322.3 322.3 322.3 322.3 322.3		2.06 0.02 0.04 0.04 0.05 0.05 0.05 0.06 0.06 0.07 0.07 0.07 0.07 0.07 0.07	4.00 0.03 0.05 0.10 0.11 0.11 0.12 0.15 0.16 0.17 0.19 0.22 0.22 0.23 0.22 0.23 0.35 0.34 0.38	0.00 0.00 0.005 0.05 0.05 0.05 0.05 0.0	0.00 0.00 0.03 0.03 0.03 0.03 0.02 0.02 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01 0.01
D D D	20.0 13.3 13.3 0.0	0.00 0.00 0.00 0.00	322.4 322.4 322.4 322.4	0.0 0.0 0.0	0.06 0.06 0.07 0.07	0.35 0.35 0.41 0.41	0.02 0.02 0.02 0.02	0.01 0.01 0.01 0.01

# SUPPRESS PRINTING

LOADS INPUT		THIS LO MEMBER FORCES		ALL	DISPL	IMUMS MEMBER FORCES	
no	yes	yes	yes	no	no	no	no

## MAXIMUM MAST DISPLACEMENTS:

ELEV	DEF	LECTIONS (f	t)	TILTS	(DEG)	TWIST
ft	NORTH		DOWN	NORTH	EAST	DEG
255.0 255.0 245.0 240.0 235.0 235.0 225.0 220.0 215.0 200.0 215.0 200.0 193.3 186.7 180.0 173.3 166.7	1.029 G 0.983 G 0.936 G 0.847 G 0.804 G 0.762 G 0.645 G 0.645 G 0.645 G 0.575 G 0.575 G 0.491 G 0.491 G 0.417 G 0.383 G 0.350 G	-0.989 D -0.946 D -0.900 D -0.857 D -0.814 D -0.773 D -0.733 D -0.657 D -0.657 D -0.621 D -0.586 D -0.553 D -0.512 D -0.472 D -0.472 D -0.436 D -0.401 D -0.368 D	0.015 G 0.015 G 0.014 G 0.014 G 0.013 G 0.012 G 0.012 G 0.012 G 0.011 G 0.010 G 0.010 G 0.010 G 0.009 G 0.009 G 0.008 G 0.008 G	0.523 G 0.524 G 0.518 G 0.499 G 0.490 G 0.476 G 0.460 G 0.441 G 0.409 G 0.392 G 0.372 G 0.331 G 0.309 G 0.292 G 0.275 G 0.258 G 0.242 G	-0.504 D -0.505 D -0.480 D -0.471 D -0.458 D -0.424 D -0.410 D -0.377 D -0.358 D -0.378 D -0.318 D -0.298 D -0.281 D -0.265 D -0.248 D	-0.029 F -0.029 F -0.029 F -0.027 F -0.026 F -0.025 F -0.023 F -0.022 F -0.021 F -0.020 F -0.019 F -0.018 F -0.016 F -0.015 F 0.014 H 0.014 H
146.7	0.292 G	-0.280 D	0.007 G	0.225 G	-0.216 D	0.012 н
140.0	0.265 G	-0.255 D	0.007 G	0.208 G	-0.200 D	0.011 н

				176719		
130.0	0.229 G	-0.220 D	0.007 G	0.192 G	-0.184 D	0.010 н
120.0	0.196 G	-0.188 D				
			0.006 G	0.175 G	-0.169 D	0.009 н
110.0	0.165 G	-0.159 D	0.006 G	0.159 G	-0.153 D	0.009 н
100.0	0.138 G	-0.132 D	0.005 G	0.143 G	-0.137 D	0.008 н
90.0	0.113 G	-0.108 D	0.005 G	0.126 G	-0.121 D	0.007 н
80.0	0.091 G	-0.087 D	0.004 G	0.110 G	-0.105 D	0.006 н
70.0	0.072 G	-0.069 D	0.004 G	0.097 G	-0.093 D	0.005 н
60.0	0.054 G	-0.052 D	0.003 G	0.084 G	-0.081 D	0.004 н
50.0	0.039 G	-0.038 D	0.003 G	0.070 G	-0.067 D	0.004 H
40.0	0.027 G	-0.025 D	0.002 G	0.056 G	-0.054 D	0.003 н
30.0	0.015 G	-0.014 D	0.002 G	0.042 G	-0.040 D	0.002 н
20.0	0.005 G	0.005 J	0.001 G	0.028 G	-0.027 D	0.001 н
13.3	0.002 G	0.002 J	0.001 G	0.019 G	-0.018 D	0.001 н
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)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	0.19 G	0.56 G	0.34 A	0.00 A
250.0			0.06 G	0.00 A
245.0	0.00 A	1.48 н  1.53 в	0.10 I	0.00 A
240.0	3.68 A 6.70 A		0.17 K	0.00 A
235.0		1.69 A	0.06 A	0.00 A
230.0	10.54 A	2.10 H	0.04 A	0.00 A
225.0	14.71 A	2.01 B	0.03 A	0.00 A
220.0	18.36 A	2.62 H	0.07 A	0.00 A
215.0	23.59 A	2.48 H	0.01 c	0.00 A
210.0	27.33 A	2.97 B	0.08 A	0.00 A
205.0	32.82 A	3.06 B	0.02 A	0.00 A
200.0	37.68 A	2.93 B	0.07 A	0.00 A
193.3	43.33 A	3.09 н 	0.02 A	0.00 A
186.7	48.84 A	2.96 в	0.06 A	0.00 A
180.0	54.29 A	2.90 L	0.02 A	0.00 A
173.3	59.04 A	2.84 L	0.04 A	0.00 A
166.7	63.73 A	2.82 L	0.02 A	0.00 A
160.0	67.97 A	2.80 L	0.03 A	0.00 A
153.3	72.17 A	2.81 L	0.03 A	0.00 A
146.7	76.05 A	2.82 D	0.03 A	0.00 A
140.7	79.92 A	2.86 )	0.03 A	0.00 A
	84.31 A	3.14 D		
130.0	89.49 A	3.18 J	0.04 A	0.00 A
120.0	94.32 A	3.21 J	0.03 A	0.00 A
110.0	99.07 A	3.27 D	0.03 A	0.00 A
100.0	103.57 A	3.33 D	0.02 A	0.00 A
90.0	108.02 A	3.40 D	0.03 A	0.00 A
80.0	112.23 A	3.48 D	0.02 A	0.00 A
70.0	116.35 A	3.56 D	0.02 A	0.00 A
60.0	120.35 A	3.64 J	0.02 A	0.00 A

			17	6719
50.0	124.34 A	 3.74 D	0.02 A	0.00 A
40.0			0.01 c	0.00 A
30.0		3.82 J	0.02 G	0.00 A
20.0	131.94 A	3.90 D	0.05 A	0.00 A
13.3	136.64 A	4.08 J	0.21 I	0.00 E
	135.35 A	5.27 ງ		
0.0			0.00 A	0.00 A

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

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	-0.35 A	 -0.54 A	-0.35 G	0.00 A
250.0			-0.05 A	0.00 A
245.0	-4.08 G	-1.50 B	-0.03 C	0.00 A
240.0	-8.05 G	-1.62 H	-0.12 E	0.00 A
235.0	-12.72 G	-1.98 G	-0.01 G	0.00 A
230.0	-18.52 G	-1.99 в	-0.03 G	0.00 A
225.0	-23.30 G	-2.15 Н	0.00 A	0.00 A
220.0	-29.70 G	-2.64 в	-0.05 G	0.00 A
215.0	-35.42 G	-2.51 н 	0.00 A	0.00 A
210.0	-41.83 G	-3.07 G	-0.05 G	0.00 A
205.0	-48.59 G	-3.05 в	0.00 G	0.00 A
200.0	-54.03 G	-2.98 B	-0.04 G	0.00 A
193.3	-60.54 G	-3.10 в	-0.01 G	0.00 A
186.7	-66.98 G	-3.01 н	-0.04 G	0.00 A
180.0	-73.45 G	-2.92 L	-0.04 G	
	-79.21 G	-2.88 L		0.00 A
173.3	-85.01 G	-2.84 L	-0.02 G	0.00 A
166.7	-90.33 G	-2.84 L	-0.01 G	0.00 A
160.0	-95.67 G	-2.83 L	-0.02 G	0.00 A
153.3	-100.69 G	-2.86 J	-0.02 G	0.00 A
146.7	-105.74 G	-2.87 D	-0.02 G	0.00 A
140.0	-111.73 G	-3.20 J	-0.02 G	0.00 A
130.0	-119.06 G	 -3.21 J	-0.02 G	0.00 A
120.0	-126.04 G	-3.26 D	-0.02 G	0.00 A
110.0	-133.01 G	-3.30 D	-0.02 G	0.00 A
100.0	-139.75 G	-3.37 D	-0.01 G	0.00 A
90.0	-146.52 G	 -3.44 J	-0.02 G	0.00 A
80.0	-153.19 G	-3.53 J	-0.01 G	0.00 A
70.0	-159.93 G	-3.61 J	-0.01 G	0.00 A
60.0	-133.33 G	J.01 J	-0.01 G	0.00 A

	166 53 -	2 60 -	17	6719
50.0	-166.52 G	-3.69 D	-0.01 G	0.00 A
40.0	-173.11 G	-3.78 J	-0.02 I	0.00 A
30.0	-179.66 G	-3.86 D	-0.03 A	0.00 A
	-186.22 G	-3.94 J		
20.0	-193.28 G	-4.15 D	-0.03 G	0.00 A
13.3	-194.57 G	 -5.31 D	-0.32 C	0.00 I
0.0			0.00 A	0.00 A

## MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)

	TOTAL			
NORTH	EAST	DOWN	UPLIFT	SHEAR
17.97 G	15.46 K	202.05 G	-140.63 A	17.97 G

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

	HORIZONTA	L	DOWN		OVERTURNING	; <b></b>	TORSION
NORTH	EAST @	TOTAL 0.0		NORTH	EAST	TOTAL @ 0.0	
27.8 G	-26.5 D	27.8 G	83.5 G	4375.2 G	-4196.4 D	4375.2 G	11.2 Н

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

Tower Description 255' S3TL Series HD1
Customer Name AT&T
Job Number 176719
Date 12/21/2017

Engineer NM

Factored Uplift (kips)	562	Anchor Bolt Count (per leg)	6
Factored Download (kips)	641		
Factored Shear (kips)	59		
Ultimate Bearing Pressure	12		
Bearing Φs	0.75		
Bearing Design Strength (ksf)	9		
Water Table Below Grade (ft)	999		
Bolt Circle Diameter (in)	18		
Top of Concrete to Top			
of Bottom Threads (in)	65.5		
Pier Diameter (ft)	4.5	Minimum Pier Diameter (ft)	2.83
Ht. Above Ground (ft)	0.5	2	
Pier Length Below Ground (ft)	39		
Quantity of Bars	24		
Bar Diameter (in)	1 1		
Tie Bar Diameter (in)	0.5		
Spacing of Ties (in)	12		
Area of Bars (in <sup>2</sup> )	18.85	Minimum Area of Steel (in <sup>2</sup> )	11.45
Spacing of Bars (in)	6.02		
f'c (ksi)	4.5		
fy (ksi)	60		
Unit Wt. of Concrete (kcf)	0.15		
Download Friction Φs	0.75		
Uplift Friction Φs	0.75		
Volume of Concrete (yd3)	23.27		
Skin Friction Factor for Uplift	1	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)	γ (kcf)
5	0.00	0.00	0.11
34	1.00	1.00	0.11
40	4.00	4.00	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

#### Download:

0

0

0

Factored Net Weight of Concrete (kips)

Bearing Design Strength (kips)

Skin Friction Design Strength (kips)

Download Design Strength (kips)

1.4	
143.1	
519.5	
662.7	

0.00

0.00

0.00

Factored Net Download (kips)

0.00

0.00

0.00

642.4

0

0

0

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

Uplift:

Nominal Skin Friction (kips)	692.7		
Wc, Weight of Concrete (kips)	94.2		
W <sub>R</sub> , Soil Resistance (kips)	2960.5		
ФsWr+0.9Wc (kips)	2305.2		
Uplift Design Strength (kips)	604.4	Factored Uplift (kips)	562.0
Pier Design:			
Design Tensile Strength (kips)	1017.9	Tu (kips)	562.0
$\phi V_n$ (kips)	135.5	V <sub>u</sub> (kips)	59.0
$\phi V_c = \phi 2(1 + N_u/(500A_g))f'_c^{1/2}b_w d$ (kips)	135.5		
V <sub>s</sub> (kips)	0.0	*** $V_s$ max = 4 $f'_c^{1/2}b_w d$ (kips)	626.0
Maximum Spacing (in)	8.67	(Only if Shear Ties are Required)	
		*** Ref. ACI 11.5.5 & 11.5.6.3	
Amahan Dala Dull Out			

#### **Anchor Bolt Pull-Out:**

$\phi P_c = \phi \lambda (2/3) f'_c^{1/2} (2.8 A_{SLOPE} + 4 A_{FLAT})$	345.1	P <sub>u</sub> (kips)	562.0
Rebar Development Length (in)	48.50	Required Length of Development (in)	24.69

Condition	1 is OK, 0 Fails
	1 is ON, 01 alis
Download	1
Uplift	1
Area of Steel	1
Shear	1
Anchor Bolt Pull-Out	1
Interaction Diagram Visual Check	1 1

EXHIBIT D
COMPETING UTILITIES, CORPORATIONS, OR PERSONS LIST

Navigation

Reports

PSC Home

# **KY Public Service Commission**

# Master Utility Search

 Search for the utility of interest by using any single or combination of criteria.

Utility ID Utility Name

**Address/City/Contact Utility Type** 

**Status** 

 Enter Partial names to return the closest match for Utility Name and Address/City/Contact entries.

Search

▼ Active ▼

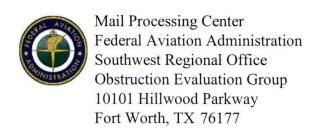
	Utility ID	Utility Name	Utility Type	Class	City	State
View	4107900	365 Wireless, LLC	Cellular	D	Atlanta	GA
View	4109300	Access Point, Inc.	Cellular	D	Cary	NC
View	4108300	Air Voice Wireless, ഥC	Cellular	Α	Bloomfield Hill	MI
View	4110650	Alliant Technologies of KY, L.L.C.	Cellular	С	Morristown	IJ
View	44451184	Alltel Communications, LLC	Cellular	A	Basking Ridge	NJ
View	4110850	AltaWorx, LLC	Cellular	С	Fairhope	AL
View	4107800	American Broadband and Telecommunications Company	Cellular	С	Toledo	ОН
View	4108650	AmeriMex Communications Corp.	Cellular	D	Dunedin	FL
View	114 1115 11111	AmeriVision Communications, Inc. d/b/a Affinity 4	Cellular	D	Virginia Beach	VA
View	4110700	Andrew David Balholm dba Norcell	Cellular	С	Clayton	WA
View	4108600	BCN Telecom, Inc.	Cellular	D	Morristown	NJ
View	4110550	Blue Casa Mobile, LLC	Cellular	D	Santa Barbara	CA
View	4108750	Blue Jay Wireless, LLC	Cellular	С	Carrollton	ΤX
View	4202300	Bluegrass Wireless, LLC	Cellular	Α	Elizabethtown	KY
View	4107600	Boomerang Wireless, LLC	Cellular	В	Hiawatha	IA
View	4105500	BullsEye Telecom, Inc.	Cellular	D	Southfield	MI
View	4110050	CampusSims, Inc.	Cellular	D	Boston	MA

		canty master information coaler				
View	4100700	Cellco Partnership dba Verizon Wireless	Cellular	A	Basking Ridge	ĽΝ
View	4106600	Cintex Wireless, LLC	Cellular	D	Rockville	MD
View	4101900	Consumer Cellular, Incorporated	Cellular	A	Portland	OR
View	4106400	Credo Mobile, Inc.	Cellular	Α	San Francisco	CA
View	4108850	Cricket Wireless, LLC	Cellular	Α	San Antonio	TX
View	4001900	CTC Communications Corp. d/b/a EarthLink Business I	Cellular	D	Grand Rapids	MI
View	10640	Cumberland Cellular Partnership	Cellular	Α	Elizabethtown	KY
View	4101000	East Kentucky Network, LLC dba Appalachian Wireless	Cellular	Α	Ivel	KY
View	4002300	Easy Telephone Service Company dba Easy Wireless	Cellular	D	Ocala	FL
View	4109500	Enhanced Communications Group, LLC	Cellular	D	Bartlesville	ок
View	4110450	Excellus Communications, LLC	Cellular	D	Chattanooga	TN
View	4105900	Flash Wireless, LLC	Cellular	С	Concord	NC
View	4104800	France Telecom Corporate Solutions L.L.C.	Cellular	D	Oak Hill	VA
View	4109350	Global Connection Inc. of America	Cellular	D	Norcross	GA
View	4102200	Globalstar USA, LLC	Cellular	В	Covington	LA
View	4109600	Google North America Inc.	Cellular	В	Mountain View	CA
View	33350363	Granite Telecommunications, LLC	Cellular	D	Quincy	MA
View	4106000	GreatCall, Inc. d/b/a Jitterbug	Cellular	Α	San Diego	CA
View	10630	GTE Wireless of the Midwest dba Verizon Wireless	Cellular	Α	Basking Ridge	NJ
View	4110600	Horizon River Technologies, LLC	Cellular	С	Atlanta	GA
View	4103100	i-Wireless, LLC	Cellular	Α	Newport	KY
View	4109800	IM Telecom, LLC d/b/a Infiniti Mobile	Cellular	D	Tulsa	ок
View	22215360	KDDI America, Inc.	Cellular	D	New York	NY
View	10872	Kentucky RSA #1 Partnership	Cellular	Α	Basking Ridge	NJ
View	10680	Kentucky RSA #3 Cellular General	Cellular	Α	Elizabethtown	KY
View	10681	Kentucky RSA #4 Cellular General	Cellular	A	Elizabethtown	KY
View	4109750	Konatel, Inc. dba telecom.mobi	Cellular	D	Johnstown	PA
View	4110900	Lunar Labs, Inc.	Cellular	С	Detroit	MI
View	4107300	Lycamobile USA, Inc.	Cellular	D	Newark	UJ
View	4108800	MetroPCS Michigan, LLC	Cellular	<del> </del>	Bellevue	WA
View	7	Mitel Cloud Services, Inc.	Cellular	D	Mesa	AZ
View	4202400	New Cingular Wireless PCS,	Cellular	A	San Antonio	TX

		LLC dba AT&T Mobility, PCS				
View	10900	New Par dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
View	4000800	Nextel West Corporation	Cellular	D	Overland Park	KS
View	4001300	NPCR, Inc. dba Nextel Partners	Cellular	D	Overland Park	KS
View	4001800	OnStar, LLC	Cellular	Α	Detroit	MI
View	4110750	Onvoy Spectrum, LLC	Cellular	С	Plymouth	MN
View	4109050	Patriot Mobile LLC	Cellular	D	Southlake	TX
View	4110250	Plintron Technologies USA LLC	Cellular	D	Bellevue	WA
View	33351182	PNG Telecommunications, Inc. dba PowerNet Global Communications	Cellular	D	Cincin <del>n</del> ati	ОН
View	4202100	Powertel/Memphis, Inc. dba T- Mobile	Cellular	A	Bellevue	WA
View	4107700	Puretalk Holdings, LLC	Cellular	Α	Covington	GA
View	4106700	Q Link Wireless, LLC	Cellular	Α	Dania	FL
View	4108700	Ready Wireless, LLC	Cellular	В	Hiawatha	IA
View	4110350	Regional Strategic Partners LLC	Cellular	D	Buford	GA
View	4110500	Republic Wireless, Inc.	Cellular	D	Raleigh	NC
View		Rural Cellular Corporation	Cellular		Basking Ridge	NJ
View	4108550	Sage Telecom Communications, LLC dba TruConnect	Cellular	D	Los Angeles	CA
View	4109150	SelecTel, Inc. d/b/a SelecTel Wireless	Cellular	D	Freemont	NE
View	4200600	Shenandoah Personal Communications, LLC	Cellular	A	Edinburg	VA
View	4106300	SI Wireless, LLC	Cellular	Α	Carbondale	ΙL
View	4110170	Spectrotel, Inc. d/b/a Touch Base Communications	Cellular	D	Neptune	נא
View	4200100	Sprint Spectrum, L.P.	Cellular	Α	Atlanta	GA
View	4200500	SprintCom, Inc.	Cellular	Α	Atlanta	GA
View	4109550	Stream Communications, LLC	Cellular	D	Dallas	ΤX
View	4110200	T C Telephone LLC d/b/a Horizon Cellular	Cellular	D	Red Bluff	CA
View	4202200	T-Mobile Central, LLC dba T- Mobile	Cellular	A	Bellevue	WA
View	4002500	TAG Mobile, LLC	Cellular	D	Carroliton	TX
View	4109700	Telecom Management, Inc. dba Pioneer Telephone	Cellular	D	South Portland	ME
View	4107200	Telefonica USA, Inc.	Cellular	D	Miami	FL
View	4108900	Telrite Corporation dba Life Wireless	Cellular	D	Covington	GA
View	4108450	Tempo Telecom, LLC	Cellular	D	Kansas City	МО
View	4109950	The People's Operator USA, LLC	Cellular	D	New York	NY
View	4109000	Ting, Inc.	Cellular	Α	Toronto	ON
1			,		· · <del>· · · · · · · · · · · · · · · · · </del>	,

View	4110400	Torch Wireless Corp.	Cellular	D	Jacksonville	FL
View	4103300	Touchtone Communications, Inc.	Cellular	D	Whippany	NJ
View	4104200	TracFone Wireless, Inc.	Cellular	D	Miami	FL
View	4002000	Truphone, Inc.	Cellular	D	Durham	NC
View	4110300	UVNV, Inc.	Cellular	D	Costa Mesa	CA
View	4105700	Virgin Mobile USA, L.P.	Cellular	Α	Atlanta	GA
View	4110800	Visible Service LLC	Cellular	С	Lone Tree	CO
View	4106500	WiMacTel, Inc.	Cellular	D	Palo Alto	CA
View	4110100	Windward Wireless LLC	Cellular	D	Suwanee	GA
View	4110950	Wing Tel Inc.	Cellular	С	New York	NY
View	4109900	Wireless Telecom Cooperative, Inc. dba theWirelessFreeway	Cellular	D	Louisville	KY

## EXHIBIT E FAA



Issued Date: 09/21/2017

Dave Cundiff (LA) AT&T 208 S Akard Room 1016 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 Morton - 13800708

Location:

PEMBROKE, KY

Latitude:

36-48-01.26N NAD 83

Longitude:

87-18-10.09W

Heights:

634 feet site elevation (SE)

270 feet above ground level (AGL) 904 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)	
X	Within 5 days after the construction reaches its greatest height (7460-2, Part	2)

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

This determination expires on 03/21/2019 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 licencee'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. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2017-ASO-17133-OE.

**Signature Control No: 341385987-344331644** 

(DNE)

Jay Garver Specialist

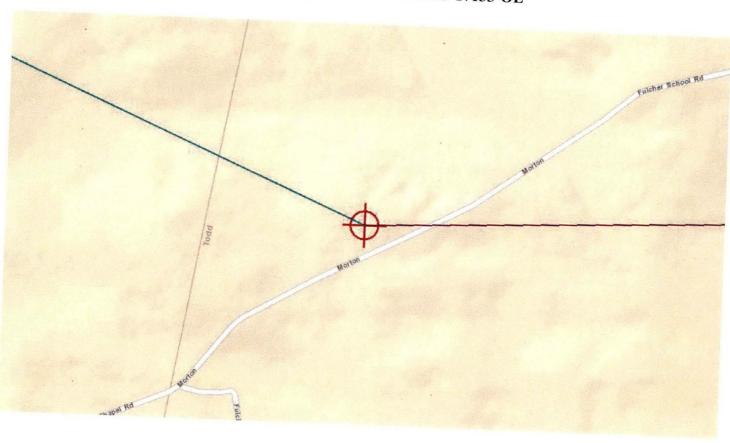
Attachment(s) Frequency Data Map(s)

cc: FCC

## Frequency Data for ASN 2017-ASO-17133-OE

LOW	HIGH	FREQUENCY UNIT	ERP	ERP UNIT
FREQUENCY	FREQUENCY_	UNII	EKP	UNII
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	$\mathbf{W}$
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	$\mathbf{W}$
896	901	MHz	500	W
901	902	MHz	7	$\mathbf{W}$
929	932	MHz	3500	$\mathbf{W}$
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1670	1675	MHz	500	W
1710	1755	MHz	500	W
1850	1910	MHz	1640	W
1850	1990	MHz	1640	W
1930	1990	MHz	1640	W
1990	2025	MHz	500	W
2110	2200	MHz	500	W
2305	2360	MHz	2000	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W
2496	2690	MHz	500	W

## Verified Map for ASN 2017-ASO-17133-OE



# 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

October 25, 2017

APPROVAL OF APPLICATION

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

SUBJECT: AS-110-HVC-2017-089

STRUCTURE: Antenna Tower LOCATION: Pembroke, KY

COORDINATES: 36° 48' 1.26" N / 87° 18' 10.09" W

HEIGHT: 270' AGL/904'AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 270'AGL/904'AMSL Antenna Tower near Pembroke, KY 36° 48' 1.26" N / 87° 18' 10.09" 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.

76hn Houlihan Administrator





#### KENTUCKY AIRPORT ZONING COMMISSION

MATTHEW BEVIN Governor

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

#### CONSTRUCTION/ALTERATION STATUS REPORT

October 25, 2017

AERONAUTICIAL STUDY NUMBER: AS-110-HVC-2017-089

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 October 25, 2017. 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: Pembroke, KY

SIGNATURE/TITLE

COORDINATES: 36° 48' 1.26" N / 87° 18' 10.09" W

HEIGHT: 270' AGL/904'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





#### KENTUCKY TRANSPORTATION CABINET

TC 55-2 Rev. 06/2016

Page 2 of 2

#### KENTUCKY AIRPORT ZONING COMMISSION

ADDITION FOR	NEDA JIT TO	CONCEDUCE OF	ALTER A	CTRUCTURE
APPLICATION FOR	PEKMILIO	CONSTRUCT OR	ALIEK A	4 21 KUCI UKE

APPLICANT (name) John Monday	PHONE 855-699-7073	FAX 972-907-1131	KY AERONAUTICA A5-110 -HVC	
ADDRESS (street)	CITY	<u> </u>	STATE	ZIP
3300 E. Renner Road, B3132	Richardson		TX	75082
APPLICANT'S REPRESENTATIVE (name)		FAX		
Roy Johnson	502-445-2475	502-222-4266		
ADDRESS (street)	CITY	<u> </u>	STATE	ZIP
3605 Mattingly Road	Buckner		KY	40010
APPLICATION FOR X New Construct	tion Alteration	Existing	WORK SCHEDULE	
	porary (months	days }	Start End	TBD
TYPE Crane Building  Antenna Tower Power Line Water Tank Landfill Other	Red Lights & Pa  Dual- red & med  Other	IG/UGHTING PREFE int White- med dium intensity white	lium intensity 🔲 '	
LATITUDE	LONGITUDE		DATUM X NAI	D83 🔲 NAD27
36 <sup>0</sup> 48′ 01.26 "	<del> </del>	0.09 "	Other	
NEAREST KENTUCKY City Pembroke County Todd	NEAREST KENTUCK HVC Hopkinsville-	Y PUBLIC USE OR N Christain County	IILITARY AIRPORT	
SITE ELEVATION (AMSL, feet) 634	TOTAL STRUCTURE 270	HEI <b>G</b> HT (AGL, feet)	CURRENT (FAA ae 2017-ASO-1713	ronautical study #) I-OE
OVERALL HEIGHT (site elevation plus to	tal structure height,	feet)	PREVIOUS (FAA a	eronautical study #}
904			DDE HOUS / KV	
DISTANCE (from nearest Kentucky publi 8.08 NM	c use or Military dirp	ort to structure)	PREVIOUS (X1 del	ronautical study #)
DIRECTION (from nearest Kentucky pub Southeast	lic use or Military ai	rport to structure)		
<b>DESCRIPTION OF LOCATION (Attach US</b>	GS 7.5 minute quad	rangle map or an air	port layout drawing	with the precise site
marked and any certified survey.)	•			·
1A a	and Quad attached			
DESCRIPTION OF PROPOSAL				
AT&T proposes to construct a 255' cell tov	ver with a 15' lightning	rod for an overall hei	ght of 270'.	
FAA Form 7460-1 (Has the "Notice of Co	onstruction or Alterd	ition" been filed witi	h the Federal Aviation	on Administration?)
CERTIFICATION (I hereby certify that all	i the above entries. I	nade by me, are trui	e. complete, and co	rect to the best of
my knowledge and belief.)		,	-,	
PENALITIES (Persons failing to comply v	with KRS 183.861 to	183.990 and 602 KA	R 050 are liable for	fines and/or
imprisonment as set forth in KRS 183.99				
NAME Michelle Ward TITLE Sr. Real Estate M	CICALATIAN	Junia Word	DATE 08/23/17	· · · · · · · · · · · · · · · · · · ·
COMMISSION ACTION	Chairperso Administra			25/17
Approved SIGNATURE	$\mathbb{I}$		DATE (D/	V d 2 1 '
Disapproved	4/-			
	$\sim$			

# EXHIBIT G GEOTECHNICAL REPORT



Geotechnical • Construction Materials • Environmental • Facilities

November 30, 2017

Mr. Jacob Goralski, P.E. Irish Tower, LLC 4603 Bermuda Drive, Sugar Land, TX 77479

ECS Project No. 26:3125-O1

Reference:

Report of Subsurface Exploration and Geotechnical Engineering Services

Morton Tower Long Mill Road Pembroke, Kentucky

Dear Mr. Goralski:

ECS Southeast, LLP (ECS) has completed the subsurface exploration for the proposed construction of a self-supported tower located on Long Mill Road, in Pembroke, Kentucky approximately 370 feet north of the intersection with Morton Road. The purpose of these services was to explore the subsurface soil and groundwater conditions at the site, and to develop geotechnical recommendations pertaining to foundation support of the structure. This report explains our understanding of the project, documents our findings, and presents our conclusions and geotechnical engineering recommendations to serve as an aid during the design and construction of the project.

#### PROJECT INFORMATION AND PROPOSED CONSTRUCTION

The project will consist of the construction of a new 255+-foot tall self-supported tower with a 15-foot lightning arrestor and fenced equipment compound. The proposed tower site is located in an agricultural field. See the attached Site Location Diagram (Figure 1) and Boring Location Diagram (Figure 2). We have received preliminary site plans showing the site boundaries and proposed tower location. No loading information was provided for the tower. Based on information provided from the client, the current elevation at the center of the tower is approximately 633 feet MSL. To achieve the proposed grading at the tower site, we anticipate minimal cut and fill will be required. We do not anticipate that any significant stormwater management (SWM) facilities or site retaining walls will be required for this project.

#### **EXPLORATION PROCEDURES**

The site subsurface conditions were explored on November 18, 2017 through the completion of three Standard Penetration Test (SPT) borings drilled 35 feet from the staked center of the tower location. The borings were drilled to auger refusal 32 to 34 feet below grade. The approximate boring locations are shown on the attached Boring Location diagram (Figure 2). The boring locations were based on a survey stake-out that was performed by others. Prior to drilling, underground utilities were cleared through the Kentucky 811system.

A CME 45 truck-mounted drill rig was utilized to complete the SPT borings. The drill rig utilized 3 ½ inch hollow stem augers to advance the boreholes. Representative soil samples were secured by means of conventional split-barrel sampling procedures (ASTM D1586). In this procedure, a 2-inch O.D., split-barrel sampler is driven into the soil a distance of 18 inches by a 140-pound hammer falling 30 inches. The number of blows required to drive the sampler

Morton Tower ECS Project No. 26:3125-O1 November 30, 2017 Page 2

through the final 12-inch interval, after initial setting of 6 inches, is termed the Standard Penetration Test (SPT) value or N-value, and is indicated for each sample on the attached boring log.

The SPT values can be used as a qualitative indication of the in-place relative density of cohesionless soils, and as a relative indication of consistency in cohesive soils. This indication is qualitative, since many factors can significantly affect the standard penetration resistance value and prevent a direct correlation between drill crews, drill rigs, drilling procedures, and hammer-rod-sampler assemblies. The drill rig utilized an automatic hammer to drive the sampler.

Field logs of the soil encountered at the boring locations were maintained by the drilling crew. After recovery, each geotechnical sample was removed from the sampler and visually classified by the driller. Representative portions of each soil sample were then sealed in plastic bags and transported to our laboratory in Nashville (Franklin), Tennessee for further visual examination. Observations for groundwater were made during sampling and upon completion of the drilling operations. After completion of the drilling operations, the boreholes were backfilled with auger cuttings and excess soil was mounded at the surface.

#### **CLASSIFICATION AND LABORATORY TESTING PROCEDURES**

A geotechnical engineer classified each soil sample on the basis of texture and plasticity in accordance with the Unified Soil Classification System (ASTM D 2487). The group symbols for each soil type are indicated in parentheses following the soil descriptions on the boring logs summary. A brief explanation of the Unified Soil Classification System (USCS) is included with this report. The engineer grouped the various soil types into the major zones noted on the boring logs. The stratification lines designating the interfaces between materials on the exploration records are approximate; in situ, the transitions may be gradual.

The soil samples will be retained in our laboratory for a period of 60 days, after which, they will be discarded unless other instructions are received as to their disposition.

#### SITE GEOLOGY

The USGS Geologic Map of the Pembroke Quadrangle (1967) indicates this particular site is underlain by the Renault Limestone Formation. This formation is typically a light olive-gray, mostly fine to medium-grained, thin to thick-bedded, limestone and interbedded with greenish gray calcareous shale. This formation typically containing numerous fossils.

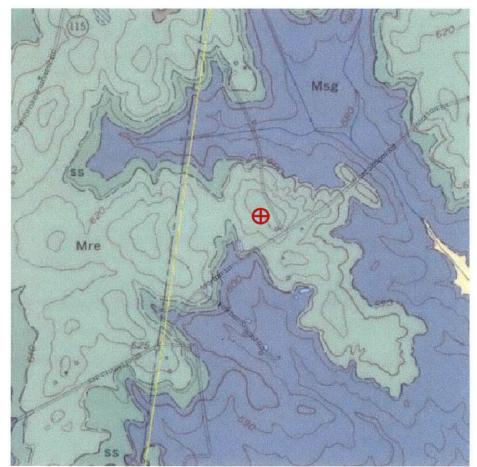


Figure 1 - USGS Geologic Map of the Pembroke Quadrangle (approximate site location highlighted)

#### SUBSURFACE CONDITIONS

The subsurface conditions discussed in the following paragraphs, and those shown on the boring logs, represent an estimate of the subsurface conditions based on interpretation of the exploration data using normally accepted geotechnical engineering judgments. It should be noted that the transition between different soil strata is often less distinct than what is shown on the exploration records.

In general, the exploration revealed an approximate 4 to 6-inch thick layer of topsoil underlain by clay extending to the depths of auger refusal (approximately 32 to 34 feet). SPT N-values for the clay materials varied from 5 to 16 blows per foot (bpf). The encountered conditions are shown on the attached boring logs.

Groundwater was not encountered at the time of our exploration. It should be noted that groundwater can vary on a seasonal basis due to precipitation, evaporation, surface run-off, area stream levels and other factors not immediately apparent at the time of this exploration. It is also possible for groundwater to exist in a perched condition within the soil overburden or at the soil/rock interface.

#### **ANALYSIS AND RECOMMENDATIONS**

#### General

The following recommendations have been developed on the basis of the previously described project information and subsurface conditions identified during this study. If there are any changes to the project characteristics, or if differing subsurface conditions are encountered during construction, ECS should be consulted so that the recommendations of this report can be reviewed and revised, as necessary.

#### Subgrade Preparation

Vegetation, and all other soft, unsuitable, or deleterious material should be removed from the existing ground surface at the foundation areas. These operations should extend at least 5 feet beyond the edge of planned structures, where practical. After examining the exposed soils, loose and yielding areas should be identified by proofrolling with an approved piece of equipment, such as a loaded dump truck, having an axle weight of at least 10 tons. Unsuitable or unstable subgrade materials may require moisture conditioning, in-place densification, or removal and replacement with new engineered fill.

It should also be emphasized that based on the refusal depths encountered and the existing site grades, depending on the grading plan, it is possible that the undercut in some areas may extend past the depth of auger refusal. Excavation of the material below auger refusal may require special excavation techniques including hoe-ramming.

#### **Engineered Fill**

The first layer of fill should be placed in a relatively uniform horizontal lift and be adequately keyed into the stripped and scarified subgrade soils. Fill materials should be free of organics, wet/frozen materials, or other deleterious materials. Engineered fill materials should consist of low to moderately plastic clays and silts, or coarse grained material such as sand and gravel, with a maximum Liquid Limit no greater than 50, and a maximum Plasticity Index no greater than 30. In general, we recommend material to be used as engineered fill have a Standard Proctor maximum dry density of at least 90 pcf. Engineered soil fill should be placed in maximum loose lifts of 8 inches and compacted to at least 95 percent of the Standard Proctor (ASTM D698) maximum dry density. Soil engineered fill should be compacted within 3 percentage points of the optimum moisture content, per the Standard Proctor method. Soil fill should not contain rock material greater than 4 inches in diameter.

Fill operations should be observed on a full-time basis by an experienced engineering technician to determine the required degree of compaction is being achieved. We recommend that a minimum of one compaction test per 2,500 square-foot area be performed for each lift of engineered fill for structural areas, and that at least one test per lift per 100 linear feet of utility trench backfill.

#### **Equipment Shelter Foundations**

Based upon our findings, the equipment shelter may be supported by a turned-down monolithic slab-on-grade with foundation elements bearing on the undisturbed natural residual soils or properly-compacted engineered fill. These foundations can be designed for a maximum net allowable soil bearing pressure of up to 2,500 psf. For footings constructed in accordance with the requirements outlined in this report, maximum total settlement is expected to be less than 1 inch (plus any consolidation settlement from new fill loads). Maximum differential settlement is expected to be half the total settlement. Shallow foundations should be designed to bear at least 24 inches below the final exterior grades. The slab-on-grade may be designed using a modulus

Morton Tower ECS Project No. 26:3125-O1 November 30, 2017 Page 5

of subgrade reaction of 100 pounds per cubic inch (pci). A layer of free draining gravel may be used underlying the slab to serve as a leveling pad and provide a capillary break. All slab and foundation subgrades should be evaluated immediately prior to concrete placement by ECS to verify that the exposed subgrades are capable of satisfactorily supporting the design loads.

#### **Self-support Tower Foundation**

The proposed tower can be supported on drilled shaft (caisson). Based on previous experience with tower structures, we anticipate that wind loading, associated uplift resistance, and lateral loading may control the sizing and depth of the tower foundation. We have provided estimated soil parameters at various depths to aid in drilled shaft foundation design in the attached Geotechnical Data Form.

Uplift forces can be resisted by the factored weight of the shaft and the side shear along the circumference of the shaft (skin friction). The compression forces can be resisted by the side shear along the circumference of the shaft and the end bearing capacity. In determining the dimensions of the drilled shafts, we recommend that a minimum factor of safety of 1.25 with regard to the weight of the concrete should be used in conjunction with the presented allowable side shear values. For uplift and compression, we recommend no contribution to resisting loads be considered from side shear within 5 feet of the ground surface, soft clay or from potentially liquefiable zones.

Casing of the excavation may be required, depending on the condition of the soils and the ground water elevation at the time of construction. Once the bearing level is reached, all loose materials and any accumulated water seepage should be removed prior to placement of pier reinforcing cage and concrete. Up to 1 inch of water standing in the base of the pier is acceptable at the time of concrete placement and an inflow rate of 1 inch per 5 minutes is also acceptable. Higher inflow rates, which could likely be encountered, may require additional control or that drilled shaft concrete be placed by tremie method. The drilled shaft contractor should be prepared to handle such a condition and to ensure suitable end bearing conditions.

The drilled shaft concrete should be placed in intimate contact with undisturbed natural soil/rock. To reduce the potential for arching, we recommend the drilled shaft concrete mix be designed for a slump of 5 to 7 inches. Provided water seepage is minimal, our experience and current research in the field indicates that the drilled shafts can be constructed by "free fall" placement of concrete without affecting the strength and quality of concrete. The concrete should "free fall" without hitting the sides of the casing or reinforcing steel. The use of a hopper or other suitable device is recommended to control concrete placement and direct it toward the center of the shaft. The placement of concrete in the cased shaft should proceed until the concrete level is above the external fluid level and should be maintained above this level throughout casing removal. However, if significant seepage is present within the excavation or if slurry is used, it will be necessary to place the concrete by tremie method, and we recommend a concrete slump of 7 to 9 inches for this method of concrete placement.

The shaft design and construction procedures should be reviewed with the foundation contractor prior to the start of construction. If you desire, we would be pleased to review the plans and specifications for the project once they are completed so we may have the opportunity to comment on the impact of the soil/rock and groundwater conditions on the final design.

Morton Tower ECS Project No. 26:3125-O1 November 30, 2017 Page 6

#### Selsmic Site Classification

Based on our interpretation of the International Building Code (IBC) 2012, it is our opinion that a Seismic Site Class "D" is appropriate for this site. In accordance with IBC 2012 and United States Geological Survey's (USGS) Seismic Hazard Curves and Uniform Hazard Response Spectra program, the following parameters may be used in design:

- Latitude: 36.80035, Longitude: 87.302800
- $S_s = 0.453, S_1 = 0.187$
- $S_{MS} = 0.651, S_{M1} = 0.384$
- $S_{DS} = 0.434, S_{D1} = 0.256$ 
  - \*Spectral accelerations were determined from USGS National Seismic Hazard Maps

#### **General Construction Considerations**

Positive site drainage should be maintained during earthwork operations and should help maintain the integrity of the soil. Placement of fill on the near surface soils which have become saturated may be very difficult. When wet, these soils will degrade quickly with disturbance from contractor operations and will be extremely difficult to stabilize for fill placement.

The surficial soils are considered moderately erodible. All erosion and sedimentation shall be controlled in accordance with Best Management Practices and current County requirements. At the appropriate time, we would be pleased to provide a proposal for NPDES monitoring and construction materials testing related services.

Morton Tower ECS Project No. 26:3125-01 November 30, 2017 Page 7

#### **CLOSING**

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. ECS is not responsible for the conclusions, opinions, or recommendations made by others based on these data. No third party is given the right to rely on this report without express written permission.

The scope of services for this study does not include environmental assessment or investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil or groundwater within or beyond the site studied. Any statements in this report regarding odors, staining of soils, or other unusual conditions observed are strictly for the information of our client.

We appreciate this opportunity to be of service to you during the design phase of this project. If you have any questions with regard to the information and recommendations presented in this report, please do not hesitate to contact us.

Respectfully,

**ECS SOUTHEAST, LLP** 

Eric M. Gasiecki

an Franklin

Principal Reviewer

Geotechnical Department Manager

Attachments: Figure 1: Site Location Map

Figure 2: Boring Location Diagrams

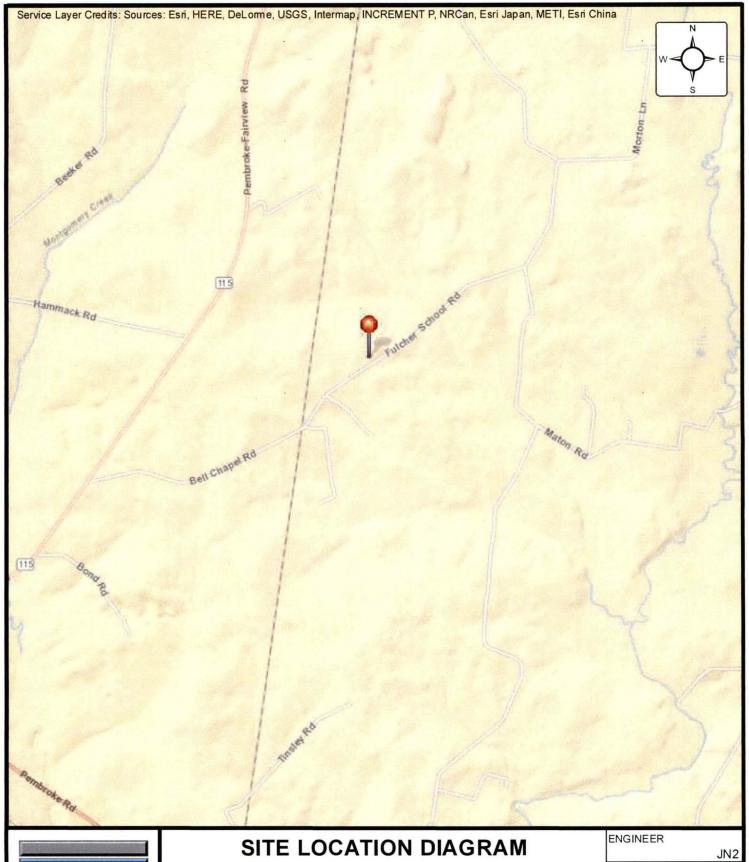
Geotechnical Data Form

SPT Boring Log (B-1 through B-3) Reference Notes for Boring Logs

**USGS Summary Report** 

Mark D. Luskin, P.E. Engineering Manager

\\S26-ARES\Data\\D3 - Geotechnical\\D3 Projects\\3180-3199\\26-3125 Irish Tower\\26-3125-01 Cerulean\\Report\26-3125-01 Ceruluan doc





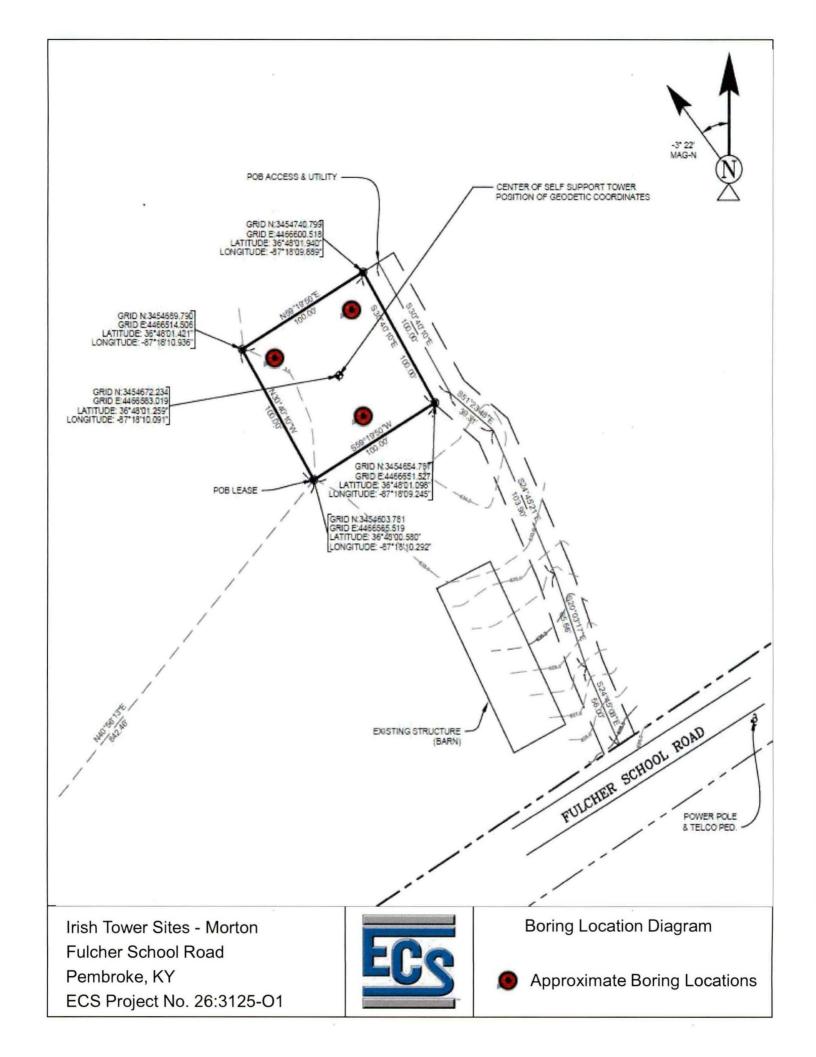
# SITE LOCATION DIAGRAM IRISH TOWER SITES-MORTON

MAVERICK PROPERTIES PEMBROKE KY 42266

ENGINEER	2
	JN2
SCALE	
	NTS
PROJECT	NO.
	26:3125-01
SHEET	
	1 OF 1

11/8/2017

DATE



#### GEOTECHNICAL DATA FORM

#### **Background Information**

Client: Irish Tower, LLC

Project: Morton

Location: Long Mill Road, Pembroke, Kentucky

ECS Project No.: 26:3125-O1

Type: Height: Sepf Support 270'+/-



Depth (feet)	Soil Behavior Type	Average N (spt)	Relative Density/Consistency	USCS Classificati on
0 - 7	Lean Clay	7	Medium Stiff	CL
7 - 34	Lean Clay	13	Stiff	CL
34+	LIMESTONE Bedrock	50/0		-



#### Estimated Soil Parameters for LPILE

Depth LPILE Soil	γ	Su	φ'	K*	E <sub>50</sub> *	
(feet)	Туре	(pcf)	(psf)	(°)	(pci)	
0 - 7	Medium Stiff Clay	110	750		100	0.01
7 - 34	Stiff Clay	110	1250		110	0.007
34+	Limestone Bedrock	135	5000+		2000	0.001

y= In-situ Soil Density

Su= Undrained Shear Strength

φ'= Effective Friction Angle

K= Horizontal Subgrade Reaction

#### Foundation Recommendations

For Drilled Shaft Foundations\*\*

Depth (ft)	Allowable End Bearing (KSF)
0 - 7	2.5
7 - 34	4
34 - 40	6
40+	50

Depth Interval	Allowable Average Side Friction (PSF)	
0 - 5		
5 - 34	500	
34 - 40	2,00	
40+	3,000	

<sup>\*\*</sup>Ignore in top 5 feet in design, minimum embedment depth of 10% tower height applies.

#### Construction Criteria

- 1) Proofroll site prior to construction to detect unsuitable soil near the surface.

- Proorfoll site prior to construction to detect unsuitable soil near the surface.
   Compact building pads/roadway subgrade and each 8 inch lift of approved fill to 95% maximum dry density in accordance with ASTM D698 standard proctor.
   Approved fill materials are soils with less than 3% organics, less than 50 liquid limit and less than 30 plastic index.
   Foundation construction should be observed by Geotechnical Engineer.
   Drilled shaft foundations should be installed in accordance with the requirements of the Deep Foundation Institute and monitored by the Geotechnical Engineer.

<sup>\*</sup>Parameters estimated from values suggested in LPILE user manual.

<sup>\*</sup>Paramaters were increased with embedment depth due to anticipated increase in bedrock quality

EC
TROMETER TO
NATION & RECOV
ER LI
NT% LI
PENETRATION S/FT
NEXT PA
BE GRADUAL.

CLIENT							Job #:		BORIN	IG#		SHEET	(850000)	NADA I SILEMBREROLDE
Irish To	Wel	, LL	<u>C</u>				26:3	3125-O1 ECT-ENGINEER		B-1		2 OF 2	E	<u>Co</u>
Irish To	wei	Site	s-	Mort	on		lrish <sup>-</sup>	Tower, LL	<u>C</u>				- 1 - 1	
													PENETROME	TER TONS/FT <sup>2</sup>
Long M NORTHING	1111 1	u, r		EASTIN	NG NG	STATION						ROCK QUALITY DE RQD%		
(£	ō.	YPE	SAMPLE DIST. (IN)	(IN)	DESCRIPTION OF M		LOSS C	ENGLISH I		EVELS			WATER ONTENT%	LIQUID LIMIT%
ОЕРТН (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE	RECOVERY (IN)	SURFACE ELEVATI					WATER LEVELS	BLOWS/6"		RD PENETRA	TION
	VS S-9		3	3	brown and red (CH) FAT CLA soft	AY, trace sand, I, moist, stiff AY, trace sand, I				WA WA	50/3		LOWS/FT	50/3
		STRAT	IFIC	CATION	LINES REPRESENT	THE APPROXIMAT	E BOUND	ARY LINES BET	WEEN	SOIL TY	PES. IN	-SITU THE TRANSITION	MAY BE GRAD	UAL.
₩L D			_	ws 🗌		BORING STARTE	D	11/18/17			CAV	E IN DEPTH		
₩ WL(SHV	W)		<u>-</u>	WL(AC	CR)	BORING COMPLE	ETED	11/18/17			-	IMER TYPE Auto		
₩L						RIG Truck		FOREMAN BI	II Kurp	ois	DRIL	LING METHOD HSA/S	PT	

CLIENT			_				Job #:	BOR	ING#	_	SHEET	г		1 1000000000000000000000000000000000000	
Irish PROJEC	Towe	er, Ll	LC				26:3125-C	1	B-:	2	1 OF	2	F	Co	
							ARCHITECT-ENGI							US	
Irish SITE LOC	CATION	er Si	tes-	Mort	on		Irish Tower,	LLC			0				
Long	Mill	Rd.	Pen	nbrol	ke. KY						-O- CALIBR	ATED PE	NETROME	TER TONS/	FT <sup>2</sup>
NORTHIN	NG	101		EASTIN	ke, KY	STATION				*	ROCK QUAL RQD%		IGNATION REC%		RY
		JE .	T. (IN)	(IN)	DESCRIPTION OF M			LISH UNITS			PLASTIC LIMIT%		ATER NTENT%	LIQU LIMI	T%
ОЕРТН (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	VEF	BOTTOM OF CASING		LOSS OF CIRCUL	ATION 2003	WATER LEVELS	BLOWS/6"		TANDAR	D PENETR	-	,
O DEF	SAN	SAN	SA	REC	Topsoil Depth			K//K	× i	BLO	:	BLO	OWS/FT	: :	_
_					(CL) LEAN CL moist, firm to s	AY, trace sand,	reddish brown,			2	- 0				
-	S-1	SS	18	18	moist, iirm to s	un				3	5-⊗ -C 1.7	75			
										2					
5 —	S-2	SS	18	18						2 3	5-⊗	2.25			
_										2					
_	S-3	SS	18	18						3 4	7-⊗		3		
_										3					
10 —	S-4	SS	18	18						3 6	9-8	2			
_															
_															
-					7					4					
15	S-5	SS	18	18						6 9	15-⊗		-O- 3.25		
15 —													5.25		
_					(CL) LEAN CL	AV trace sand	light brown and								
_					gray, moist, sti		ngrit brown and								
_	S-6	SS	18	18						7 9	16-⊗			- <b>○</b> - 4.5	
20 —														4.5	
_															
_															
_	S-7	SS	18	18						5 6 8	14-⊗		<del>-</del>		
25 —										°			3.25		
_															
_	S-8	ss	18	18						4 9 6	-0≪-	15			
30 —										6	1.25				
							l.			*	ONTINUE				E.
\( \tau \cdots \		E STR			LINES REPRESENT	1			N SOIL T	T		SITION MA	AY BE GRAI	DUAL.	
≟ MΓ				WS 🗌		BORING STARTE				-	E IN DEPTH				
₩ WL(S	SHW)		=	WL(AC	CR)	BORING COMPLE				+	IMER TYPE Auto				
₩L						RIG Truck	FOREMA	N Bill Kui	rpis	DRII	LING METHOD	HSA/SP	T		

CLIENT							Job #:		BORIN	NG#		SHEET			Shirt Section Section
Irish T	OWE	r, Ll	_C				26:3	3125-O1		B-2		2 OF 2	2	E	Co
Irish T			es-	Mort	ton			Tower, LL							
ı												-O- CALIBRA	TED PE	NETROME	TER TONS/FT <sup>2</sup>
NORTHIN	G G	<u>≺a, i</u>	-en	<u>ndro</u> Eastin	ke, KY	STATION						ROCK QUALI' RQD% -			& RECOVERY
		JE .	(N)	<u> </u>	DESCRIPTION OF I			ENGLISH		ELS (FT)		PLASTIC LIMIT%		ATER	LIQUID LIMIT%
ОЕРТН (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	BOTTOM OF CASIN	IG 🖢	LOSS C	F CIRCULATIO	N >1002>	WATER LEVELS ELEVATION (FT)	9/S/			•	
DEPT	SAMP	SAMP	SAMP	RECO	SURFACE ELEVAT				,,,,	WATE	BLOWS/6"	⊗ st.	BLC	D PENETR DWS/FT	ATION
					gray, moist, st	_AY, trace sand, tiff AY, trace sand, ç	_								
	S-9	SS	13	13	(CH)TATOL	AT, trace sand, (	gray, mo	nst, iiiii			2	_			
35 —	3-3	33	13	13	AUGER REFI	JSAL @ 34.08'					3 50/1	0.5			50/7
_					, to obtain	30,12 @ 01.00									
_					×										
-															
40 —															
_					,										
45 —															
=															
_															
50 —															
_															
_															
_															
55 —															
=															
60 —															
					l										
₩L I		STRA	ATIFIC	WS [	VD⊠	BORING STARTE		11/18/17	WEEN	SOIL TYP		SITU THE TRANSI	TION MA	AY BE GRAD	DUAL.
₩ WL(SI	_		Ť	WL(AC		BORING COMPLE		11/18/17				MER TYPE Auto			
₩L						RIG Truck		FOREMAN BI	ll Kurr	ois	DRIL	LING METHOD H	SA/SP	т	

CLIENT							Job #:		BORING	G#		SHEET	Section	tiniesettiniigisee
Irish PROJECT	Towe	er, Ll	_C		*		26:31	125-01		B-3		1 OF 2		Co
								T-ENGINEER						
Irish SITE LOG	CATION	er Si	es-	Mort	on		Irish T	ower, LL	<u>C</u>			0		l <sub>w</sub>
Long	Mill	Rd.	Per	nbrol	ke. KY							-()- CALIBRAT	TED PENETROME	ETER TONS/FT²
NORTHIN	NG			EASTIN	ke, KY	STATION						ROCK QUALIT RQD% -	Y DESIGNATION  — - REC%	and the second s
			Ê	0	DESCRIPTION OF MA	ATERIAL		ENGLISH		S (		PLASTIC LIMIT%	WATER CONTENT%	LIQUID LIMIT%
Œ	o.	TYPE	DIST. (IN)	RY (II	BOTTOM OF CASING	<b>&gt;</b>	LOSS OF	CIRCULATIO	N >1002>	LEVEL ION (F	9	X	•	$\Delta$
ОЕРТН (FT)	SAMPLE	SAMPLE TYPE	SAMPLE	RECOVERY (IN)	SURFACE ELEVATIO	N				WATER LEVELS ELEVATION (FT)	BLOWS/6"	⊗ STA	NDARD PENETR BLOWS/FT	RATION
0 _	0)	0)	0)	II.	Topsoil Depth				****	> ш	Ш			
	S-1	ss	18	18	(CL) LEAN CL/ moist, firm to st		reddish t	orown,			2 3	8-⊗ -○-		
_											5	1.75		
-	S-2	ss	18	18							2 3	8-⊗	-Q-	
5 —											5	\.	2.75	
	S-3	SS	18	18							2 5	11-8	-0-	
_											6	\	3.25	
_	S-4	SS	18	18							3	13-⊗	-0-	
10 —											7		3.5	
_														
_	S-5	SS	18	18							2 5	1:4−⊗		-0-
15 —	3-3	33	10	10							9			4.5
-														
_														
_		00	40	40							2 5			
20 —	S-6	SS	18	18							9	1:4-⊗		- <b>○</b> 4.5
-	-													
_														
											5			
25 —	S-7	SS	18	18							7 8	15-⊗	-Q 3.79	5
_					(CH) FAT CLA	Y, trace sand, b	rown and	d grav.						
_					moist, firm	,		3-71						
_											4			
30 —	S-8	SS	18	18							7 6	-⊖⊗-13 1		
-	-1	l,		1									ONNEY	TDAGE
												NTINUED		
¥ wL		E STR	ATIFI	WS [	UNES REPRESENT				WEEN S	OIL TYPE			ION MAY BE GRA	DUAL.
			_			BORING STARTED		1/18/17		+	_	IN DEPTH		
₩ WL(8	SHW)		÷	WL(AC	K)	BORING COMPLE		1/18/17	0.12		_	MER TYPE Auto	A (057	
₩L						RIG Truck	F	OREMAN BI	II Kurpi	S	DRIL	LING METHOD HS	SA/SPT	

CLIENT								Job #:		BORII	NG#			SHEET		
Irish T	OWE	r, Ll	<u>_C</u>					26 ARCH	3:3125-O1	₹	В	-3		2 OF 2	E	Co
Irish T	OWE	r Sit	es-	Mort	ton			Irish	n Tower, Ll	.C				0		
Long	Mill F	54 <b>I</b>	Dan	nhro	ko KV									-O- CALIBRATED F	PENETROME	TER TONS/FT*
Long I	G	τα, ι		EASTIN	NG	S	TATION							ROCK QUALITY DESIGNATION & RECOVERY RQD% REC%		
		JE .	(S)	(II)	DESCRIPTION				ENGLISH		ELS	(FT)			WATER INTENT%	LIQUID LIMIT%
ОЕРТН (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	BOTTOM OF C			LOSS	S OF CIRCULATION	ON ∑100%	WATER LEVELS	ELEVATION (FT)	BLOWS/6"	⊗ STANDA	RD PENETRA	
DE	SA	SAI	SAI	REC			/, trace sand,	brown	and gray,		W	ELE	BLC	Bl	.OWS/FT	
					moist, firm		SAL @ 32'									
35 —																
-																
40 —																
45																
=																
50 —																
=																
55 —																
-																
$\equiv$																
60																
		1		1	ı					I	ļ.		1		1	i
	THE	STRA	ATIFIC	CATION	N LINES REPRE	SENT 1	THE APPROXIMAT	TE BOUN	NDARY LINES BE	TWEEN	SOIL	TYPE	ES. IN-	SITU THE TRANSITION N	MAY BE GRAD	UAL.
					11/18/17				CAVE	E IN DEPTH						
₩ WL(SH	HW)		Ť	WL(AC	CR)		BORING COMPL	ETED	11/18/17			$\perp$		MER TYPE Auto	-	
≟ Mr						- 1	RIG Truck		FOREMAN E	ill Kur	ois	- 1	DRIL	LING METHOD HSA/SI	PT	



## REFERENCE NOTES FOR BORING LOGS

1		0	
	MATERIAL <sup>1,</sup>	.2	
		ASPH	ALT
		CONC	RETE
	80000	GRAV	EL
		TOPS	OIL
		VOID	
		BRICK	C .
	80000	AGGR	EGATE BASE COURSE
	C. P. C.	FILL <sup>3</sup>	MAN-PLACED SOILS
	4	GW	WELL-GRADED GRAVEL gravel-sand mixtures, little or no fines
		GP	POORLY-GRADED GRAVEL gravel-sand mixtures, little or no fines
	CICI	GM	SILTY GRAVEL gravel-sand-silt mixtures
	17.7	GC	CLAYEY GRAVEL gravel-sand-clay mixtures
		SW	WELL-GRADED SAND gravelly sand, little or no fines
		SP	POORLY-GRADED SAND gravelly sand, little or no fines
	1 0 d 0 3 3 K	SM	SILTY SAND sand-silt mixtures
	7.7.7.7	SC	CLAYEY SAND sand-clay mixtures
		ML	SILT non-plastic to medium plasticity
	ПП	МН	ELASTIC SILT high plasticity
	////	CL	LEAN CLAY low to medium plasticity
	1/1	СН	FAT CLAY high plasticity
	577	OL	ORGANIC SILT or CLAY non-plastic to low plasticity
	" 100, " 100" 100 " 100 100" 100 " 100 100 100 " 100 100 100 100 100 100	ОН	ORGANIC SILT or CLAY high plasticity
		PT	PEAT

	DRILLING SAMPLING SYMBOLS & ABBREVIATIONS								
SS	Split Spoon Sampler	PM	Pressuremeter Test						
ST	Shelby Tube Sampler	RD	Rock Bit Drilling						
WS	Wash Sample	RC	Rock Core, NX, BX, AX						
BS	<b>Bulk Sample of Cuttings</b>	REC	Rock Sample Recovery %						
PA	Power Auger (no sample)	RQD	Rock Quality Designation %						
HSA	Hollow Stem Auger								

PARTICLE SIZE IDENTIFICATION							
DESIGNA	TION	PARTICLE SIZES					
Boulders	3	12 inches (300 mm) or larger					
Cobbles		3 inches to 12 inches (75 mm to 300 mm)					
Gravel:	Coarse	3/4 inch to 3 inches (19 mm to 75 mm)					
	Fine	4.75 mm to 19 mm (No. 4 sieve to 3/4 inch)					
Sand:	Coarse	2.00 mm to 4.75 mm (No. 10 to No. 4 sieve)					
	Medium	0.425 mm to 2.00 mm (No. 40 to No. 10 sieve)					
	Fine	0.074 mm to 0.425 mm (No. 200 to No. 40 sieve)					
Silt & Clay ("Fines")		<0.074 mm (smaller than a No. 200 sieve)					

COHESIV	E SILTS &	CLAYS
UNCONFINED COMPRESSIVE STRENGTH, QP	SPT <sup>5</sup> (BPF)	CONSISTENCY <sup>7</sup> (COHESIVE)
<0.25	<3	Very Soft
0.25 - < 0.50	3 - 4	Soft
0.50 - < 1.00	5 - 8	Medium Stiff
1.00 - <2.00	9 - 15	Stiff
2.00 - <4.00	16 - 30	Very Stiff
4.00 - 8.00	31 - 50	Hard
>8.00	>50	Very Hard

RELATIVE AMOUNT <sup>7</sup>	COARSE GRAINED (%) <sup>8</sup>	FINE GRAINED (%) <sup>8</sup>
Trace	≤5	<u>≤</u> 5
Dual Symbol (ex: SW-SM)	10	10
With	15 - 20	15 - 25
Adjective (ex: "Silty")	<u>≥</u> 25	<u>≥</u> 30

GRAVELS, SANDS	& NON-COHESIVE SILTS
SPT <sup>5</sup>	DENSITY
<5	Very Loose
5 - 10	Loose
11 - 30	Medium Dense
31 - 50	Dense
>50	Very Dense

	W	ATER LEVELS <sup>6</sup>
$\overline{\mathbb{Z}}$	WL	Water Level (WS)(WD)
1		(WS) While Sampling
l		(WD) While Drilling
$\overline{\underline{\Psi}}$	SHW	Seasonal High WT
▼	ACR	After Casing Removal
$\bar{\nabla}$	SWT	Stabilized Water Table
	DCI	Dry Cave-In
	WCI	Wet Cave-In

highly organic soils

<sup>&</sup>lt;sup>1</sup>Classifications and symbols per ASTM D 2488-09 (Visual-Manual Procedure) unless noted otherwise.

<sup>&</sup>lt;sup>2</sup>To be consistent with general practice, "POORLY GRADED" has been removed from GP, GP-GM, GP-GC, SP, SP-SM, SP-SC soil types on the boring logs.

<sup>&</sup>lt;sup>3</sup>Non-ASTM designations are included in soil descriptions and symbols along with ASTM symbol [Ex: (SM-FILL)].

<sup>&</sup>lt;sup>4</sup>Typically estimated via pocket penetrometer or Torvane shear test and expressed in tons per square foot (tsf).

<sup>&</sup>lt;sup>5</sup>Standard Penetration Test (SPT) refers to the number of hammer blows (blow count) of a 140 lb. hammer falling 30 inches on a 2 inch OD split spoon sampler required to drive the sampler 12 inches (ASTM D 1586). "N-value" is another term for "blow count" and is expressed in blows per foot (bpf).

<sup>&</sup>lt;sup>6</sup>The water levels are those levels actually measured in the borehole at the times indicated by the symbol. The measurements are relatively reliable when augering, without adding fluids, in granular soils. In clay and cohesive silts, the determination of water levels may require several days for the water level to stabilize. In such cases, additional methods of measurement are generally employed.

<sup>&</sup>lt;sup>7</sup>Minor deviation from ASTM D 2488-09 Note 16.

<sup>&</sup>lt;sup>8</sup>Percentages are estimated to the nearest 5% per ASTM D 2488-09.

## **ZUSGS** Design Maps Summary Report

#### **User-Specified Input**

Building Code Reference Document 2012/2015 International Building Code

(which utilizes USGS hazard data available in 2008)

Site Coordinates 36.80035°N, 87.3028°W

Site Soil Classification Site Class D - "Stiff Soil"

Risk Category I/II/III



#### **USGS-Provided Output**

$$S_s = 0.453 g$$

$$S_{MS} = 0.651 g$$

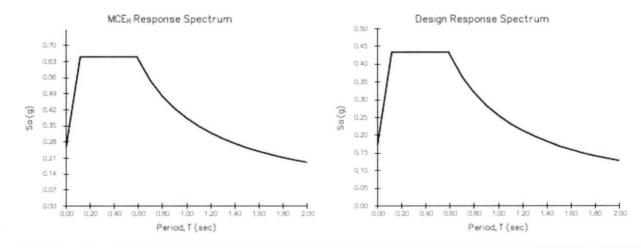
$$S_{ps} = 0.434 \, q$$

$$S_1 = 0.187 \, q$$

$$S_{M1} = 0.384 g$$

$$S_{p1} = 0.256 \, q$$

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.



Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.

# EXHIBIT H DIRECTIONS TO WCF SITE

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

- 1. Beginning at 202 E. Washington Street in Elkton, KY, head west on Washington Street towards Williams Lane. Travel approximately 157 feet.
- 2. Turn right onto Williams Lane and travel approximately 394 feet.
- 3. Turn right onto Public Square and travel approximately 213 feet.
- 4. Turn right onto KY-181 North / North Main Street and travel approximately 1 mile.
- 5. Turn left onto US-68 West and travel approximately 6.4 miles.
- 6. Turn left onto Fulcher School Road / Morton and travel approximately 1.4 miles.
- 7. Turn right to stay on Fulcher School Road / Morton and travel approximately 0.7 miles.
- 8. Turn left to stay on Fulcher School Road / Morton and travel approximately 2.5 miles.
- 9. The site is on the right. The site coordinates are
  - a. North 36 deg 48 min 01.26 sec
  - b. West 87 deg 18 min 10.09 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

## EXHIBIT I COPY OF REAL ESTATE AGREEMENT

Market Evansville Cell Site Number: <u>KYL03678</u> Cell Site Name. <u>Morton</u> Fixed Asset Number: 13800708

#### OPTION AND LEASE AGREEMENT

TIIIS OPTION AND LEASE AGREEMENT ("Agreement"), dated as of the latter of the signature dates below (the "Effective Date"), is entered into by Chad Anthony Hampton and wife, Diana Hampton, 3200 Fulcher School Road, Pembroke, Kentucky 42266; Paul Reno Hampton, Jr. and wife, Nicole Hampton, 1010 Arthur Henderson Road, Trenton, Kentucky 42286; Robert G. Sholar and wife, Connie Sholar, 2665 Morton Lane, Trenton, Kentucky 42286; Patrick A. Sholar, unmarried, 2700 Morton Lane, Trenton, Kentucky 42286; Ann H. Osborn and husband, Will Osborn, 4400 Tress Shop Road, Trenton, Kentucky 42286; Gayla H. Shanks and husband, Billy Shanks, 290 Maton Road, Trenton, Kentucky 42286; and, Dustin R. Shanks, unmarried, 5300 Tress Shop Road, Trenton, Kentucky 42286 ("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 Long Mill Road, in the County of Todd. 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 10.000 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 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 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 Fenant'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 (the "Rent"), at the address set forth above. In any partial month occurring after the Rent Commencement Date, Rent will be prorated. The initial Rent payment will be forwarded by Tenant to Landlord within forty-five (45) days after the Rent Commencement Date.
- (b) In year two (2) of the Initial Term, and each year thereafter, including throughout any Extension Terms exercised, the monthly Rent will increase by ever the Rent paid during the previous year
- (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 per occurrence and 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 uses 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, 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, crected 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.
- 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 #KYL03678; Cell Site Name: Morton (KY)

Fixed Asset No.: 13800708 575 Morosgo Drive NE Atlanta, GA 30324

With a copy to:

New Cingular Wireless PCS, LLC

Attn.: Legal Department

Re: Cell Site #: KYL03678; Cell Site Name: Morton (KY)

Fixed Asset No.: 13800708

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: Paul Hampton and/or Chad A. Hampton

3208 Fulcher School Road
Pembroke, KY 42266

3200 Fulcher School Road
Pembroke, KY 42266

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 #KYL03678; Cell Site Name: Morton (KY) Fixed Asset No: 13800708 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.

(h) Notwithstanding anything contained in Section 21(a), Tenant shall reimburse Landlord for the Attributable Amount of taxes or assessments levied on the lands or other property owned by Landlord, under the following circumstances and following receipt by Tenant of all of the documents listed below: (1) there has been an increase in the taxes and assessments levied upon the lands or property, Landlord improvements and other property of Landlord, that is attributable solely to Tenant's leasehold improvements on the Premises (a "Qualified Increase"), as initially measured for the period beginning immediately before the Tenant leasehold improvements are made to the Premises and ending on the first succeeding assessment date (the "Base Amount"), and, with respect to any subsequent assessment period, any increase in the taxes and assessments levied upon the lands or other property that is a Qualified Increase over the Base Amount (the Base Amount or any subsequent Qualified Increase over the Base Amount shall be hereinafter referred to as the "Attributable Amount"), (2) Landlord shall provide Tenant with copies of all notices of assessment on or including the Premises immediately upon receipt, but in no event later than thirty (30) days after the date of such notice of assessment, along with sufficient written documentation evidencing any Qualified Increase, (3) Landlord shall provide Tenant with written notice including evidence that Landlord has timely paid the taxes and assessments that are the subject of the notice of assessment in question, and (4) Landlord shall provide to Tenant any other documentation reasonably requested by Tenant to allow Tenant to evaluate the Attributable Amount and to reimburse to Landlord as required hereunder. If Landlord fails to provide such notices within such thirty (30) day period, Tenant shall have no obligation to reimburse Landlord for the Attributable Amount for the year covered by the assessment and all subsequent years to the extent that (i) Landlord continues to fail in providing timely notice following receipt of subsequent assessment notices, or (ii) Tenant is precluded from challenging such assessment with the appropriate government authorities. Landlord shall timely pay to the appropriate taxing or governmental authority the full amount of the assessed taxes or assessments, but may seek reimbursement from Tenant as provided herein.

## 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.
- (I) 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.

**ISIGNATURES APPEAR ON NEXT PAGE!** 

IN WITNESS WHEREOF, the parties have executed this document as of the day and year first above written.

"LANDLORD"
MIAL 11 L
Chad Anthony Hampton
Chad Anthony Hampton
Diana Hampton
Diana Hampton
Paul Reno Hampton, Jr
Paul Reno Hampton, Jr/
Micole Hampton Nicole Hampton
Nicole Hampton
Robert G. Sholar
Robert G. Sholar
Congie Sholar
Congie Sholar
Jata a Shelm
Patrick A. Sholar, unmarried
t attick A. Shoiai, unmarried
ann H. Usbaza
Ann H. Osborn
Will Osborn
Will Osborn
Duile H Jung Gayla H. Shanks
Gayla H. Shanks
Bills Shits
Jus Juna
Billy Shanks
Land St.

Dustin R. Shanks, unmarried

## LANDLORD ACKNOWLEDGMENT

)
) ss:
)
ampton, Jr. and wife, Nicole Hampton; Robert G. Sholar and wife,
rried: Ann H. Osborn and husband, Will Osborn; Gayla H. Shanks
R. Shanks, unmarried, who acknowledged under oath, that he/she/
the within instrument, and that he/she/they executed the same in
y act and deed of the Landlerd for the purposes therein contained.
Notary Public: Ky. State at Frige
Notary Public: Ky. State at raige
My Commission Expires: 10-9-3030

### "TENANT"

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

Its: Manager

Print Name: Bryan Coleman

Its: Area Manager Network Engineering Gulf States/

TNKY Site Acquisition

Date:

## TENANT ACKNOWLEDGMENT

STATE	OF	ALABAMA	

**COUNTY OF JEFFERSON** 

On the day of June . 2017, before me personally appeared Bryan Coleman, and acknowledged under oath that he is the Area Manager Network Engineering Gulf States/ TNKY Site Acquisition 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.

) ss:

Notary Public: Lisa Henderson My Commission Expires: 7/9/2018

## **EXHIBIT 1**

## **DESCRIPTION OF PREMISES**

Page 1 of 4

The Property is legally described as follows:

### TRACT I:

A certain tract or parcel of land lying and being in Christian and Todd Counties on the Fairview and Pembroke Road about three miles Rast of Pembroke, Kentucky, and bounded and described as follows:

BEGINNING at a rock 6 1/2 poles West of a branch in Long's Mill road and in J. M. Burrus line; thence North 10 degrees West 197 poles to a rock, corner to B. Downer; thence with said Downer and W. W. Eddins lines South 69 1/2 degrees West 96 1/2 poles to a rock, corner to Moddie (now W. W. Eddins); thence South 54 degrees West 82 1/4 poles to a rock, a new corner and corner to W. W. Eddins; thence South 32-3/4 degrees East 58 poles to a rock, snother new corner; thence South 55 1/2 degrees West 67 poles to a rock, W. W. Eddins Southwest corner; thence North 33 1/2 degrees West 93 1/2 poles to a large post oak in seld Eddin's line to B. D. Lackey; thence with Lackey's line and the Pembroke Road, South 58 1/2 degrees West 92 1/4 poles with center of road to a stone, corner with Dossett's; thence South 28 degrees Bast 175 1/4 poles with division fence to a gate post; thence another fence by survey North 56 1/2 degrees East 105-1/3 poles to fence corner; thence as per deed and Burrus line South 33 1/2 degrees East 89 1/2 poles to a rock by a culvert in Long's Mill Road; thence with said road and North 49 degrees East 109 poles to a rock, corner to J. M. Burrus and F. W. Hampton; thence with said Burrus line and said Long's Mill Road North 40 1/2 degrees East 39 poles to a rock; corner to a lot of 16-3/4 acres bought by B. D. Edding from J. C. Daniel in Burrus line; thence said road and Burrus line North 41 1/2 degrees East 14 poles to the beginning, and containing 352.95 acres, more or less.

THERE IS EXCEPTED from the foregoing tract the following parcel which was conveyed by Thomas L. Bwing and Ada F. Goins, both unmarried to E. S. Lackey by deed dated May 17, 1941, as of record in Deed Book 195, Page 528, said parcel being more particularly described as follows:

BEGINNING at a point in the West side of the new road and the old line between lands of the parties hereto; thence an old line South 58 1/2 West 210 feet, more or less to a stone, corner with Dossett; thence with another old line South 28 East 200 feet, more or less, to a point in the West line of the Fairview and Pembroke road; thence with the West side of said road 320 feet, more or less, to the point of beginning.

THERE IS ALSO EXCEPTED FROM the foregoing

BEGINNING at an iron pin, being the southeast corner of Doyle Foley property, thence with the original line South 26° 28' 04" Rast. 541.96 feet to a king post, being the southwest corner of 24.45 acres tract; thence a new line through the original farm South 26° 00' 01" East. 2207.25 feet to a king post; thence with an original line South 62° 25' 42" West, 1747.94 feet to a king post, southeast corner of Thomas Burd farm; thence with Burd line North 21° 42' 17" West, 2583.08 feet to an iron pin. right-of-way of KY - 115 (Pembroke - Fairview Road); thence with said right-of-way the next two calls: North 25° 09' 08" East, 174.00 feet' thence North 22° 20' 01" East, 246.22 feet to an iron pin, corner to Doyle Foley farm; thence with Foley line North 66° 23' 54" East. 1231.02 feet to the BEGINNING. Containing 104.59 acres more or less.

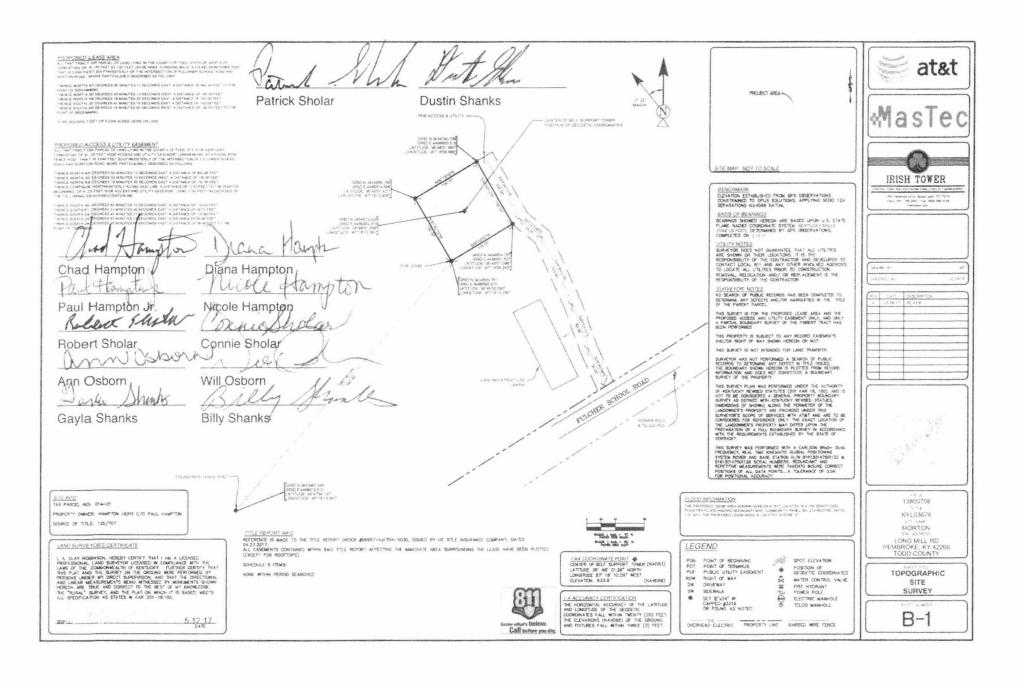
This description prepared from physical survey conducted by: Howard G. Lancaster, L. S. #2096 on March 30, 1989.

The Premises are described and/or depicted as follows:

## Notes:

- 1. THIS EXHIBIT MAY BE REPLACED BY A LAND SURVEY AND/OR CONSTRUCTION DRAWINGS OF THE PREMISES ONCE
- 2. ANY SETBACK OF THE PREMISES FROM THE PROPERTY'S BOUNDARIES SHALL BE THE DISTANCE REQUIRED BY THE APPLICABLE GOVERNMENTAL AUTHORITIES.
- ATTECABLE COVERNMENTAL ACTIONITIES

  WIDTH OF ACCESS ROAD SHALL BE THE WIDTH REQUIRED BY THE APPLICABLE GOVERNMENTAL AUTHORITIES, INCLUDING BY THE BY THE APPLICABLE GOVERNMENTAL AUTHORITIES, INCLUDING BY THE APPLICABLE GOVERNMENTAL BY THE BY TH
- 4 THE TYPE, NUMBER AND MOUNTING POSITIONS AND LOCATIONS OF ANTENNAS AND TRANSMISSION LINES ARE ILLUSTRATIVE ONLY. ACTUAL TYPES, NUMBERS AND MOUNTING POSITIONS MAY VARY FROM WHAT IS SHOWN ABOV



## EXHIBIT 11

## **ENVIRONMENTAL DISCLOSURE**

Landlord represents and warrants that the Property, as of the date of this Agreement, is free of hazardous substances except as follows:

1. NONE.

## EXHIBIT 12 STANDARD ACCESS LETTER

## [FOLLOWS ON NEXT PAGE]

## [Landlord Letterhead]

## DATE

Building Staff / Security Staff Landlord, Lessee, Licensee Street Address City, State, Zip

Re: Authorized Access granted to AT&T

Dear Building and Security Staff,

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

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

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

Landlord Signature

## **EXHIBIT J NOTIFICATION LISTING**

## Morton - Notice List

Hampton Heirs c/o Paul Hampton 3208 Fulcher School Rd Pembroke, KY 42266

Jason S & Ruth S Zimmerman 2950 Pembroke Fairview Rd Pembroke, KY 42266

Davis S Weaver Jr. & Wilma L Weaver 2648 Pembroke Fairview Rd Pembroke, KY 42266

Bailey Annette Inter Vivos Tru c/o Annette Bailey 1843 Fulcher School Rd Pembroke, KY 42266

Glenn Hampton 3235 Tress Shop Rd Trenton, KY 42286

Chad A Hampton 3200 Fulcher School Rd Pembroke, KY 42266

Paul Hampton 3208 Fulcher School Rd Pembroke, KY 42266

Annie & Charles Barnes 3500 Fulcher School Road Pembroke, KY 42266

Phillip A Garnett 3501 Bradshaw Road Hopkinsville, KY 42240

Philip A Garnett 3501 Bradshaw Rd Hopkinsville, KY 42240

## 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: Morton

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 at Long Mill Road in Pembroke, KY 42266 (36° 48' 01.26" North latitude, 87° 18' 10.09" West longitude). The proposed facility will include a 255-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 2018-00001 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. Applicant's radio frequency engineers assisted in selecting the proposed site for the facility, and they have determined it is the proper location and elevation needed to provide quality service to wireless customers in the area. Please feel free to contact us toll free at (800) 516-4293 if you have any comments or questions about this proposal.

Sincerely, David A. Pike Attorney for Applicant

enclosure

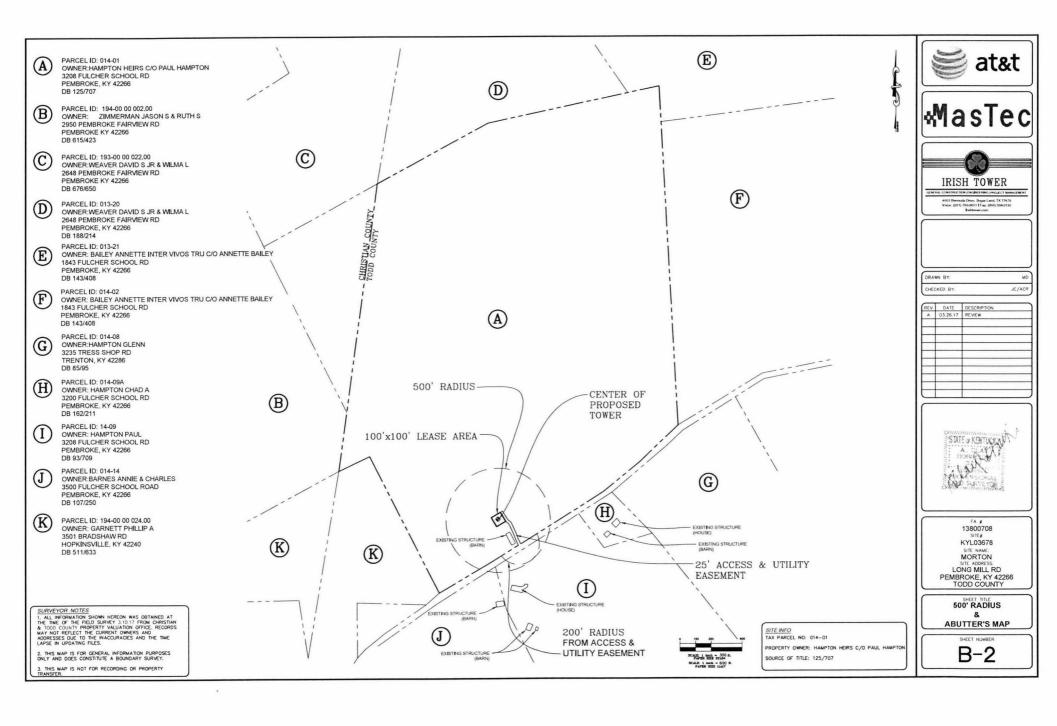
## **Driving Directions to Proposed Tower Site**

- 1. Beginning at 202 E. Washington Street in Elkton, KY, head west on Washington Street towards Williams Lane. Travel approximately 157 feet.
- 2. Turn right onto Williams Lane and travel approximately 394 feet.
- 3. Turn right onto Public Square and travel approximately 213 feet.
- 4. Turn right onto KY-181 North / North Main Street and travel approximately 1 mile.
- 5. Turn left onto US-68 West and travel approximately 6.4 miles.
- 6. Turn left onto Fulcher School Road / Morton and travel approximately 1.4 miles.
- 7. Turn right to stay on Fulcher School Road / Morton and travel approximately 0.7 miles.
- 8. Turn left to stay on Fulcher School Road / Morton and travel approximately 2.5 miles.
- 9. The site is on the right. The site coordinates are
  - a. North 36 deg 48 min 01.26 sec
  - b. West 87 deg 18 min 10.09 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



## 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

Daryl Greenfield County Judge Executive P.O. Box 355 Elkton, KY 42220

RE:

Notice of Proposal to Construct Wireless Communications Facility

Kentucky Public Service Commission Docket No. 2018-00001

Site Name: Morton

## Dear Judge/Executive:

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 at Long Mill Road, Pembroke, KY 42266 (36° 48' 01.26" North latitude, 87° 18' 10.09" West longitude). The proposed facility will include a 255-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 2018-00001 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

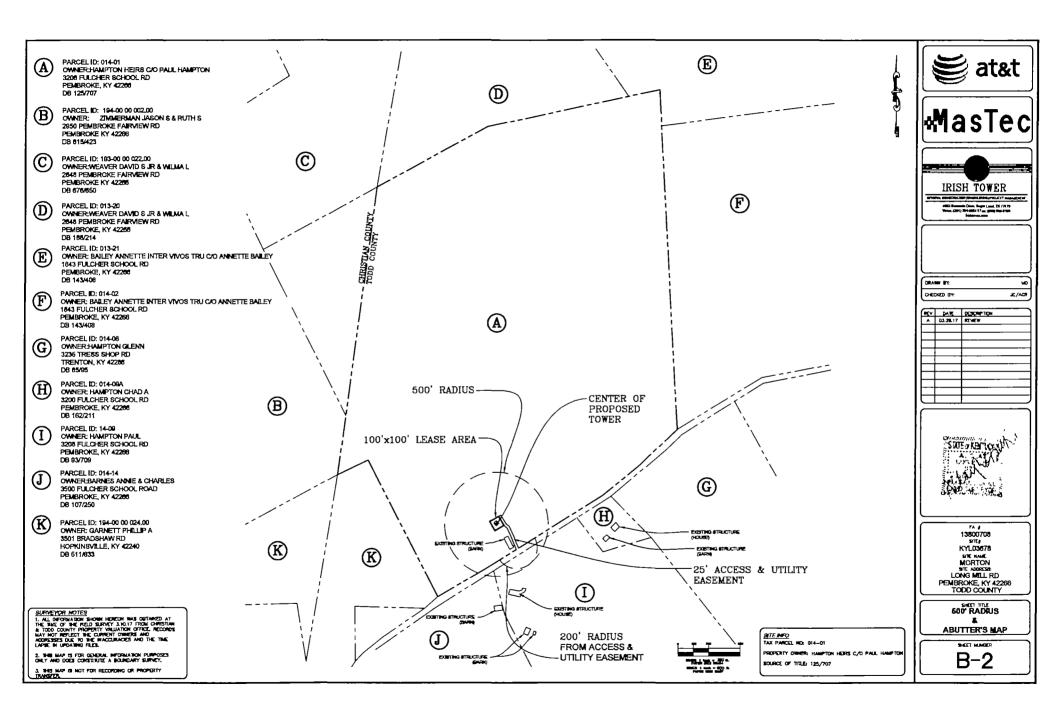
## **Driving Directions to Proposed Tower Site**

- 1. Beginning at 202 E. Washington Street in Elkton, KY, head west on Washington Street towards Williams Lane. Travel approximately 157 feet.
- 2. Turn right onto Williams Lane and travel approximately 394 feet.
- 3. Turn right onto Public Square and travel approximately 213 feet.
- 4. Turn right onto KY-181 North / North Main Street and travel approximately 1 mile.
- 5. Turn left onto US-68 West and travel approximately 6.4 miles.
- 6. Turn left onto Fulcher School Road / Morton and travel approximately 1.4 miles.
- 7. Turn right to stay on Fulcher School Road / Morton and travel approximately 0.7 miles.
- 8. Turn left to stay on Fulcher School Road / Morton and travel approximately 2.5 miles.
- 9. The site is on the right. The site coordinates are
  - a. North 36 deg 48 min 01.26 sec
  - b. West 87 deg 18 min 10.09 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





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

Fiscal Court c/o: Daryl Greenfield County Judge Executive P.O. Box 355 Elkton, KY 42220

RF.

Notice of Proposal to Construct Wireless Communications Facility

Kentucky Public Service Commission Docket No. 2018-00001

Site Name: Morton

## Dear Judge/Executive:

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 at Long Mill Road, Pembroke, KY 42266 (36° 48' 01.26" North latitude, 87° 18' 10.09" West longitude). The proposed facility will include a 255-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 2018-00001 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

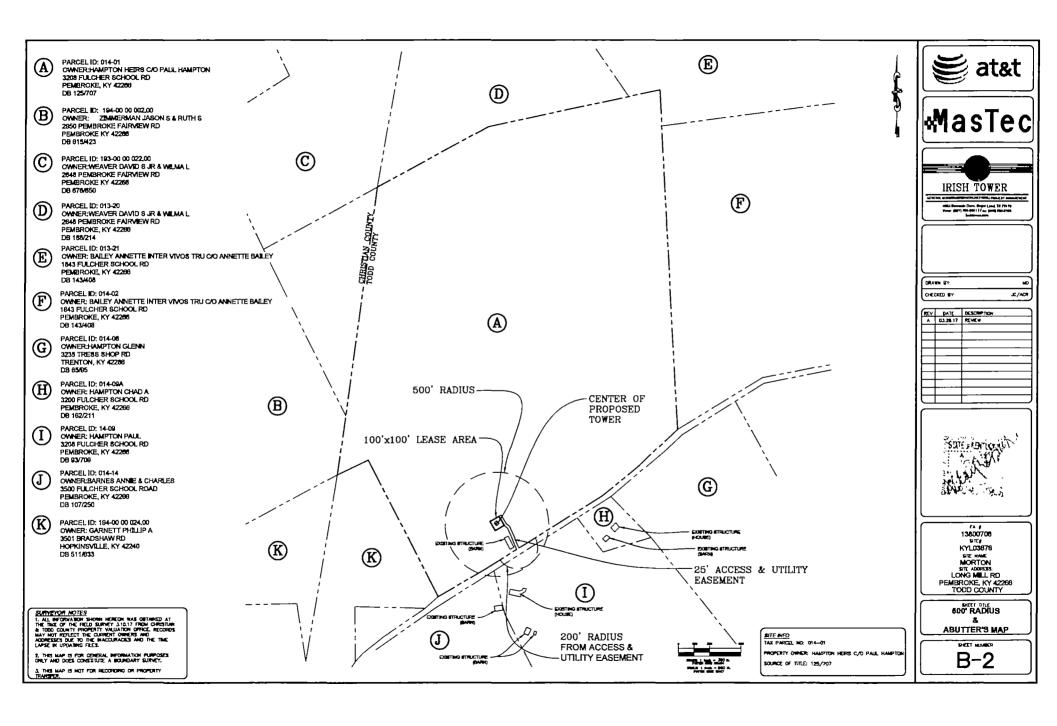
## **Driving Directions to Proposed Tower Site**

- 1. Beginning at 202 E. Washington Street in Elkton, KY, head west on Washington Street towards Williams Lane. Travel approximately 157 feet.
- 2. Turn right onto Williams Lane and travel approximately 394 feet.
- 3. Turn right onto Public Square and travel approximately 213 feet.
- 4. Turn right onto KY-181 North / North Main Street and travel approximately 1 mile.
- 5. Turn left onto US-68 West and travel approximately 6.4 miles.
- 6. Turn left onto Fulcher School Road / Morton and travel approximately 1.4 miles.
- 7. Turn right to stay on Fulcher School Road / Morton and travel approximately 0.7 miles.
- 8. Turn left to stay on Fulcher School Road / Morton and travel approximately 2.5 miles.
- 9. The site is on the right. The site coordinates are
  - a. North 36 deg 48 min 01.26 sec
  - b. West 87 deg 18 min 10.09 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



## EXHIBIT M COPY OF POSTED NOTICES

## 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 2018-00001 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 2018-00001 in your correspondence.

VIA TELEPHONE: 270-265-2439 / 270-878-0235

The Todd County Standard ATTN: Legal Notice 41 Public Square P.O. Box 308 Elkton, KY 42220

RE: Legal Notice Advertisement

Site Name: Morton

Dear Todd County Standard:

Please publish the following legal notice advertisement in the next edition of *The Todd County Standard*:

### NOTICE

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 Long Mill Road, Pembroke, KY 42266 (36°48'01.26" North latitude, 87°18'10.09" West longitude). You may contact the PSC for additional information concerning this matter at: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2018-00001 in any correspondence sent in connection with this matter.

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

Sincerely,

Aaron L. Roof Pike Legal Group, PLLC

## EXHIBIT N COPY OF RADIO FREQUENCY DESIGN SEARCH AREA



Lat: 36.807039 Lon: -87.303911 Radius: .5 miles

Morton Search Area