COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

JUN 07 2018

In the Matter of:

PUBLIC SERVICE
COMMISSION

SITE NAME: TUCKER HOLLOW

* * * * * * *

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

New Cingular Wireless PCS, LLC, a Delaware Limited Liability Company, d/b/a AT&T Mobility ("Applicant"), by counsel, pursuant to (i) KRS §§ 278.020, 278.040, 278.650, 278.665, and other statutory authority, and the rules and regulations applicable thereto, and (ii) the Telecommunications Act of 1996, respectfully submits this Application requesting issuance of a Certificate of Public Convenience and Necessity ("CPCN") from the Kentucky Public Service Commission ("PSC") to construct, maintain, and operate a Wireless Communications Facility ("WCF") to serve the customers of the Applicant with wireless communications services.

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

- 1. The complete name and address of the Applicant: New Cingular Wireless PCS, LLC, a Delaware Limited Liability Company, d/b/a AT&T Mobility, having a local address of Meidinger Tower, 462 S. 4th 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 Tucker Hollow Ln., Hartford, KY 42347 (37°31'40.70" North latitude, 87°01'15.92" 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 Ronda and Patty Humphrey pursuant to a Deed recorded at Deed Book 205, Page 383 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**.
- on the site parcel will be required to conduct the geotechnical study. After receiving PSC approval for this site, a geotechnical engineering firm will perform geotechnical studies at the WCF site, and the Applicant will submit a geotechnical report into the record before beginning construction.
 - 14. Clear directions to the proposed WCF site from the County seat are attached

- as **Exhibit G**. The name and telephone number of the preparer of **Exhibit G** 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 H**.
- 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 tower site is not within any flood hazard area and a portion of the access easement is in the "zone AE."
- 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 I** and **Exhibit J**, 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 K**.
- 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 L**. A legal notice advertisement regarding the location of the proposed facility has been published in a newspaper of general circulation in the county in which the WCF is proposed to be located. A copy of the newspaper legal notice advertisement is attached as part of **Exhibit L**.

- 23. The general area where the proposed facility is to be located is heavily wooded and removed a significant distance from any residential structures. There are no residential structures within 500' of the proposed tower site.
- 24. The process that was used by the Applicant's radio frequency engineers in selecting the site for the proposed WCF was consistent with the general process used for selecting all other existing and proposed WCF facilities within the proposed network design area. Applicant's radio frequency engineers have conducted studies and tests in order to develop a highly efficient network that is designed to handle voice and data traffic in the service area. The engineers determined an optimum area for the placement of the proposed facility in terms of elevation and location to provide the best quality service to customers in the service area. A radio frequency design search area prepared in reference to these radio frequency studies was considered by the Applicant when searching for sites for its antennas that would provide the coverage deemed necessary by the Applicant. A map of the area in which the tower is proposed to be located which is drawn to scale and clearly depicts the necessary search area within which the site should be located pursuant to radio frequency requirements is attached as **Exhibit M**.
- 25. The tower must be located at the proposed location and proposed height to provide necessary service to wireless communications users in the subject area. In addition to expanding and improving voice and data service for AT&T mobile customers, this site will also provide wireless local loop ("WLL") broadband internet service in the subject area. As a participant in the FCC's Connect America Fund Phase II (CAF II) program, AT&T is aggressively deploying WLL service infrastructure to bring expanded

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

- 26. All Exhibits to this Application are hereby incorporated by reference as if fully set out as part of the Application.
- 27. All responses and requests associated with this Application may be directed to:

David A. Pike
Pike Legal Group, PLLC
1578 Highway 44 East, Suite 6
P. O. Box 369
Shepherdsville, KY 40165-0369
Telephone: (502) 955-4400

Telefax:

(502) 543-4410

Email:

dpike@pikelegal.com

WHEREFORE, Applicant respectfully request that the PSC accept the foregoing Application for filing, and having met the requirements of KRS §§ 278.020(1), 278.650, and 278.665 and all applicable rules and regulations of the PSC, grant a Certificate of Public Convenience and Necessity to construct and operate the WCF at the location set forth herein.

Respectfully submitted,

David A. Pike

Pike Legal Group, PLLC

1578 Highway 44 East, Suite 6

Lewid a Pelse

P. O. Box 369

Shepherdsville, KY 40165-0369

Telefax:

Telephone: (502) 955-4400 (502) 543-4410

Email: dpike@pikelegal.com

Attorney for New Cingular Wireless PCS, LLC

d/b/a AT&T Mobility

LIST OF EXHIBITS

Α	-	FCC License Documentation
В	-	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 - Directions to WCF Site

H - Copy of Real Estate Agreement

I - Notification Listing

J - Copy of Property Owner Notification

K - Copy of County Judge/Executive Notice

L - Copy of Posted Notices and Newspaper Notice Advertisement

M - Copy of Radio Frequency Design Search Area

EXHIBIT A FCC LICENSE DOCUMENTATION

ULS License

PCS Broadband License - KNLH406 - New Cingular Wireless PCS, LLC

Call Sign

KNLH406

Radio Service

CW - PCS Broadband

Status

Active

Auth Type

Regular

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP)

bidding credit?

Reserved Spectrum

Reserved Spectrum

Market

Market

BTA338 - Owensboro, KY

Channel Block

D

Submarket

0

Associated Frequencies

(MHz)

001865.00000000-001870.00000000 001945.00000000-

001950.00000000

Dates

Grant

04/12/2017

Expiration

04/28/2027

Effective

06/14/2017

Cancellation

Buildout Deadlines

1st

04/28/2002

2nd

Notification Dates

1st

04/25/2002

2nd

Licensee

FRN

0003291192

Type

Limited Liability Company

Licensee

New Cingular Wireless PCS, LLC 208 S Akard St., RM 1016

Dallas, TX 75202

ATTN Leslie Wilson

P:(855)699-7073 F:(214)746-6410

E:FCCMW@att.com

Contact

AT&T Mobility LLC Michael P Goggin

1120 20th Street, NW - Suite 1000

Washington, DC 20036

ATTN FCC Group

P:(202)457-2055 F:(202)457-3073

E:michael.p.goggin@att.com

Ownership and Qualifications

Radio Service Type

Mobile

Regulatory Status Common Carrier Interconnected

Yes

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

http://wireless2.fcc.gov/UIsApp/UIsSearch/license.jsp?licKey=10575&printable

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender

ULS License

PCS Broadband License - WPOI255 - NEW CINGULAR WIRELESS PCS, LLC

Call Sign

WPOI255

Radio Service

CW - PCS Broadband

Status

Active

Auth Type

Regular

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP)

bidding credit?

Reserved Spectrum

Reserved Spectrum

Market

Market

MTA026 - Louisville-Lexington-

Channel Block

Α

Submarket

19

Evansvill

Associated Frequencies

(MHz)

001850.00000000 001865.00000000 001930.00000000-

001945.00000000

Dates

Grant

05/27/2015

Expiration

06/23/2025

Effective

06/14/2017

Cancellation

Buildout Deadlines

1st

06/23/2000

2nd

06/23/2005

Notification Dates

1st

07/07/2000

2nd

02/17/2005

Licensee

FRN

0003291192

Type

Limited Liability Company

Licensee

NEW CINGULAR WIRELESS PCS, LLC

208 S Akard St., RM 1016

Dallas, TX 75202 ATTN Leslie Wilson P:(855)699-7073 F:(214)746-6410

E:FCCMW@att.com

Contact

AT&T MOBILITY LLC Michael P Goggin

1120 20th Street, NW - Suite 1000

Washington, DC 20036 ATTN FCC Group P:(202)457-2055 F:(202)457-3073

E:michael.p.goggin@att.com

Ownership and Qualifications

Radio Service Type Regulatory Status Mobile

Common Carrier

Interconnected

Yes

http://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=193011&printable

Gender

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

ULS License

PCS Broadband License - WPTJ404 - NEW CINGULAR WIRELESS PCS, LLC

Call Sign

WPTJ404

Radio Service

CW - PCS Broadband

Status

Active

Auth Type

Regular

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP)

bidding credit?

Reserved Spectrum

Reserved Spectrum

Market

Market

BTA338 - Owensboro, KY

Channel Block

C

Submarket

Associated Frequencies

(MHz)

001895.00000000-001910.00000000 001975.00000000-

001990.00000000

Dates

Grant

10/29/2009

Expiration

09/29/2019

Effective

06/14/2017

Cancellation

Buildout Deadlines

1st

09/29/2004

2nd

09/29/2009

Notification Dates

1st

10/22/2001

2nd

10/22/2001

Licensee

FRN

0003291192

Type

Limited Liability Company

Licensee

NEW CINGULAR WIRELESS PCS, LLC

208 S Akard St., RM 1016

Dallas, TX 75202 ATTN Leslie Wilson P:(855)699-7073 F:(214)746-6410

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P:(202)457-2055 F:(202)457-3073

E:michael.p.goggin@att.com

Ownership and Qualifications

Radio Service Type Regulatory Status

Mobile

Common Carrier

Interconnected

Yes

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender

ULS License

AWS (1710-1755 MHz and 2110-2155 MHz) License - WQGD546 - New Cingular Wireless PCS, LLC

Call Sign

WQGD546

Radio Service

AW - AWS (1710-1755 MHz and

2110-2155 MHz)

Status

Active

Auth Type

Regular

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP)

bidding credit?

Reserved Spectrum

Reserved Spectrum

Market

Market

CMA445 - Kentucky 3 - Meade

Channel Block

Submarket

0

Associated Frequencies (MHz)

001710.00000000-001720.00000000 002110.00000000-002120.00000000

Dates

Grant

12/18/2006

Expiration Cancellation 12/18/2021

Effective

06/14/2017

Buildout Deadlines

Notification Dates

1st

1st

2nd

2nd

Licensee

FRN

0003291192

Type

Limited Liability Company

Licensee

New Cingular Wireless PCS, LLC 208 S Akard St., RM 1016

Dallas, TX 75202 ATTN Leslie Wilson

P:(855)699-7073 F:(214)746-6410 E:FCCMW@att.com

Contact

AT&T Mobility LLC

P:(202)457-2055 F:(202)457-3073

1120 20th Street, NW - Suite 1000

Washington, DC 20036 ATTN Michael P. Goggin E:michael.p.goggin@att.com

Ownership and Qualifications

Radio Service Type Regulatory Status

Fixed, Mobile Non-Common

Interconnected

No

http://wireless2.fcc.gov/UlsApp/UlsSearch/license.jsp?licKey=2867691&printable

1/2

Carrier

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

D	em	ogi	rap	hic	:s

Race

Ethnicity

Gender

ULS License

AWS (1710-1755 MHz and 2110-2155 MHz) License - WQGT878 - New Cingular Wireless PCS, LLC

Call Sign

WQGT878

Radio Service

AW - AWS (1710-1755 MHz and

2110-2155 MHz)

Status

Active

Auth Type

Regular

C

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP)

bidding credit?

Reserved Spectrum

Reserved Spectrum

Market

Market

BEA069 - Evansville-Henderson,

IN-KY-IL

Submarket

0

Channel Block

Associated Frequencies

(MHz)

001730.00000000-

001735.00000000 002130.00000000-002135.00000000

Dates

Grant

04/16/2007

Expiration

04/16/2022

Effective

06/14/2017

Cancellation

Buildout Deadlines

1st

2nd

Notification Dates

1st

2nd

Licensee

FRN

0003291192

Туре

Limited Liability Company

Licensee

New Cingular Wireless PCS, LLC 208 S Akard St., RM 1016

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P:(202)457-2055 F:(202)457-3073

1120 20th Street, NW - Suite 1000

Washington, DC 20036 ATTN Michael P. Goggin E:michael.p.goggin@att.com

Ownership and Qualifications

Radio Service Type

Fixed, Mobile

Regulatory Status

Common Carrier

Interconnected

Ye:

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender

ULS License

PCS Broadband License - WQNE326 - New Cingular Wireless PCS, LLC

Call Sign

WQNE326

Radio Service

CW - PCS Broadband

Status

Active

Auth Type

Regular

В

Rural Service Provider Bidding Credit

Is the Applicant seeking a Rural Service Provider (RSP)

bidding credit?

Reserved Spectrum

Reserved Spectrum

Market

Market

MTA026 - Louisville-Lexington-

Evansvill

Submarket

4

Channel Block

Associated Frequencies (MHz)

001870.00000000 001885.00000000 001950.00000000 001965.0000000

Dates

Grant

06/05/2015

Expiration

Cancellation

06/23/2025

Effective

06/14/2017

Buildout Deadlines

1st

2nd

Notification Dates

1st

2nd

Licensee

FRN

0003291192

Type

Limited Liability Company

Licensee

New Cingular Wireless PCS, LLC 208 S Akard St., RM 1016

Dallas, TX 75202 ATTN Leslie Wilson P:(855)699-7073 F:(214)746-6410

E:FCCMW@att.com

Contact

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1120 20th Street, NW - Suite 1000

Washington, DC 20036 ATTN FCC Group P:(202)457-2055 F:(202)457-3073

E:michael.p.goggin@att.com

Ownership and Qualifications

Radio Service Type

Mobile

Common Carrier

Interconnected

Yes

Regulatory Status

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender

EXHIBIT B

SITE DEVELOPMENT PLAN:

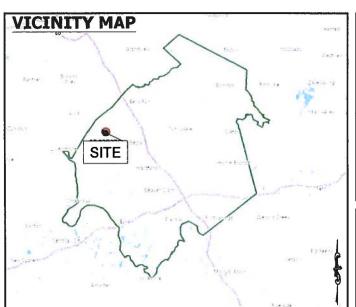
500' VICINITY MAP
LEGAL DESCRIPTIONS
FLOOD PLAIN CERTIFICATION
SITE PLAN
VERTICAL TOWER PROFILE



SITE NAME:

TUCKER HOLLOW

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 301 S MAIN ST #201, HARTFORD, KY 42347 1. DEPART US-231 / S MAIN ST TOWARD E CENTER ST 1.7 MI

CONSTRUCTION OF A PROPOSED UNMANNED TELECOMMUNICATIONS

SITE WORK: PROPOSED TOWER, UNMANNED EQUIPMENT CABINET AND GENERATOR ON A PLATFORMS, AND UTILITY INSTALLATIONS.

TURN LEFT ONTO KY-136 6.0 MI

3. TURN RIGHT ONTO HEFLIN RD 1.7 MI

PROJECT SCOPE OF WORK

ZONING DRAWINGS FOR:

FACILITY.

4. ARRIVE AT HEFLIN RD ON THE LEFT

COUNTY:

MEIDINGER TOWER

LONGITUDE:

DRAWING INDEX

T-1 TITLE SHEET & PROJECT INFORMATION

B-1 SITE SURVEY

B-2 500' RADIUS AND ABUTTERS MAP

C-1 ENLARGED COMPOUND LAYOUT

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

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

FOR EMERGENCIES CALL: 911

THE UTILITIES SHOWN HEREON ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS, THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS SHOWN AND IT SHALL FOR CONTRACTOR'S RESPONSIBILITY TO VEREY ALL UTILITIES WITHIN THE LIMITS OF THE WORK, ALL OMANGE MADE TO ENSTRUCY UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

AMERICAN CONCRETE INSTITUTE 318

AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL OF STEEL

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS IEEE-81,

Know what's below. Call before you dig.

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

C-2 TOWER ELEVATION

FIRE DEPARTMENT: HARTFORD FIRE DEPARTMENT PHONE: 270-298-4663

POLICE DEPARTMENT:
HARTFORD POLICE DEPARTMENT PHONE: 270-298-3379

ELECTRIC COMPANY:

PHONE: 800-981-0600

TELEPHONE COMPANY: AT&T

PHONE: 855-293-7676

FOLLOWING STANDARDS:

TELECOMMUNICATIONS

IEEE 1100, IEEE C62.41

2014 NEC

ENVIRONMENTAL PROTECTION

2014 KENTUCKY BUILDING CODE

JURISDICTION FOR THE LOCATION

SUPPORTING STRUCTURES TIA-601







4603 Bermuda Drive, Sugar Land, TX 77479 Voice, (281) 796-2651 I Fax: (866) 598-3136

ZONING DRAWINGS NOT FOR CONSTRUCTION

DRAWN BY:	
CHECKED BY:	

REV	DATE	DESCRIPTION
0	06/05/18	ISSUED FOR ZONING
\dashv		
\dashv		
_		



ENG. PERMIT # 4363

13800751 KYL03667 SITE NAME: **TUCKER HOLLOW** SITE ADDRESS: TUCKER HOLLOW LN. HARTFORD, KY 42347

> TITLE SHEET & **PROJECT INFORMATION**

> > SHEET NUMBER

-1

PROJECT INFORMATION

SITE ADDRESS:

TUCKER HOLLOW LN. HARTFORD KY 42347

APPLICANT:

NEW CINGULAR WIRELESS PCS, LLC. A DELAWARE LIMITED LIABILITY COMPANY,

D/B/A AT&T MOBILITY

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

LATITUDE:

37' 31' 40.70" -87" 01' 15.92"

PROPOSED LEASE AREA ALL THAT TRACT OR PARCEL OF LAND LYING IN THE COUNTY OF OHIO STATE OF KENTUCKY CONSISTING OF A 100 FEET BY 100 FEET LEASE AREA COMMENCING AT A FOUND PK NAB. THAT IS THENCE NORTH 42 DEGREES 47 MINUTES 40 SECONDS WEST, A DISTANCE OF 1,052,56 FEET TO THE

POINT OF BEGINN POINT OF BEGINNING; THENCE SOUTH 69 DEGREES 50 MINUTES 38 SECONDS WEST, A DISTANCE OF 100.00 FEET. THENCE NORTH 20 DEGREES 09 MINUTES 22 SECONDS WEST A DISTANCE OF 100 00 FEET THENCE NORTH 69 DEGREES 50 MINUTES 38 SECONDS EAST A DISTANCE OF 100.00 FEET THENCE SOUTH 20 DEGREES 09 MINUTES 22 SECONDS EAST 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 OHIO. STATE OF KENTUCKY CONSISTING OF A 25 FEET WIDE ACCESS AND UTILITY EASEMENT COMMENCING AT A FOUND PK NAIL THAT IS AT THE INTERSECTION OF TUCKER HOLLOW LANE AND HEFLIN ROAD MORE PARTICULARLY

THENCE NORTH 42 DEGREES 47 MINUTES 40 SECONDS WEST, A DISTANCE OF 1 052.56 FEET. THENCE SOUTH 69 DEGREES 30 MINUTES 32 SECONDS WEST A DISTANCE OF 100 00 FEET THENCE SOUTH 69 DEGREES 99 MINUTES 22 SECONDS WEST A DISTANCE OF 100 00 FEET TO THE POINT OF BEGINNING OF A25 FEET WIDE ACCESS AND UTILITY EASEMENT LYING 12:50 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE

THENCE SOUTH 53 DEGREES 25 MINUTES 08 SECONDS WEST A DISTANCE OF 34.43 FEET THENCE SOUTH 03 DEGREES 34 MINUTES 40 SECONDS WEST. A DISTANCE OF 44.46 FEET THENCE SOUTH 01 DEGREES 52 MINUTES 32 SECONDS WEST. A DISTANCE OF 71.08 FEET THENCE SOUTH 39 DEGREES 49 MINUTES 37 SECONDS EAST A DISTANCE OF 72.49 FEET THENCE SOUTH 08 DEGREES 49 MINUTES 37 SECONDS EAST A DISTANCE OF 78.63 FEET THENCE SOUTH 09 DEGREES 47 MINUTES 17 SECONDS EAST A DISTANCE OF 72.55 FEET THENCE SOUTH 39 DEGREES 47 MINUTES 17 SECONDS EAST A DISTANCE OF 65.43 FEET THENCE SOUTH 43 DEGREES 47 MINUTES 17 SECONDS EAST A DISTANCE OF 57.78 FEET THENCE SOUTH 43 DEGREES 57 MINUTES 37 SECONDS EAST A DISTANCE OF 57.78 FEET THENCE SOUTH 43 DEGREES 57 MINUTES 37 SECONDS EAST A DISTANCE OF 77.78 FEET THENCE SOUTH 19 DEGREES 57 MINUTES 37 SECONDS EAST A DISTANCE OF 77.78 FEET THENCE SOUTH 19 DEGREES 57 MINUTES 37 SECONDS EAST A DISTANCE OF 77.78 FEET THENCE SOUTH 19 DEGREES 57 MINUTES 37 SECONDS EAST A DISTANCE OF 77.78 FEET THENCE SOUTH 19 DEGREES 57 MINUTES 56 SECONDS EAST A DISTANCE OF 71.39 FEET THENCE SOUTH 19 DEGREES 30 MINUTES 56 SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAST A DISTANCE OF 74.76 FEET OF 74 FEET SECONDS EAS THENCE SOUTH 12 DEGREES 28 MINUTES 56 SECONDS EAST, A DISTANCE OF 74,76 FEET THENCE SOUTH 06 DEGREES 45 MINUTES 04 SECONDS WEST A DISTANCE OF 106.71 FEET THENCE SOUTH 04 DEGREES 25 MINUTES 49 SECONDS WEST A DISTANCE OF 51.74 FEET THENCE SOUTH 03 DEGREES 48 MINUTES 19 SECONDS EAST, A DISTANCE OF 43 32 FEET TO THE POINT OF TERMINUS

LATITUDE: N37" 31" 40 98"

TITLE REPORT INFO

REFERENCE IS MADE TO THE TITLE REPORT ORDER #56718-KY1703-5034, ISSUED BY US TITLE INSURANCE COMPANY, DATED 03.31.2017. ALL EASEMENTS CONTAINED WITHIN SAID TITLE REPORT AFFECTING THE IMMEDIATE AREA SURROUNDING THE LEASE HAVE BEEN PLOTTED (EXCEPT FOR

SCHEDULE B ITEMS:

NONE WITHIN PERIOD SEARCHED

SITE INFO

TAX PARCEL NO: 42-37

PROPERTY OWNER: HUMPHREY RONDA & PATT

SOURCE OF TITLE: OB 205-383

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 KENTLICKY 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 WEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN FERSON ARE TRUE AND CORRECT TO THE TEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATION AS STATES IN KAR 201—18:150.

SIGNED: XClay Loggingor

5.31.17

LONGITUDE W87' 01' 15 56" NORTHING: 3718394.17 EASTING: 4552702 42 LONG TUDE: W87' 01' 16 72' EASTING: 4552608 57 LATITUDE N37" 31" 40.70" POB ACCESS & UTILITY LONGITUDE: W87° C1' 15 92" NORTHING: 3718330 10 EASTING: 4552672 82 EASEMENT 38"W S53' 25' 08"W - CENTER OF SELF SUPPORT TOWER POSITION OF GEODETIC COORDINATES POB LEASE 53" 34" 40"W 44 46 LATITUDE: N37' 31' 40.41" LATITUDE: N37' 31' 40.06" LONGITUDE W87' 01' 15.12" NORTHING 3718300 49 EASTING 4552737 08 LONG TUCE W87: 01 16 28" NORTHING: 3718265.83 EASTING 4552643.02 MAG-N \$39" 49" 37"E 78-63 59 47 17"E LATITUDE: N.37' 31' 32 87" LONGITUDE W87' G1' C6 11" NORTHING 3717527.92 EASTING: 4553451.98 543° 57° 37° E \$36' 16' 13'E FOUND PK NAME INTERSECTION OF TUCKER HOLLOW IN & HEFLIN ROAD S19" 34" 15"E FEMA ZONE X S12" 28" 55"E FEMA ZONE AE SCALE 1 inch = 50 ft. S4" 25" 49"W SCALE 1 inch = 100 ft. PAPER SIZE 11z17 - POWER POLE POT ACCESS & UTILITY FAA COORDINATE POINT � S3" 48" 19"E CENTER OF SELF SUPPORT TOWER (NAD83) EASEMENT LONGITUDE 87' 01' 15 92" WEST ELEVATION 488 55' - 24" CMP TUCKER HOLLOW LANE 1-A ACCURACY CERTIFICATION THE HORIZONTAL ACCURACY OF THE LATITUDE AND LONGITUDE OF THE GEODETIC COORDINATES FALL WITHIN TWENTY (20) FEET.

LATITUDE N37' 31' 41.33"



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

BASIS OF BEARINGS

BEARINGS SHOWED HEREON ARE BASED UPON U.S. STATE PLANE NAD83 COORDINATE SYSTEM KENTUCKY SINGLE ZONE US FOOT, DETERMINED BY GPS OBSERVATIONS, COMPLETED ON 4.28.17

UTILITY NOTES

SURVEYOR DOES NOT GUARANTEE THAT ALL UTILITIES ARE SHOWN OR THEIR LOCATIONS IT IS THE RESPONS BILLTY OF THE CONTRACTOR AND DEVELOPER TO CONTACT LOCAL BIT AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. REMOVAL, RELOCATION AND/ OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR. RESPONSIBILITY OF THE CONTRACTOR

SURVEYOR NOTES

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED TO DETERMINE ANY DEFECTS AND/OR AVEIGUITIES 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

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.

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 SURVEY OF THE PROPERTY.

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 LANDUMARK S PROPERTY ARE PROVIDED UNDER THIS SURVEYOR'S SCOPE OF SERVICES WITH A TAX 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

THIS SURVEY WAS PERFORMED WITH A CARLSON BRX5+ DUAL FREQUENCY, REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM ROVER AND BASE STATION H/W BIB130147501133 & BIB130147501126 SERIAL NUMBERS, REDUNDANT AND REPETITIVE MEASUREMENTS WERE TAKENTO INSURE CORRECT POSITIONS OF ALL DATA POINTS ... 4 TOLERANCE OF 0.04

THE PROPOSED LEASE AREA SHOWN HEREON IS NOT LOCATED IN A 100-YEAR FLOOD PLAIN PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NO 21-83C00950, DATED 06-02-2011. THE PROPOSED LEASE AREA IS LOCATED IN ZONE "X", A PORTION OF THE ACCESS IS IN ZONE AE

LEGEND

POINT OF BEGINNING POT POINT OF TERMINUS PUBLIC UTILITY EASEMENT ROW RIGHT OF WAY

WC CRIVEWAY SW SIDEWALK

THE ELEVATIONS (NAVD88) OF THE GROUND

AND FIXTURES FALL WITHIN THREE (3) FEET

Know what's below.

Call before you dig.

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

WATER CONTROL VALVE FIRE HYDRANT POWER POLE ELECTRIC MANHOLE TELCO MANHOLE

•

OVERHEAD ELECTRIC PROPERTY LINE BARBED WIRE FENCE

SPOT ELEVATION

GEODETIC COORDINATES

POSITION OF





4603 Bermuda Drive Sugar Land TX 77479 Voice (281) 796-2651 | Fax (866) 598-3138

DRAWN BY:	ME

CHECKED BY JC/ACR

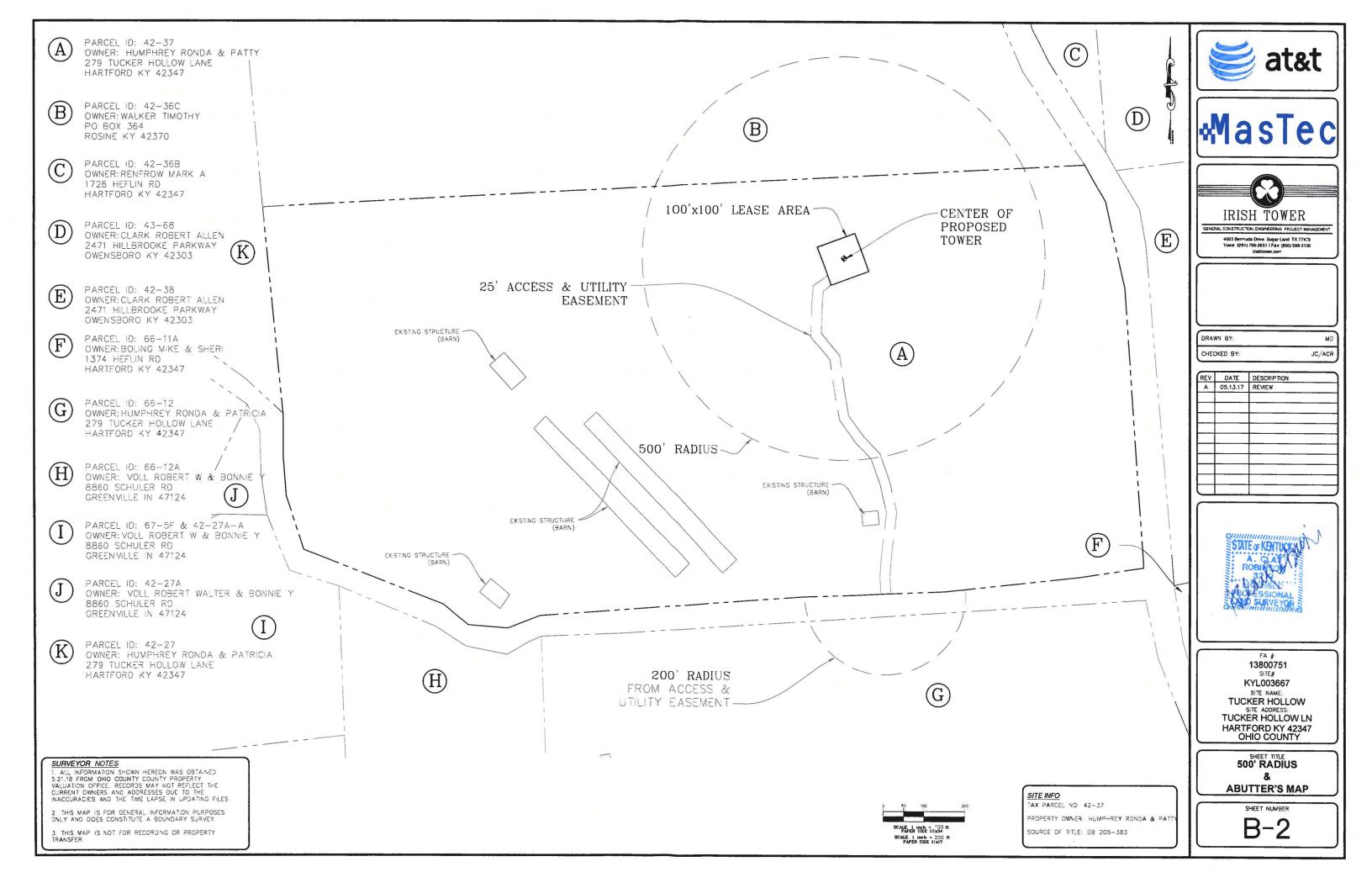
REV DATE DESCRIPTION A 05.13.17 REVIEW

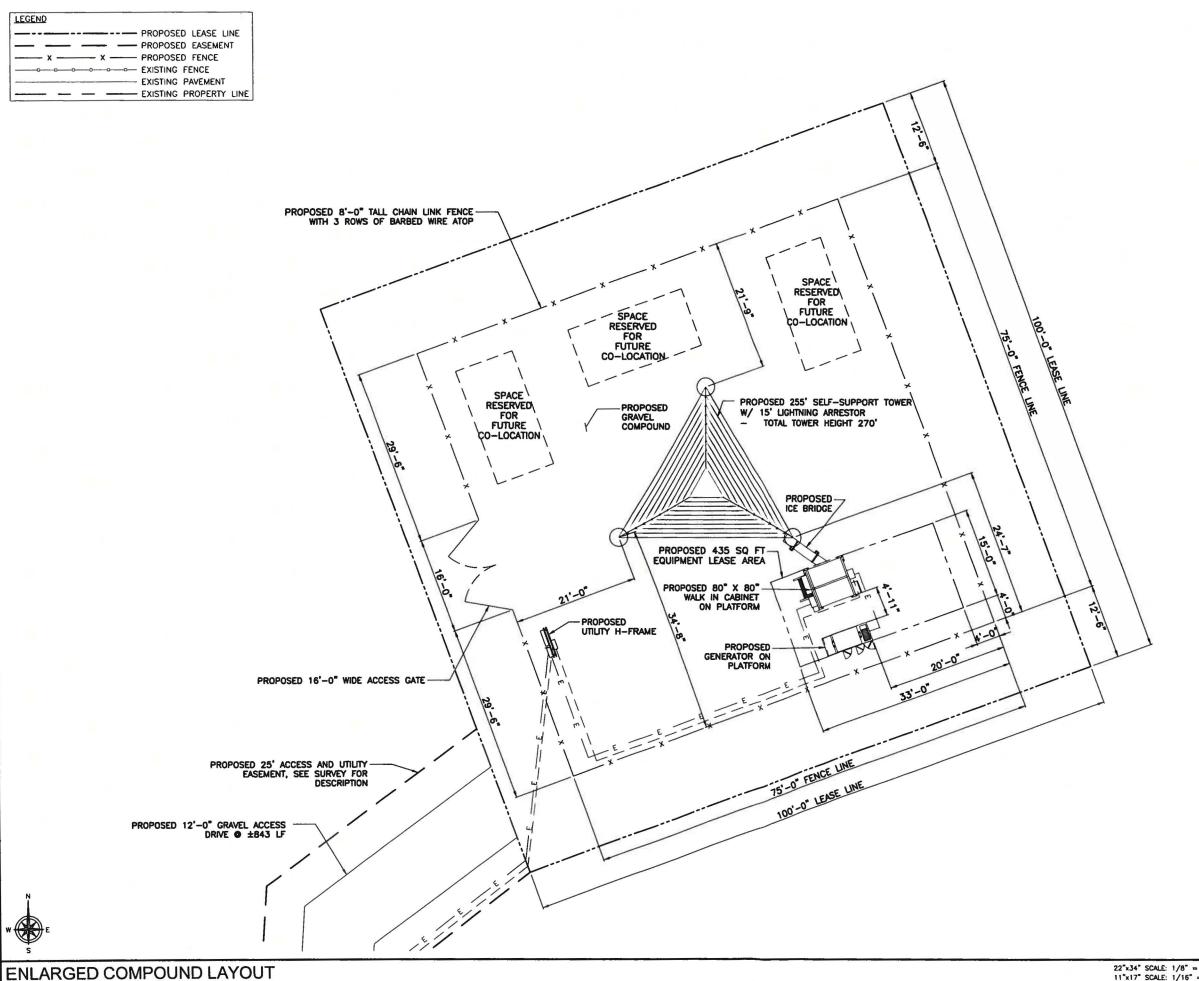


13800751 S TE# KYL003667 SITE NAME: **TUCKER HOLLOW** SITE ADDRESS: TUCKER HOLLOW LN HARTFORD KY 42347 OHIO COUNTY

> **TOPOGRAPHIC** SITE SURVEY













L CONSTRUCTION JENGINEERING J PROJECT MANAGEMEN 4603 Bermuda Drive, Sugar Land, TX 77479 Voice (281) 796-2651 J Fax: (866) 598-3136 Inshilower.com

ZONING DRAWINGS NOT FOR CONSTRUCTION

DRAWN BY: DL
CHECKED BY: JRG

DATE	DESCRIPTION
06/05/18	ISSUED FOR ZONING



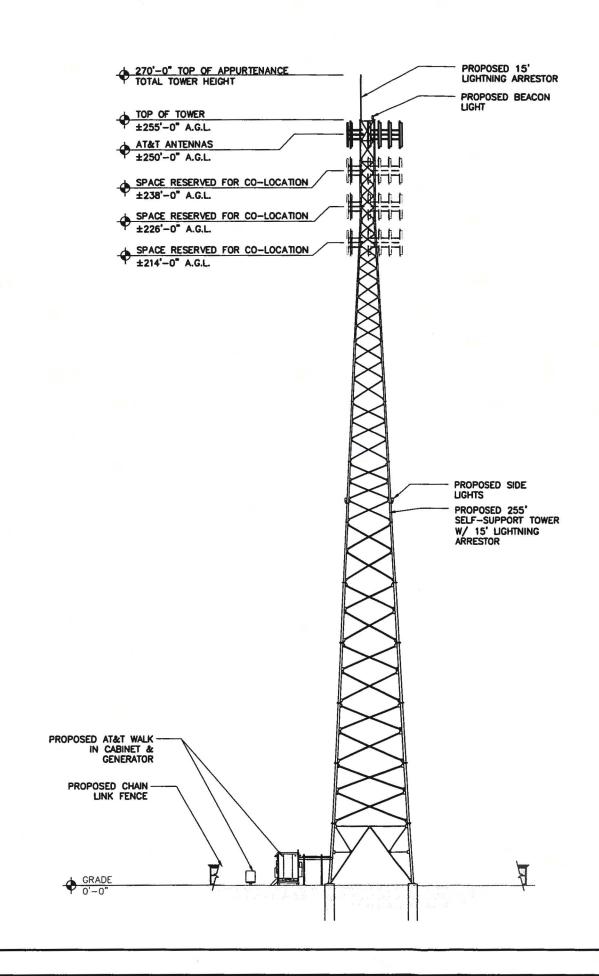
FA #
13800751
SITE#
KYL03667
SITE NAME:
TUCKER HOLLOW
SITE ADDRESS:
TUCKER HOLLOW LN.
HARTFORD, KY 42347

ENLARGED COMPOUND LAYOUT

SHEET NUMBER

C-1

22"x34" SCALE: 1/8" = 1'-0" 11"x17" SCALE: 1/16" = 1'-0" 8' 6' 4' 2' 0"









ZONING DRAWINGS NOT FOR CONSTRUCTION

DRAWN BY: CHECKED BY:

REV	DATE	DESCRIPTION
0	06/05/18	ISSUED FOR ZONING



ENG. PERMIT # 4363

FA # 13800751 SITE# KYL03667 SITE NAME: TUCKER HOLLOW SITE ADDRESS: TUCKER HOLLOW LN. HARTFORD, KY 42347

TOWER ELEVATION

C-2

EXHIBIT C TOWER AND FOUNDATION DESIGN



May 29th, 2018 Kentucky Public Service Commission 211 Sower Blvd. P.O. Box 615 Frankfort, KY 40602-0615

RE: Site Name – Tucker Hollow Proposed Cell Tower 37 31 40.70 North Latitude, 87 01 15.92 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 Don.Murdock@mastec.com

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



Structural Design Report

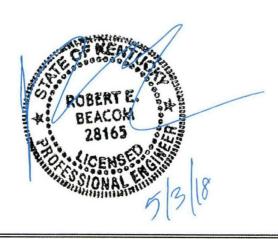
255' S3TL Series HD1 Self-Supporting Tower Site: Tucker Hollow, KY Site Number: KYL003667

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

Job Number: 408063

May 3, 2018

Tower Profile	1-2
Foundation Design Summary (Preliminary) (Option 1)	3
Foundation Design Summary (Preliminary) (Option 2)	4
Maximum Leg Loads	5
Maximum Diagonal Loads	6
Maximum Foundation Loads	7
Calculations	8-23



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Base Reactions

Total Fou	ındation	Individual F	ooting
Shear (kips)	106.16	Shear (kips)	63.61
Axial (kips)	254.95	Compression (kips)	654
Moment (ft-kips)	15582	Uplift (kips)	574
Torsion (ft-kips)	-44.08		

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)
T	L 4 X 3 1/2 X 1/4 (SLV)
J	L 3 1/2 X 3 X 1/4 (SLV)
К	L 2 1/2 X 2 1/2 X 1/4
L.	L 2 1/2 X 2 1/2 X 3/16
М	L2X2X1/8
N	L 4 X 4 X 1/4
0	L 2 X 2 X 3/16
Р	L3 X 3 X 1/4
a	L 3 X 3 X 3/16
R	1 @ 13.333'
S	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 3, with a Crest Height of 75'.
- 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: 98.98%



Sabre Communications Corporation 7101 Southbridge Drive P.O. Box 558 Sicux City, IA 51102-0658 Phone: (712) 258-6590 Fax (712) 279-0814

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Customer: AT&T

Site Name: Tucker Hollow, KY KYL003667 .

Description: 2551 S2T1

Description: 255' S3TL Date: 5/3/2018

By: 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"

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

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Site Name: Tucker Hollow, KY KYL003667

ate: 5/3/2018 By: NM



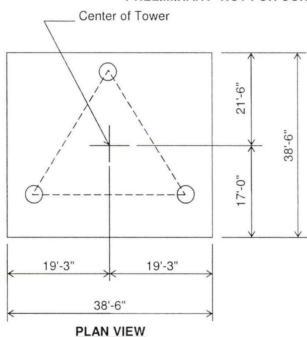
No.: 408063

Date: 5/3/18 By: NM

Customer: AT&T Site: Tucker Hollow, KY KYL003667

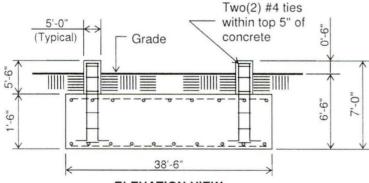
255 ft. Model S3TL Series HD1 Self Supporting Tower At 89 mph Wind with no ice and 30 mph Wind with 0.75 in. Ice per ANSI/TIA-222-G.

PRELIMINARY -NOT FOR CONSTRUCTION-



Notes:

- 1). Concrete shall have a minimum 28-day compressive strength of 4500 PSI, in accordance with ACI 318-11.
- 2). Rebar to conform to ASTM specification A615 Grade 60.
- 3). All rebar to have a minimum of 3" concrete cover.
- 4). All exposed concrete corners to be chamfered 3/4".
- 5.) The foundation design is based on presumptive clay soil as defined in ANSI/TIA-222-G-2005. It is recommended that a soil analysis of the site be performed to verify the soil parameters used in the design.



ELEVATION VIEW

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

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

- 6). The foundation is based on the following factored loads:
 Factored download (kips) = 100.36
 Factored overturn (kip-ft) = 15,581.84
 Factored shear (kips) = 106.16
- 7). 5 ft of soil cover is required over the entire area of the foundation slab.

	Rebar Schedule per Mat and per Pier
Pier	(34) #6 vertical rebar w/ hooks at bottom w/ #4 Rebar ties, two (2) within top 5" of pier then 12" C/C
Mat	(66) #11 horizontal rebar evenly spaced each way top and bottom. (264 total)



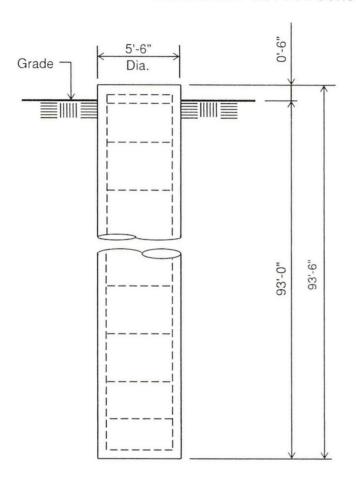
No.: 408063

Date: 5/3/18 By: NM

Customer: AT&T Site: Tucker Hollow, KY KYL003667

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.

PRELIMINARY -NOT FOR CONSTRUCTION-



ELEVATION VIEW

(82.27 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 presumptive clay soil as defined in ANSI/TIA-222-G-2005. It is recommended that a soil analysis of the site be performed to verify the soil parameters used in the design.
- 6). The foundation is based on the following factored loads:
 Factored uplift (kips) = 574.00
 Factored download (kips) = 654.00
 Factored shear (kips) = 64.00

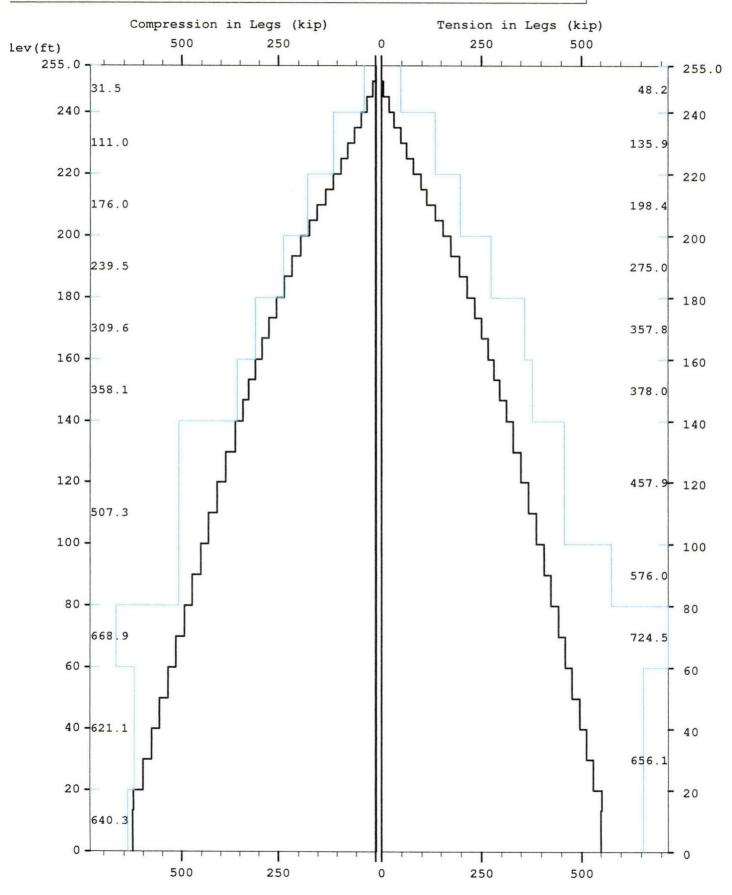
	Rebar Schedule per Pier
Pier	(26) #9 vertical rebar w/#4 ties, two (2) within top 5" of pier then 12" C/C

icensed to: Sabre Towers and Poles

11:26:50

3 may 2018

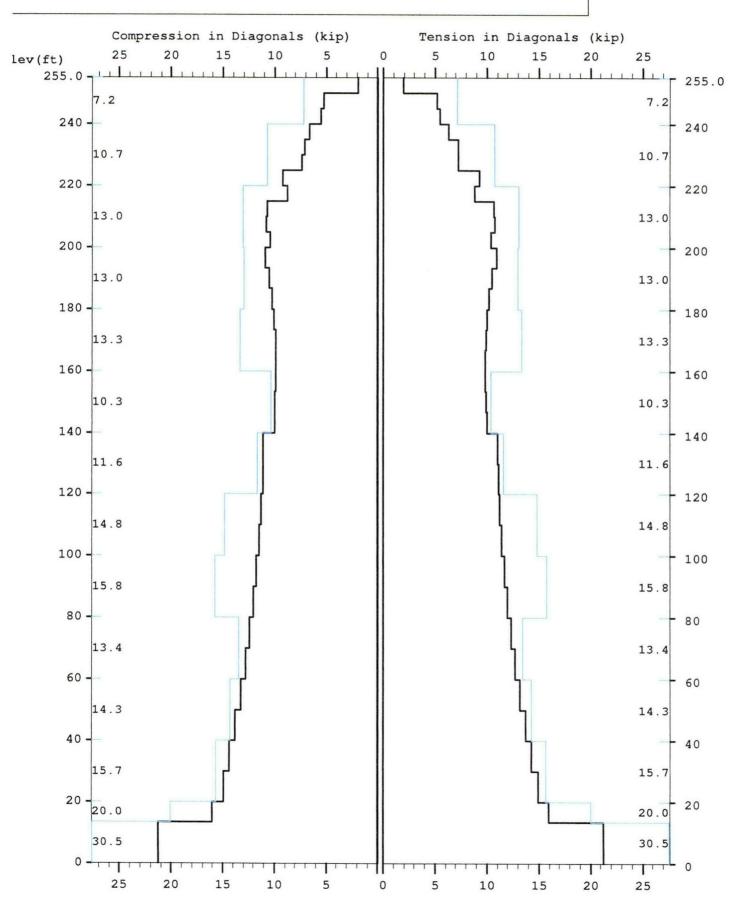




icensed to: Sabre Towers and Poles

11:26:50

Maximum



RAWFORCE Ver 2.2 (c) Guymast Inc. 2006-2009 Phone: (416) 736-7453

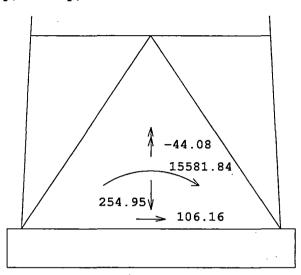
3 may 2018

icensed to: Sabre Towers and Poles

11:26:50

Maximum

TOTAL FOUNDATION LOADS (kip, ft-kip)



INDIVIDUAL FOOTING LOADS (kip)

Latticed Tower Analysis (Unguyed)
Processed under license at:

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

Sabre Towers and Poles

oles on: 3 may 2018 at: 11:26:50

MAST GEOMETRY (ft)

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 80.00 60.00 40.00 20.00 13.33	255.00 250.00 240.00 235.00 220.00 200.00 180.00 140.00 120.00 80.00 60.00 40.00 20.00	5.00 5.00 5.50 7.00 9.00 11.00 13.00 17.00 19.00 21.00 23.00 27.00 27.67 29.00	5.00 5.00 5.00 5.50 7.00 9.00 11.00 13.00 17.00 19.00 21.00 23.00 25.00 27.67	5.00 5.00 5.00 5.00 6.67 6.67 10.00 10.00 10.00 10.00 10.00

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 LE LE DI	240.00 220.00 200.00 180.00 140.00 60.00 240.00 220.00 220.00 140.00 140.00 140.00 140.00 13.33 0.00	255.00 240.00 220.00 200.00 160.00 140.00 80.00 255.00 240.00 220.00 180.00 140.00 120.00 100.00	in.sq 1.075 3.016 4.407 6.111 7.952 8.399 12.763 16.101 14.579 0.484 0.715 0.902 1.188 1.090 1.562 1.812 1.938 2.405	in 0.787 0.787 0.787 0.787 0.787 0.787 0.7887 0.626 0.626 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.	/deg 0.0000117
HO	250.00	255.00	0.484	0.626	29000.	0.0000117
НО	235.00	240.00	0.715	0.626	29000.	0.0000117
НО	0.00	13.33	1.938	0.626	29000.	0.0000117
BR	0.00	13.33	1.438	0.000	29000.	0.0000117

FACTORED MEMBER RESISTANCES

BOTTOM ELEV ft	TOP ELEV ft	COMP kip	EGS TENS kip	DIAC COMP kip	GONALS TENS kip	HORIZ COMP kip	ONTALS TENS kip	INT COMP kip	BRACING TENS kip
250.0 240.0 235.0 220.0 200.0 180.0 160.0	255.0 250.0 240.0 235.0 220.0 200.0 180.0	31.48 31.48 110.98 110.98 175.98 239.46 309.64	48.15 48.15 135.90 135.90 198.45 274.95 357.75	7.16 7.16 10.74 10.74 13.03 13.00 13.34	7.16 7.16 10.74 10.74 13.03 13.00 13.34	5.82 0.00 8.46 0.00 0.00 0.00	5.82 0.00 8.46 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

					408063			
160.0	358.08	378.00	10.34	10.34	0.00	0.00	0.00	0.00
140.0	507.33	457.90	11.62	11.62	0.00	0.00	0.00	0.00
120.0	507.33	457.90	14.82	14.82	0.00	0.00	0.00	0.00
100.0	507.33	576.00	15.77	15.77	0.00	0.00	0.00	0.00
80.0	668.86	724.50	13.43	13.43	0.00	0.00	0.00	0.00
60.0	621.06	656.10	14.31	14.31	0.00	0.00	0.00	0.00
40.0	621.06	656.10	15.70	15.70	0.00	0.00	0.00	0.00
20.0	640.29	656.10	20.02	20.02	0.00	0.00	0.00	0.00
13.3	640.29	656.10	30.51	30.51	15.60	15.60	7.41	7.41
	140.0 120.0 100.0 80.0 60.0 40.0 20.0	140.0 507.33 120.0 507.33 100.0 507.33 80.0 668.86 60.0 621.06 40.0 621.06 20.0 640.29	140.0 507.33 457.90 120.0 507.33 457.90 100.0 507.33 576.00 80.0 668.86 724.50 60.0 621.06 656.10 40.0 621.06 656.10 20.0 640.29 656.10	140.0 507.33 457.90 11.62 120.0 507.33 457.90 14.82 100.0 507.33 457.90 14.82 100.0 507.33 576.00 15.77 80.0 668.86 724.50 13.43 40.0 621.06 656.10 14.31 40.0 621.06 656.10 15.70 20.0 640.29 656.10 20.02	140.0 507.33 457.90 11.62 11.62 120.0 507.33 457.90 14.82 14.82 100.0 507.33 576.00 15.77 15.77 80.0 668.86 724.50 13.43 13.43 60.0 621.06 656.10 14.31 14.31 40.0 621.06 656.10 15.70 15.70 20.0 640.29 656.10 20.02 20.02	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

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

89 mph wind with no ice. Wind Azimuth: 00

MAST LOADING ========

LOAD TYPE	ELEV ft	APPLYLO RADIUS ft	ADAT AZI	LOAD AZI	FORCE HORIZ kip	S 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	0.28 10.02 7.42 7.35 7.27	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 0.00
000000000000000000000000000000000000000	255.0 250.0 240.0 240.0 235.0 235.0 230.0 225.0 220.0 215.0 210.0 210.0 210.0 210.0 160.0 140.0 140.0 80.0 60.0 40.0 20.0 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 64.4 679.5 83.3 92.0 899.2 3533.1 3222.4 9322.2 3533.3 3222.4		0.07 0.13 0.13 0.16 0.17 0.17 0.18 0.21 0.22 0.22 0.223 0.23 0.24 0.23 0.24 0.25 0.26 0.27 0.25 0.30 0.30 0.30 0.35 0.35 0.43 0.43	0.04 0.06 0.06 0.12 0.12 0.13 0.13 0.15 0.20 0.22 0.22 0.22 0.24 0.22 0.24 0.24	0.00 0.06 0.06 0.06 0.06 0.06 0.05 0.05 0.01 0.01 0.02	0.00 0.00 0.10 0.11 0.11 0.11 0.11 0.10 0.06 0.06 0.06 0.04

LOADING CONDITION M

MAST LOADIN	C
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LOAD TYPE	ELEV ft	APPLYLOA RADIUS ft	DAT AZI	LOAD AZI	FORCES HORIZ kip	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	0.28 10.02 7.42 7.35 7.27	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
	255.0 250.0 240.0 240.0 235.0 235.0 235.0 225.0 225.0 220.0 215.0 200.0 160.0 140.0 80.0 60.0 40.0 20.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	180.0 180.0 42.0 42.0 64.4 79.5 83.3 92.0 892.0 892.0 892.0 893.2 3322.4 3222.4 3222.4 3222.4 3222.4 3222.4 3222.4 3222.4 3222.4 3222.4	0.0000000000000000000000000000000000000	0.07 0.07 0.13 0.13 0.16 0.16 0.17 0.18 0.21 0.22 0.22 0.23 0.24 0.23 0.24 0.25 0.26 0.27 0.25 0.26 0.30 0.30 0.30 0.30 0.31 0.35 0.35 0.35 0.35 0.43 0.43	0.03 0.04 0.04 0.09 0.09 0.10 0.11 0.11 0.13 0.15 0.15 0.17 0.20 0.21 0.22 0.31 0.32 0.33 0.33 0.33 0.337	0.00 0.00 0.04 0.04 0.04 0.04 0.04 0.03 0.03 0.04 0.01 0.02	0.00 0.10 0.11 0.11 0.11 0.11 0.10 0.06 0.06 0.06 0.06 0.04

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

MAST LOADING

LOAD TYPE	ELEV ft	APPLYLO RADIUS ft	ADAT AZI	LOAD AZI	FORCI HORIZ kip	ES DOWN kip	MOMI 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	0.05 1.24 1.49 1.47 1.45	0.30 18.23 12.12 12.08 12.04	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
	255.0 250.0 250.0 240.0 240.0 235.0 235.0 230.0 225.0 225.0 220.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	180.0 180.0 42.0 42.0 69.8 69.8 89.5 91.0 91.0 86.8 86.8	0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.01 0.01 0.01 0.01 0.02 0.02 0.02 0.02	0.18 0.25 0.25 0.39 0.39 0.39 0.42 0.42 0.50	0.00 0.00 0.22 0.22 0.20 0.20 0.21 0.21	0.00 0.00 0.01 0.01 0.01 0.01 0.01 0.01

000000000000000000000000000000000000000	220.0 215.0 215.0 210.0 210.0 180.0 160.0 140.0 140.0 80.0 80.0 20.0 20.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	84.3 84.3 345.5 345.5 321.9 321.9 322.4 322.4 322.3 322.4 322.3	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.02 0.02 0.02 0.02 0.02 0.02 0.02 0.03 0.03	408063 0.55 0.55 0.61 0.61 0.63 0.66 0.70 0.72 0.75 0.76 0.79 0.88 0.94 1.03	0.13 0.13 0.05 0.05 0.08 0.08 0.08 0.08 0.08 0.08	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
D D	13.3	0.00	322.4 322.4	0.0	0.04	1.37 1.37	0.11 0.11	0.00

MAXIMUM TENSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	0.85 S	 1.92 G	1.20 A	0.00 A
250.0	4.84 M	5.18 H	0.20 G	0.00 A
245.0	18.42 M	5.46 T	0.26 I	0.00 A
240.0	31.06 M	6.27 M	0.55 K	0.00 A
235.0	47.02 M	7.24 H	0.16 A	0.00 A
230.0	62.37 M	7.24 F 7.24 T	0.12 A	0.00 A
225.0	78.72 M	9.26 B	0.06 Y	0.00 A
220.0	97.70 M		0.22 A	0.00 A
215.0	114.29 M		0.04 a	0.00 A
210.0	135.24 M		0.24 A	0.00 A
205.0	153.24 M 		0.05 A	0.00 A
200.0			0.20 A	0.00 A
193.3	173.96 M 194.39 M	10.91 T 10.49 N	0.07 A	0.00 A
186.7	214.73 M		0.18 A	0.00 A
180.0		10.21 X	0.07 A	0.00 A
173.3	232.56 M	10.02 X	0.12 A	0.00 A
166.7	250.31 M	9.92 X	0.07 A	0.00 A
160.0	266.38 M	9.86 X	0.10 A	0.00 A
153.3	282.42 M	9.87 X	0.09 A	0.00 A
146.7	297.26 M	9.91 P	0.09 A	0.00 A
140.0	312.14 M	10.01 V	0.09 A	0.00 A
130.0	329.32 M	11.04 P	0.11 A	0.00 A
120.0	349.86 M	11.10 P	0.09 A	0.00 A
110.0	369.13 M	11.22 V	0.10 A	0.00 A
100.0	388.26 M	11.42 P	0.06 A	0.00 A
90.0	406.54 M	11.66 P	0.09 A	0.00 A
80.0	424.77 M	11.97 P	0.06 A	0.00 A
	442.42 M	12.33 P		

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70.0	460.00.4	 74 D	0.06 A	0.00 A
60.0	460.09 M 12.	74 P 	0.06 A	0.00 A
50.0	477.48 M 13.	20 V	0.06 A	0.00 A
30.0	495.09 M 13.	 72 Р	0.06 A	0.00 A
40.0	512.59 M 14.	 29 V	0.09 o	0.00 A
30.0			0.08 s	0.00 A
20.0	530.22 M 14.	90 P	0.15 A	0.00 A
	551.21 M 15.	93 V		
13.3	550.04 M 21.	 22 V	1.53 U	0.00 U
0.0			0.00 A	0.00 A

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
255.0	1 02 4	1 00 4	-1.21 G	0.00 A
250.0	-1.02 A	-1.90 A	-0.19 M	0.00 A
245.0	-9.38 G	-5.21 B	-0.18 o	0.00 A
240.0	-23.17 G	-5.55 н	-0.50 Q	0.00 A
235.0	-37.66 G	-6.62 G	-0.10 s	0.00 A
230.0	-55.81 G	-7.12 Т	-0.11 s	0.00 A
225.0	-71.94 G	-7.40 в	-0.02 s	0.00 A
220.0	-91.32 G	-9.28 в	-0.20 s	0.00 A
215.0	-110.97 G	-8.81 B	-0.01 U	0.00 A
210.0	-130.52 G	-10.75 G	-0.21 s	0.00 A
205.0	-152.98 G	-10.78 N	-0.03 s	0.00 A
200.0	-171.57 G	-10.44 н	-0.18 s	0.00 A
193.3	-193.63 G	-10.92 в	-0.05 s	0.00 A
	-215.32 G	-10.53 н		
186.7	-237.02 G	-10.23 L	-0.16 S	0.00 A
180.0	-256.22 G	-10.06 F	-0.05 S	0.00 A
173.3	-275.44 G	-9.94 L	-0.10 s	0.00 A
166.7	-292.98 G	-9.89 F	-0.06 s	0.00 A
160.0	-310.56 G	-9.89 L	-0.09 s	0.00 A
153.3	-326.96 G	-9.95 D	-0.08 s	0.00 A
146.7	-343.47 G	-10.02 D	-0.08 s	0.00 A
140.0	-362.79 G	-11.10 D	-0.08 s	0.00 A
130.0	-386.19 G	-11.14 D	-0.10 s	0.00 A
120.0	-408.31 G	-11.28 D	-0.07 s	0.00 A
110.0	-430.38 G	-11.46 D	-0.08 s	0.00 A
100.0	-451.63 G	-11.40 D 	-0.05 s	0.00 A
90.0	-431.63 G -472.98 G		-0.08 s	0.00 A
80.0	-7/2.30 G	-12.02 D	-0.05 s	0.00 A

	-493.94 G	-12.38 D		
70.		40.70	-0.05 s	0.00 A
60	-515.12 G	-12.78 J	-0.05 s	0.00 A
60.	-536.05 G	-13.25 D	-0.03 3	0.00 A
50.			-0.05 s	0.00 A
	-557.21 G	-13.76 D		
40.			-0.09 I	0.00 A
30.	-578.43 G	-14.32 D	-0.10 A	0.00 A
30.	-599.94 G	-14.94 D	-0.10 A	0.00 A
20.			-0.13 s	0.00 A
	-624.57 G	-16.00 D		
13.		24 27 8	-1.78 C	0.00 C
0.	-626.14 G	-21.27 D	0.00 A	0.00 A
υ.	U		0.00 A	0.00 A

FORCE/RESISTANCE RATIO IN LEGS

MAST	LEG COMPRESSION FORCE/			LEG TENSION FORCE/		
ELEV	MAX COMP	COMP RESIST	RESIST RATIO	MAX TENS	TENS RESIST	RESIST RATIO
255.00	1.02	31.48	0.03	0.85	48.15	0.02
250.00	9.38	31.48	0.30	4.84	48.15	0.10
245.00	23.17	31.48	0.74	18.42	48.15	0.38
240.00	37.66	110.98	0.34	31.06	135.90	0.23
235.00	55.81	110.98	0.50	47.02	135.90	0.35
230.00	71 94	110.98	0.65	62.37	135.90	0.46
225.00	91.32	110.98	0.82	78.72	135.90	0.58
220.00	110.97	175.98	0.63	97.70	198.45	0.49
215.00	130.52	175.98	0.74	114.29	198.45	0.58
210.00	152.98	175.98	0.87	135.24	198.45	0.68
205.00	171.57	175.98	0.97	153.02	198.45	0.77
200.00	193.63	239.46	0.81	173.96	274.95	0.63
193.33	215.32	239.46	0.90	194.39	274.95	0.03
186.67	237.02	239.46	0.99	214.73	274.95 274.95	0.78
180.00	256.22	309.64	0.83	232.56	357.75	0.75
173.33	275.44	309.64	0.89	250.31	357.75 357.75	0.03
166.67	292.98	309.64	0.89	266.38	357.75	0.70
160.00	310.56	358.08	0.93	282.42	378.00	0.74
153.33	326.96	358.08	0.87	297.26	378.00	0.73
146.67	343.47	358.08	0.91	312.14	378.00	0.79
140.00	362.79	507.33	0.96	312.14	457.90	0.83
130.00	386.19	507.33	0.72	349.86	457.90	0.72
120.00	408.31	507.33	0.76	369.13	457.90	
110.00			0.80			0.81
100.00	430.38	507.33	·	388.26	457.90	0.85
90.00	451.63	507.33	0.89	406.54	576.00	0.71
80.00	472.98	507.33	0.93	424.77	576.00	0.74
•	493.94	668.86	0.74	442.42	724.50	0.61

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515.12	668.86	0.77	460.09	724.50	0.64
536.05	621.06	0.86	477.48	656.10	0.73
557.21	621.06	0.90	495.09	656.10	0.75
578.43	621.06	0.93	512.59	656.10	0.78
599.94	621.06	0.97	530.22	656.10	0.81
624.57	640.29	0.98	551.21	656.10	0.84
626.14	640.29	0.98	550.04 	656.10	0.84
	536.05 557.21 578.43 599.94 624.57	515.12 668.86 536.05 621.06 557.21 621.06 578.43 621.06 599.94 621.06 624.57 640.29 626.14 640.29	536.05 621.06 0.86 557.21 621.06 0.90 578.43 621.06 0.93 599.94 621.06 0.97 624.57 640.29 0.98	536.05 621.06 0.86 477.48 557.21 621.06 0.90 495.09 578.43 621.06 0.93 512.59 599.94 621.06 0.97 530.22 624.57 640.29 0.98 551.21	536.05 621.06 0.86 477.48 656.10 557.21 621.06 0.90 495.09 656.10 578.43 621.06 0.93 512.59 656.10 599.94 621.06 0.97 530.22 656.10 624.57 640.29 0.98 551.21 656.10

FORCE/RESISTANCE RATIO IN DIAGONALS

MAST	- DIA	G COMPRE	SSION - FORCE/		DIAG TEN	SION FORCE/
ELEV ft	MAX COMP	COMP RESIST	RESIST RATIO	MAX TENS	TENS RESIST	RESIST RATIO
255.00	1,90	 7.16	0.27	1.92	 7.16	0.27
250.00				- 		
245.00	5.21	7.16	0.73	5.18	7.16	0.72
240.00	5.55	7.16	0.78	5.46	7.16	0.76
235.00	6.62	10.74	0.62	6.27	10.74	0.58
230.00	7.12	10.74	0.66	7.24	10.74	0.67
225.00	7.40	10.74	0.69	7.24	10.74	0.67
220.00	9.28	10.74	0.86	9.26	10.74	0.86
	8.81	13.03	0.68	8.77	13.03	0.67
215.00	10.75	13.03	0.83	10.62	13.03	0.82
210.00	10.78	13.03	0.83	10.79	13.03	0.83
205.00	10.44	13.03	0.80	10.39	13.03	0.80
200.00	10.92	13.00	0.84	10.91	13.00	0.84
193.33	10.53	13.00	0.81	10.49	13.00	0.81
186.67	10.23	13.00	0.79	10.21	13.00	0.79
180.00	10.06	13.34	0.75	10.02	13.34	0.75
173.33	9.94	13.34	0.74	9,92		0.74
166.67	9.89	13.34	0.74	9.86	. 	0.74
160.00	9.89	10.34	0.96	9.87	10.34	0.95
153.33			0.96			
146.67	9.95	10.34		9.91	10.34	0.96
140.00	10.02	10.34	0.97	10.01	10.34	0.97
130.00	11.10	11.62 	0.95	11.04	11.62	0.95
120.00	11.14	11.62	0.96	11.10	11.62	0.96
110.00	11.28	14.82	0.76	11.22	14.82	0.76
100.00	11.46	14.82	0.77	11.42	14.82	0.77
90.00	11.71	15.77	0.74	11.66	15.77	0.74
80.00	12.02	15.77	0.76	11.97	15.77	0.76
70.00	12.38	13.43	0.92	12.33	13.43	0.92
70.00	12.78	13.43	0.95	12.74	13.43	0.95

60.00						408063		
50.00	13.25	14.31				0.92		
40.00	13.76			13.72		0.96		
	14.32	15.70	0.91	14.29	15.70	0.91		
30.00	14.94	15.70	0.95	14.90	15.70	0.95		
20.00	16.00	20.02				0.80		
13.33	21.27	30.51	0.70	21.22	30.51	0.70		
0.00		 -		· -				
MAXIMUM	INDIVID	JAL FOUNDA	TION LO	DADS: (ki	p) ===			
 NOR		LOAD EAST	_	ENTS DOWN	UPLIF		TOTAL SHEAR	
63.	61 G	54.72 K	653	3.88 G	-574.0	4 M	63.61 G	
********	TOTAL	DADC 011 ==		M . Cl!	. 0 1.2	£+)		
		OADS ON FO						
NORTH	-HORIZON EAST	TAL TOTAL @ 0.0	DOWN		ORTH	OVERTURN EAST	ING TOTAL @ 0.0	TORSION
106.2 S	-101.0 D	106.2 S	254.9 c	1558	31.8 G	-14930.7 D	15581.8 G	-44.1 B
Lattice	d Tower		Unguyed				 ymast Inc. 41	
Sabre T	owers an						3 may 2018 a	t: 11:27:25
======			:=G====					<u> </u>
*****	*****	*****	servi	ice Load	Conditi	on ****	*************** ************** *****	****
							wind tunnel t	
LOADING	CONDITI	ON A ==			=========	========	:=====================================	
50 mph w	ind with	no ice. V	vind Az	imuth: 04	>			

MAST LOADING

OMENTS
L TORSNAL p ft-kip
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.03
00000

					408063		
240.0 240.0 235.0 235.0 225.0	0.00 0.00 0.00 0.00 0.00	42.0 64.4 64.4 79.5 83.3 92.0	0.0 0.0 0.0 0.0 0.0	0.04 0.05 0.05 0.05 0.05	0.05 0.10 0.10 0.10 0.11	0.05 0.05 0.05 0.05 0.04	0.03 0.03 0.03 0.03 0.03
220.0	0.00	92.0	0.0	0.06	0.13	0.04	0.02
							0.02 0.02
215.0	0.00	353.1	0.0	0.07	0.16	0.01	0.01
		353.1 322 3					$0.01 \\ 0.01$
200.0	0.00	322.2	0.0	0.07	0.17	0.02	0.01
							0.01
180.0	0.00	322.4	0.0	0.07			$\substack{0.01\\0.01}$
	0.00	321.9	0.0	0.07	0.22	0.02	0.01
140.0	0.00	322.4	0.0				$0.01 \\ 0.01$
140.0	0.00	322.3	0.0	0.07	0.28	0.02	0.01
80.0							$0.01 \\ 0.01$
40.0	0.00	322.3	0.0	0.09	0.34	0.02	0.01
							0.01 0.01
20.0	0.00	322.4	0.0	0.10	0.35	0.02	0.01
			0.0	0.10	0.35	0.02	0.01
0.0	0.00	322.4	0.0	0.12	0.41	0.02	0.01 0.01
	240.0 235.0 225.0 225.0 220.0 220.0 215.0 210.0 210.0 200.0 180.0 160.0 140.0 80.0 40.0 40.0 20.0 20.0	240.0 0.00 235.0 0.00 235.0 0.00 225.0 0.00 225.0 0.00 220.0 0.00 220.0 0.00 215.0 0.00 215.0 0.00 210.0 0.00 210.0 0.00 210.0 0.00 210.0 0.00 180.0 0.00 180.0 0.00 180.0 0.00 140.0 0.00 140.0 0.00 140.0 0.00 80.0 0.00 80.0 0.00 80.0 0.00 80.0 0.00 20.0 0.00 20.0 0.00 20.0 0.00 20.0 0.00 20.0 0.00 20.0 0.00 20.0 0.00 20.0 0.00 20.0 0.00 20.0 0.00 20.0 0.00 213.3 0.00	240.0 0.00 64.4 235.0 0.00 64.4 235.0 0.00 79.5 225.0 0.00 83.3 225.0 0.00 92.0 220.0 0.00 89.2 215.0 0.00 89.2 215.0 0.00 353.1 210.0 0.00 322.3 200.0 0.00 322.2 200.0 0.00 322.2 180.0 0.00 321.9 180.0 0.00 321.9 160.0 0.00 322.4 140.0 0.00 322.4 140.0 0.00 322.3 80.0 0.00 322.3 40.0 0.00 322.3 40.0 0.00 322.3 20.0 0.00 322.3 20.0 0.00 322.4 13.3 0.00 322.4 13.3 0.00 322.4	240.0 0.00 64.4 0.0 235.0 0.00 64.4 0.0 235.0 0.00 79.5 0.0 225.0 0.00 83.3 0.0 225.0 0.00 92.0 0.0 220.0 0.00 89.2 0.0 215.0 0.00 89.2 0.0 215.0 0.00 353.1 0.0 210.0 0.00 353.1 0.0 210.0 0.00 322.3 0.0 200.0 0.00 322.4 0.0 180.0 0.00 321.9 0.0 180.0 0.00 322.4 0.0 160.0 0.00 322.4 0.0 140.0 0.00 322.3 0.0 140.0 0.00 322.3 0.0 80.0 0.00 322.2 0.0 80.0 0.00 322.3 0.0 40.0 0.00 322.3 0.0	240.0 0.00 64.4 0.0 0.05 235.0 0.00 64.4 0.0 0.05 235.0 0.00 64.4 0.0 0.05 225.0 0.00 83.3 0.0 0.05 225.0 0.00 92.0 0.0 0.06 220.0 0.00 92.0 0.0 0.06 220.0 0.00 89.2 0.0 0.06 215.0 0.00 89.2 0.0 0.06 215.0 0.00 353.1 0.0 0.07 210.0 0.00 353.1 0.0 0.07 210.0 0.00 322.3 0.0 0.07 200.0 0.00 322.2 0.0 0.07 200.0 0.00 322.2 0.0 0.07 180.0 0.00 322.4 0.0 0.07 180.0 0.00 322.4 0.0 0.07 160.0 0.00 322.4 0.0	240.0 0.00 64.4 0.0 0.05 0.10 235.0 0.00 64.4 0.0 0.05 0.10 235.0 0.00 79.5 0.0 0.05 0.10 225.0 0.00 83.3 0.0 0.05 0.11 225.0 0.00 92.0 0.0 0.06 0.13 220.0 0.00 89.2 0.0 0.06 0.15 215.0 0.00 89.2 0.0 0.06 0.15 215.0 0.00 89.2 0.0 0.06 0.15 215.0 0.00 353.1 0.0 0.07 0.16 210.0 0.00 353.1 0.0 0.07 0.16 210.0 0.00 322.3 0.0 0.07 0.17 200.0 0.00 322.4 0.0 0.07 0.17 200.0 0.00 322.4 0.0 0.07 0.21 180.0 0.00 322.4	240.0 0.00 42.0 0.0 0.04 0.05 0.05 240.0 0.00 64.4 0.0 0.05 0.10 0.05 235.0 0.00 64.4 0.0 0.05 0.10 0.05 235.0 0.00 79.5 0.0 0.05 0.11 0.04 225.0 0.00 83.3 0.0 0.05 0.11 0.04 225.0 0.00 92.0 0.0 0.06 0.13 0.04 220.0 0.00 92.0 0.0 0.06 0.13 0.04 220.0 0.00 89.2 0.0 0.06 0.15 0.04 215.0 0.00 89.2 0.0 0.06 0.15 0.04 215.0 0.00 89.2 0.0 0.06 0.15 0.04 215.0 0.00 89.2 0.0 0.06 0.15 0.04 215.0 0.00 353.1 0.0 0.07 0.16 0.01 210.0 0.00 352.3 0.0 0.07 0.17<

MAYTAMIA MACE DE ACTUALITÉ.

MAXIMUM MAST DISPLACEMENTS:

-----DEFLECTIONS (ft)-------TILTS (DEG)---TWIST **EAST** DOWN **NORTH** ÉAST DEG 255.0 250.0 0.015 G 0.015 G 0.014 G 1.036 G -0.996 D 0.525 G 0.526 G 0.520 G 0.501 G 0.492 G 0.478 G 0.443 G 0.421 G 0.374 G 0.374 G 0.333 G 0.311 G 0.294 G 0.275 G 0.275 G 0.226 G 0.193 G -0.506 D -0.507 D -0.482 D -0.473 D -0.460 D -0.412 D -0.378 D -0.378 D -0.379 D -0.380 D -0.299 D -0.283 D -0.266 D -0.234 D -0.218 D -0.218 D -0.029 F -0.029 F -0.952 D -0.907 D 0.990 G 0.943 245.0 -0.029 G 0.014 G 0.014 G 0.013 G 0.013 G 0.012 G -0.028 F -0.027 F -0.025 F -0.024 F 240.0 -0.863 D G -0.821 D -0.779 D -0.739 D 235.0 0.854 G 230.0 0.810 G 0.769 G 0.728 G 225.0 0.012 G 0.012 G 0.011 G 220.0 -0.700 D 0.023 L -0.663 D -0.626 D 215.0 0.689 G 0.022 L 0.651 G 0.615 G 210.0 0.021 -0.592 D -0.558 D 205.0 0.011 G 0.020 0.010 G 200.0 0.581 G 0.019 0.010 G 0.010 G 193.3 186.7 0.538 G 0.496 G -0.517 D -0.477 D 0.018 0.017 0.009 G -0.440 D -0.405 D 180.0 0.458 G 0.017 173.3 166.7 0.422 0.387 0.355 G 0.009 G 0.008 G 0.008 G 0.007 G 0.007 G 0.007 G 0.016 -0.405 D -0.372 D -0.341 D -0.311 D -0.284 D -0.258 D -0.223 D Ğ 0.015 H 0.355 G 0.324 G 0.296 G 0.269 G 0.232 G 160.0 0.014 н 153.3 0.013 H 146.7 0.012 H 140.0 0.012 H 130.0 -0.186 D 0.011 H -0.223 D -0.191 D -0.162 D -0.135 D -0.111 D 0.199 G 0.168 G 120.0 -0.170 D -0.154 D 0.010 H 0.006 G 0.006 G 0.005 G 0.005 G 0.004 G 0.003 G 0.003 G 0.002 F 0.002 F 110.0 0.160 G 0.009 H 0.141 G 0.116 G 100.0 0.144 G -0.138 D 0.008 H 90.0 0.127 G 0.111 G G -0.122 D 0.007 80.0 -0.090 D -0.071 D 0.094 G -0.106 D 0.006 н 0.074 0.098 G 0.085 G G 0.006 H -0.094 D 0.056 G 0.041 G -0.054 D -0.039 D 60.0 -0.082 D 0.005 H 50.0 0.071 G 0.057 G -0.068 D 0.004 H -0.027 D -0.015 D 0.028 G 40.0 -0.055 D 0.003 H 30.0 0.016 0.016 G 0.006 G 0.042 G -0.041 D 0.002 H -0.006 D -0.002 D 0.001 F 0.001 F 0.000 A 20.0 -0.027 D 0.028 G 0.001 H 13.3 0.003 G 0.019 -0.018 D G 0.001 H 0.000 0.000 A 0.000 A 0.000 A 0.000 A

MAXIMUM TENSION IN MAST MEMBERS (kip)

ELEV

LEGS

DIAG

HORIZ

BRACE

				408063
255.0	0.19 G	- 0.56 G	0.34 A	0.00 A
250.0	0.00 A	1.48 H	0.06 G	0.00 A
245.0	3.68 A	1.54 B	0.10 I	0.00 A
240.0		-	0.17 K	0.00 A
235.0	6.71 A	1.69 A	0.06 A	0.00 A
230.0	10.56 A	2.10 H	Ò.04 A	0.00 A
225.0	14.73 A	2.01 B	0.03 A	0.00 A
220.0	18.40 A	2.63 H	0.07 A	0.00 A
215.0		. 2.49 H	0.01 c	0.00 A
210.0	27.39 A	2.98 н	0.08 A	0.00 A
205.0	32.89 A	3. 07 н	0.02 A	0.00 A
200.0	37.76 A	2.94 в	0.07 A	0.00 A
193.3	43.43 A	3.10 H	0.02 A	0.00 A
186.7	48.95 A	2.97 в	0.02 A	
180.0	54.42 A	2.91 F		0.00 A
	59.18 A	2.85 L	0.02 A	0.00 A
173.3	63.89 A	2.83 F	0.04 A	0.00 A
166.7	68.14 A	2.81 L	0.02 A	0.00 A
160.0	72.37 A	2.82 F	0.03 A	0.00 A
153.3	76.26 A	2.83 D	0.03 A	0.00 A
146.7	80.15 A	2.87 J	0.03 A	0.00 A
140.0	84.58 A	3.16 D	0.03 A	0.00 A
130.0	89.78 A	3.19 D	0.04 A	0.00 A
120.0	94.64 A	3.23 D	0.03 A	0.00 A
110.0	99.43 A	3.29 D	0.03 A	0.00 A
100.0	103.98 A	3.36 D	0.02 A	0.00 A
90.0	108.51 A	3.46 D	0.03 A	0.00 A
80.0	112.82 A	3.55 D	0.02 A	0.00 A
70.0			0.02 A	0.00 A
60.0	117.08 A	3.67 D	0.02 A	0.00 A
50.0	121.27 A	3.80 D	0.02 A	0.00 A
40.0	125.50 A	3.94 D	0.02 c	0.00 A
30.0	129.66 A	4.10 D	0.02 G	0.00 A
20.0	133.81 A	4.28 D	0.05 A	0.00 A
13.3	139.10 A	4.55 D	0.40 I	0.00 н
0.0	137.80 A	6.08 D	0.00 A	0.00 A

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

255.0			-0.35 G	0.00 A
250.0	-0.35 A	-0.54 A	-0.05 A	0.00 A
245.0	-4.08 G	-1.50 в	-0.03 C	0.00 A
240.0	-8.06 G	-1.62 н 	-0.12 E	0.00 A
235.0	-12.73 G	-1.98 G	-0.01 G	0.00 A
230.0	-18.55 G	-1.99 в	-0.03 G	0.00 A
225.0	-23.33 G	-2.16 н	0.00 A	0.00 A
220.0	-29.74 G	-2.65 в	-0.05 G	0.00 A
215.0	-35.47 G	-2.52 в		
•	-41.89 G	-3.08 G	0.00 A	0.00 A
210.0	-48.66 G	-3.06 н	-0.05 G	0.00 A
205.0	-54.12 G	-2.99 н	0.00 G	0.00 A
200.0	-60.64 G	-3.11 в	-0.04 G	0.00 A
193.3	-67.10 G	-3.02 H	-0.01 G	0.00 A
186.7	-73.58 G	-2.93 L	-0.04 G	0.00 A
180.0	-79.36 G	-2.89 F	-0.01 G	0.00 A
173.3	-85.18 G	-2.85 L	-0.02 G	0.00 A
166.7	-90.51 G	-2.85 F	-0.01 G	0.00 A
160.0	-95.88 G		-0.02 G	0.00 A
153.3		-2.84 L	-0.02 G	0.00 A
146.7	-100,91 G	-2.87 J	-0.02 G	0.00 A
140.0	-105.98 G	-2.89 D	-0.02 G	0.00 A
130.0	-111.99 G	-3.21 D	-0.02 G	0.00 A
120.0	-119.36 G	-3.23 D	-0.02 G	0.00 A
110.0	-126.37 G	-3.28 D	-0.02 G	0.00 A
100.0	-133.39 G	-3.33 D	-0.01 G	0.00 A
90.0	-140.20 G	-3.41 D	-0.02 G	0.00 A
80.0	-147.04 G	-3.50 D	-0.01 G	0.00 A
70.0	-153.81 G	-3.60 D	-0.01 G	0.00 A
60.0	-160.69 G	-3.72 D	-0.01 G	0.00 A
50.0	-167.49 G	-3.85 D	-0.01 G	0.00 A
	-174.35 G	-3.98 D		
40.0	-181.24 G	-4.14 D	-0.03 I	0.00 A
30.0	-188.25 G	-4.31 D	-0.03 A	0.00 A
20.0	-195.97 G	-4.62 D	-0.03 G	0.00 A
13.3	-197.28 G	-6.12 D	-0.53 C	0.00 C
0.0			0.00 A	0.00 A

MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)

	TOTAL			
NORTH	EAST	DOWN	UPLIFT	SHEAR
19.28 G	16.59 K	205.83 G	-144.02 A	19.28 G

408063

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

-----HORIZONTAL---- DOWN NORTH EAST TOTAL @ 0.0 TOTAL @ 0.0

30.4 -29.0 30.4 83.6 F G D G H

MAT FOUNDATION DESIGN BY SABRE TOWERS & POLES

Tower Description 255' S3TL Series HD1 Customer AT&T Project Number 408063 Date 5/3/2018 Engineer NM

_				
Overa	11	Lo	ac	is:

Overall Loads:			
Factored Moment (ft-kips)	15581.84	Anchor Bolt Count (per leg)	6
Factored Axial (kips)	254.95		
Factored Shear (kips)	106.16		
Individual Leg Loads:		Tower eccentric from mat (ft):	= 2.25
Factored Uplift (kips)	574.00		
Factored Download (kips)	654.00		
Factored Shear (kips)	64.00		
Width of Tower (ft)	29	Allowable Bearing Pressure (ksf)	2.50
Ultimate Bearing Pressure	5.00	Safety Factor	2.00
Bearing Φs	0.75		
Bearing Design Strength (ksf)	3.75	Max. Factored Net Bearing Pressure (ksf)	3.35
Water Table Below Grade (ft)	999		
Width of Mat (ft)	38.5	Minimum Mat Width (ft)	36.00
Thickness of Mat (ft)	1.5		
Depth to Bottom of Slab (ft)	6.5		
Bolt Circle Diameter (in)	18		
Top of Concrete to Top			
of Bottom Threads (in)	65.5		
Diameter of Pier (ft)	5	Minimum Pier Diameter (ft)	2.83
Ht. of Pier Above Ground (ft)	0.5	Equivalent Square b (ft)	4.43
Ht. of Pier Below Ground (ft)	5		
Quantity of Bars in Mat	66		
Bar Diameter in Mat (in)	1.41		
Area of Bars in Mat (in ²)	103.06		
Spacing of Bars in Mat (in)	6.99	Recommended Spacing (in)	6 to 12
Quantity of Bars Pier	34		,
Bar Diameter in Pier (in)	0.75		
Tie Bar Diameter in Pier (in)	0.5		
Spacing of Ties (in)	12		
Area of Bars in Pier (in ²)	15.02	Minimum Pier A _s (in ²)	14.14
Spacing of Bars in Pier (in)	4.82		
f'c (ksi)	4.5		
fy (ksi)	60		
Unit Wt. of Soil (kcf)	0.11		
Unit Wt. of Concrete (kcf)	0.15		
Volume of Concrete (yd3)	94.35		
() =)	04.00		

MAT FOUNDATION DESIGN BY SABRE TOWERS & POLES (CONTINUED)

Two-Way Shear:

Average d (in)	13.59		
φν _c (ksi)	0.228	v _u (ksi)	0.216
$\phi V_c = \phi (2 + 4/\beta_c) f'_c^{1/2}$	0.342		
$\phi v_c = \phi(\alpha_s d/b_o + 2) f'_c^{1/2}$	0.249		
$\phi V_c = \phi 4 f'_c^{1/2}$	0.228		
Shear perimeter, bo (in)	229.59		
$eta_{ extsf{c}}$	1		
Stability:			

Overturning Design Strength (ft-k) 21181.6

One-Way Shear:			
ϕV_c (kips)	716.0	V _u (kips)	677.0
Pier Design:			
Design Tensile Strength (kips)	811.1	Tu (kips)	574.0
ϕV_n (kips)	195.1	V _u (kips)	64.0
$\phi V_c = \phi 2(1 + N_u/(500A_g))f'_c^{1/2}b_w d$	195.1		
V _s (kips)	0.0	*** $V_s max = 4 f'_c^{1/2} b_w d (kips)$	772.8
Maximum Spacing (in)	7.81	(Only if Shear Ties are Required)	
Actual Hook Development (in)	12.18	Req'd Hook Development I _{dh} (in)	8.84
		*** Ref. ACI 11.5.5.8.11.5.6.3	

Anchor Bolt Pull-Out:

$\phi P_c = \phi \lambda (2/3) f'_c^{1/2} (2.8 A_{SLOPE} + 4 A_{FLAT})$	426.0	P _u (kips)	574.0
Pier Rebar Development Length (in)	45.38	Required Length of Development (in)	18.99
Flexure in Slab:			

φM _n (ft-kips)	5491.0
a (in)	3.50
Steel Ratio	0.01641
β_1	0.825
Maximum Steel Ratio (ρ_t)	0.0197
Minimum Steel Ratio	0.0018
Rebar Development in Pad (in)	127.13

Required Development in Pad (in)	

M_u (ft-kips)

Factored Overturning Moment (ft-k)

16325.0

5475.0

20.79

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

DRILLED STRAIGHT PIER DESIGN BY SABRE TOWERS & POLES

Tower Description 255' S3TL Series HD1
Customer Name AT&T
Job Number 408063
Date 5/3/2018
Engineer NM

Factored Uplift (kips)	574	Anchor Bolt Count (per leg)	6
Factored Download (kips)	654	(1	
Factored Shear (kips)	64		
Ultimate Bearing Pressure	9		
Bearing Φs	0.75		
Bearing Design Strength (ksf)	6.75		
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)	5.5	Minimum Pier Diameter (ft)	2.83
Ht. Above Ground (ft)	0.5		
Pier Length Below Ground (ft)	93		
Quantity of Bars	26		
Bar Diameter (in)	1.128		
Tie Bar Diameter (in)	0.5		
Spacing of Ties (in)	12		
Area of Bars (in ²)	25.98	Minimum Area of Steel (in ²)	17.11
Spacing of Bars (in)	6.99		
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)	82.27		
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)
100	0.50	0.50	0.11
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0
0	0.00	0.00	0

Download:

Factored Net Weight of Concrete (kips)	
Bearing Design Strength (kips)	
Skin Friction Design Strength (kips)	
Download Design Strength (kips)	

108.2	
160.4	
 602.6	
763.0	

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Hact	ored	Nat	Down	nad	(kins)

7	6	2	2
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DRILLED STRAIGHT PIER DESIGN BY SABRE TOWERS & POLES (CONTINUED)

Uplift:

Nominal Skin Friction (kips)	803.5		
Wc, Weight of Concrete (kips)	333.2		
W _R , Soil Resistance (kips)	35630.6		
ФsWr+0.9Wc (kips)	27022.8		
Uplift Design Strength (kips)	902.5	Factored Uplift (kips)	574.0
Pier Design:			
Design Tensile Strength (kips)	1403.1	Tu (kips)	574.0
ϕV_n (kips)	264.1	V _u (kips)	64.0
$\phi V_c = \phi 2(1 + N_u/(500A_g))f'_c^{1/2}b_w d \text{ (kips)}$	264.1		
V _s (kips)	0.0	*** $V_s max = 4 f'_c^{1/2} b_w d (kips)$	935.1
Maximum Spacing (in)	7.10	(Only if Shear Ties are Required)	
		*** Ref. ACI 11.5.5 & 11.5.6.3	

Anchor Bolt Pull-Out:

$\phi P_c = \phi \lambda (2/3) f'_c^{1/2} (2.8 A_{SLOPE} + 4 A_{FLAT})$	515.4	P _u (kips)	574.0
Rebar Development Length (in)	42.56	Required Length of Development (in)	20.64

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

COMPETING UTILITIES,	EXHIBIT D CORPORATIO	ONS, OR PERS	ONS LIST

KY Public Service Commission

Master Utility Search

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

Utility ID Utility Name Address/City/

Address/City/Contact Utility Type

Status

▼ Active ▼

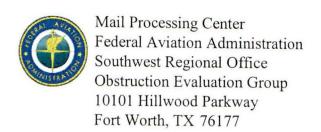
	Utility ID	Utility Name	Utility Type	Class	Clay	State
View	4107900	365 Wireless, LLC	Cellular	D	Atlanta	GA
View	4109300	Access Point, Inc.	Cellular	D	Cary	NC
View	4108300	Air Voice Wireless, LLC	Cellular	Α	Bloomfield Hill	MI
View	4110650	Alliant Technologies of KY, L.L.C.	Cellular	D	Morristown	NJ
View	44451184	Alltel Communications, LLC	Cellular	Α	Basking Ridge	NJ
View	4110850	AltaWorx, LLC	Cellular	D	Fairhope	AL
View	4107800	American Broadband and Telecommunications Company	Cellular	D	Toledo	ОН
View	4108650	AmeriMex Communications Corp.	Cellular	D	Dunedin	FL
View	4105100	AmeriVision Communications, Inc. d/b/a Affinity 4	Cellular	D	Virginia Beach	VA
View	4110700	Andrew David Balholm dba Norcell	Cellular	D	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	TX
View	4111050	BlueBird Communications, LLC	Cellular	С	New York	NY
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
View	4100700	Cellco Partnership dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
View	4106600	Cintex Wireless, LLC	Cellular	D	Rockville	MD
View	4111000	ComApp Technologies LLC	Cellular	С	Melrose	MA
View	4111150	Comcast OTR1, LLC	Cellular	D	Philadelphia	PA
View	4101900	Consumer Cellular, Incorporated	Cellular	A	Portland	OR
View	4106400	Credo Mobile, Inc.	Cellular	В	San Francisco	CA
View	4108850	Cricket Wireless, LLC	Cellular	D	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	4111200	Dynalink Communications, Inc.	Cellular	С	Brooklyn	NY
View	4101000	East Kentucky Network, LLC dba Appalachian Wireless	Cellular	A	Ivel	KY
View	4002300	Easy Telephone Service Company dba Easy Wireless	Cellular	D	Ocala	FL
View	4109500	Enhanced Communications Group, LLC	Cellular	D	Bartlesville	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	A	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	UЭ
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	נא
View	10680	Kentucky RSA #3 Cellular General	Cellular	Α	Elizabethtown	KY
View	10681	Kentucky RSA #4 Cellular General	Cellular	Α	Elizabethtown	KY
View	4109750	Konatel, Inc. dba telecom.mobi	Cellular	D	Johnstown	PA
View	4111250	Liberty Mobile Wireless, LLC	Cellular	С	Sunny Isles Beach	
View	4110900	Lunar Labs, Inc.	Cellular	D	Detroit	MI
View	4107300	Lycamobile USA, Inc.	Cellular	D	Newark	NJ

View	4108800	MetroPCS Michigan, LLC	Cellular	Α	Bellevue	WA
View			Cellular	D	Mesa	ΑZ
View		New Cingular Wireless PCS, LLC dba AT&T Mobility, PCS	Cellular	Α	San Antonio	TX
View	10900	New Par dba Verizon Wireless	Cellular	Δ :	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	D	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	Cincinnati	ОН
View	4202100	Powertel/Memphis, Inc. dba T- Mobile	Cellular	Α	Bellevue	WA
View	4107700	Puretalk Holdings, LLC	Cellular	Α	Covington	GA
View	4106700	Q Link Wireless, LLC	Cellular	В	Dania	FL
View	4108700	Ready Wireless, LLC	Cellular	В	Hiawatha	ΙA
View	4110500	Republic Wireless, Inc.	Cellular	D	Raleigh	NC
View	4111100	ROK Mobile, Inc.	Cellular	С	Culver City	CA
View	4106200	Rural Cellular Corporation	Cellular		Basking Ridge	ΝJ
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	4106300	SI Wireless, LLC	Cellular	Α	Carbondale	IL
View	4110150	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	TX
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	Α	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	С	Kansas City	МО
View	4109950	The People's Operator USA, LLC	Cellular	D	New York	NY

View	4109000	Ting, Inc.	Cellular	Α	Toronto	ON
View	4110400	Torch Wireless Corp.	Cellular	D	Jacksonville	FL
View	4103300	Touchtone Communications, Inc.	Cellular	D	Whippany	נא
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	D	Lone Tree	CO
View	4106500	WiMacTel, Inc.	Cellular	D	Palo Alto	CA
View	4110950	Wing Tel Inc.	Cellular	D	New York	NY
View	4109900	Wireless Telecom Cooperative, Inc. dba theWirelessFreeway	Cellular	D	Louisville	KY

EXHIBIT E FAA



Issued Date: 10/27/2017

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 Tucker Hollow - 13800751

Location:

Hartford, KY

Latitude:

37-31-40.70N NAD 83

Longitude:

87-01-15.92W

Heights:

489 feet site elevation (SE)

270 feet above ground level (AGL) 759 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

This determination expires on 04/27/2019 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-20069-OE.

Signature Control No: 345498660-347656913

(DNE)

Jay Garver Specialist

Attachment(s) Frequency Data Map(s)

cc: FCC

Frequency Data for ASN 2017-ASO-20069-OE

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

Verified Map for ASN 2017-ASO-20069-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

December 28, 2017

APPROVAL OF APPLICATION

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

SUBJECT: AS-092-JQD-2017-125

STRUCTURE:

Antenna Tower

LOCATION:

Hartford, KY

COORDINATES: 37° 31' 40.70" N / 87° 1' 15.92" W

HEIGHT:

270' AGL/759' AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 270'AGL/759'AMSL Atenna Tower near Hartford, KY 37° 31' 40.70" N / 87° 1' 15.92" W.

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

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

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

John Houlihan Administrator





KENTUCKY AIRPORT ZONING COMMISSION

MATTHEW BEVIN Governor

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

CONSTRUCTION/ALTERATION STATUS REPORT

December 28, 2017

AERONAUTICIAL STUDY NUMBER: AS-092-JQD-2017-125

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

2.

This concerns the permit which was issued to you by the Kentucky Airport Zoning Commission on December 28, 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:	Hartford, KY
COORDINATES:	37° 31' 40.70" N / 87° 1' 15.92" W
HEIGHT:	270' AGL /759'AMSL
CONSTRUCTION/	ALTERATION STATUS
1 The project ()	is abandoned () is not abandoned

Construction status is as follows:		
Structure reached its greatest height of		
ft. AMSL on	(date).	
Date construction was completed.		··
Type of obstruction marking/painting.		
Type of obstruction lighting.		
As built coordinates.		-,-
Miscellaneous Information.		
DATE		
SIGNATURE/TITLE		







KENTUCKY TRANSPORTATION CABINET

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

KENTUCKY AIRPORT ZONING COMMISSION

APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE

APPLICANT (name)	PHONE	FAX	KY AERONAUTICAL	
John Monday	855-699-7073	972-907-1131	15-092-JQU-	2017-125
ADDRESS (street)	CITY		STATE	ZIP
3300 E. Renner Road, B3132	Richardson		TX	75082
APPLICANT'S REPRESENTATIVE (name)	PHONE	FAX		
Roy Johnson	502-445-2475	502-222-4266		
ADDRESS (street)	CITY		STATE	ZIP
3605 Mattingly Road	Buckner		KY	40010
APPLICATION FOR X New Construct			WORK SCHEDULE	
IRATION Permanent Temporary (months days) Start End TBD				
TYPE Crane Building	MARKING/PAINTING/LIGHTING PREFERRED			
X Antenna Tower	Red Lights & Paint White- medium intensity White- high intensit			
Power Line Water Tank	Dual- red & medium intensity white Dual- red & high intensity white			
Landfill Other	Other			
LATITUDE	LONGITUDE		DATUM X NAD	83 NAD27
37° 31′ 40.70″	87 ⁰ 01' 15.92 "		Other	
NEAREST KENTUCKY PUBLIC USE OR MILITARY AIRPORT				
City Hartford County Ohio	JQD Ohio County			
SITE ELEVATION (AMSL, feet)	TOTAL STRUCTURE HEIGHT (AGL, feet)		CURRENT (FAA aeronautical study #)	
489	270		2017-ASO-20069-OE	
OVERALL HEIGHT (site elevation plus total structure height, feet)		PREVIOUS (FAA aeronautical study #)		
759				
DISTANCE (from nearest Kentucky public use or Military airport to structure)			PREVIOUS (KY aeronautical study #)	
9.17 NM				
DIRECTION (from nearest Kentucky public use or Military airport to structure)				
Northwest				
DESCRIPTION OF LOCATION (Attach USGS 7.5 minute quadrangle map or an airport layout drawing with the precise site				
marked and any certified survey.)				
1A and Quad attached				
DESCRIPTION OF PROPOSAL				
AT&T proposes to construct a 255' cell tower with a 15' lightning rod for an overall height of 270'.				
FAA Form 7460-1 (Has the "Notice of Construction or Alteration" been filed with the Federal Aviation Administration?)				
No X Yes, when? 10/5/17				
CERTIFICATION (I hereby certify that all the above entries, made by me, are true, complete, and correct to the best of				
my knowledge and belief.)				
PENALITIES (Persons failing to comply with KRS 183.861 to 183.990 and 602 KAR 050 are liable for fines and/or				
imprisonment as set forth in KRS 183.990(3). Noncompliance with FAA regulations may result in further penalties.)				
NAME TITLE	SIGNATURE	Lana white	DATE 10/27/17	
Michelle Ward Sr. Real Estate N	gr.	the letter	10/2//1/	
Chairperson, KAZC				
COMMISSION ACTION	X Administra			
Approved SIGNATURE	_		DATE /2/	18-17
Disapproved	N		DATE /	28-17
☐ nigabhingen	1			

EXHIBIT G DIRECTIONS TO WCF SITE

Driving Directions to Proposed Tower Site

- Beginning at the offices of the Ohio County Judge Executive located at 130 E. Washington Street, Hartford, KY, head southwest towards Main Street. Travel approximately 354 feet.
- 2. Turn right onto US-231 N / S. Main Street. Travel approximately 1.7 miles.
- 3. Turn left onto KY-136 W and travel approximately 6.0 miles.
- 4. Turn right onto Heflin Road and travel approximately 1.6 miles.
- 5. Turn left onto Tucker Hollow and travel approximately 0.1 miles.
- 6. The site is on the right, north of Tucker Hollow. The site coordinates are:
 - a. North 37 deg 31 min 40.70 sec
 - b. West 87 deg 01 min 15.92 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 H COPY OF REAL ESTATE AGREEMENT

OPTION AND LEASE AGREEMENT

THIS OPTION AND LEASE AGREEMENT ("Agreement"), dated as of the latter of the signature dates below (the "Effective Date"), is entered into by Ronda Humphrey and Patty Humphrey, a husband and wife, having a mailing address of 279 Tucker Hollow Lane, Hartford, KY 42347 ("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

Landford 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 Tucker Hollow Lane, Hartford, KY 42347, in the County of Ohio, 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 (100°x100°) 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.
- PERMITTED USE. Upon commencement of the Initial Term. Tenant may use the Premises for the 2. transmission and reception of communications signals and the installation, construction, maintenance, operation, repair, replacement and ungrade 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. Tenant acknowledges that it will not interfere with any and all buried electric and water lines that service Lesson's Property when accessing the site. Landlord agrees to mark the location of

any buried electric and water lines along Tenant's access road lines prior to Tenant's construction. Tenant agrees to use its best efforts to avoid damage to the lines and to avoid disruption of the electric and water supply. In the event of any damage or disruption of service. Tenant agrees to repair or cause to be repaired the damaged line or lines as promptly as reasonably possible, in accordance with applicable law and safety codes.

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 (5th) anniversary of the Ferm Commencement Date.
- (b) This Agreement will automatically renew for four (4) additional five (5) year term(s) teach 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.
- Unless (i) Landlord or Tenant notifies the other in writing of its intention to terminate this Agreement at least six (b) 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 (5th) 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 one (1) of each Extension Term, the monthly Rent will increase by over the Rent paid during the previous five (5) year term.
- 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 servive 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 ail 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 hability, 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 Fenant 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 Fenant, upon written notice to Landford, 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.

- 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 I andlord 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) I andford 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.

- 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.
- 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 Lenant will be and remain Lenant's personal property and, at Lenant's option, may be removed by Lenant at any time during or after the Term. Landlord covenants and agrees that no part of the Communication Facility constructed, erected or placed on the Premises by Lenant 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 Lerm. 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, Lenant 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 Landford 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 most operate (wenty-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.
- I and/ord 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 appurenances thereto, as such companies may from time to time require in order to provide such services to the Premises. Upon Tenant's of 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. <u>ASSIGNMENT/SUBLEASE</u>. 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 # KYL03667; Cell Site Name: Tucker Hollow (KY)

Fixed Asset No.: 13800751 575 Morosgo Drive NE Atlanta, GA 30324

With a copy to:

New Cingular Wireless PCS, LLC

Attn.: Legal Department

Re: Cell Site #: KYL03667; Cell Site Name: Tucker Hollow (KY)

Fixed Asset No.: 13800751

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:

Ronda & Party Humphrey 279 Tucker Hollow Lane Hartford, KY 42347

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, such consent not to be unreasonably withheld, conditioned or delayed.

- (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 Fenant. In the event that Tenant's tax addresses changes by notice to 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 # KYL03667; Cell Site Name: Tucker Hollow (KY)

Fixed Asset No: 13800751 575 Morosgo Drive NE Atlanta, GA 30324

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

22. SALE OF PROPERTY

- (a) Landlord shall not be prohibited from the selling, leasing or use of any of the Property or the Surrounding Property except as provided below.
- (b) If Landlord, at any time during the Term of this Agreement, decides to rezone or sell, subdivide or otherwise transfer all or any part of the Premises, or all or any part of the Property or Surrounding Property, to a purchaser other than Tenant, Landlord shall promptly notify Tenant in writing, and such rezoning, sale, subdivision or transfer shall be subject to this Agreement and Tenant's rights hereunder. In the event of a change in ownership, transfer or sale of the Property, within ten (10) days of such transfer. Landlord or its successor shall send the documents listed below in this subsection (b) to Tenant. Until Tenant receives all such documents, Tenant shall not be responsible for any failure to make payments under this Agreement and reserves the right to hold payments due under this Agreement.
 - i. Old deed to Property
 - ii. New deed to Property
 - iii. Bill of Sale or Transfer
 - iv. Copy of current Tax Bill
 - v. New IRS Form W-9
 - vi. Completed and Signed AT&T Payment Direction Form
 - vii. Full contact information for new Landlord including phone number(s)
- (c) Landlord agrees not to sell, lease or use any areas of the Property or Surrounding Property for the installation, operation or maintenance of other wireless communications facilities if such installation, operation or maintenance would interfere with Tenant's Permitted Use or communications equipment as determined by radio propagation tests performed by Tenant in its sole discretion. Landlord or Landlord's prospective purchaser shall reimburse Tenant for any costs and expenses of such testing. If the radio frequency propagation tests demonstrate levels of interference unacceptable to Tenant, Landlord shall be prohibited from selling, leasing or using any areas of the Property or the Surrounding Property for purposes of any installation, operation or maintenance of any other wireless communications facility or equipment.

- (d) The provisions of this Section shall in no way limit or impair the obligations of Landlord under this Agreement, including interference and access obligations.
- 23. RENTAL STREAM OFFER. If at any time after the date of this Agreement, Landlord receives a bona fide written offer from a third party seeking an assignment or transfer of Rent payments associated with this Agreement ("Rental Stream Offer"), I andlord shall immediately furnish Tenant with a copy of the Rental Stream Offer. Tenant shall have the right within twenty (20) days after it receives such copy to match the Rental Stream Offer and agree in writing to match the terms of the Rental Stream Offer. Such writing shall be in the form of a contract substantially similar to the Rental Stream Offer. If Tenant chooses not to exercise this right or fails to provide written notice to Landlord within the twenty (20) day period. Landlord may assign the right to receive Rent payments pursuant to the Rental Stream Offer, subject to the terms of this Agreement. If Landlord attempts to assign or transfer Rent payments without complying with this Section, the assignment or transfer shall be void. Tenant shall not be responsible for any failure to make payments under this Agreement and reserves the right to hold payments due under this Agreement until Landlord complies with this Section.

24. MISCELLANEOUS.

- (a) Amendment/Waiver. This Agreement cannot be amended, modified or revised unless done in writing and signed by Landlord and Tenant. No provision may be waived except in a writing signed by both parties. The failure by a party to enforce any provision of this Agreement or to require performance by the other party will not be construed to be a waiver, or in any way affect the right of either party to enforce such provision thereafter.
- (b) Memorandum/Short Form Lease. Contemporaneously with the execution of this Agreement, the parties will execute a recordable Memorandum or Short Form of Lease substantially in the form attached as Exhibit 24b. Either party may record this Memorandum or Short Form of Lease at any time during the Term, in its absolute discretion. Thereafter during the Term of this Agreement, either party will, at any time upon fifteen (15) business days' prior written notice from the other, execute, acknowledge and deliver to the other a recordable Memorandum or Short Form of Lease.
- (c) Limitation of Liability. Except for the indemnity obligations set forth in this Agreement, and otherwise notwithstanding anything to the contrary in this Agreement, Tenant and Landlord each waives any claims that each may have against the other with respect to consequential, incidental or special damages, however caused, based on any theory of liability.
- (d) Compliance with Law. Tenant agrees to comply with all federal, state and local laws, orders, rules and regulations ("Laws") applicable to Tenant's use of the Communication Facility on the Property. Landlord agrees to comply with all Laws relating to Landlord's ownership and use of the Property and any improvements on the Property.
- (e) Bind and Benefit. The terms and conditions contained in this Agreement will run with the Property and bind and inure to the benefit of the parties, their respective heirs, executors, administrators, successors and assigns.
- (f) Entire Agreement. This Agreement and the exhibits attached hereto, all being a part hereof, constitute the entire agreement of the parties hereto and will supersede all prior offers, negotiations and agreements with respect to the subject matter of this Agreement. Exhibits are numbered to correspond to the Section wherein they are first referenced. Except as otherwise stated in this Agreement, each party shall bear its own fees and expenses (including the fees and expenses of its agents, brokers, representatives, attorneys, and accountants) incurred in connection with the negotiation, drafting, execution and performance of this Agreement and the transactions it contemplates.
- (g) Governing Law. This Agreement will be governed by the laws of the state in which the Premises are located, without regard to conflicts of law.
- (h) Interpretation. Unless otherwise specified, the following rules of construction and interpretation apply: (i) captions are for convenience and reference only and in no way define or limit the construction of the terms and conditions hereof; (ii) use of the term "including" will be interpreted to mean "including but not limited to": (iii) whenever a party's consent is required under this Agreement, except as otherwise stated in this Agreement or as same may be duplicative, such consent will not be unreasonably

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

- (i) Affiliates. All references to "Tenant" shall be deemed to include any Affiliate of New Cingular Wireless PCS, LLC using the Premises for any Permitted Use or otherwise exercising the rights of Tenant pursuant to this Agreement. "Affiliate" means with respect to a party to this Agreement, any person or entity that (directly or indirectly) controls, is controlled by, or under common control with, that party. "Control" of a person or entity means the power (directly or indirectly) to direct the management or policies of that person or entity, whether through the ownership of voting securities, by contract, by agency or otherwise.
- (j) Survival. Any provisions of this Agreement relating to indemnification shall survive the termination or expiration hereof. In addition, any terms and conditions contained in this Agreement that by their sense and context are intended to survive the termination or expiration of this Agreement shall so survive.
- (k) W-9. As a condition precedent to payment, Landlord agrees to provide Tenant with a completed IRS Form W-9, or its equivalent, upon execution of this Agreement and at such other times as may be reasonably requested by Tenant, including, any change in Landlord's name or address.
- (l) Execution/No Option. The submission of this Agreement to any party for examination or consideration does not constitute an offer, reservation of or option for the Premises based on the terms set forth herein. This Agreement will become effective as a binding Agreement only upon the handwritten legal execution, acknowledgment and delivery hereof by Landlord and Tenant. This Agreement may be executed in two (2) or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties. All parties need not sign the same counterpart.
- (m) Attorneys' Fees. In the event that any dispute between the parties related to this Agreement should result in litigation, the prevailing party in such litigation shall be entitled to recover from the other party all reasonable fees and expenses of enforcing any right of the prevailing party, including without limitation, reasonable attorneys' fees and expenses. Prevailing party means the party determined by the court to have most nearly prevailed even if such party did not prevail in all matters. This provision will not be construed to entitle any party other than Landlord, Tenant and their respective Affiliates to recover their fees and expenses.
- (n) WAIVER OF JURY TRIAL. EACH PARTY. TO THE EXTENT PERMITTED BY LAW, KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVES ITS RIGHT TO A TRIAL BY JURY IN ANY ACTION OR PROCEEDING UNDER ANY THEORY OF LIABILITY ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR THE TRANSACTIONS IT CONTEMPLATES.

[SIGNATURES APPEAR ON NEXT PAGE]

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

"LANDLORD"

Ronda Humphrey

By: Maces Surphies

Print Name: Ronda Humphrey

Its: Owner

Date: 4-11-17

ID No 474822

LANDLORD ACKNOWLEDGMENT

STATE OF LACTOR OF THE	
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* * _* ,) SS:
COUNTY OF DAMEST)
On the Carthern	of <u>paragraphs</u> 2017 before me, personally appeared who acknowledged under oath, that
he/she/they is/are the person/officer no	uned in the within instrument, and that he/she/they executed the same in
	ntary act and deed of the Landlord for the purposes therein contained.
	Notary Public:
	My Commission Evoires

"LANDLORD"

Patty Humphrey

By: F	atty	Hu	mi2h	ru-
Print N	lame: J	Patty Hu	implicey	
lts:	Owner	Patt	y Hu	mphrel
Date:	4-1		7	7

LANDLORD ACKNOWLEDGMENT

COUNTY OF Decree 1	
he/she/they is/aré the person/office/ named in the with	. 2017 before me, personally appeared , who acknowledged under oath, that hin instrument, and that he/she/they executed the same in sed of the Landlord for the purposes therein contained.
	Notary Public: 2016 11 15 11 1

"TENANT"

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

lts: Manager

Print Name: Bryan Coleman

Its: Area Manager Network Engineering Gulf States/INKY Site Acquisition

Date:

TENANT ACKNOWLEDGMENT

STATE OF ALABAMA	
) ss:
COUNTY OF JEFFERSON)
States/TNKY Site Acquisition of AT	sath that he is the Area Manager Network Engineering – Gulf &T Mobility Corporation, the Manager of New Cingular Wireless attached instrument, and as such was authorized to execute this
AOTARL BOND STATE AMINING	Notary Public: Kata, 11. Utanght. My Commission Expires: 7-5-17

EXHIBIT 1

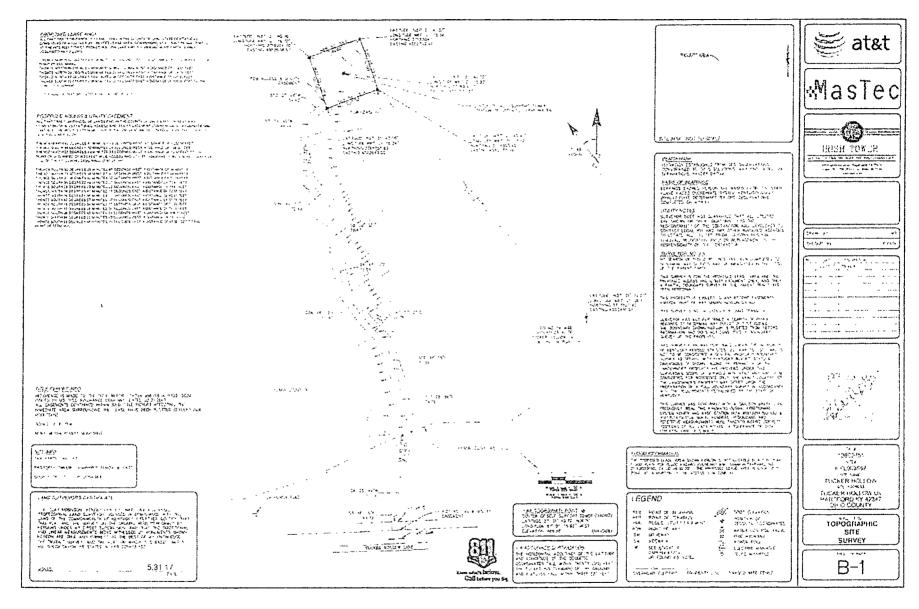
DESCRIPTION OF PREMISES

Page of 2 to the Option and Lease Agreement dated 2005. 2017, by and between Ronda and Patty Humphrey, a married couple, as Landlord, and New Cingular Wireless PCS, LLC, a Delaware limited liability company, as Tenant.

The Property is legally described as follows:

Beginning at a stone corner to M.I. and Lily Tucker thence N. 80 F. 128 poles to two white oaks in said Tucker's line thence N. 10 W. 63 poles and 18 links to a stone in Robert Nantz's line, thence S. 80 W. 188 poles to white oak in Rhonda Tuckers line, thence S. 10 E. 62 poles and 12 links in the beginning, containing 50 acres more or less.

The Premises are described and/or depicted as follows:



Ronda Humphrey Patricia Humphrey

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:

L 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

To Whom It May Concern,

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 Signatúre

EXHIBIT I NOTIFICATION LISTING

<u>Tucker Hollow - Notice List</u>

Humphrey Ronda & Patty 279 Tucker Hollow Lane Hartford, KY 42347

Walker Timothy PO Box 364 Rosine, KY 42370

Renfrow Mark A 1728 Heflin Rd Hartford, KY 42347

Clark Robert Allen 2471 Hillbrooke Parkway Owensboro, KY 42303

Boling Mike & Sheri 1374 Heflin Rd Hartford, KY 42347

Humphrey Ronda & Patricia 279 Tucker Hollow Lane Hartford, KY 42347

Voll Robert W & Bonnie Y 8860 Schuler Rd. Greenville, IN 47124

Voll Robert Walter & Bonnie Y 8860 Schuler Rd. Greenville, IN 47124

EXHIBIT J 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: Tucker Hollow

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 Tucker Hollow Lane, Hartford, KY 42347 (37° 31' 40.70" North latitude, 87° 01' 15.92" 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 2018-00179 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

- Beginning at the offices of the Ohio County Judge Executive located at 130 E. Washington Street, Hartford, KY, head southwest towards Main Street. Travel approximately 354 feet.
- 2. Turn right onto US-231 N / S. Main Street. Travel approximately 1.7 miles.
- 3. Turn left onto KY-136 W and travel approximately 6.0 miles.
- 4. Turn right onto Heflin Road and travel approximately 1.6 miles.
- 5. Turn left onto Tucker Hollow and travel approximately 0.1 miles.
- 6. The site is on the right, north of Tucker Hollow. The site coordinates are:
 - a. North 37 deg 31 min 40.70 sec
 - b. West 87 deg 01 min 15.92 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

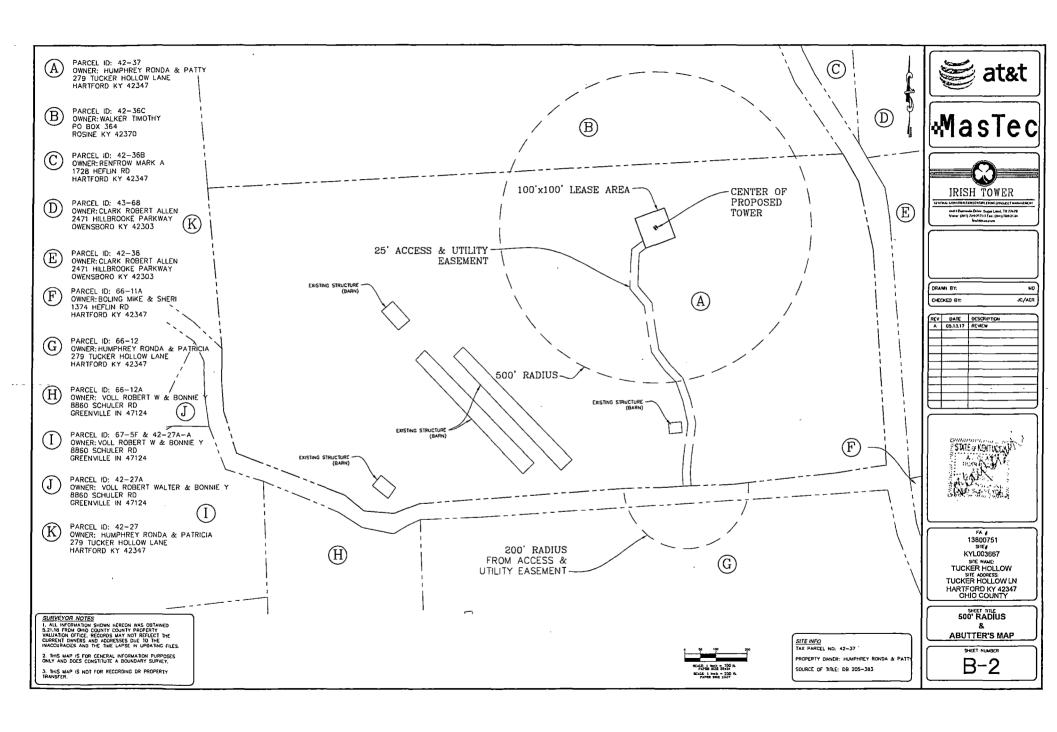


EXHIBIT K COPY OF COUNTY JUDGE/EXECUTIVE NOTICE



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

VIA CERTIFIED MAIL

David Johnston County Judge Executive 130 E. Washington Street, Suite 209 Hartford, KY 42347

RE:

Notice of Proposal to Construct Wireless Communications Facility

Kentucky Public Service Commission Docket No. 2018-00179

Site Name: Tucker Hollow

Dear Judge Johnston:

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 Tucker Hollow Lane, Hartford, KY 42347 (37°31'40.70" North latitude, 87°01'15.92" 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.

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Sincerely, David A. Pike Attorney for Applicant enclosures

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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

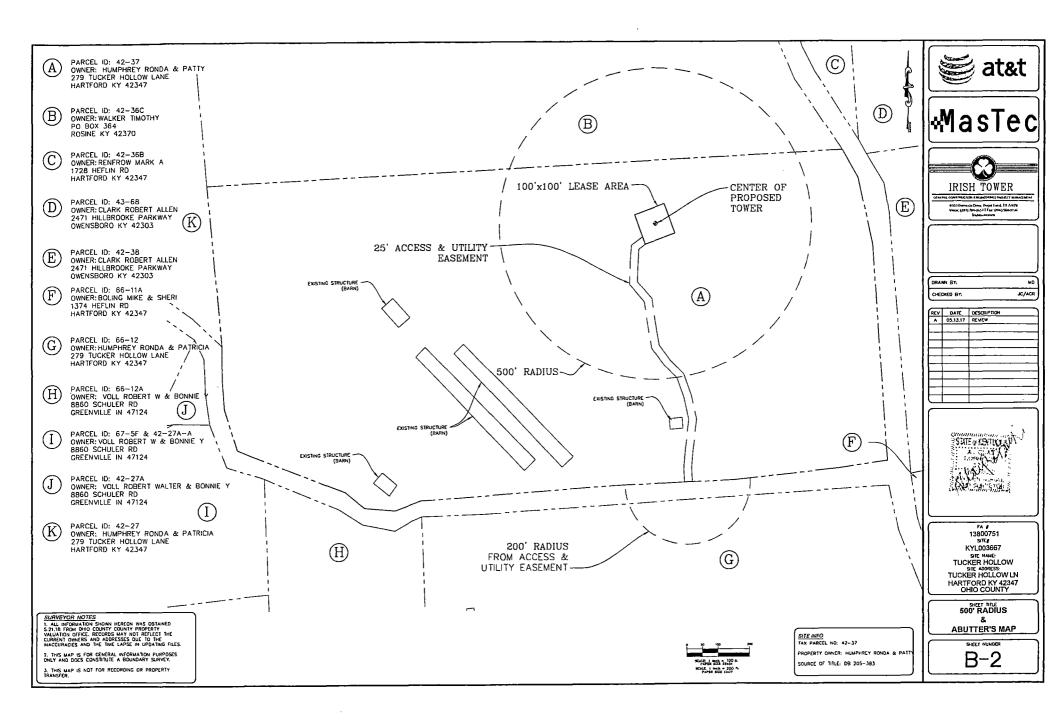


EXHIBIT L COPY OF POSTED NOTICES AND NEWSPAPER NOTICE ADVERTISEMENT

SITE NAME: TUCKER HOLLOW 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 2018-00179 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 2018-00179 in your correspondence.

VIA TELEPHONE: 270-298-7100

Ohio County Times News 314 Main Street PO Box 226 Hartford, KY 42347

RE: Legal Notice Advertisement

Site Name: Tucker Hollow

Dear Ohio County Times News:

Please publish the following legal notice advertisement in the next edition of *The Ohio County Times News*:

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 Tucker Hollow Ln, Hartford, KY (37°31'40.70" North latitude, 87°01'15.92" 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 2018-00179 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 M COPY OF RADIO FREQUENCY DESIGN SEARCH AREA



Lat: 37.522023 Lon: -87.025814 Radius: .5 miles

Tucker Hollow Search Area