COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF	)	
NEW CINGULAR WIRELESS PCS, LLC,	)	
A DELAWARE LIMITED LIABILITY COMPANY,	)	
D/B/A AT&T MOBILITY	)	
AND HARMONI TOWERS LLC, A DELAWARE	)	
LIMITED LIABILITY COMPANY	)	
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC	)	CASE NO.: 2022-00144
CONVENIENCE AND NECESSITY TO CONSTRUCT	)	
A WIRELESS COMMUNICATIONS FACILITY	)	
IN THE COMMONWEALTH OF KENTUCKY	)	
IN THE COUNTY OF MARION	)	

SITE NAME: LEBANON ROAD

* * * * * * *

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 and Harmoni Towers LLC, a Delaware limited liability company ("Applicants"), by counsel, pursuant to (i) KRS §§ 278.020, 278.040, 278.650, 278.665, and other statutory authority, and the rules and regulations applicable thereto, and (ii) the Telecommunications Act of 1996, respectfully submit 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 Applicants with wireless communications services.

In support of this Application, Applicants respectfully provide and state the following

information:

1. The complete names and addresses of the Applicants are: New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility, having an address of Meidinger Tower, 462 S. 4th Street, Suite 2400, Louisville, Kentucky 40202 and Harmoni Towers LLC, a Delaware limited liability company having an address of 11101 Anderson Drive, Suite 200, Little Rock, Arkansas 72212.

2. Applicants propose construction of an antenna tower for communications services, which is to be located in an area outside the jurisdiction of a planning commission, and Applicants submit this application to the PSC for a certificate of public convenience and necessity pursuant to KRS §§ 278.020(1), 278.040, 278.650, 278.665, and other statutory authority.

3. AT&T Mobility is a limited liability company organized in the State of Delaware on October 20, 1994. Harmoni Towers is a limited liability company organized in the State of Delaware on December 2, 2015.

4. Applicants attest that they are in good standing in the state in which they are organized and further state that they are authorized to transact business in Kentucky.

5. The Certificates of Authority filed with the Kentucky Secretary of State for both Applicants are attached as part of **Exhibit A** pursuant to 807 KAR 5:001: Section 14(3). Note that Harmoni Towers LLC was formerly organized as Uniti Towers LLC (see an Amended Certificate of Authority to change entity name dated March 22, 2021 attached as part of Exhibit A). The Certificates of Authority for Uniti Towers LLC along with the Amended Certificate of Authority for Harmoni Towers LLC is attached as part of **Exhibit A.**

6. AT&T Mobility operates on frequencies licensed by the Federal Communications Commission ("FCC") pursuant to applicable FCC requirements. Copies of AT&T Mobility'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.

7. The public convenience and necessity require the construction of the proposed WCF. The construction of the WCF will bring or improve AT&T Mobility's services to an area currently not served or not adequately served by AT&T Mobility 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 AT&T Mobility'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 AT&T Mobility's network design that must be in place to provide adequate coverage to the service area.

8. To address the above-described service needs, Applicants propose to construct a WCF at 4098 Springfield Highway, Springfield, KY 40069 (E-911) / Springfield Highway, Springfield, KY 40069 (PARCEL) (37° 37' 55.60" North latitude, 85° 16' 05.44" 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 Greg T. and Ann Michelle Morris pursuant to a deed recorded at Deed Book 259, Page 11 in the office of the County Clerk. The proposed WCF will consist of a 195-foot tall tower, with an approximately 12-foot tall lightning arrestor attached at the top, for a total height of

207-feet, plus related ground facilities. The WCF will also include concrete foundations and a shelter or cabinets to accommodate the placement of AT&T Mobility's radio electronics equipment and appurtenant equipment. The Applicants' 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**.

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

10. 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 AT&T Mobility's antennas has also been included as part of **Exhibit B**.

11. 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**.

12. Applicants have considered the likely effects of the installation of the proposed WCF on nearby land uses and values and have 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 AT&T Mobility's antennas on an existing structure. When suitable towers or structures exist, AT&T Mobility attempts to co-locate on existing structures such as communications towers or other structures

capable of supporting AT&T Mobility's facilities; however, no other suitable or available co-location site was found to be located in the vicinity of the site.

13. A copy of the Determination of No Hazard to Air Navigation issued by the Federal Aviation Administration ("FAA") is attached as **Exhibit E**.

14. A copy of the application for approval to construct filed with the Kentucky Airport Zoning Commission ("KAZC") is attached as **Exhibit F**.

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

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

17. Harmoni Towers LLC, pursuant to a written agreement, has acquired the right to use the WCF site and associated property rights. A copy of the agreements or abbreviated agreements recorded with the County Clerk are attached as **Exhibit I**.

18. 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.

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

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

21. **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**.

22. Applicants have notified every person who, according to the records of the County Property Valuation Administrator, owns property which is within 500 feet of the proposed tower or contiguous to the site property, by certified mail, return receipt requested, of the proposed construction. Each notified property owner has been provided with a map of the location of the proposed construction, the PSC docket number for this application, the address of the PSC, and has been informed of his or her right to request intervention. A list of the notified property owners and a copy of the form of the notice sent by certified mail to each landowner are attached as **Exhibit J** and **Exhibit K**, respectively. Copies of the certified green card receipts for each of the landowners who were provided

notice are also included as part of **Exhibit J**.

23. Applicants have notified the applicable County Judge/Executive by certified mail, return receipt requested, of the proposed construction. This notice included the PSC docket number under which the application will be processed and informed the County Judge/Executive of his/her right to request intervention. A copy of this notice is attached as **Exhibit L**.

24. Notice signs meeting the requirements prescribed by 807 KAR 5:063, Section 1(2) that measure at least 2 feet in height and 4 feet in width and that contain all required language in letters of required height, have been posted, one in a visible location on the proposed site and one on the nearest public road. Such signs shall remain posted for at least two weeks after filing of the Application, and a copy of the posted text is attached as **Exhibit M**. A legal notice advertisement regarding the location of the proposed facility has been published in a newspaper of general circulation in the county in which the WCF is proposed to be located. A copy of the newspaper legal notice advertisement is attached as part of **Exhibit M**.

25. The general area where the proposed facility is to be located is rural. There are no existing residences within 3,500' of the proposed tower site.

26. The process that was used by AT&T Mobility'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. AT&T Mobility'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 Applicants when searching for sites for its antennas that would provide the coverage deemed necessary by AT&T Mobility. A map of the area in which the tower is proposed to be located which is drawn to scale and clearly depicts the necessary search area within which the site should be located pursuant to radio frequency requirements is attached as **Exhibit N**.

27. The tower must be located at the proposed location and proposed height to provide necessary service to wireless communications users in the subject area.

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

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

Respectfully submitted,

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

LIST OF EXHIBITS

A - Certificate of Authority & FCC License Documentation

B - Site Development Plan:

- 500' Vicinity Map
- Legal Descriptions
- Flood Plain Certification
- Site Plan
- Vertical Tower Profile

C - Tower and Foundation Design

D - Competing Utilities, Corporations, or Persons List

E - FAA Determination of No Hazard to Air Navigation

F - Kentucky Airport Zoning Commission – Application for Approval to Construct

G - Geotechnical Report

H - Directions to WCF Site

I - Copy of Real Estate Agreement

J - Notification Listing & Certified Green Card Receipts

K - Copy of Property Owner Notification

L - Copy of County Judge/Executive Notice

M - Copy of Posted Notices and Newspaper Notice Advertisement

N - Copy of Radio Frequency Design Search Area

EXHIBIT A

CERTIFICATE OF AUTHORITY
AND FCC LICENSE DOCUMENTATION

Commonwealth of Kentucky
Alison Lundergan Grimes, Secretary of State

Alison Lundergan Grimes
Secretary of State
P. O. Box 718
Frankfort, KY 40602-0718
(502) 564-3490
http://www.sos.ky.gov

Certificate of Authorization

Authentication number: 216299
Visit https://app.sos.ky.gov/ftshow/certvalidate.aspx to authenticate this certificate.

I, Alison Lundergan Grimes, Secretary of State of the Commonwealth of Kentucky, do hereby certify that according to the records in the Office of the Secretary of State,

NEW CINGULAR WIRELESS PCS, LLC

, a limited liability company authorized under the laws of the state of Delaware, is authorized to transact business in the Commonwealth of Kentucky, and received the authority to transact business in Kentucky on October 14, 1999.

I further certify that all fees and penalties owed to the Secretary of State have been paid; that an application for certificate of withdrawal has not been filed; and that the most recent annual report required by KRS 14A.6-010 has been delivered to the Secretary of State.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal at Frankfort, Kentucky, this 28th day of May, 2019, in the 227th year of the Commonwealth.

COMMONWEALTH OF KENTUCKY
OFFICE OF SECRETARY OF STATE

Alison Lundergan Grimes
Alison Lundergan Grimes
Secretary of State
Commonwealth of Kentucky
216299/0481848

0972004.06 mstratton ADD

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

COMMONWEALTH OF KENTUCKY
ALISON LUNDERGAN GRIMES, SECRETARY OF STATE

Division of Business Filings **Business Filings** PO Box 718 Frankfort, KY 40602 (502) 564-3490 www.sos.ky.gov	Certificate of Authority (Foreign Business Entity)	FBE

Pursuant to the provisions of KRS 14A and KRS 271B, 273, 274,275, 362 and 386 the undersigned hereby applies for authority to transact business in Kentucky on behalf of the entity named below and, for that purpose, submits the following statements:

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

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

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

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

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

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

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

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

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

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

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

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

9. If a professional service corporation, all the individual shareholders, not less than one half (1/2) of the directors, and all of the officers other than the secretary and treasurer are licensed in one or more states or territories of the United States or District of Columbia to render a professional service described in the statement of purposes of the corporation.

10. I certify that, as of the date of filing this application, the above-named entity validly exists under the laws of the jurisdiction of its formation.

11. If a limited partnership, it elects to be a limited liability limited partnership. Check the box if applicable: ☐

12. If a limited liability company, check box if manager-managed: ■

13. This application will be effective upon filing, unless a delayed effective date and/or time is provided.
The effective date or the delayed effective date cannot be prior to the date the application is filed. The date and/or time is _____
(Delayed effective date and/or time)

Signature of Authorized Representative	Keith Harvey, VP - Deputy General Counsel Printed Name & Title	12/30/2016 Date

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

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

(09/15)

0972004.06	vmiller AMD
Michael G. Adams **Kentucky Secretary of State** Received and Filed: 3/22/2021 12:28 PM Fee Receipt: $40.00	

COMMONWEALTH OF KENTUCKY
MICHAEL ADAMS, SECRETARY OF STATE

Division of Business Filings P.O. Box 718 Frankfort, KY 40602 (502) 564-3490 www.sos.ky.gov	**Amended Certificate of Authority** **(Foreign Business Entity)**	**FCA**

Pursuant to the provisions of KRS Chapter KRS 14A and 271B, 273, 274, 275, 362 or 386 the undersigned hereby applies for an amended certificate of authority on behalf of the entity named below and, for that purpose, submits the following statements:

1. The business entity is:
- ☐ profit corporation (KRS 271B)
- ☐ professional service corporation (KRS 274).
- ☒ limited liability company (KRS 275).
- ☐ professional limited liability company (KRS 275
- ☐ limited cooperative association
- ☐ cooperative association
- ☐ nonprofit corporation (KRS 273).
- ☐ business trust (KRS 386).
- ☐ limited partnership (KRS 362).
- ☐ statutory trust (KRS 386)
- ☐ non-profit LLC (KRS 275).

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

3. It is an entity organized and existing under the laws of the state or country of Delaware.

4. The entity received authority to transact business in Kentucky on 1/3/2017.

5. The entity has changed its **(check all that apply)**

- ☑ Domicile name to Harmoni Towers LLC
- ☑ Name to be used in Kentucky to Harmoni Towers LLC
- ☐ Jurisdiction of organization to
- ☐ Period of duration
- ☐ Form of organization
- ☐ Management type: ☒ Member managed ☐ Manager managed

6. This application will be effective upon filing, unless a delayed effective date and/or time is provided. The effective date or the delayed effective date cannot be prior to the date the application is filed. The effective date is .

Please indicate the county in which your business operates:
County: Franklin

To complete the following, please shade the box completely.

Please indicate the size of your business:
- ☐ Small (Fewer than 50 employees)
- ☑ Large (50 or more employees)

Please indicate whether any of the following make up more than fifty percent (50%) of your business ownership:
- ☐ Women-Owned
- ☐ Veteran Owned
- ☐ Minority Owned

Please indicate which of the following best describes your business:
- ☐ Agriculture
- ☐ Wholesale Trade
- ☐ Public Administration
- ☐ Other
- ☐ Mining
- ☐ Retail Trade
- ☑ Transportation, Communications, Electric, Gas, Sanitary Services
- ☐ Services
- ☐ Manufacturing
- ☐ Construction
- ☐ Finance, Insurance, Real Estate

I declare under penalty of perjury under the laws of the state of Kentucky that the foregoing is true and correct.

Signature of Authorized Representative	Dara Hoey Printed Name	In-House Counsel Title	2/25/21 Date

(1/20)

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THAT THE SAID "UNITI TOWERS LLC", FILED A CERTIFICATE OF AMENDMENT, CHANGING ITS NAME TO "HARMONI TOWERS LLC" ON THE EIGHTEENTH DAY OF SEPTEMBER, A.D. 2020, AT 5:13 O`CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID LIMITED LIABILITY COMPANY IS DULY FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL EXISTENCE NOT HAVING BEEN CANCELLED OR REVOKED SO FAR AS THE RECORDS OF THIS OFFICE SHOW AND IS DULY AUTHORIZED TO TRANSACT BUSINESS.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "HARMONI TOWERS LLC" WAS FORMED ON THE SECOND DAY OF DECEMBER, A.D. 2015.

5896640 8320
SR# 20210417869

Authentication: 202491953
Date: 02-11-21

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

Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL J MATHEW
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST., RM 1015
DALLAS, TX 75202

Call Sign	File Number
KNKQ346	
Radio Service CL - Cellular	
Market Numer CMA446	**Channel Block** A
Sub-Market Designator 0	

FCC Registration Number (FRN): 0003291192

Market Name
Kentucky 4 - Spencer

Grant Date	Effective Date	Expiration Date	Five Yr Build-Out Date	Print Date
10-16-2012	08-31-2018	10-01-2022		

Site Information:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
12	38-01-44.0 N	085-18-16.0 W	235.9	91.1	1002473

Address: 100 Overlook Rd (86923)
City: TAYLORSVILLE **County:** SPENCER **State:** KY **Construction Deadline:**

Antenna: 4
Maximum Transmitting ERP in Watts: 140.820

Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	120.800	95.400	102.100	97.600	95.800	113.600	147.700	114.700
Transmitting ERP (watts)	86.300	143.200	53.200	37.700	0.300	18.900	67.000	133.700

Antenna: 5
Maximum Transmitting ERP in Watts: 140.820

Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	120.800	95.400	102.100	97.600	95.800	113.600	147.700	114.700
Transmitting ERP (watts)	18.000	119.800	240.400	250.300	157.000	45.000	33.200	12.400

Antenna: 6
Maximum Transmitting ERP in Watts: 140.820

Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	120.800	95.400	102.100	97.600	95.800	113.600	147.700	114.700
Transmitting ERP (watts)	28.800	21.300	26.500	39.100	121.000	115.500	147.700	81.200

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKQ346 **File Number:** **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
15	37-36-21.0 N	086-03-25.0 W	260.0	91.1	1009674

Address: 975 Meeting Creek Rd. (94217)
City: EASTVIEW **County:** HARDIN **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	114.000	122.900	133.500	138.400	151.700	127.100	115.800	123.200
Transmitting ERP (watts)	16.000	50.600	40.600	6.300	0.400	0.101	0.101	1.500

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	114.000	122.900	133.500	138.400	151.700	127.100	115.800	123.200
Transmitting ERP (watts)	0.400	0.400	11.700	89.800	178.200	74.900	6.100	0.800

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	114.000	122.900	133.500	138.400	151.700	127.100	115.800	123.200
Transmitting ERP (watts)	60.500	2.600	0.600	0.600	3.500	47.900	240.300	282.400

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
16	37-32-36.0 N	085-15-34.0 W	246.3	112.8	1203419

Address: 335 Thornton Smith Road (94223)
City: Lebanon **County:** MARION **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	116.100	86.000	77.700	104.400	108.400	123.500	143.500	128.500
Transmitting ERP (watts)	192.100	140.000	19.200	2.500	0.400	0.900	4.100	55.100

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	116.100	86.000	77.700	104.400	108.400	123.500	143.500	128.500
Transmitting ERP (watts)	0.900	4.100	55.100	192.100	140.000	19.200	2.500	0.400

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	116.100	86.000	77.700	104.400	108.400	123.500	143.500	128.500
Transmitting ERP (watts)	8.600	2.200	0.448	0.700	11.900	95.200	224.400	84.800

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKQ346 **File Number:** **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
17	37-39-03.2 N	085-04-40.4 W	260.0	80.8	1253600

Address: 9076 Perryville Road (97855)
City: Springfield **County:** WASHINGTON **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	67.200	65.000	50.900	33.800	63.300	60.700	76.300	96.900
Transmitting ERP (watts)	170.600	190.300	55.800	31.200	0.400	11.600	64.100	190.300

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	67.200	65.000	50.900	33.800	63.300	60.700	76.300	96.900
Transmitting ERP (watts)	41.300	108.800	92.600	128.100	61.300	26.200	8.900	21.200

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	67.200	65.000	50.900	33.800	63.300	60.700	76.300	96.900
Transmitting ERP (watts)	55.800	31.200	0.400	11.600	64.100	190.300	170.600	190.300

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
21	37-25-20.1 N	085-16-59.5 W	333.5	60.7	

Address: 6945 NEW LEBANON ROAD (87882)
City: CAMPBELLSVILLE **County:** TAYLOR **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	145.100	145.900	105.000	110.500	135.200	126.600	110.600	124.300
Transmitting ERP (watts)	252.900	102.500	5.700	1.200	0.505	0.800	15.100	132.400

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	145.100	145.900	105.000	110.500	135.200	126.600	110.600	124.300
Transmitting ERP (watts)	1.400	16.000	81.800	98.400	23.100	2.200	0.200	0.300

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	145.100	145.900	105.000	110.500	135.200	126.600	110.600	124.300
Transmitting ERP (watts)	1.900	0.500	0.500	7.400	74.100	235.600	174.400	17.000

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKQ346 **File Number:** **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
23	37-28-43.0 N	085-53-55.8 W	266.7	99.1	1200192

Address: 15385 South Dixie (37616)
City: Upton **County:** HARDIN **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	137.800	123.200	106.100	117.100	122.100	144.800	138.400	141.600
Transmitting ERP (watts)	22.500	14.000	1.500	0.100	0.100	0.200	1.700	14.000

Antenna: 4
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	137.800	123.200	106.100	117.100	122.100	144.800	138.400	141.600
Transmitting ERP (watts)	6.300	22.300	40.900	31.700	32.100	4.800	1.300	2.200

Antenna: 5
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	137.800	123.200	106.100	117.100	122.100	144.800	138.400	141.600
Transmitting ERP (watts)	63.400	41.400	38.200	75.300	214.800	202.800	252.300	137.100

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
25	37-53-29.0 N	085-31-56.0 W	220.7	78.3	1062550

Address: 720 South Saint Gregory Road (37679)
City: Samuels **County:** NELSON **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 4
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	128.800	95.600	83.500	85.900	115.200	97.000	105.400	106.900
Transmitting ERP (watts)	2.200	2.000	2.400	0.600	0.100	0.100	0.100	0.500

Antenna: 5
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	128.800	95.600	83.500	85.900	115.200	97.000	105.400	106.900
Transmitting ERP (watts)	0.200	0.300	1.300	2.600	2.400	1.500	0.200	0.100

Antenna: 6
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	128.800	95.600	83.500	85.900	115.200	97.000	105.400	106.900
Transmitting ERP (watts)	8.600	0.600	0.227	0.227	5.100	42.300	113.800	71.900

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKQ346 **File Number:** **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
27	37-44-18.6 N	084-50-22.9 W	273.1	93.9	1042987

Address: 510 Lauren Drive (85566)
City: HARRODSBURG **County:** MERCER **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	94.900	97.000	92.200	89.100	67.100	91.800	105.500	107.400
Transmitting ERP (watts)	22.500	9.700	0.800	0.100	0.200	0.300	3.000	17.400

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	94.900	97.000	92.200	89.100	67.100	91.800	105.500	107.400
Transmitting ERP (watts)	0.100	1.000	9.400	22.000	17.400	2.600	0.200	0.100

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	94.900	97.000	92.200	89.100	67.100	91.800	105.500	107.400
Transmitting ERP (watts)	0.200	0.100	0.100	0.400	1.800	2.300	2.600	1.000

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
30	37-45-36.7 N	085-59-28.9 W	242.3	77.7	1228925

Address: 140 BERRYTOWN ROAD (86906)
City: Rineyville **County:** HARDIN **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.800	88.600	61.000	80.100	84.200	80.000	69.700	78.500
Transmitting ERP (watts)	223.400	150.100	23.100	8.300	0.446	1.100	25.400	136.900

Antenna: 4
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.800	88.600	61.000	80.100	84.200	80.000	69.700	78.500
Transmitting ERP (watts)	1.500	50.300	183.700	235.200	88.900	12.500	4.700	0.500

Antenna: 5
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.800	88.600	61.000	80.100	84.200	80.000	69.700	78.500
Transmitting ERP (watts)	10.200	1.200	0.500	7.000	88.900	214.500	206.100	42.800

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKQ346 **File Number:** **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
31	37-56-34.5 N	084-57-41.8 W	279.2	99.1	1219406

Address: 1114 Bondville Road (94203)
City: Willisburg **County:** ANDERSON **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	133.500	140.200	135.100	117.400	118.100	134.100	132.900	128.800
Transmitting ERP (watts)	189.700	79.700	6.500	0.800	0.400	0.400	12.400	95.600

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	133.500	140.200	135.100	117.400	118.100	134.100	132.900	128.800
Transmitting ERP (watts)	1.500	17.300	88.500	106.400	25.000	2.400	0.212	0.400

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	133.500	140.200	135.100	117.400	118.100	134.100	132.900	128.800
Transmitting ERP (watts)	1.900	0.629	0.629	8.700	104.200	314.700	227.900	23.900

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
32	37-33-17.6 N	086-04-47.0 W	255.7	78.6	1224566

Address: 1051 Rock Creek Rd (81453)
City: Big Clifty **County:** HARDIN **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.100	117.100	126.800	128.200	117.700	108.900	118.200	111.300
Transmitting ERP (watts)	7.700	21.500	18.900	3.500	0.300	0.100	0.100	0.800

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.100	117.100	126.800	128.200	117.700	108.900	118.200	111.300
Transmitting ERP (watts)	180.400	21.600	3.300	0.611	1.200	8.700	98.400	305.700

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.100	117.100	126.800	128.200	117.700	108.900	118.200	111.300
Transmitting ERP (watts)	1.400	0.809	0.809	22.800	184.900	404.600	198.600	15.400

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKQ346 **File Number:** **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
34	37-09-56.5 N	085-32-47.5 W	261.5	60.7	

Address: Matney Rd (114158)
City: Greensburg **County:** GREEN **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	117.100	110.000	104.200	85.500	77.400	93.900	94.100	102.900
Transmitting ERP (watts)	178.200	198.800	58.300	32.600	0.400	12.100	67.000	198.800

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	117.100	110.000	104.200	85.500	77.400	93.900	94.100	102.900
Transmitting ERP (watts)	16.300	108.000	216.800	225.700	141.600	40.600	29.900	11.200

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	117.100	110.000	104.200	85.500	77.400	93.900	94.100	102.900
Transmitting ERP (watts)	31.000	12.000	16.100	35.400	158.900	210.600	237.700	91.900

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
35	37-45-21.0 N	084-49-26.0 W	285.0	64.3	1031524

Address: 1190 US 127 Bypass (114803)
City: HARRODSBURG **County:** MERCER **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	73.000	82.600	68.600	68.500	43.400	68.500	77.300	78.300
Transmitting ERP (watts)	16.900	69.800	58.700	9.100	0.400	0.139	0.139	1.200

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	73.000	82.600	68.600	68.500	43.400	68.500	77.300	78.300
Transmitting ERP (watts)	0.200	0.200	3.000	34.100	79.400	38.200	3.800	0.200

Antenna: 4
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	73.000	82.600	68.600	68.500	43.400	68.500	77.300	78.300
Transmitting ERP (watts)	19.800	1.200	0.149	0.149	0.500	7.400	53.500	74.800

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKQ346 **File Number:** **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
36	37-54-01.0 N	085-55-32.9 W	206.7	57.0	

Address: 7101 9th Cavalry Regiment Avenue (119146)
City: Fort Knox **County:** HARDIN **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	78.500	62.700	62.400	46.400	30.000	34.400	34.300	51.400
Transmitting ERP (watts)	14.200	22.100	6.400	2.600	0.300	1.600	8.200	17.900

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	78.500	62.700	62.400	46.400	30.000	34.400	34.300	51.400
Transmitting ERP (watts)	2.100	48.300	243.200	333.800	71.000	7.600	2.700	1.000

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	78.500	62.700	62.400	46.400	30.000	34.400	34.300	51.400
Transmitting ERP (watts)	41.800	16.200	21.700	47.700	214.300	284.100	320.600	124.000

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
37	37-19-24.0 N	085-19-29.0 W	276.8	63.1	1042222

Address: 685 Smith Ridge Road (94212)
City: CAMPBELLSVILLE **County:** TAYLOR **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	50.800	60.800	65.900	91.400	109.700	103.600	107.900	86.800
Transmitting ERP (watts)	23.000	86.600	74.000	13.000	0.600	0.200	0.200	1.700

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	50.800	60.800	65.900	91.400	109.700	103.600	107.900	86.800
Transmitting ERP (watts)	0.500	0.400	6.900	73.500	150.000	80.500	9.000	0.300

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	50.800	60.800	65.900	91.400	109.700	103.600	107.900	86.800
Transmitting ERP (watts)	17.900	1.100	0.135	0.135	0.400	6.700	48.300	67.600

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKQ346 **File Number:** **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
39	37-59-45.5 N	085-57-01.3 W	131.7	45.7	

Address: 201 S 10TH STREET (37605)
City: WEST POINT **County:** HARDIN **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	30.000	30.000	30.000	30.000	30.000	30.000	30.000
Transmitting ERP (watts)	7.600	6.900	10.000	3.400	1.100	0.100	0.700	3.100

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	30.000	30.000	30.000	30.000	30.000	30.000	30.000
Transmitting ERP (watts)	2.700	0.600	0.900	21.900	145.300	283.900	89.300	9.100

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
40	37-31-58.0 N	085-18-59.0 W	319.1	103.6	1043055

Address: 5.6 KM SOUTHWEST OF (87842)
City: LEBANON **County:** MARION **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	134.500	114.000	119.600	125.400	109.400	124.600	166.500	158.900
Transmitting ERP (watts)	72.400	252.600	184.100	25.300	3.200	0.505	1.100	5.300

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	134.500	114.000	119.600	125.400	109.400	124.600	166.500	158.900
Transmitting ERP (watts)	0.600	0.900	15.700	125.200	295.100	111.600	11.400	2.900

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	134.500	114.000	119.600	125.400	109.400	124.600	166.500	158.900
Transmitting ERP (watts)	55.000	5.900	2.100	0.800	1.700	37.400	188.400	258.500

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
41	37-59-10.4 N	084-52-49.1 W	263.3	91.4	1250393

Address: 1815 Bypass South (148463)
City: Lawrenceburg **County:** ANDERSON **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	86.600	77.000	77.400	99.500	82.400	76.000	81.700	75.700
Transmitting ERP (watts)	118.900	197.200	73.300	51.900	0.400	26.000	92.300	184.100

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKQ346 **File Number:** **Print Date:**

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
41	37-59-10.4 N	084-52-49.1 W	263.3	91.4	1250393

Address: 1815 Bypass South (148463)
City: Lawrenceburg **County:** ANDERSON **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	86.600	77.000	77.400	99.500	82.400	76.000	81.700	75.700
Transmitting ERP (watts)	27.400	134.400	181.300	170.500	159.100	48.000	60.500	27.400

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	86.600	77.000	77.400	99.500	82.400	76.000	81.700	75.700
Transmitting ERP (watts)	47.300	18.300	24.500	54.000	242.700	321.700	363.100	140.400

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
42	37-46-06.0 N	084-51-43.0 W	275.2	93.3	1042217

Address: 840 Cornishville Road (94222)
City: HARRODSBURG **County:** MERCER **State:** KY **Construction Deadline:** 12-17-2015

Antenna: 1
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	107.300	113.900	98.100	93.600	90.600	103.600	113.100	108.400
Transmitting ERP (watts)	233.400	0.500	0.500	0.500	0.600	1.300	4.900	1.000

Antenna: 2
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	107.300	113.900	98.100	93.600	90.600	103.600	113.100	108.400
Transmitting ERP (watts)	2.500	296.500	18.600	4.900	1.000	0.600	0.600	0.600

Antenna: 3
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	107.300	113.900	98.100	93.600	90.600	103.600	113.100	108.400
Transmitting ERP (watts)	0.100	1.200	10.200	19.800	14.000	1.700	0.100	0.100

Antenna: 4
Maximum Transmitting ERP in Watts: 140.820

Azimuth(from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	107.300	113.900	98.100	93.600	90.600	103.600	113.100	108.400
Transmitting ERP (watts)	1.400	0.200	0.102	0.400	6.100	36.600	51.100	16.900

Control Points:

Control Pt. No. 1

Address: 124 S. Keeneland Drive (Suite 103)
City: Richmond **County:** MADISON **State:** KY **Telephone Number:** (859)544-4804

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKQ346 **File Number:** **Print Date:**

Waivers/Conditions:

NONE

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL J. MATHEW
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST., RM 1016
DALLAS, TX 75202

Call Sign	File Number
KNLF251	
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

Grant Date	Effective Date	Expiration Date	Print Date
06-02-2015	12-07-2020	06-23-2025	

Market Number	Channel Block	Sub-Market Designator
MTA026	A	15

Market Name
Louisville-Lexington-Evansvill

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

Waivers/Conditions:

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

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

Conditions:

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

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNLF251 **File Number:** **Print Date:**

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

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

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNLF251 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

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

Call Sign	File Number
KNLG209	
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

Grant Date	Effective Date	Expiration Date	Print Date
04-12-2017	08-31-2018	04-28-2027	

Market Number	Channel Block	Sub-Market Designator
BTA263	D	0

Market Name
Louisville, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
04-28-2002			

Waivers/Conditions:

NONE

Conditions:

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

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNLG209 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL J MATHEW
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST., RM 1015
DALLAS, TX 75202

Call Sign	File Number
WPOI255	
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

Grant Date	Effective Date	Expiration Date	Print Date
05-27-2015	03-12-2020	06-23-2025	

Market Number	Channel Block	Sub-Market Designator
MTA026	A	19

Market Name
Louisville-Lexington-Evansvill

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

Waivers/Conditions:

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

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

Conditions:

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

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WPOI255 **File Number:** **Print Date:**

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

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

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

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WPOI255 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL MATHEW
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST., 21ST FL
DALLAS, TX 75202

Call Sign	File Number
WQDI528	
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

Grant Date	Effective Date	Expiration Date	Print Date
08-17-2015	05-27-2021	09-06-2025	

Market Number	Channel Block	Sub-Market Designator
BTA263	C	7

Market Name
Louisville, KY

1st Build-out Date	2nd Build-out Date	3rd Build-out Date	4th Build-out Date
09-06-2010			

Waivers/Conditions:

NONE

Conditions:

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

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WQDI528 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: CECIL J MATHEW
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST., RM 1015
DALLAS, TX 75202

Call Sign	File Number
WQFA869	
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

Grant Date	Effective Date	Expiration Date	Print Date
04-11-2017	08-31-2018	04-28-2027	

Market Number	Channel Block	Sub-Market Designator
BTA263	E	4

Market Name
Louisville, KY

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

Waivers/Conditions:

NONE

Conditions:

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

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WQFA869 **File Number:** **Print Date:**

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: FCC GROUP
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST., RM 2100
DALLAS, TX 75202

Call Sign	File Number
WQGA817	0009696737
Radio Service AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

FCC Registration Number (FRN): 0003291192

Grant Date	Effective Date	Expiration Date	Print Date
11-16-2021	11-16-2021	11-29-2036	11-17-2021

Market Number	Channel Block	Sub-Market Designator
CMA446	A	0

Market Name
Kentucky 4 - Spencer

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

Waivers/Conditions:

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

Conditions:

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

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WQGA817 **File Number:** 0009696737 **Print Date:** 11-17-2021

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: FCC GROUP
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST., RM 2100
DALLAS, TX 75202

Call Sign	File Number
WQGD755	0009778271
Radio Service AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

FCC Registration Number (FRN): 0003291192

Grant Date	Effective Date	Expiration Date	Print Date
01-10-2022	01-10-2022	12-18-2036	01-11-2022

Market Number	Channel Block	Sub-Market Designator
BEA047	C	9

Market Name
Lexington, KY-TN-VA-WV

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

Waivers/Conditions:

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

Special Condition for AU/name change (6/4/2016): Grant of the request to update licensee name is conditioned on it not reflecting an assignment or transfer of control (see Rule 1.948); if an assignment or transfer occurred without proper notification or FCC approval, the grant is void and the station is licensed under the prior name.

Conditions:

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

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

FCC 601-MB
August 2021

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WQGD755 **File Number:** 0009778271 **Print Date:** 01-11-2022

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: FCC GROUP
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST. RM 2100
DALLAS, TX 75202

Call Sign	File Number
WQGD757	0009778278
Radio Service AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

FCC Registration Number (FRN): 0003291192

Grant Date	Effective Date	Expiration Date	Print Date
01-10-2022	01-10-2022	12-18-2036	01-11-2022

Market Number	Channel Block	Sub-Market Designator
BEA070	C	0

Market Name
Louisville, KY-IN

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

Waivers/Conditions:

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

Special Condition for AU/name change (6/4/2016): Grant of the request to update licensee name is conditioned on it not reflecting an assignment or transfer of control (see Rule 1.948); if an assignment or transfer occurred without proper notification or FCC approval, the grant is void and the station is licensed under the prior name.

Conditions:

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

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

FCC 601-MB
August 2021

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WQGD757 **File Number:** 0009778278 **Print Date:** 01-11-2022

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: FCC GROUP
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST. RM 2100
DALLAS, TX 75202

Call Sign	File Number
WQUZ670	0009696437
Radio Service AW - AWS (1710-1755 MHz and 2110-2155 MHz)	

FCC Registration Number (FRN): 0003291192

Grant Date	Effective Date	Expiration Date	Print Date
11-16-2021	11-16-2021	11-29-2036	11-17-2021

Market Number	Channel Block	Sub-Market Designator
REA004	D	10

Market Name
Mississippi Valley

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

Waivers/Conditions:

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

Conditions:

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

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

The license is subject to compliance with the provisions of the January 12, 2001 Agreement between Deutsche Telekom AG, VoiceStream Wireless Corporation, VoiceStream Wireless Holding Corporation and the Department of Justice (DOJ) and the Federal Bureau of Investigation (FBI), which addresses national security, law enforcement, and public safety issues of the FBI and the DOJ regarding the authority granted by this license. Nothing in the Agreement is intended to limit any obligation imposed by Federal lawor regulation including, but not limited to, 47 U.S.C. Section 222(a) and (c)(1) and the FCC's implementing regulations. The Agreement is published at VoiceStream-DT Order, IB Docket No. 00-187, FCC 01-142, 16 FCC Rcd 9779, 9853 (2001).

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WQUZ670 **File Number:** 0009696437 **Print Date:** 11-17-2021

700 MHz Relicensed Area Information:

Market	Market Name	Buildout Deadline	Buildout Notification	Status

EXHIBIT B

SITE DEVELOPMENT PLAN:

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

SITE NAME: LEBANON ROAD / (LEGACY) CARTWRIGHT CREEK RELO
FA NUMBER: 15435107 SITE ID: KYLOU2014 / 10132792
PROJECT TRACKING #: 2451A0XDDL
PACE #: MRTNK052245

PROPERTY ADDRESS:
SPRINGFIELD HWY
SPRINGFIELD, KY 40069
MARION COUNTY

911 ADDRESS:
4098 SPRINGFIELD HWY
SPRINGFIELD, KY 40069
MARION COUNTY

PROPOSED 195' SELF-SUPPORT TOWER

ZONING DRAWINGS

A/E DOCUMENT REVIEW STATUS

TITLE	SIGNATURE	DATE
HARMONI TOWERS PROP:		
HARMONI TOWERS CONST. MGR.:		
INTERCONNECT:		
HARMONI TOWERS SITE DEV. MGR.:		
PROPERTY OWNER:		

STATUS CODE:

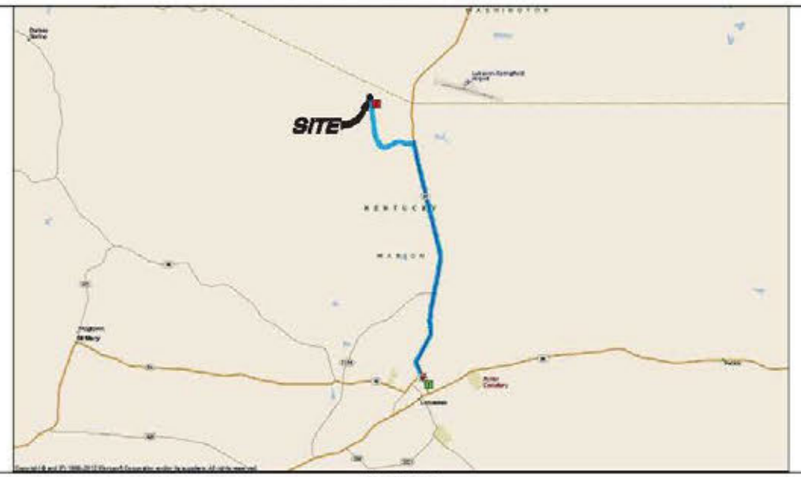
1		ACCEPTED: WITH OR NO COMMENTS, CONSTRUCTION MAY PROCEED
2		NOT ACCEPTED: RESOLVE COMMENTS AND RESUBMIT

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR MODIFICATIONS.

PROJECT SUMMARY

SITE NAME:	LEBANON ROAD
SITE NUMBER:	KYLOU2014
TAX MAP PROPERTY ID:	054-005
SITE ADDRESS:	SPRINGFIELD HWY SPRINGFIELD, KY 40069
911 ADDRESS:	4098 SPRINGFIELD HWY SPRINGFIELD, KY 40069
JURISDICTION:	MARION COUNTY
TOWER OWNER:	HARMONI TOWERS 11101 ANDERSON DRIVE, SUITE 200 LITTLE ROCK, AR 72212
NAD83	
LATITUDE:	37.632111° N
LONGITUDE:	-85.268178° W
APPLICANT:	NEW CINGULAR WIRELESS, PCS, LLC, A DELAWARE LIMITED LIABILITY COMPANY d/b/a AT&T MOBILITY MEIDINGER TOWER 462 S/ 4th STREET, SUITE 2400 LOUISVILLE, KY 40202
CO-APPLICANT:	N/A
OCCUPANCY TYPE:	UNMANNED
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION

LOCATION MAP



NO SCALE

DRAWING INDEX

DESIGN INFORMATION

A&E FIRM:	B+T GROUP 1717 S. BOULDER, SUITE 300 TULSA, OK 74119 MIKE A. SPEEDIE, PE (918) 587-4630	ELECTRIC PROVIDER:	INTER-COUNTY ENERGY 888-268-7322
		TELCO PROVIDER:	WINDSTREAM XXX-XXX-XXXX
SURVEYOR:	POINT TO POINT 100 GOVERNORS TRACE, STE #103 PEACHTREE CITY, GA 30269 PH. (678) 565-4440	AT&T RF SITE ENGINEER:	607 NORTH MILLER BLVD OKLAHOMA CITY, OK 73107 CRAIG HALL (405) 306-9487

DRIVING DIRECTIONS

DEPART JUDGE EXECUTIVE OFFICE [223 N SPALDING AVE, LEBANON, KY 40033] ON KY-55 [KY-55 SPUR] (NORTH) 3.6 MI
TURN LEFT (WEST) ONTO YOUNG LN [YOUNG] 109 YDS
BEAR RIGHT (WEST) ONTO LOCAL ROAD(S) 0.8 MI
BEAR RIGHT (NORTH) ONTO LOCAL ROAD(S) 0.6 MI
ARRIVE 37.63211°N 85.26818°W

CODE COMPLIANCE

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

CODE TYPE	CODE
BUILDING/DWELLING	IBC 2015
STRUCTURAL	IBC 2015
MECHANICAL	IMC 2015
ELECTRICAL	NEC 2017

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES:

- CONSTRUCT (1) NEW 195' SELF-SUPPORT TOWER
- CONSTRUCT FENCED GRAVEL UTILITY COMPOUND WITH LOCKING ACCESS GATE, 60' x 60' WITHIN 100' x 100' LEASE AREA.
- INSTALL (1) H-FRAME W/ UTILITY EQUIPMENT.
- INSTALL NEW POWER & TELCO UTILITY SERVICES.
- CONSTRUCT 12' WIDE GRAVEL ACCESS ROAD

DO NOT SCALE DRAWINGS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 11X17. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CALL KENTUCKY ONE CALL
(800) 752-6007
CALL 3 WORKING DAYS
BEFORE YOU DIG!

B+T GRP

at&t mobility corp.

HARMONI TOWERS

HARMONI TOWERS
LEBANON ROAD
FA# 15435110
PACE# MRTNK052245
PT# 2451A0XDDL
(PROPERTY)
SPRINGFIELD HWY
SPRINGFIELD, KY 40069
MARION COUNTY
PROPOSED 195' SELF-SUPPORT TOWER

PROJECT NO: G0144647.002.01
CHECKED BY: MAS

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
3	4/7/22	DLS	FINAL
4	4/21/22	DLS	FINAL
5	4/27/22	JJR	FINAL

B&T ENGINEERING, INC.
4011
Expires 12/31/22

STATE OF KENTUCKY
BRAD P. MILAKOWSKI
25311
LICENSED PROFESSIONAL ENGINEER
4/27/22

TITLE SHEET

SHEET NUMBER:
T-1

VICINITY MAP

NOT TO SCALE

TITLE EXCEPTIONS

THIS SURVEY WAS COMPLETED WITH THE AID OF TITLE WORK PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, COMMITMENT DATE OF DECEMBER 22, 2020, BEING COMMITMENT NO. 33549269, FOR THE PARENT PARCEL, TO DETERMINE THE IMPACTS OF EXISTING TITLE EXCEPTIONS.

8. MATTERS AS SHOWN AND NOTED ON PLAT RECORDED IN PLAT BOOK 3, PAGE 433. [THIS ITEM IS APPLICABLE TO THE PARENT PARCEL AND THE BOUNDARY OF THE PROPERTY SHOWN HEREON IS BASED ON THIS DOCUMENT.]

9. TERMS, PROVISIONS, COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, EASEMENTS, CHARGES, ASSESSMENTS AND LIENS PROVIDED IN A DEED OR COVENANTS, CONDITIONS AND RESTRICTIONS RECORDED IN DEED BOOK 259, PAGE 11, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW. [THIS ITEM IS APPLICABLE TO THE PARENT PARCEL AND THE BOUNDARY OF THE PROPERTY SHOWN HEREON IS BASED ON THIS DOCUMENT.]

GPS NOTES

THE FOLLOWING GPS STATISTICS UPON WHICH THIS SURVEY IS BASED HAVE BEEN PRODUCED AT THE 95% CONFIDENCE LEVEL:

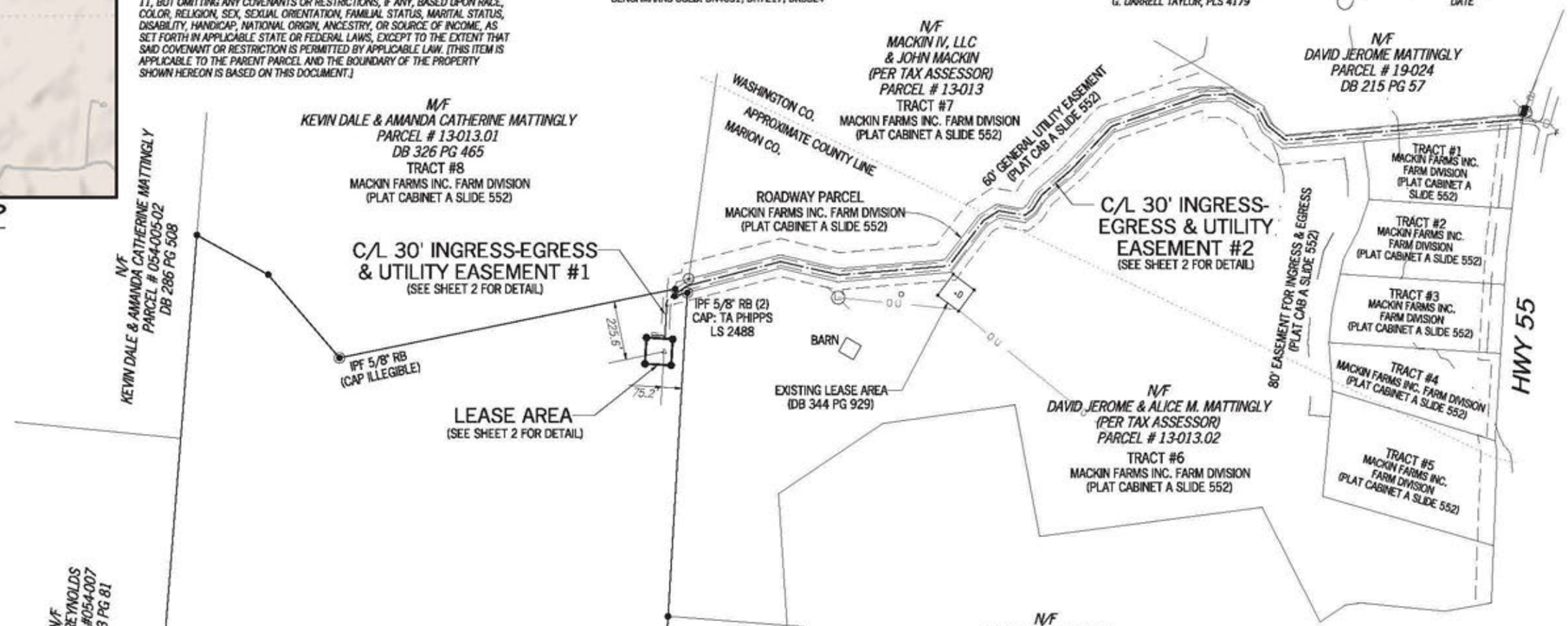
POSITIONAL ACCURACY: 0.02 FEET (HORZ) 0.23 FEET (VERT)
TYPE OF EQUIPMENT: GEOMAX ZENITH35 PRO BASE AND ROVER, DUAL FREQUENCY
TYPE OF GPS FIELD PROCEDURE: ONLINE POSITION USER INTERFACE
DATES OF SURVEY: 02/12/2021
DATUM / EPOCH: NAD_83(2011)(EPOCH:2010.0000)
PUBLISHED / FIXED CONTROL USE: N/A
GEOID MODEL: 18
COMBINED GRID FACTOR(S): 0.99988028 CENTERED ON THE GPS BASE POINT AS SHOWN HEREON.
CONVERGENCE ANGLE: 0.29601657°
BENCHMARKS USED: DK4051, DH7217, DK3324

SURVEYOR'S CERTIFICATE

I, G. DARRELL TAYLOR, A KENTUCKY PROFESSIONAL LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. THE UNADJUSTED PRECISION RATIO OF THE TRAVERSE EXCEEDED 1:10,000 AND WAS NOT ADJUSTED FOR CLOSURE. THIS SURVEY MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR AN URBAN SURVEY AS ESTABLISHED BY THE STATE OF KENTUCKY, PER 201 KAR 18:150 AND IN EFFECT ON THE DATE OF THIS SURVEY.

03/05/2021
G. DARRELL TAYLOR, PLS 4179 — DATE

STATE of KENTUCKY
G. DARRELL TAYLOR 4179
LICENSED PROFESSIONAL LAND SURVEYOR



PARENT PARCEL

OWNER: GREG T. MORRIS & ANN MICHELLE MORRIS

SITE ADDRESS: SPRINGFIELD HWY, SPRINGFIELD, KY 40069

PARCEL ID: 054-006

AREA: 94.99 ACRES (PER TAX ASSESSOR)

ALL ZONING INFORMATION SHOULD BE VERIFIED WITH THE PROPER ZONING OFFICIALS

REFERENCE: DEED BOOK 259 PAGE 11 (MARION COUNTY RECORDS)

LEGEND

POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
IPS	IRON PIN SET
IPF	IRON PIN FOUND
CMF	CONCRETE MONUMENT FOUND
RB	REBAR
UP	UTILITY POLE
INV	INVERT
EP	EDGE OF PAVEMENT
OU	OVERHEAD UTILITY
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE PIPE
GW	GUY WIRE ANCHOR
TR	TRANSFORMER
C.L.F.	CHAIN LINK FENCE
BWF	BARBED WIRE FENCE
N/F	NOW OR FORMERLY
TBM	TEMPORARY BENCHMARK

SURVEY NOT VALID WITHOUT SHEETS 2 - 4

GENERAL NOTES

* THIS SPECIFIC PURPOSE SURVEY IS FOR THE LEASED PREMISES AND EASEMENTS ONLY. THIS SPECIFIC PURPOSE SURVEY WAS PREPARED FOR THE EXCLUSIVE USE OF HARMONI TOWERS AND EXCLUSIVELY FOR THE TRANSFERRAL OF THE LEASED PREMISES AND THE RIGHTS OF EASEMENT SHOWN HEREON AND SHALL NOT BE USED AS AN EXHIBIT OR EVIDENCE IN THE FEE SIMPLE TRANSFERRAL OF THE PARENT PARCEL NOR ANY PORTION OR PORTIONS THEREOF. BOUNDARY INFORMATION SHOWN HEREON HAS BEEN COMPILED FROM TAX MAPS AND DEED DESCRIPTIONS ONLY. NO BOUNDARY SURVEY OF THE PARENT PARCEL WAS PERFORMED.

THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY.

THE FIELD DATA UPON WHICH THIS SPECIFIC PURPOSE SURVEY IS BASED HAS A CLOSURE PRECISION OF ONE FOOT IN 10,000+ FEET AND AN ANGULAR ERROR OF 5.0" PER ANGLE POINT AND WAS NOT ADJUSTED FOR CLOSURE.

EQUIPMENT USED FOR ANGULAR & LINEAR MEASUREMENTS: LEICA TPS 1200 ROBOTIC & GEOMAX ZENITH 35. [DATE OF LAST FIELD VISIT: 02/25/2021]

THE 2' CONTOURS AND SPOT ELEVATIONS SHOWN ON THIS SPECIFIC PURPOSE SURVEY ARE ADJUSTED TO NAVD 88 DATUM (COMPUTED USING GEOID18) AND HAVE A VERTICAL ACCURACY OF ± 1'. CONTOURS OUTSIDE THE IMMEDIATE SITE AREA ARE APPROXIMATE.

BEARINGS SHOWN ON THIS SPECIFIC PURPOSE SURVEY ARE BASED ON GRID NORTH (NAD 83) KENTUCKY SINGLE ZONE.

PER THE FEMA FLOODPLAIN MAPS, THE LEASE AREA IS LOCATED IN AN AREA DESIGNATED AS ZONE X (AREA OF MINIMAL FLOOD HAZARD). COMMUNITY PANEL NO. : 21155C0050C DATED: 01/06/2010. A PORTION OF THE 30' INGRESS-EGRESS & UTILITY EASEMENT IS LOCATED IN AN AREA DESIGNATED AS FLOOD ZONE "A" (NO BFE DETERMINED). COMMUNITY PANEL NO.: 21229C0200C DATED: 02/17/2010 AND IS SHOWN HEREON AS THE HATCHED AREA.

NO WETLAND AREAS HAVE BEEN INVESTIGATED BY THIS SPECIFIC PURPOSE SURVEY.

ALL ZONING INFORMATION SHOULD BE VERIFIED WITH THE PROPER ZONING OFFICIALS.

ANY UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM ABOVE GROUND FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEES THAT ANY UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT ANY UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED ANY UNDERGROUND UTILITIES.

811 Know what's below. Call before you dig.

NO.	DATE	REVISION
1	7/30/21	LEASE AREA
2	9/1/21	COMMENTS
3	1/26/22	LEASE AREA

* SPECIFIC PURPOSE SURVEY PREPARED BY:

POINT TO POINT LAND SURVEYORS
100 Governors Trace, Ste. 103
Peachtree City, GA 30269
(p) 678.565.4440 (f) 678.565.4497
(w) pointtopointsurvey.com

SPECIFIC PURPOSE SURVEY PREPARED FOR:

HARMONI TOWERS
10801 EXECUTIVE CENTER DRIVE
SHANNON BLDG., STE 100
LITTLE ROCK, AR 72211

LEBANON ROAD
SITE NO.
KYLOU2014
WASHINGTON &
MARION COUNTIES
KENTUCKY

DRAWN BY: EAL
CHECKED BY: JKL
APPROVED: D. MILLER
DATE: MARCH 5, 2021
P2P JOB #: 202602KY

SHEET: 1 OF 4

E:\Dropbox (Point To Point)\P2P Current Jobs\2026\202602KY\Lebanon Road\202602KY.pro

30' INGRESS-EGRESS & UTILITY EASEMENT #1

TOGETHER WITH A 30-FOOT WIDE INGRESS-EGRESS AND UTILITY EASEMENT (LYING 15 FEET EACH SIDE OF CENTERLINE) LYING AND BEING IN MARION COUNTY, KENTUCKY, AND BEING A PORTION OF TRACT NUMBER 9 OF MACKIN FARMS INC. FARM DIVISION, AS RECORDED IN PLAT CABINET A, SLIDE 552, WASHINGTON COUNTY RECORDS AND DUALLY RECORDED IN PLAT CABINET 3, SLIDE 433, MARION COUNTY RECORDS AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A 5/8-INCH REBAR WITH CAP STAMPED "TA PHIPPS LS 2488" FOUND AT THE NORTHEAST CORNER OF SAID TRACT NUMBER 9, SAID REBAR HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754323.2850 E: 5060860.4026; THENCE RUNNING FOR A TIE LINE SOUTH 17°26'53" WEST 185.50 FEET TO A POINT LOCATED ON THE NORTHEAST CORNER OF THE LEASE AREA HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754146.3164 E: 5060804.7807; THENCE RUNNING WITH SAID LEASE AREA, SOUTH 03°24'32" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 86°35'28" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 03°24'32" EAST, 100.00 FEET TO A POINT; THENCE SOUTH 86°35'28" EAST 69.79 FEET TO A POINT AND THE TRUE POINT OF BEGINNING; THENCE RUNNING, NORTH 03°24'32" EAST, 147.10 FEET TO A POINT; THENCE, NORTH 54°25'24" EAST, 35.99 FEET TO AN ENDING POINT ON THE NORTH LINE OF SAID TRACT NUMBER 9.

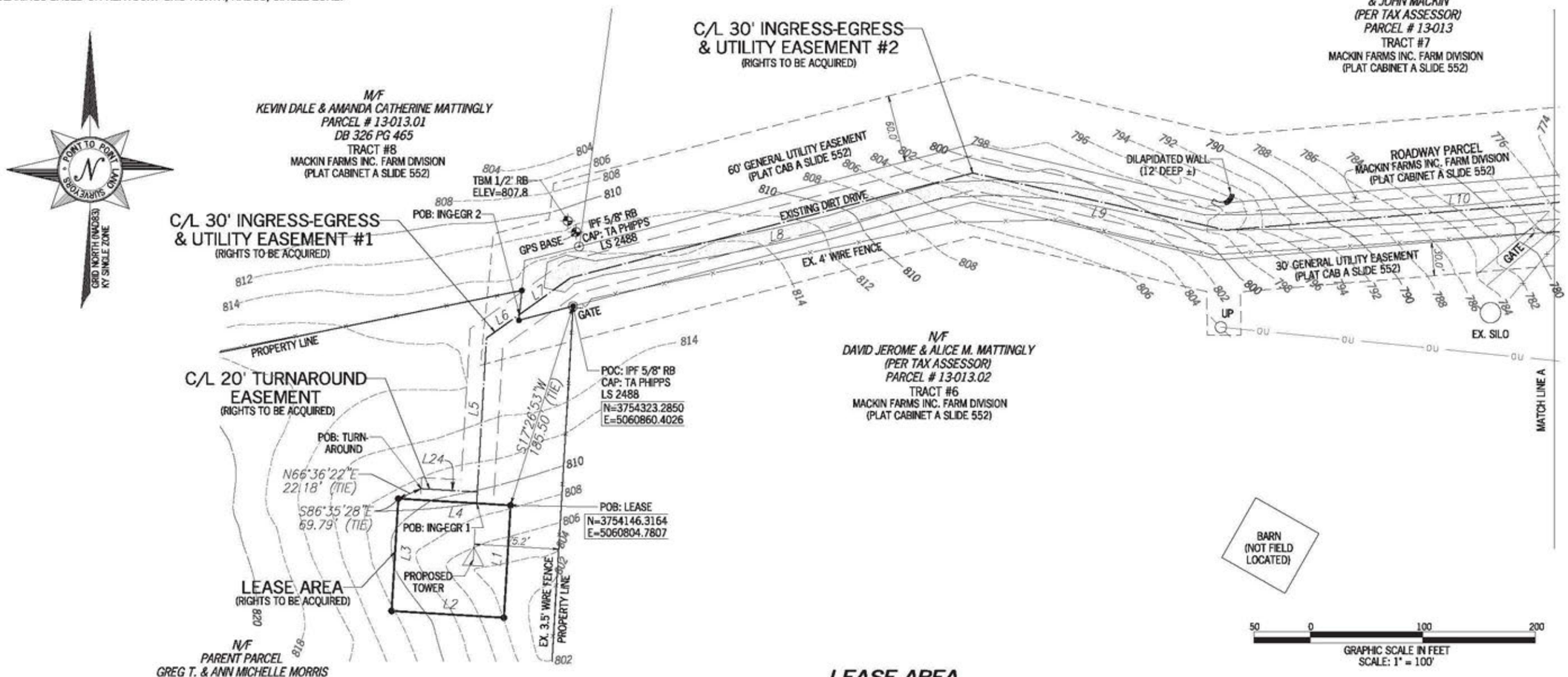
BEARINGS BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

20' TURNAROUND EASEMENT

TOGETHER WITH A 20-FOOT WIDE TURNAROUND EASEMENT (LYING 10 FEET EACH SIDE OF CENTERLINE) LYING AND BEING IN MARION COUNTY, KENTUCKY, AND BEING A PORTION OF TRACT NUMBER 9 OF MACKIN FARMS INC. FARM DIVISION, AS RECORDED IN PLAT CABINET A, SLIDE 552, WASHINGTON COUNTY RECORDS AND DUALLY RECORDED IN PLAT CABINET 3, SLIDE 433, MARION COUNTY RECORDS AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A 5/8-INCH REBAR WITH CAP STAMPED "TA PHIPPS LS 2488" FOUND AT THE NORTHEAST CORNER OF SAID TRACT NUMBER 9, SAID REBAR HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754323.2850 E: 5060860.4026; THENCE RUNNING FOR A TIE LINE SOUTH 17°26'53" WEST 185.50 FEET TO A POINT LOCATED ON THE NORTHEAST CORNER OF THE LEASE AREA HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754146.3164 E: 5060804.7807; THENCE RUNNING WITH SAID LEASE AREA, SOUTH 03°24'32" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 86°35'28" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 03°24'32" EAST, 100.00 FEET TO A POINT; THENCE LEAVING SAID LEASE AREA AND RUNNING FOR A TIE LINE, NORTH 66°36'22" EAST, 22.18 FEET TO A POINT AND THE TRUE POINT OF BEGINNING; THENCE RUNNING, SOUTH 86°35'28" EAST, 50.00 FEET TO THE ENDING POINT.

BEARINGS BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.



LEGEND

POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
IPS	IRON PIN SET
IPF	IRON PIN FOUND
CMF	CONCRETE MONUMENT FOUND
RB	REBAR
UP	UTILITY POLE
INV	INVERT
EP	EDGE OF PAVEMENT
OU	OVERHEAD UTILITY
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE PIPE
GW	GUY WIRE ANCHOR
TR	TRANSFORMER
CLF	CHAIN LINK FENCE
BWF	BARBED WIRE FENCE
N/F	NOW OR FORMERLY
TBM	TEMPORARY BENCHMARK

SURVEY NOT VALID WITHOUT SHEETS 1, 3 & 4

SITE INFORMATION

LEASE AREA = 10,000 SQUARE FEET (0.2296 ACRES)

LATITUDE = 37°37'55.60" (NAD 83) (37.632111°)
LONGITUDE = -85°16'05.44" (NAD 83) (-85.268178°)
AT CENTER PROPOSED TOWER

ELEVATION AT CENTER OF PROPOSED TOWER = 804.9' A.M.S.L.

SEE SHEET 3 FOR LINE TABLE

LEASE AREA

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN MARION COUNTY, KENTUCKY, AND BEING A PORTION OF TRACT NUMBER 9 OF MACKIN FARMS INC. FARM DIVISION, AS RECORDED IN PLAT CABINET A, SLIDE 552, WASHINGTON COUNTY RECORDS AND DUALLY RECORDED IN PLAT CABINET 3, SLIDE 433, MARION COUNTY RECORDS AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A 5/8-INCH REBAR WITH CAP STAMPED "TA PHIPPS LS 2488" FOUND AT THE NORTHEAST CORNER OF SAID TRACT NUMBER 9, SAID REBAR HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754323.2850 E: 5060860.4026; THENCE RUNNING FOR A TIE LINE SOUTH 17°26'53" WEST 185.50 FEET TO A POINT HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754146.3164 E: 5060824.7807; AND THE TRUE POINT OF BEGINNING; THENCE RUNNING, SOUTH 03°24'32" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 86°35'28" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 03°24'32" EAST, 100.00 FEET TO A POINT; THENCE, SOUTH 86°35'28" EAST, 100.00 FEET TO A POINT AND THE TRUE POINT OF BEGINNING.

BEARINGS BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

SAID TRACT CONTAINS 0.2296 ACRES (10,000 SQUARE FEET), MORE OR LESS.

STATE of KENTUCKY
G. DARRELL TAYLOR
4179
LICENSED PROFESSIONAL LAND SURVEYOR

NO.	DATE	REVISION
1	7/30/21	LEASE AREA
2	9/1/21	COMMENTS
3	1/26/22	LEASE AREA

* SPECIFIC PURPOSE SURVEY PREPARED BY:
POINT TO POINT LAND SURVEYORS
100 Governors Trace, Ste. 103
Peachtree City, GA 30269
(p) 678.565.4440 (f) 678.565.4497
(w) pointtopointsurvey.com

SPECIFIC PURPOSE SURVEY PREPARED FOR:

HARMONI TOWERS
10801 EXECUTIVE CENTER DRIVE
SHANNON BLDG., STE 100
LITTLE ROCK, AR 72211

LEBANON ROAD
SITE NO.
KYLOU2014
WASHINGTON & MARION COUNTIES
KENTUCKY

DRAWN BY: EAL
CHECKED BY: JKL
APPROVED: D. MILLER
DATE: MARCH 5, 2021
P2P JOB #: 202602KY

SHEET: 2 OF 4

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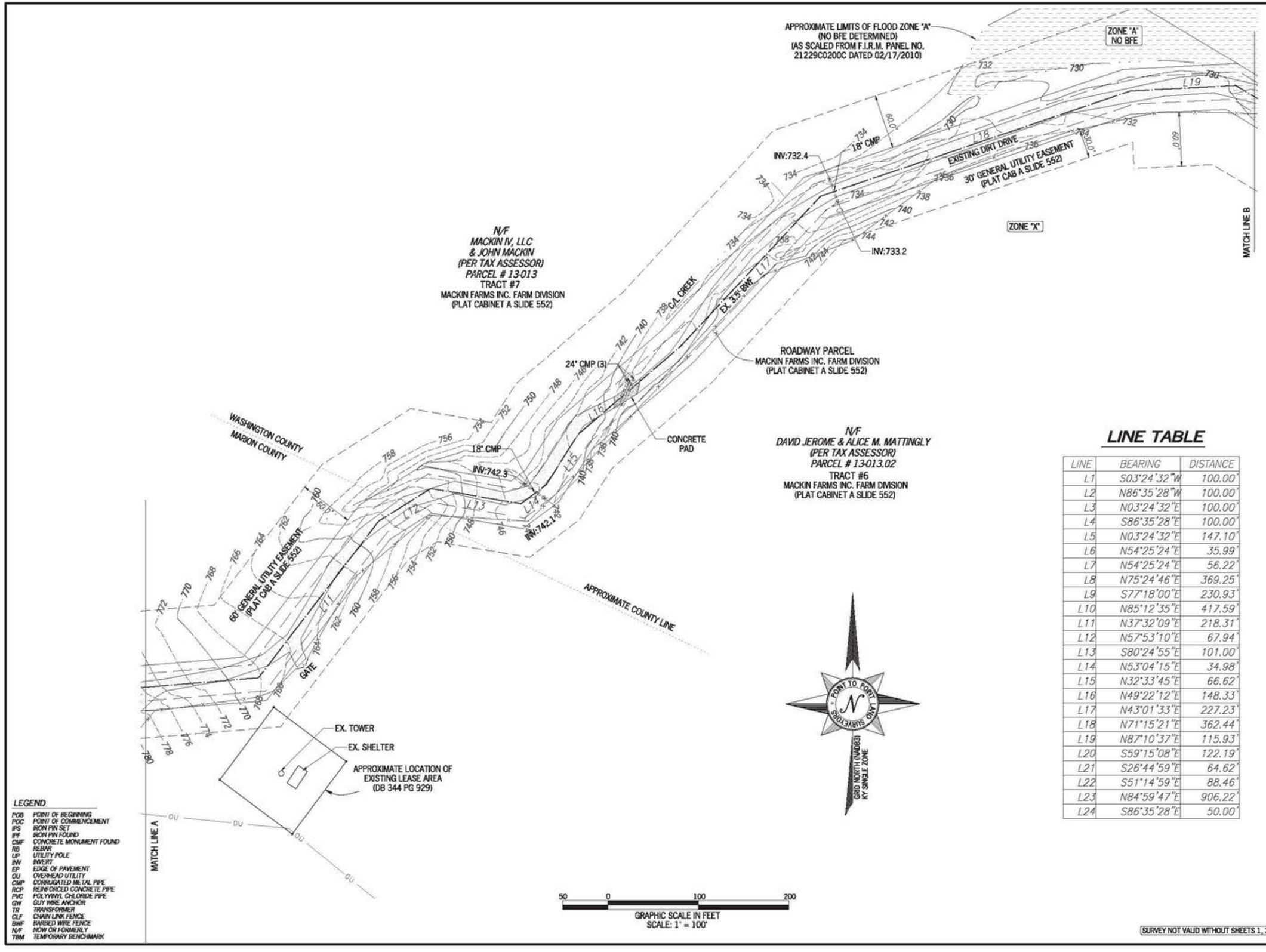

LINE TABLE

LINE	BEARING	DISTANCE
L1	S03°24'32"W	100.00'
L2	N86°35'28"W	100.00'
L3	N03°24'32"E	100.00'
L4	S86°35'28"E	100.00'
L5	N03°24'32"E	147.10'
L6	N54°25'24"E	35.99'
L7	N54°25'24"E	56.22'
L8	N75°24'46"E	369.25'
L9	S77°18'00"E	230.93'
L10	N85°12'35"E	417.59'
L11	N37°32'09"E	218.31'
L12	N57°53'10"E	67.94'
L13	S80°24'55"E	101.00'
L14	N53°04'15"E	34.98'
L15	N32°33'45"E	66.62'
L16	N49°22'12"E	148.33'
L17	N43°01'33"E	227.23'
L18	N71°15'21"E	362.44'
L19	N87°10'37"E	115.93'
L20	S59°15'08"E	122.19'
L21	S26°44'59"E	64.62'
L22	S51°14'59"E	88.46'
L23	N84°59'47"E	906.22'
L24	S86°35'28"E	50.00'

LEGEND

POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
IPS	IRON PIN SET
IPF	IRON PIN FOUND
CMF	CONCRETE MONUMENT FOUND
RB	REBAR
UP	UTILITY POLE
INV	INVERT
EP	EDGE OF PAVEMENT
OU	OVERHEAD UTILITY
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE PIPE
GW	GUY WIRE ANCHOR
TR	TRANSFORMER
CLF	CHAIN LINK FENCE
BWF	BARBED WIRE FENCE
N/F	NOW OR FORMERLY
TBM	TEMPORARY BENCHMARK

SURVEY NOT VALID WITHOUT SHEETS 1, 2 & 4

STATE of KENTUCKY
G. DARRELL TAYLOR
4179
LICENSED PROFESSIONAL LAND SURVEYOR

NO.	DATE	REVISION
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3	1/26/22	LEASE AREA

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SHANNON BLDG., STE 100
LITTLE ROCK, AR 72211

LEBANON ROAD
SITE NO.
KYLOU2014
WASHINGTON &
MARION COUNTIES
KENTUCKY

DRAWN BY: EAL
CHECKED BY: JKL
APPROVED: D. MILLER
DATE: MARCH 5, 2021
P2P JOB #: 202602KY

SHEET: 3 OF 4

E:\Dropbox (Point To Point)\P2P Current Jobs\2026\202602KY\Lebanon Road\202602KY.dwg

30' INGRESS-EGRESS & UTILITY EASEMENT #2

TOGETHER WITH A 30-FOOT WIDE INGRESS-EGRESS AND UTILITY EASEMENT (LYING 15 FEET EACH SIDE OF CENTERLINE) LYING AND BEING IN WASHINGTON AND MARION COUNTIES, KENTUCKY, AND BEING A PORTION OF THE ROADWAY PARCEL OF MACKIN FARMS INC. FARM DIVISION, AS RECORDED IN PLAT CABINET A, SLIDE 552, WASHINGTON COUNTY RECORDS AND DUALLY RECORDED IN PLAT CABINET 3, SLIDE 433, MARION COUNTY RECORDS AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A 5/8-INCH REBAR WITH CAP STAMPED "TA PHIPPS LS 2488" FOUND AT THE NORTHEAST CORNER OF SAID TRACT NUMBER 9, SAID REBAR HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754323.2850 E: 5060860.4026; THENCE RUNNING FOR A TIE LINE SOUTH 17°26'53" WEST 185.50 FEET TO A POINT LOCATED ON THE NORTHEAST CORNER OF THE LEASE AREA HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754146.3164 E: 5060804.7807; THENCE RUNNING WITH SAID LEASE AREA, SOUTH 03°24'32" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 86°35'28" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 03°24'32" EAST, 100.00 FEET TO A POINT; THENCE SOUTH 86°35'28" EAST 69.79 FEET TO A POINT; THENCE RUNNING, NORTH 03°24'32" EAST, 147.10 FEET TO A POINT; THENCE, NORTH 54°25'24" EAST, 35.99 FEET TO A POINT ON THE NORTH LINE OF SAID TRACT NUMBER 9 AND THE TRUE POINT OF BEGINNING; THENCE RUNNING NORTH 54°25'24" EAST, 56.22 FEET TO A POINT; THENCE, NORTH 75°24'46" EAST, 369.25 FEET TO A POINT; THENCE, SOUTH 77°18'00" EAST, 230.93 FEET TO A POINT; THENCE, NORTH 85°12'35" EAST, 417.59 FEET TO A POINT; THENCE, NORTH 37°32'09" EAST, 218.31 FEET TO A POINT; THENCE, NORTH 57°53'10" EAST, 67.94 FEET TO A POINT; THENCE, SOUTH 80°24'55" EAST, 101.00 FEET TO A POINT; THENCE, NORTH 53°04'15" EAST, 34.98 FEET TO A POINT; THENCE, NORTH 32°33'45" EAST, 66.62 FEET TO A POINT; THENCE, NORTH 49°22'12" EAST, 148.33 FEET TO A POINT; THENCE, NORTH 43°01'33" EAST, 227.23 FEET TO A POINT; THENCE, NORTH 71°15'21" EAST, 362.44 FEET TO A POINT; THENCE, NORTH 87°10'37" EAST, 115.93 FEET TO A POINT; THENCE, SOUTH 59°15'08" EAST, 122.19 FEET TO A POINT; THENCE, SOUTH 26°44'59" EAST, 64.62 FEET TO A POINT; THENCE, SOUTH 51°14'59" EAST, 88.46 FEET TO A POINT; THENCE, NORTH 84°59'47" EAST, 906.22 FEET TO AN ENDING POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF HIGHWAY 55.

BEARINGS BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

PARENT PARCEL LEGAL DESCRIPTION

PER FIDELITY NATIONAL TITLE INSURANCE COMPANY COMMITMENT 33549269

TRACT 9 OF THE MACKIN FARMS, INC. FARM DIVISION AS PER PLAT OF RECORD AT PLAT CABINET A, SLIDE 552, IN THE OFFICE OF THE WASHINGTON COUNTY COURT CLERK AND DUALLY RECORDED AT PLAT CABINET 3, SLIDE 433 IN THE OFFICE OF THE MARION COUNTY COURT CLERK.

ALSO GRANTED HEREIN TO AN ONE-THIRD (1/3) UNDIVIDED INTEREST IN THE ROADWAY PARCEL FROM POINT "A" TO POINT "E" AND AN ONE-HALF (1/2) UNDIVIDED INTEREST IN THE ROADWAY PARCEL FROM POINT "E" TO POINT "F".

THIS PROPERTY IS FURTHER SUBJECT TO RESTRICTIONS, ROADWAY MAINTENANCE AND EASEMENT AGREEMENTS AS SET FORTH IN DOCUMENTS ACCOMPANYING THE PLATS OF RECORD AT THE LOCATIONS REFERENCED ABOVE.

ROADWAY PARCEL FROM POINT "A" TO POINT "F" IS FOR INGRESS AND EGRESS PURPOSES ONLY AND CANNOT BE GATED OR BLOCKED IN ANY MANNER.

EACH OF TRACTS 7, 8, AND 9 SHALL OWN AN ONE-THIRD (1/3) UNDIVIDED INTEREST IN THE ROADWAY FROM POINT "A" TO POINT "E". EACH OF TRACTS 8 AND 9 SHALL OWN AN ONE-HALF (1/2) UNDIVIDED INTEREST IN THE ROADWAY FROM POINT "E" TO POINT "F".

TRACTS 1, 2, 3, 4, 5, 6 SHALL HAVE A PERMANENT EASEMENT FOR INGRESS AND EGRESS PURPOSES ONLY FROM POINT "A" TO POINT "B".

TRACTS 1, 5 AND 6 SHALL HAVE A PERMANENT EASEMENT FOR INGRESS AND EGRESS PURPOSES ONLY FROM POINT "B" TO POINT "C".

TRACTS 5 AND 6 SHALL HAVE A PERMANENT EASEMENT FOR INGRESS AND EGRESS ONLY FROM POINT "C" TO POINT "D".

TRACT 6 SHALL HAVE A PERMANENT EASEMENT FOR INGRESS AND EGRESS FORM POINT "D" TO POINT "E".

MAINTENANCE RESPONSIBILITY

ROADWAY SHALL BE MAINTAINED TO PROVIDE REASONABLE ACCESS BY A TWO-WHEEL DRIVE PASSENGER AUTOMOBILE SUITABLE FOR LICENSING ON PUBLIC ROADS.

TRACTS 1, 2, 3, 4, 5, 6, 7, 8 AND 9 WILL BE RESPONSIBLE FOR ONE-NINTH (1/9) SHARE OF MAINTENANCE COST FROM POINT "A" TO POINT "B".

TRACTS 1, 5, 6, 7, 8 AND 9 WILL BE RESPONSIBLE FOR ONE-SIXTH (1/6) SHARE OF MAINTENANCE COST FROM POINT "B" TO POINT "C".

TRACTS 5, 6, 7, 8 AND 9 WILL BE RESPONSIBLE FOR ONE-FIFTH (1/5) SHARE OF MAINTENANCE COST FROM POINT "C" TO POINT "D". TRACTS 5, 6, 7, 8 AND 9 ARE ALSO RESPONSIBLE FOR ONE-FIFTH (1/5) SHARE OF MAINTENANCE COST AND UPKEEP OF BRIDGE CROSSING CARTWRIGHT CREEK AS SHOWN ON THE PLAT BETWEEN POINT "C" AND "D".

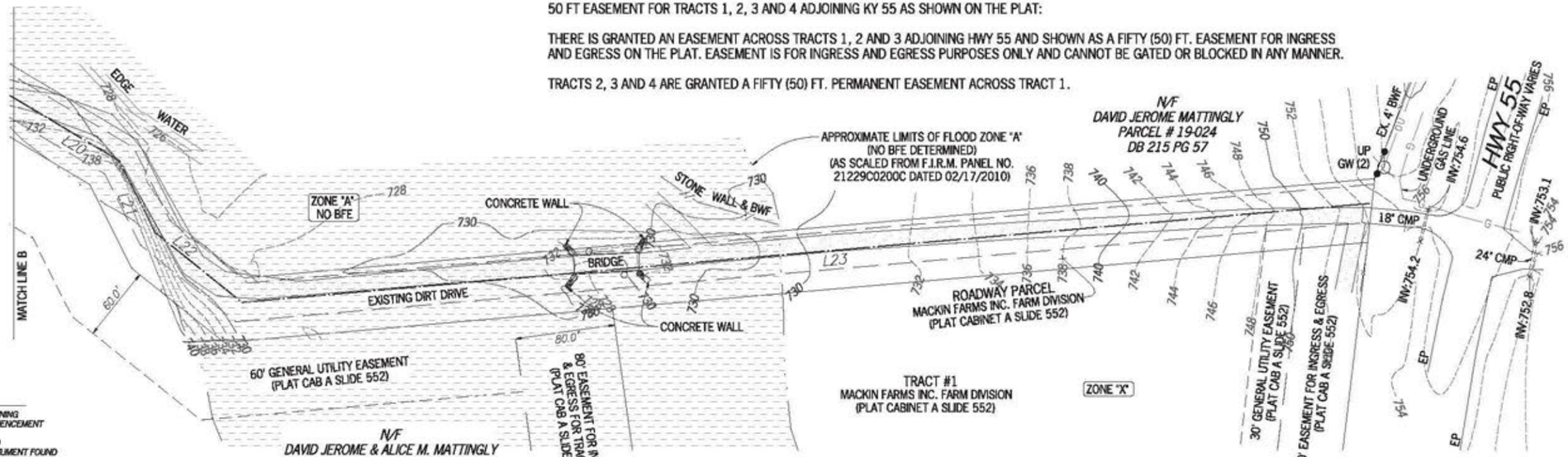
TRACTS 6, 7, 8 AND 9 WILL BE RESPONSIBLE FOR ONE-FOURTH (1/4) SHARE OF MAINTENANCE COST FROM POINT "D" TO POINT "E".

TRACTS 8 AND 9 WILL BE RESPONSIBLE FOR ONE-HALF (1/2) SHARE OF MAINTENANCE COST FROM POINT "E" TO POINT "F".

50 FT EASEMENT FOR TRACTS 1, 2, 3 AND 4 ADJOINING KY 55 AS SHOWN ON THE PLAT:

THERE IS GRANTED AN EASEMENT ACROSS TRACTS 1, 2 AND 3 ADJOINING HWY 55 AND SHOWN AS A FIFTY (50) FT. EASEMENT FOR INGRESS AND EGRESS ON THE PLAT. EASEMENT IS FOR INGRESS AND EGRESS PURPOSES ONLY AND CANNOT BE GATED OR BLOCKED IN ANY MANNER.

TRACTS 2, 3 AND 4 ARE GRANTED A FIFTY (50) FT. PERMANENT EASEMENT ACROSS TRACT 1.



SEE SHEET 3 FOR LINE TABLE

GRAPHIC SCALE IN FEET
SCALE: 1" = 100'

SURVEY NOT VALID WITHOUT SHEETS 1 - 3

LEGEND

POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
IPS	IRON PIN SET
IPF	IRON PIN FOUND
CMF	CONCRETE MONUMENT FOUND
RB	REBAR
UP	UTILITY POLE
INV	INVERT
EP	EDGE OF PAVEMENT
OU	OVERHEAD UTILITY
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE PIPE
GW	GUY WIRE ANCHOR
TR	TRANSFORMER
CLF	CHAIN LINK FENCE
BWF	BARBED WIRE FENCE
N/F	NOW OR FORMERLY
TBM	TEMPORARY BENCHMARK

STATE of KENTUCKY
G. DARRELL TAYLOR
4179
LICENSED PROFESSIONAL LAND SURVEYOR

NO.	DATE	REVISION
1	7/30/21	LEASE AREA
2	9/1/21	COMMENTS
3	1/26/22	LEASE AREA

* SPECIFIC PURPOSE SURVEY PREPARED BY:
POINT TO POINT LAND SURVEYORS
100 Governors Trace, Ste. 103
Peachtree City, GA 30269
(p) 678.565.4440 (f) 678.565.4497
(w) pointtopointsurvey.com

SPECIFIC PURPOSE SURVEY PREPARED FOR:

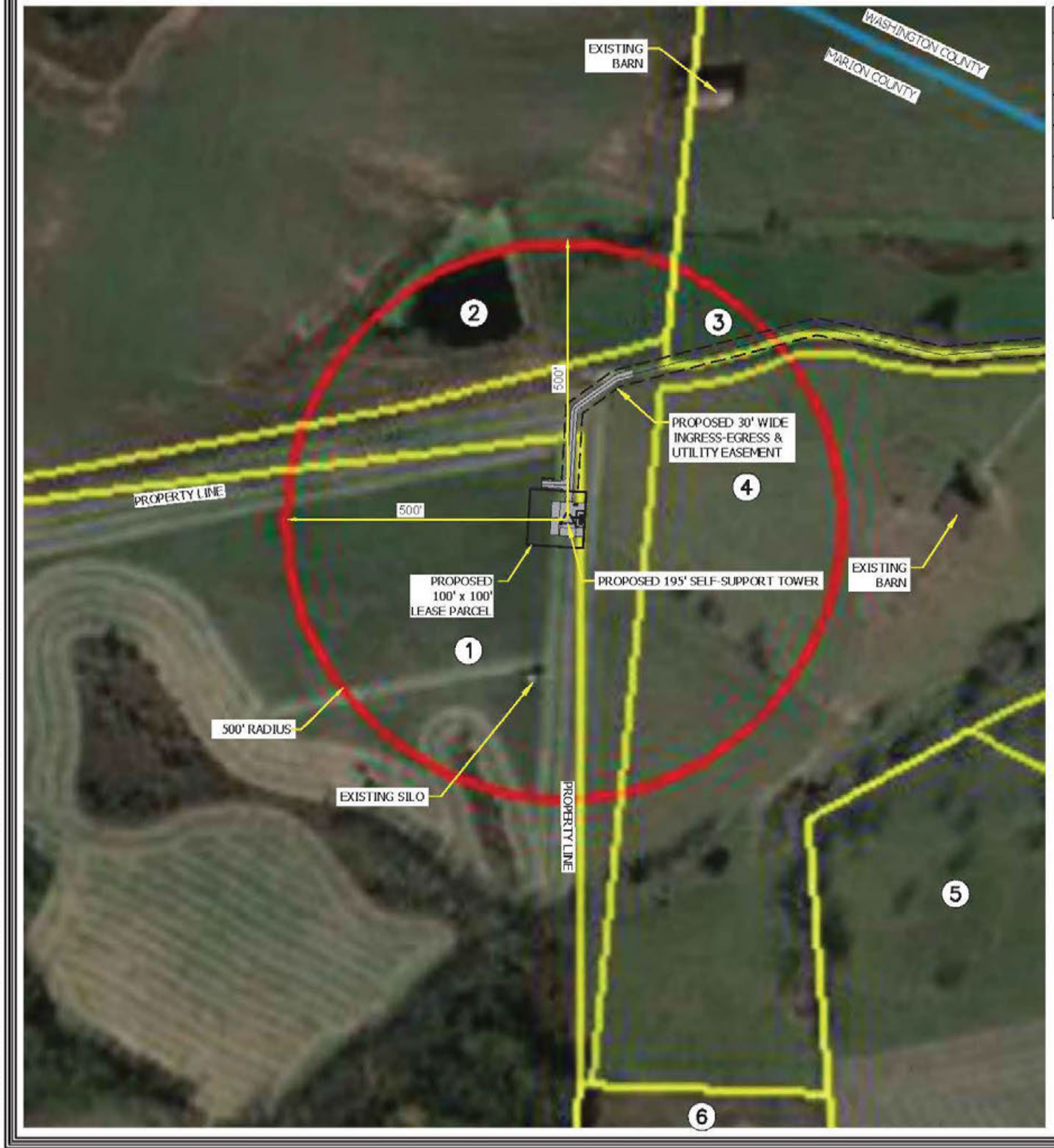
HARMONI TOWERS
10801 EXECUTIVE CENTER DRIVE
SHANNON BLDG., STE 100
LITTLE ROCK, AR 72211

LEBANON ROAD
SITE NO.
KYLOU2014
WASHINGTON & MARION COUNTIES
KENTUCKY

DRAWN BY: EAL
CHECKED BY: JKL
APPROVED: D. MILLER
DATE: MARCH 5, 2021
P2P JOB #: 202602KY

SHEET: 4 OF 4

E:\Dropbox (Point To Point)\P2P Current Jobs\2020\202602KY Lebanon Road\202602KY.prc



#	OWNER	ADDRESS	PID	REF
1	GREGORY THOMAS & ANN MICHELLE MORRIS	3239 ST ROSE RD LEBANON, KY 40033	054-006	DB 259 PG 11
2	KEVIN DALE & AMANDA CATHERINE MATTINGLY	750 ST ROSE-LEBANON RD SPRINGFIELD, KY 40069	13-013.01	DB 326 PG 465
3	MACKIN IV, LLC % JOHN MACKIN	P.O. BOX 29607 SAN FRANCISCO, CA 94129	13-013	DB 305 PG 636
4	DAVID JEROME & ALICE M MATTINGLY	4000 SPRINGFIELD RD SPRINGFIELD, KY 40069	13-013.02	DB 305 PG 332
5	DAVID J MATTINGLY	4000 SPRINGFIELD RD SPRINGFIELD, KY 40069	054-011	DB 146 PG 637
6	MARK RAYMOND NALLY	3780 SPRINGFIELD RD SPRINGFIELD, KY 40069	054-010	DB 305 PG 350

NOTE:

1. PVA INFORMATION WAS OBTAINED ON 4/1/2022 FROM THE OFFICIAL RECORDS OF THE COUNTY'S PROPERTY VALUATION ADMINISTRATOR.
2. THIS MAP IS FOR GENERAL INFORMATION PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY.
3. NOT FOR RECORDING OR PROPERTY TRANSFER.

1 500' RADIUS & ADJOINER'S DRAWING

SCALE: 0' 100' 200' 300' 400' 1"=200'

N

CALL KENTUCKY ONE CALL
(800) 752-6007
CALL 3 WORKING DAYS
BEFORE YOU DIG!

811

B+T GRP

at&t mobility corp

HARMONI TOWERS

HARMONI TOWERS
LEBANON ROAD
FA# 15435110
PACE# MRTNK052245
PT# 2451A0XDDL
(PROPERTY)
SPRINGFIELD HWY
SPRINGFIELD, KY 40069
MARION COUNTY
PROPOSED 195' SELF-SUPPORT TOWER

PROJECT NO: G0144647.002.01
CHECKED BY: MAS

ISSUED FOR

REV	DATE	DRWN	DESCRIPTION
3	4/7/22	DLS	FINAL
4	4/21/22	DLS	FINAL
5	4/27/22	JJR	FINAL

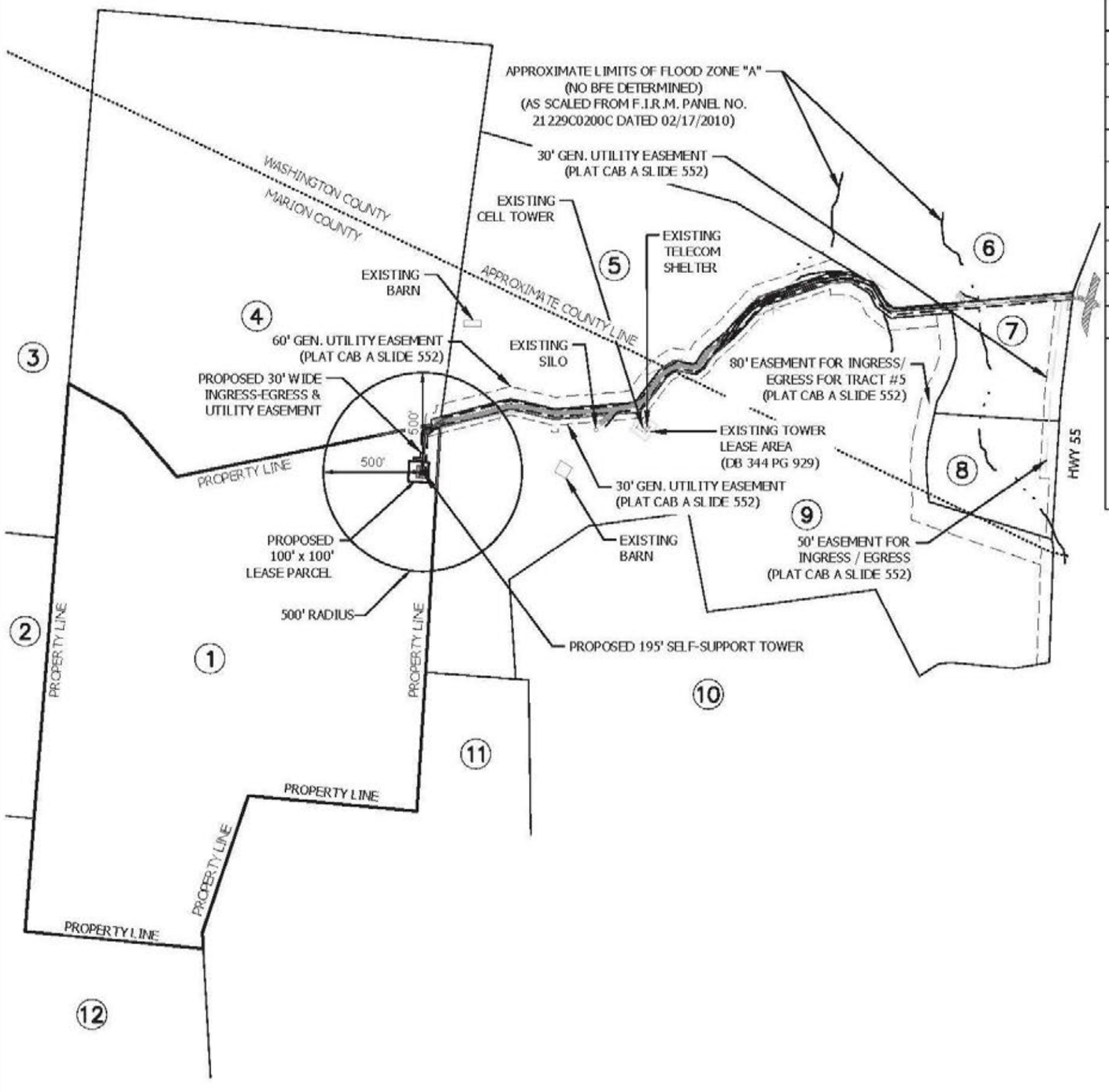
B&T ENGINEERING, INC.
4011
Expires 12/31/22

STATE OF KENTUCKY
BRADLEY MILANOWSKI
25311
LICENSED PROFESSIONAL ENGINEER
4/27/22

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

500' RADIUS & ADJOINER'S DRAWING

SHEET NUMBER:
C-1.0



#	OWNER	ADDRESS	PID	REF
1	GREGORY THOMAS & ANN MICHELLE MORRIS	3239 ST ROSE RD LEBANON, KY 40033	054-006	DB 259 PG 11
2	JAMES MICHAEL & DELORES C REYNOLDS	4355 ST ROSE RD LEBANON, KY 40033	054-007	DB 143 PG 81
3	KEVIN DALE & AMANDA CATHERINE MATTINGLY	750 ST ROSE-LEBANON RD SPRINGFIELD, KY 40069	054-005-02	DB 286 PG 508
4	KEVIN DALE & AMANDA CATHERINE MATTINGLY	750 ST ROSE-LEBANON RD SPRINGFIELD, KY 40069	13-013.01	DB 326 PG 465
5	MACKIN IV, LLC % JOHN MACKIN	P.O. BOX 29607 SAN FRANCISCO, CA 94129	13-013	DB 305 PG 636
6	DAVID JEROME MATTINGLY	4000 SPRINGFIELD RD SPRINGFIELD, KY 40069	19-024	DB 215 PG 57
7	KEVIN GLENN FORD & ELLEN HAMILTON	1799 ST ROSE RD LEBANON, KY 40033	13-013.04	DB 306 PG 330
8	38 WORLD, LLC ATTN: BARBARA MACKIN	**MEZONE DE 103 2-24-29 OHARA SETAGAYA KU TOKYO JAPAN 156-0041**	13-013.03	DB 305 PG 469
9	DAVID JEROME & ALICE M MATTINGLY	4000 SPRINGFIELD RD SPRINGFIELD, KY 40069	13-013.02	DB 305 PG 332
10	DAVID J MATTINGLY	4000 SPRINGFIELD RD SPRINGFIELD, KY 40069	054-011	DB 146 PG 637
11	MARK RAYMOND NALLY	3780 SPRINGFIELD RD SPRINGFIELD, KY 40069	054-010	DB 305 PG 350
12	GREGORY THOMAS & ANN MICHELLE MORRIS	3239 ST ROSE RD LEBANON, KY 40033	054-009	DB 205 PG 631

NOTE:

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1 OVERALL ADJOINER'S DRAWING
SCALE: 0' 300' 600' 900' 1200' 1"=600'

N

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B+T GRP

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HARMONI TOWERS

HARMONI TOWERS
LEBANON ROAD
FA# 15435110
PACE# MRTNK052245
PT# 2451A0XDDL
(PROPERTY)
SPRINGFIELD HWY
SPRINGFIELD, KY 40069
MARION COUNTY
PROPOSED 195' SELF-SUPPORT TOWER

PROJECT NO:	G0144647.002.01
CHECKED BY:	MAS

ISSUED FOR

REV	DATE	DRWN	DESCRIPTION
3	4/7/22	DLS	FINAL
4	4/21/22	DLS	FINAL
5	4/27/22	JJR	FINAL

B&T ENGINEERING, INC.
4011
Expires 12/31/22

STATE OF KENTUCKY
BRAD R. MILANOWSKI
25311
LICENSED PROFESSIONAL ENGINEER
4/27/22

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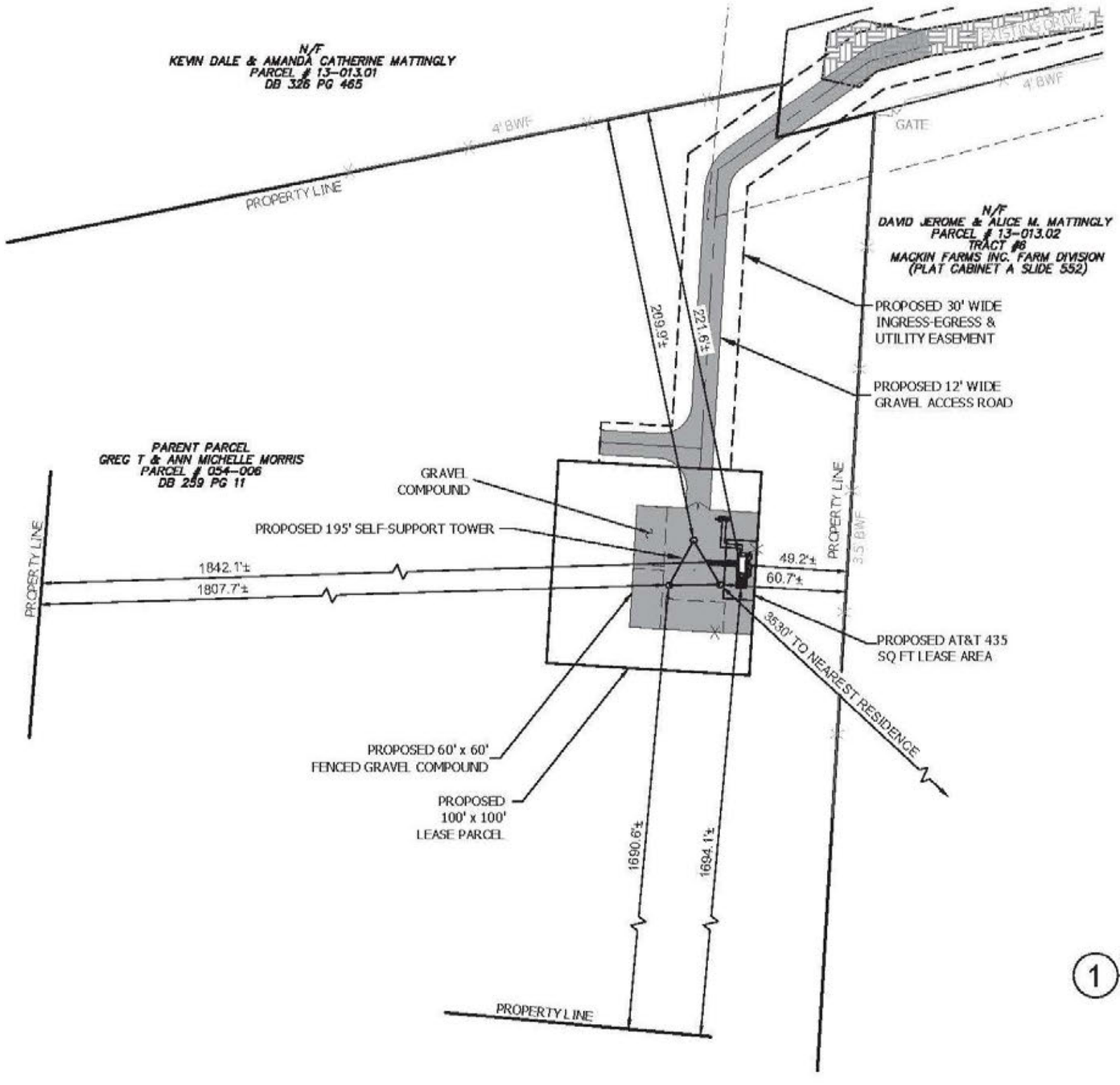
OVERALL ADJOINER'S DRAWING

SHEET NUMBER:
C-1.1

T:\4464?_KYLOU\2021\4_Lebanon Rd_203\a (5).dwg - Sheet (C-1.1 - User: jridenbaugh - Apr 27, 2022 - 2:11pm



NOTES:

1. TOWER LATITUDE, LONGITUDE & ELEVATION MEET FAA"1-A" ACCURACY REQUIREMENTS.

2. CENTER OF TOWER:

LATITUDE: NORTH 37°37'55.60" (37.63211) NAD 83
LONGITUDE: WEST -85°16'05.44" (-85.268178) NAD 83
GROUND ELEVATION @ 804.9' A.M.S.L. NAVD 88

3. THE APPROXIMATE PERPENDICULAR DISTANCES FROM THE OUTER EDGE OF THE PROPOSED TOWER TO PARENT TRACT NEAREST PROPERTY LINE ARE AS FOLLOWS:

SOUTH:	1690.6'±
EAST:	60.7'±
NORTH:	209.9'±
WEST:	1807.7'±

1 OVERALL SITE LAYOUT
SCALE: 0' 30' 60' 90' 120' 1"=60'

N

CALL KENTUCKY ONE CALL
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HARMONI TOWERS

HARMONI TOWERS
LEBANON ROAD
FA# 15435110
PACE# MRTNK052245
PT# 2451A0XDDL
(PROPERTY)
SPRINGFIELD HWY
SPRINGFIELD, KY 40069
MARION COUNTY
PROPOSED 195' SELF-SUPPORT TOWER

PROJECT NO:	G0144647.002.01
CHECKED BY:	MAS

ISSUED FOR

REV	DATE	DRWN	DESCRIPTION
3	4/7/22	DLS	FINAL
4	4/21/22	DLS	FINAL
5	4/27/22	JJR	FINAL

B&T ENGINEERING, INC.
4011
Expires 12/31/22

STATE OF KENTUCKY
BRAD P. PHILAKOWSKI
25311
LICENSED PROFESSIONAL ENGINEER
4/27/22

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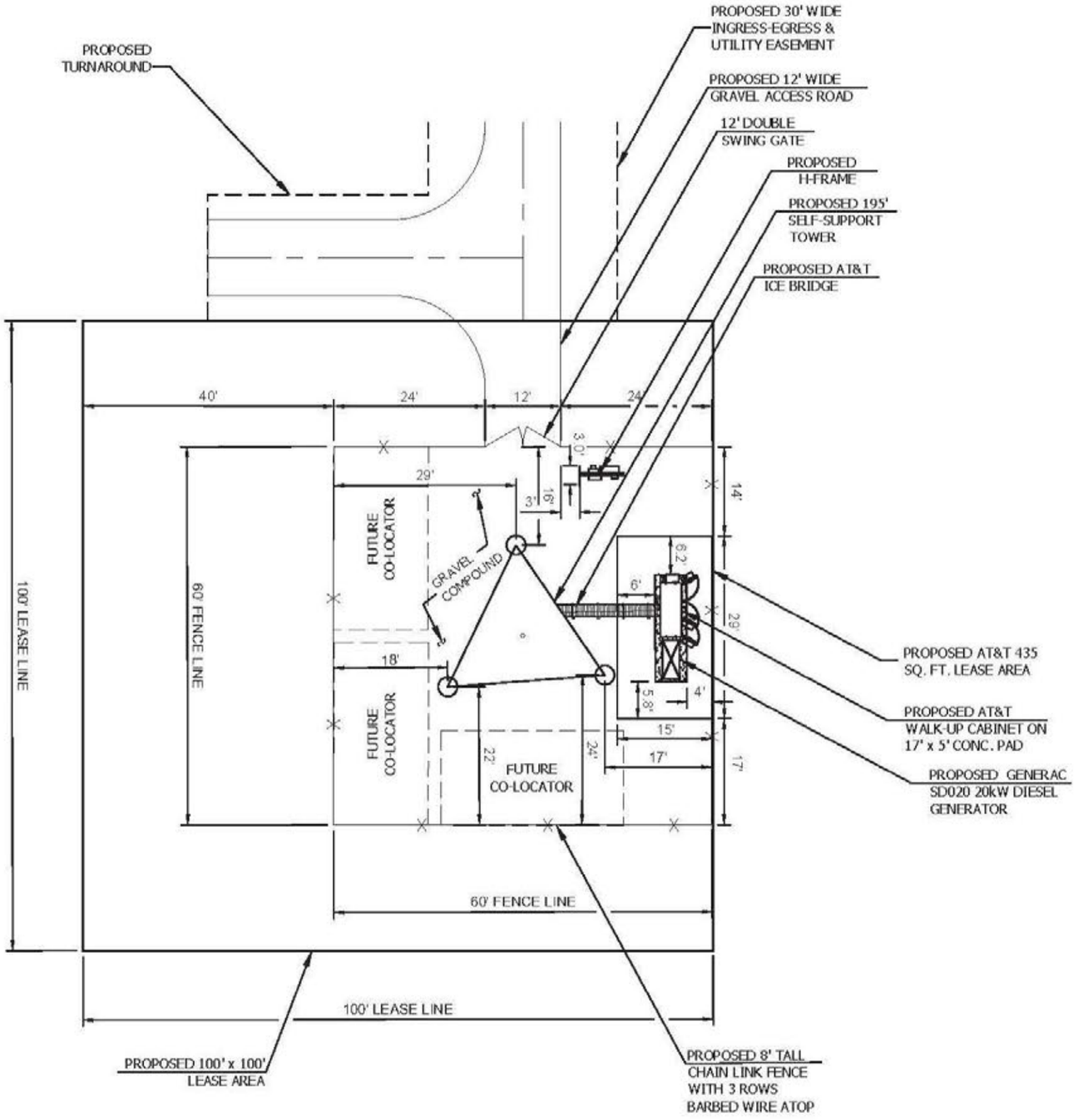
OVERALL SITE LAYOUT

SHEET NUMBER:
C-2



1 ENLARGED COMPOUND LAYOUT
SCALE: 0' 10' 20' 30' 40' 1"=20'

N

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at&t mobility corp

HARMONITOWERS

HARMONI TOWERS
LEBANON ROAD
FA# 15435110
PACE# MRTNK052245
PT# 2451A0XDDL
(PROPERTY)
SPRINGFIELD HWY
SPRINGFIELD, KY 40069
MARION COUNTY
PROPOSED 195' SELF-SUPPORT TOWER

PROJECT NO:	G0144647.002.01
CHECKED BY:	MAS

ISSUED FOR

REV	DATE	DRWN	DESCRIPTION
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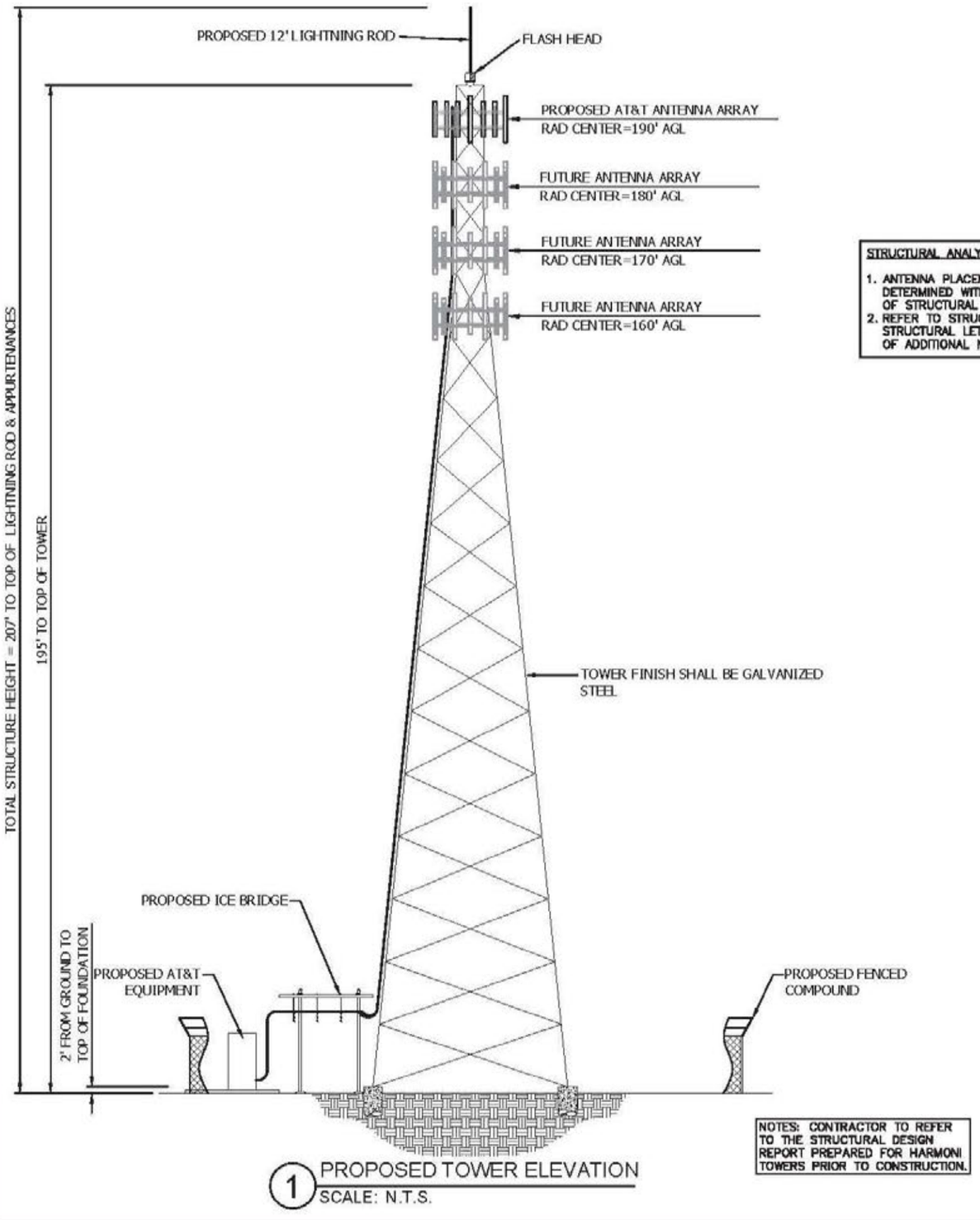
4	4/21/22	DLS	FINAL
5	4/27/22	JJR	FINAL

B&T ENGINEERING, INC.
4011
Expires 12/31/22

STATE OF KENTUCKY
BRAD P. MILANOWSKI
25311
LICENSED PROFESSIONAL ENGINEER
4/27/22

ENLARGED COMPOUND LAYOUT

SHEET NUMBER:
C-3



1 PROPOSED TOWER ELEVATION
SCALE: N.T.S.

STRUCTURAL ANALYSIS NOTES:

1. ANTENNA PLACEMENT WAS DETERMINED WITHOUT VERIFICATION OF STRUCTURAL ANALYSIS.
2. REFER TO STRUCTURAL ANALYSIS OR STRUCTURAL LETTER FOR APPROVAL OF ADDITIONAL NEW APPURTENANCES.

NOTES: CONTRACTOR TO REFER TO THE STRUCTURAL DESIGN REPORT PREPARED FOR HARMONI TOWERS PRIOR TO CONSTRUCTION.

B+T GRP

at&t mobility corp

HARMONITOWERS

HARMONI TOWERS
LEBANON ROAD
FA# 15435110
PACE# MRTNK052245
PT# 24514A0XDDL
(PROPERTY)
SPRINGFIELD HWY
SPRINGFIELD, KY 40069
MARION COUNTY
PROPOSED 195' SELF-SUPPORT TOWER

PROJECT NO:	G0144647.002.01
CHECKED BY:	MAS

ISSUED FOR

REV	DATE	DRWN	DESCRIPTION
3	4/7/22	DLS	FINAL
4	4/21/22	DLS	FINAL
5	4/27/22	JJR	FINAL

B&T ENGINEERING, INC.
4011
Expires 12/31/22

STATE OF KENTUCKY
BRAD P. KILANOWSKI
25311
LICENSED PROFESSIONAL ENGINEER
4/27/22

TOWER ELEVATION

SHEET NUMBER:
C-4

EXHIBIT C

TOWER AND FOUNDATION DESIGN

May 2, 2022

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

RE: Site Name – Cartwright Creek Relo/Lebanon Road
Proposed Cell Tower
37.632111 North Latitude, -85.268178 West Longitude

Dear Commissioners:

The Construction Manager for the proposed new communications facility will be Marshall Corbin. His contact information is (540) 287-8142 or Marshall Corbin@harmonitowers.com. Marshall has been in the industry completing civil construction and constructing towers since 1996. He has worked at Harmoni Towers LLC since 2021 completing project and construction management on new site build projects.

Thank you,

Marshall Corbin

Marshall Corbin
Construction Manager – Tennessee/Kentucky Market
Harmoni Towers LLC

Harmoni Towers LLC
11101 Anderson Drive, Suite 200
Little Rock, AR 72212
501.621.0521 | harmonitowers.com

Sabre Industries
INNOVATION DELIVERED

Structural Design Report

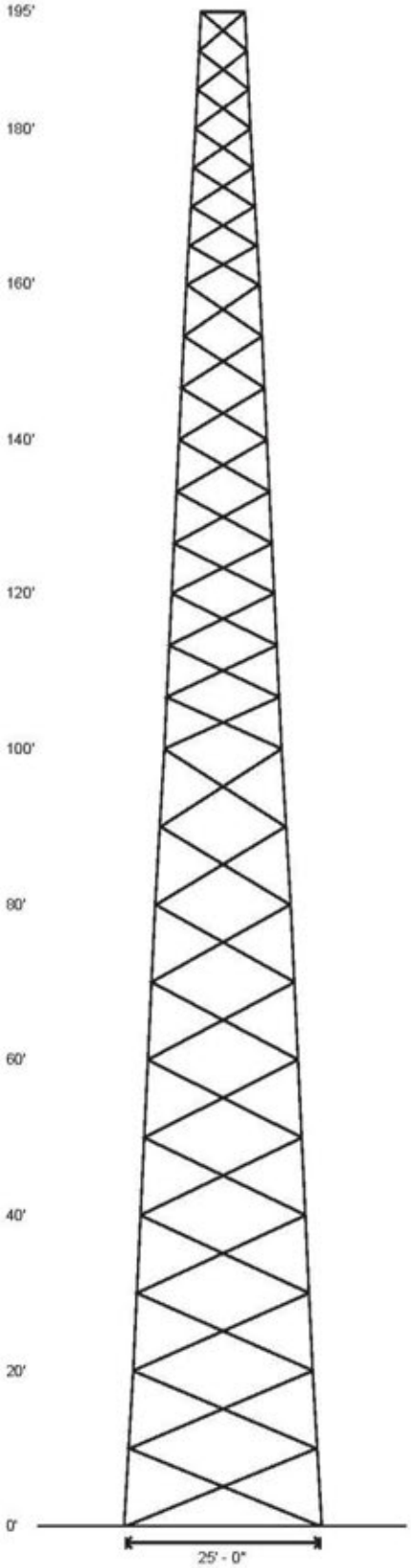
195' S3TL Series HD1 Self-Supporting Tower
Site: Lebanon Road, KY
Site Number: 15435107

Prepared for: HARMONI TOWERS
by: Sabre Industries IM

Job Number: 22-4840-JAC

February 22, 2022

Legs	8.625 OD X .322		5.563 OD X .500			5.563 OD X .375	5.563 OD X .258	4.000 OD X .318	4.000 OD X .226	3.500 OD X .216	A
Diagonals	L 4 X 4 X 1/4		L 3 1/2 X 3 1/2 X 1/4			L 3 X 3 X 3/16	L 2 1/2 X 2 1/2 X 3/16			L 2 X 2 X 1/8	
Horizontals	NONE										B
Brace Bolts	(2) 5/8"		(1) 3/4"						(1) 5/8"		
Top Face Width	23'	21'	19'	17'		15'	13'	11'	9'	7'	5.5'
Panel Count/Height	10 @ 10'							9 @ 6.6667'		7 @ 5'	
Section Weight	4329	4089	3652	3351		2373	2033	1838	1530	1106	756



Design Criteria - ANSI/TIA-222-H

Wind Speed (No Ice)	105 mph
Wind Speed (Ice)	30 mph
Design Ice Thickness	1.50 in
Risk Category	II
Exposure Category	C
Topographic Factor Procedure	Method 1 (Simplified)
Topographic Category	1
Ground Elevation	814 ft
Seismic Importance Factor, Ie	1.00
0.2-sec Spectral Response, Ss	0.17 g
1-sec Spectral Response, S1	0.094 g
Site Class	B
Seismic Design Category	A
Basic Seismic Force-Resisting System	Telecommunication Tower (Truss: Steel)

Base Reactions - Wind/Ice

Total Foundation		Individual Footing	
Shear (kips)	51.82	Shear (kips)	31.28
Axial (kips)	147.97	Compression (kips)	311
Moment (ft-kips)	6321	Uplift (kips)	267

Base Reactions - Seismic

Total Foundation		Individual Footing	
Shear (kips)	1.49	Shear (kips)	2.52
Axial (kips)	61.7	Compression (kips)	31
Moment (ft-kips)	219	Uplift (kips)	0

Material List

Display	Value
A	2.875 OD X .203
B	L 2 1/2 X 2 1/2 X 3/16

Notes

1) All legs are A500 (50 ksi Min. Yield).
2) All braces are A572 Grade 50.
3) All brace bolts are A325-X.
4) The tower model is S3TL Series HD1.
5) Transmission lines are to be attached to standard 12 hole waveguide ladders with stackable hangers.
6) Azimuths are relative (not based on true north).
7) Foundation loads shown are maximums.
8) All unequal angles are oriented with the short leg vertical.
9) Weights shown are estimates. Final weights may vary.
10) Tower Rating: 99.94%
11) This tower design and, if applicable, the foundation design(s) shown on the following page(s) also meet or exceed the requirements of the 2018 Kentucky Building Code.

Sabre Industries
INNOVATION DELIVERED

Sabre Industries
7101 Southbridge Drive
P.O. Box 658
Sioux City, IA 51102-0658
Phone (712) 258-6690
Fax (712) 279-0814

Job:	22-4840-JAC
Customer:	HARMONI TOWERS
Site Name:	Lebanon Road, KY 15435107
Description:	195' S3TL
Date:	2022.02.22 By: DJH

Designed Appurtenance Loading

Elev	Description	Tx-Line
190		(6) 1 1/2"
190	(1) 40,000 sq. in. antenna loading (below top)	(9) 1 5/8"
178		(6) 1 1/2"
178	(1) 30,000 sq. in. antenna loading (below top)	(9) 1 5/8"
166		(6) 1 1/2"

Elev	Description	Tx-Line
166	(1) 30,000 sq. in. antenna loading (below top)	(9) 1 5/8"
154	(2) Leg Dish Mount	
154	(2) 6' Solid Dish W/ Radome	(2) 1 5/8"
142	(2) Leg Dish Mount	
142	(2) 6' Solid Dish W/ Radome	(2) 1 5/8"

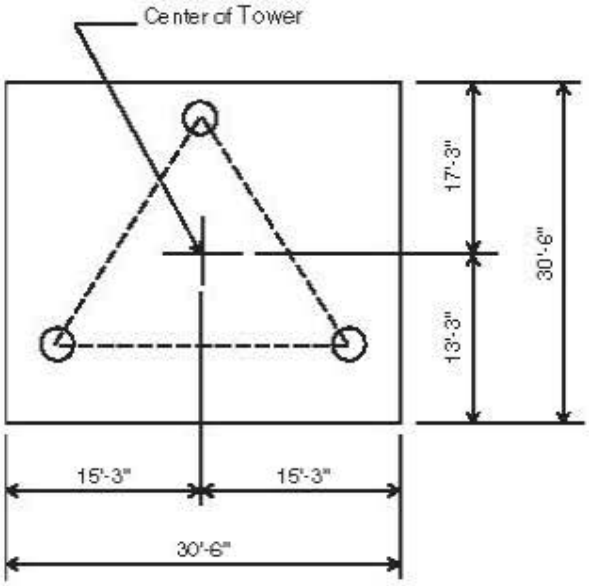
Sabre Industries
INNOVATION DELIVERED
Sabre Industries
7101 Southbridge Drive
P.O. Box 658
Sioux City, IA 51102-0658
Phone (712) 258-6690
Fax (712) 279-0814

Job:	22-4840-JAC
Customer:	HARMONI TOWERS
Site Name:	Lebanon Road, KY 15435107
Description:	195' S3TL
Date:	2022.02.22 By: DJH

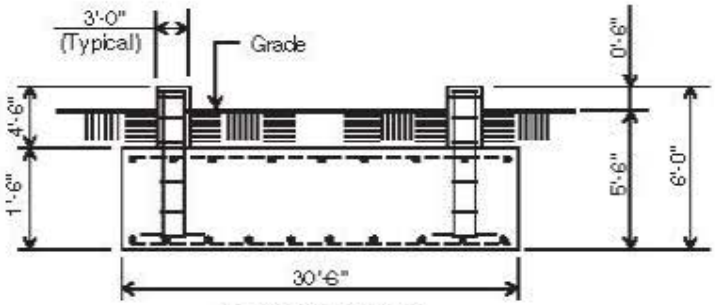
Sabre Industries
INNOVATION DELIVERED

No.: 22-4840-JAC
Date: 02/22/2022
By: DJH

Customer: HARMONI TOWERS
Site: Lebanon Road, KY 15435107
195 ft. Model S3TL Series HD1 Self Supporting Tower



PLAN VIEW



ELEVATION VIEW
(55.2 cu. yds.)
(1 REQD.; NOT TO SCALE)

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

Notes:

1) Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-14.
2) Rebar to conform to ASTM specification A615 Grade 60.
3) All rebar to have a minimum of 3" concrete cover.
4) All exposed concrete corners to be chamfered 3/4".
5) The foundation design is based on the geotechnical report by Alt & Witzig Engineering, Inc.; project# 21EV0093; dated February 16, 2022.
6) See the geotechnical report for compaction requirements, if specified.
7) 4' of soil cover is required over the entire area of the foundation slab.
8) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

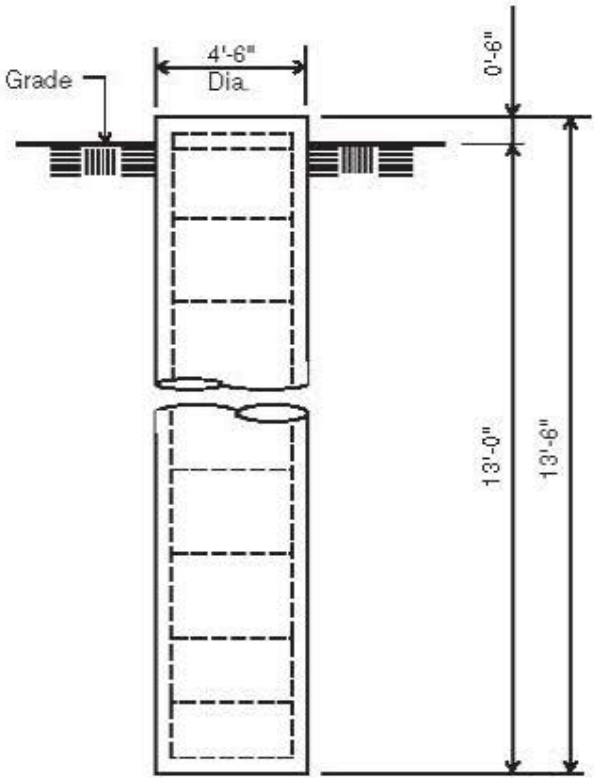
Rebar Schedule per Mat and per Pier	
Pier	(16) #7 vertical rebar w/ hooks at bottom w/ #4 rebar ties, two (2) within top 5" of pier then 4" C/C
Mat	(55) #7 horizontal rebar evenly spaced each way top and bottom. (220 total)
Anchor Bolts per Leg	
(6) 1.25" dia. x 63" F1554-105 on a 12.75" B.C. w/ 8" max. projection above concrete.	

7101 Southbridge Dr - P.O. Box 658 - Sioux City, IA 51102-0658 - Phone 712.258.6690 - Fax 712.258.8250

Sabre Industries
INNOVATION DELIVERED

No.: 22-4840-JAC
Date: 02/22/2022
By: DJH

Customer: HARMONI TOWERS
Site: Lebanon Road, KY 15435107
195 ft. Model S3TL Series HD1 Self Supporting Tower



ELEVATION VIEW
(8.0 cu. yds.)
(3 REQUIRED; NOT TO SCALE)

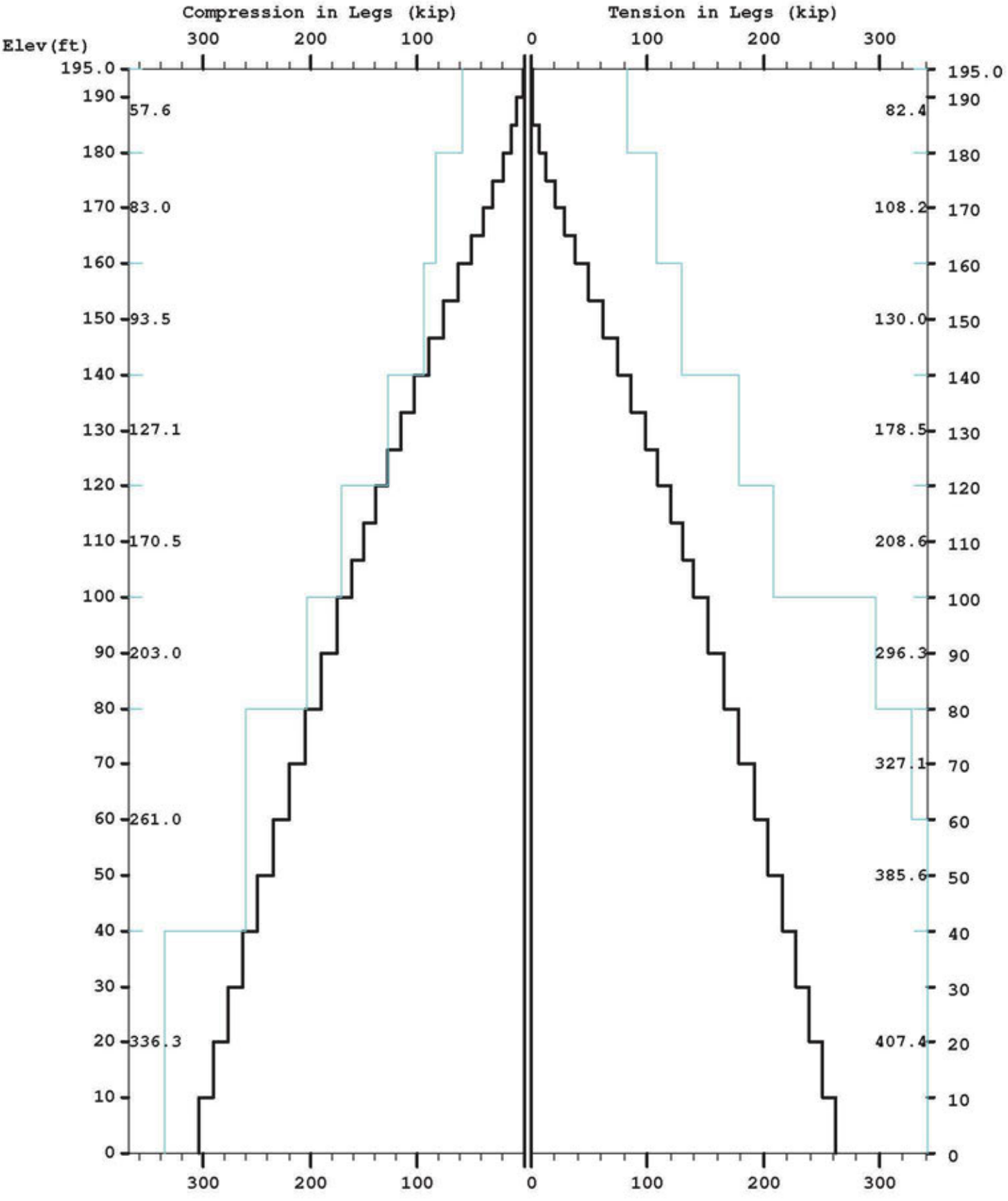
Notes:

1) Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-14.
2) Rebar to conform to ASTM specification A615 Grade 60.
3) All rebar to have a minimum of 3" concrete cover.
4) All exposed concrete corners to be chamfered 3/4".
5) The foundation design is based on the geotechnical report by Alt & Witzig Engineering, Inc.; project# 21EV0093; dated February 16, 2022.
6) See the geotechnical report for drilled pier installation requirements, if specified.
7) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

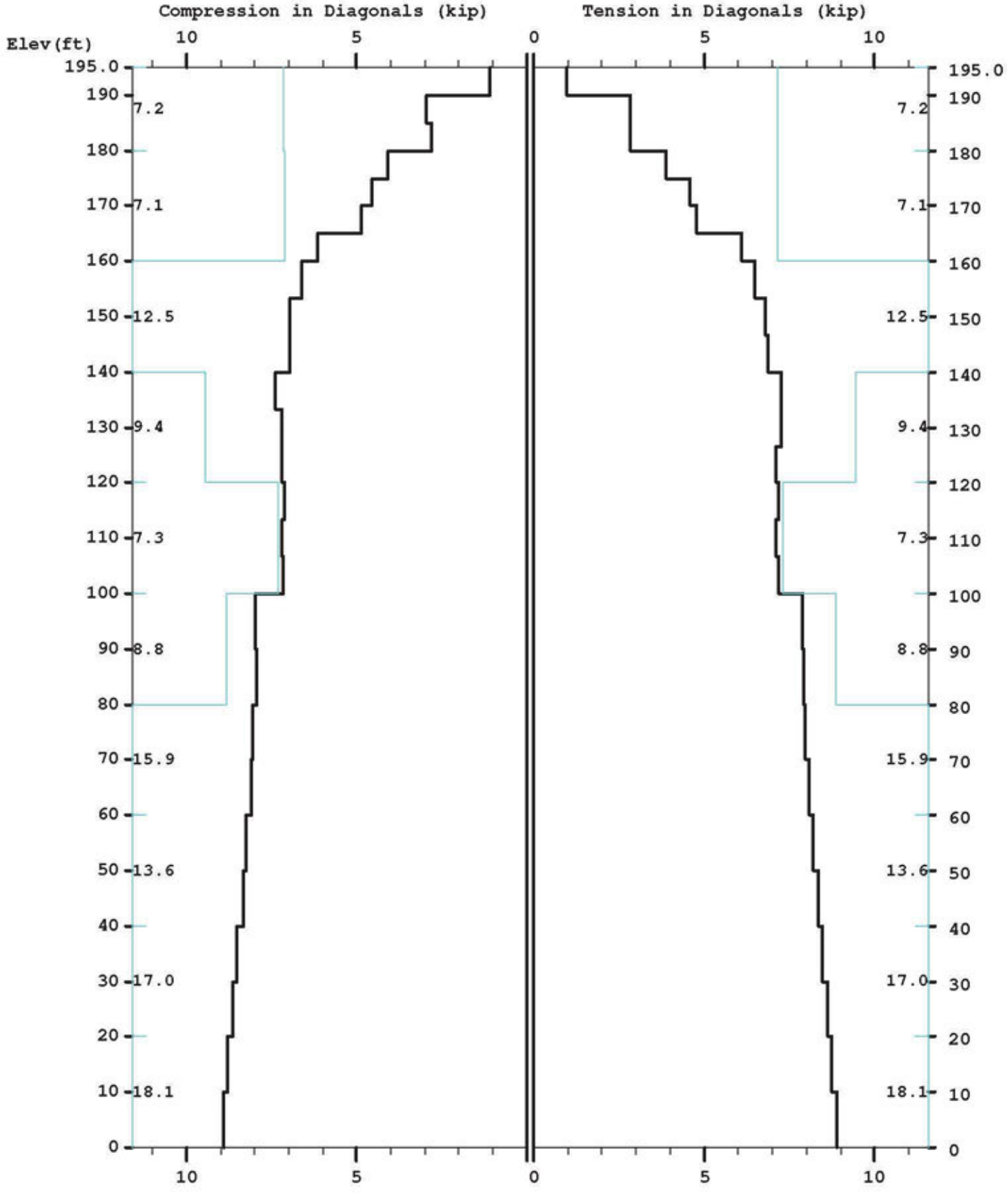
Rebar Schedule per Pier	
Pier	(14) #9 vertical rebar w/ #4 ties, two (2) within top 5" of pier then 12" C/C
Anchor Bolts per Leg	
(6) 1.25" dia. x 63" F1554-105 on a 12.75" B.C. w/ 8" max. projection above concrete.	

7101 Southbridge Dr - P.O. Box 658 - Sioux City, IA 51102-0658 - Phone 712.258.6690 - Fax 712.258.8250

Maximum

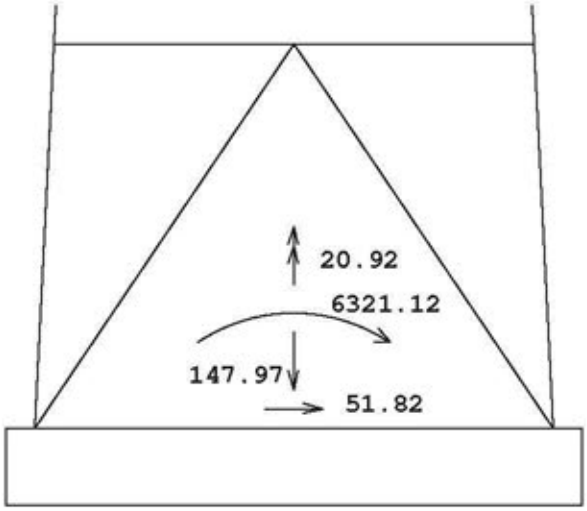

Compression in Legs (kip)
Tension in Legs (kip)
Elev(ft)
300
200
100
0
100
200
300
195.0
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
57.6
83.0
93.5
127.1
170.5
203.0
261.0
336.3
82.4
108.2
130.0
178.5
208.6
296.3
327.1
385.6
407.4

Maximum

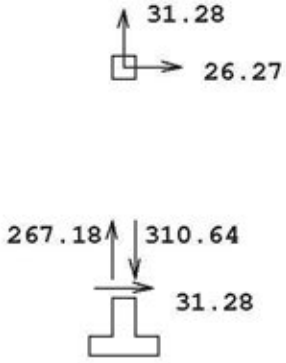

Compression in Diagonals (kip)
Tension in Diagonals (kip)
Elev(ft)
10
5
0
5
10
195.0
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
7.2
7.1
12.5
9.4
7.3
8.8
15.9
13.6
17.0
18.1

Maximum

TOTAL FOUNDATION LOADS (kip, ft-kip)



INDIVIDUAL FOOTING LOADS (kip)



MAST GEOMETRY (ft)

PANEL TYPE	NO.OF LEGS	ELEV.AT BOTTOM	ELEV.AT TOP	F.W..AT BOTTOM	F.W..AT TOP	TYPICAL PANEL HEIGHT
X	3	190.00	195.00	6.00	5.50	5.00
X	3	180.00	190.00	7.00	6.00	5.00
X	3	160.00	180.00	9.00	7.00	5.00
X	3	140.00	160.00	11.00	9.00	6.67
X	3	120.00	140.00	13.00	11.00	6.67
X	3	100.00	120.00	15.00	13.00	6.67
X	3	80.00	100.00	17.00	15.00	10.00
X	3	60.00	80.00	19.00	17.00	10.00
X	3	40.00	60.00	21.00	19.00	10.00
X	3	20.00	40.00	23.00	21.00	10.00
X	3	0.00	20.00	25.00	23.00	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	180.00	195.00	1.704	0.947	29000.	0.0000117
LE	160.00	180.00	2.228	0.947	29000.	0.0000117
LE	140.00	160.00	2.680	0.947	29000.	0.0000117
LE	120.00	140.00	3.678	0.947	29000.	0.0000117
LE	100.00	120.00	4.299	0.947	29000.	0.0000117
LE	80.00	100.00	6.111	0.947	29000.	0.0000117
LE	40.00	80.00	7.952	0.947	29000.	0.0000117
LE	0.00	40.00	8.399	0.947	29000.	0.0000117
DI	160.00	195.00	0.484	0.626	29000.	0.0000117
DI	100.00	160.00	0.902	0.626	29000.	0.0000117
DI	80.00	100.00	1.090	0.626	29000.	0.0000117
DI	40.00	80.00	1.688	0.626	29000.	0.0000117
DI	0.00	40.00	1.938	0.626	29000.	0.0000117
HO	190.00	195.00	0.902	0.778	29000.	0.0000117

FACTORED MEMBER RESISTANCES

BOTTOM ELEV ft	TOP ELEV ft	LEGS COMP kip	LEGS TENS kip	DIAGONALS COMP kip	DIAGONALS TENS kip	HORIZONTALS COMP kip	HORIZONTALS TENS kip	INT BRACING COMP kip	INT BRACING TENS kip
190.0	195.0	57.62	82.45	7.16	7.16	13.03	13.03	0.00	0.00
180.0	190.0	57.62	82.45	7.16	7.16	0.00	0.00	0.00	0.00
160.0	180.0	83.04	108.15	7.13	7.13	0.00	0.00	0.00	0.00
140.0	160.0	93.52	129.98	12.47	12.47	0.00	0.00	0.00	0.00
120.0	140.0	127.08	178.48	9.45	9.45	0.00	0.00	0.00	0.00
100.0	120.0	170.46	208.55	7.32	7.32	0.00	0.00	0.00	0.00
80.0	100.0	203.00	296.33	8.84	8.84	0.00	0.00	0.00	0.00
60.0	80.0	260.96	327.10	15.88	15.88	0.00	0.00	0.00	0.00
40.0	60.0	260.96	385.58	13.59	13.59	0.00	0.00	0.00	0.00
20.0	40.0	336.31	407.40	17.02	17.02	0.00	0.00	0.00	0.00
0.0	20.0	336.31	407.40	18.13	18.13	0.00	0.00	0.00	0.00

* Only 5 condition(s) shown in full
* Some wind loads may have been derived from full-scale wind tunnel testing

LOADING CONDITION A

105 mph wind with no ice. Wind Azimuth: 0◆ (1.2 D + 1.0 Wo)

MAST LOADING
============

LOAD TYPE	ELEV	APPLY..LOAD..AT RADIUS	AZI	LOAD AZI	......FORCES...... HORIZ	DOWN	......MOMENTS..... VERTICAL	TORSNAL
	ft	ft			kip	kip	ft-kip	ft-kip
C	190.0	0.00	0.0	0.0	6.37	7.20	0.00	0.00
C	178.0	0.00	0.0	0.0	4.72	4.80	0.00	0.00
C	166.0	0.00	0.0	0.0	4.65	4.80	0.00	0.00
D	195.0	0.00	180.0	0.0	0.06	0.05	0.00	0.00
D	190.0	0.00	180.0	0.0	0.06	0.05	0.00	0.00
D	190.0	0.00	42.7	0.0	0.11	0.06	0.06	0.10
D	180.0	0.00	44.9	0.0	0.11	0.06	0.06	0.10
D	180.0	0.00	55.9	0.0	0.13	0.09	0.07	0.12
D	175.0	0.00	55.9	0.0	0.13	0.09	0.07	0.12
D	175.0	0.00	65.2	0.0	0.14	0.09	0.07	0.12
D	170.0	0.00	65.2	0.0	0.14	0.09	0.07	0.12
D	170.0	0.00	75.3	0.0	0.14	0.10	0.07	0.12
D	165.0	0.00	75.3	0.0	0.14	0.10	0.07	0.12
D	165.0	0.00	103.3	0.0	0.15	0.11	0.09	0.13
D	160.0	0.00	103.3	0.0	0.15	0.11	0.09	0.13
D	160.0	0.00	100.8	0.0	0.15	0.13	0.09	0.14
D	153.3	0.00	100.8	0.0	0.15	0.13	0.09	0.14
D	153.3	0.00	101.9	0.0	0.15	0.14	0.10	0.14
D	146.7	0.00	101.9	0.0	0.15	0.14	0.10	0.14
D	146.7	0.00	102.3	0.0	0.16	0.14	0.09	0.12
D	140.0	0.00	102.3	0.0	0.16	0.14	0.09	0.12
D	140.0	0.00	93.6	0.0	0.17	0.16	0.09	0.08
D	120.0	0.00	97.1	0.0	0.17	0.16	0.08	0.08
D	120.0	0.00	89.6	0.0	0.17	0.17	0.10	0.09
D	100.0	0.00	91.9	0.0	0.18	0.18	0.09	0.08
D	100.0	0.00	86.6	0.0	0.17	0.19	0.12	0.09
D	80.0	0.00	88.1	0.0	0.17	0.20	0.11	0.09
D	80.0	0.00	84.1	0.0	0.17	0.25	0.13	0.09
D	60.0	0.00	85.3	0.0	0.18	0.26	0.12	0.09
D	60.0	0.00	82.1	0.0	0.17	0.26	0.14	0.09
D	40.0	0.00	83.0	0.0	0.17	0.26	0.14	0.09
D	40.0	0.00	80.4	0.0	0.17	0.29	0.16	0.08
D	20.0	0.00	81.2	0.0	0.17	0.29	0.15	0.08
D	20.0	0.00	79.0	0.0	0.15	0.29	0.17	0.08
D	0.0	0.00	79.7	0.0	0.16	0.30	0.16	0.08

ANTENNA LOADING
===============

.....ANTENNA..... TYPE	ELEV	AZI	ATTACHMENT RAD	AZI	..........ANTENNA FORCES..... AXIAL	SHEAR	GRAVITY	TORSION
	ft		ft		kip	kip	kip	ft-kip
STD+R	154.0	0.0	7.0	0.0	0.67	0.00	0.24	0.00
STD+R	154.0	180.0	7.0	120.0	-0.54	0.00	0.24	0.00
STD+R	142.0	0.0	7.7	0.0	0.66	0.00	0.24	0.00
STD+R	142.0	180.0	7.7	120.0	-0.53	0.00	0.24	0.00

LOADING CONDITION M

105 mph wind with no ice. Wind Azimuth: 0◆ (0.9 D + 1.0 Wo)

MAST LOADING
============

LOAD TYPE	ELEV	APPLY..LOAD..AT RADIUS	AZI	LOAD AZI	......FORCES...... HORIZ	DOWN	......MOMENTS..... VERTICAL	TORSNAL
	ft	ft			kip	kip	ft-kip	ft-kip
C	190.0	0.00	0.0	0.0	6.37	5.40	0.00	0.00
C	178.0	0.00	0.0	0.0	4.72	3.60	0.00	0.00
C	166.0	0.00	0.0	0.0	4.65	3.60	0.00	0.00
D	195.0	0.00	180.0	0.0	0.06	0.04	0.00	0.00
D	190.0	0.00	180.0	0.0	0.06	0.04	0.00	0.00

D	190.0	0.00	42.7	0.0	0.11	0.05	0.04	0.10
D	180.0	0.00	44.9	0.0	0.11	0.05	0.04	0.10
D	180.0	0.00	55.9	0.0	0.13	0.06	0.05	0.12
D	175.0	0.00	55.9	0.0	0.13	0.06	0.05	0.12
D	175.0	0.00	65.2	0.0	0.14	0.07	0.06	0.12
D	165.0	0.00	75.3	0.0	0.14	0.07	0.05	0.12
D	165.0	0.00	103.3	0.0	0.15	0.09	0.07	0.13
D	160.0	0.00	103.3	0.0	0.15	0.09	0.07	0.13
D	160.0	0.00	100.8	0.0	0.15	0.10	0.07	0.14
D	146.7	0.00	101.9	0.0	0.15	0.10	0.08	0.14
D	146.7	0.00	102.3	0.0	0.16	0.11	0.07	0.12
D	140.0	0.00	102.3	0.0	0.16	0.11	0.07	0.12
D	140.0	0.00	93.6	0.0	0.17	0.12	0.07	0.08
D	120.0	0.00	97.1	0.0	0.17	0.12	0.06	0.08
D	120.0	0.00	89.6	0.0	0.17	0.13	0.08	0.09
D	100.0	0.00	91.9	0.0	0.18	0.13	0.07	0.08
D	100.0	0.00	86.6	0.0	0.17	0.15	0.09	0.09
D	80.0	0.00	88.1	0.0	0.17	0.15	0.08	0.09
D	80.0	0.00	84.1	0.0	0.17	0.19	0.10	0.09
D	60.0	0.00	85.3	0.0	0.18	0.19	0.09	0.09
D	60.0	0.00	82.1	0.0	0.17	0.19	0.11	0.09
D	40.0	0.00	83.0	0.0	0.17	0.20	0.10	0.09
D	40.0	0.00	80.4	0.0	0.17	0.21	0.12	0.08
D	20.0	0.00	81.2	0.0	0.17	0.22	0.11	0.08
D	20.0	0.00	79.0	0.0	0.15	0.22	0.13	0.08
D	0.0	0.00	79.7	0.0	0.16	0.22	0.12	0.08

ANTENNA LOADING
==========

.....ANTENNA.....			ATTACHMENT		..........ANTENNA FORCES.....			
TYPE	ELEV	AZI	RAD	AZI	AXIAL	SHEAR	GRAVITY	TORSION
	ft		ft		kip	kip	kip	ft-kip
STD+R	154.0	0.0	7.0	0.0	0.67	0.00	0.18	0.00
STD+R	154.0	180.0	7.0	120.0	-0.54	0.00	0.18	0.00
STD+R	142.0	0.0	7.7	0.0	0.66	0.00	0.18	0.00
STD+R	142.0	180.0	7.7	120.0	-0.53	0.00	0.18	0.00

==========
LOADING CONDITION Y ==========

30 mph wind with 1.5 ice. Wind Azimuth: 0◆ (1.2 D + 1.0 Di + 1.0 Wi)

MAST LOADING
==========

LOAD	ELEV	APPLY..LOAD..AT		LOAD	......FORCES.....		......MOMENTS.....	
TYPE		RADIUS	AZI	AZI	HORIZ	DOWN	VERTICAL	TORSNAL
	ft	ft			kip	kip	ft-kip	ft-kip
C	190.0	0.00	0.0	0.0	0.89	17.92	0.00	0.00
C	178.0	0.00	0.0	0.0	0.66	11.90	0.00	0.00
C	166.0	0.00	0.0	0.0	0.65	11.85	0.00	0.00
D	195.0	0.00	180.0	0.0	0.01	0.20	0.00	0.00
D	190.0	0.00	180.0	0.0	0.01	0.20	0.00	0.00
D	190.0	0.00	42.7	0.0	0.01	0.26	0.26	0.01
D	185.0	0.00	42.7	0.0	0.01	0.26	0.26	0.01
D	185.0	0.00	44.9	0.0	0.01	0.26	0.25	0.01
D	180.0	0.00	44.9	0.0	0.01	0.26	0.25	0.01
D	180.0	0.00	58.8	0.0	0.01	0.32	0.27	0.01
D	175.0	0.00	58.8	0.0	0.01	0.32	0.27	0.01
D	175.0	0.00	71.6	0.0	0.02	0.36	0.27	0.01
D	170.0	0.00	71.6	0.0	0.02	0.36	0.27	0.01
D	170.0	0.00	80.5	0.0	0.02	0.37	0.27	0.01
D	165.0	0.00	80.5	0.0	0.02	0.37	0.27	0.01
D	165.0	0.00	103.9	0.0	0.02	0.42	0.33	0.01
D	160.0	0.00	103.9	0.0	0.02	0.42	0.33	0.01
D	160.0	0.00	101.1	0.0	0.02	0.44	0.35	0.01
D	153.3	0.00	101.1	0.0	0.02	0.44	0.35	0.01
D	153.3	0.00	100.3	0.0	0.02	0.45	0.38	0.01
D	146.7	0.00	100.3	0.0	0.02	0.45	0.38	0.01
D	146.7	0.00	99.6	0.0	0.02	0.47	0.33	0.01
D	140.0	0.00	99.6	0.0	0.02	0.47	0.33	0.01
D	140.0	0.00	86.5	0.0	0.02	0.51	0.28	0.00
D	126.7	0.00	88.1	0.0	0.02	0.51	0.27	0.00
D	126.7	0.00	89.6	0.0	0.02	0.52	0.25	0.00

D	120.0	0.00	89.6	0.0	0.02	0.52	0.25	0.00
D	120.0	0.00	82.9	0.0	0.02	0.54	0.32	0.00
D	100.0	0.00	85.2	0.0	0.02	0.56	0.29	0.00
D	100.0	0.00	80.4	0.0	0.02	0.55	0.36	0.00
D	90.0	0.00	80.4	0.0	0.02	0.55	0.36	0.00
D	90.0	0.00	81.7	0.0	0.02	0.55	0.34	0.00
D	80.0	0.00	81.7	0.0	0.02	0.55	0.34	0.00
D	80.0	0.00	78.3	0.0	0.02	0.62	0.40	0.00
D	70.0	0.00	78.3	0.0	0.02	0.62	0.40	0.00
D	70.0	0.00	79.3	0.0	0.02	0.63	0.38	0.00
D	60.0	0.00	79.3	0.0	0.02	0.63	0.38	0.00
D	60.0	0.00	76.6	0.0	0.02	0.63	0.44	0.00
D	40.0	0.00	77.4	0.0	0.02	0.64	0.42	0.00
D	40.0	0.00	75.4	0.0	0.02	0.68	0.47	0.00
D	20.0	0.00	75.9	0.0	0.02	0.69	0.46	0.00
D	20.0	0.00	76.6	0.0	0.02	0.56	0.26	0.01
D	10.0	0.00	76.6	0.0	0.02	0.56	0.26	0.01
D	10.0	0.00	75.3	0.0	0.02	0.62	0.41	0.00
D	0.0	0.00	75.3	0.0	0.02	0.62	0.41	0.00

ANTENNA LOADING
==========

.....ANTENNA.....			ATTACHMENT		.....ANTENNA FORCES.....			
TYPE	ELEV	AZI	RAD	AZI	AXIAL	SHEAR	GRAVITY	TORSION
	ft		ft		kip	kip	kip	ft-kip
STD+R	154.0	0.0	7.0	0.0	0.06	0.00	0.80	0.00
STD+R	154.0	180.0	7.0	120.0	-0.05	0.00	0.80	0.00
STD+R	142.0	0.0	7.7	0.0	0.06	0.00	0.79	0.00
STD+R	142.0	180.0	7.7	120.0	-0.05	0.00	0.79	0.00

==========
LOADING CONDITION k ==========

Seismic - Azimuth: 0◆ (1.2 D + 1.0 Ev + 1.0 Eh)

MAST LOADING
==========

LOAD	ELEV	APPLY..LOAD..AT		LOAD	......FORCES......		......MOMENTS......	
TYPE		RADIUS	AZI	AZI	HORIZ	DOWN	VERTICAL	TORSNAL
	ft	ft			kip	kip	ft-kip	ft-kip
C	190.0	0.00	0.0	0.0	0.32	7.32	0.00	0.00
C	187.5	0.00	0.0	0.0	0.04	0.92	0.00	0.00
C	185.0	0.00	0.0	0.0	0.01	0.22	0.00	0.00
C	179.0	0.00	0.0	0.0	0.00	0.04	0.00	0.00
C	178.0	0.00	0.0	0.0	0.20	4.88	0.00	0.00
C	172.0	0.00	0.0	0.0	0.01	0.15	0.00	0.00
C	172.0	0.00	0.0	0.0	0.01	0.37	0.00	0.00
C	170.0	0.00	0.0	0.0	0.05	1.35	0.00	0.00
C	166.0	0.00	0.0	0.0	0.19	4.88	0.00	0.00
C	163.0	0.00	0.0	0.0	0.01	0.18	0.00	0.00
C	163.0	0.00	0.0	0.0	0.01	0.19	0.00	0.00
C	157.0	0.00	0.0	0.0	0.01	0.18	0.00	0.00
C	157.0	0.00	0.0	0.0	0.01	0.19	0.00	0.00
C	154.0	0.00	0.0	0.0	0.02	0.44	0.00	0.00
C	154.0	0.00	0.0	0.0	0.02	0.44	0.00	0.00
C	150.0	0.00	0.0	0.0	0.06	1.87	0.00	0.00
C	148.0	0.00	0.0	0.0	0.01	0.37	0.00	0.00
C	148.0	0.00	0.0	0.0	0.01	0.38	0.00	0.00
C	142.0	0.00	0.0	0.0	0.01	0.44	0.00	0.00
C	142.0	0.00	0.0	0.0	0.01	0.44	0.00	0.00
C	141.0	0.00	0.0	0.0	0.00	0.06	0.00	0.00
C	141.0	0.00	0.0	0.0	0.00	0.01	0.00	0.00
C	141.0	0.00	0.0	0.0	0.00	0.07	0.00	0.00
C	130.0	0.00	0.0	0.0	0.02	0.62	0.00	0.00
C	130.0	0.00	0.0	0.0	0.07	2.24	0.00	0.00
C	130.0	0.00	0.0	0.0	0.00	0.12	0.00	0.00
C	130.0	0.00	0.0	0.0	0.02	0.66	0.00	0.00
C	110.0	0.00	0.0	0.0	0.02	0.66	0.00	0.00
C	110.0	0.00	0.0	0.0	0.00	0.12	0.00	0.00
C	110.0	0.00	0.0	0.0	0.02	0.62	0.00	0.00
C	110.0	0.00	0.0	0.0	0.06	2.48	0.00	0.00
C	90.0	0.00	0.0	0.0	0.01	0.62	0.00	0.00
C	90.0	0.00	0.0	0.0	0.00	0.12	0.00	0.00
C	90.0	0.00	0.0	0.0	0.01	0.66	0.00	0.00

C	90.0	0.00	0.0	0.0	0.06	2.90	0.00	0.00
C	70.0	0.00	0.0	0.0	0.06	4.09	0.00	0.00
C	70.0	0.00	0.0	0.0	0.01	0.66	0.00	0.00
C	70.0	0.00	0.0	0.0	0.00	0.12	0.00	0.00
C	70.0	0.00	0.0	0.0	0.01	0.62	0.00	0.00
C	50.0	0.00	0.0	0.0	0.01	0.66	0.00	0.00
C	50.0	0.00	0.0	0.0	0.00	0.12	0.00	0.00
C	50.0	0.00	0.0	0.0	0.01	0.62	0.00	0.00
C	50.0	0.00	0.0	0.0	0.05	4.46	0.00	0.00
C	30.0	0.00	0.0	0.0	0.00	0.12	0.00	0.00
C	30.0	0.00	0.0	0.0	0.00	0.62	0.00	0.00
C	30.0	0.00	0.0	0.0	0.00	0.66	0.00	0.00
C	30.0	0.00	0.0	0.0	0.03	4.99	0.00	0.00
C	10.0	0.00	0.0	0.0	0.00	0.66	0.00	0.00
C	10.0	0.00	0.0	0.0	0.00	0.62	0.00	0.00
C	10.0	0.00	0.0	0.0	0.01	5.28	0.00	0.00
C	10.0	0.00	0.0	0.0	0.00	0.12	0.00	0.00
D	195.0	0.00	180.0	180.0	0.00	0.00	0.00	0.00
D	0.0	0.00	180.0	180.0	0.00	0.00	0.00	0.00

ANTENNA LOADING
==========

.....ANTENNA.....			ATTACHMENT		..........ANTENNA FORCES.....			
TYPE	ELEV	AZI	RAD	AZI	AXIAL	SHEAR	GRAVITY	TORSION
	ft		ft		kip	kip	kip	ft-kip
STD+R	154.0	0.0	7.0	0.0	0.00	0.00	0.00	0.00
STD+R	154.0	180.0	7.0	120.0	0.00	0.00	0.00	0.00
STD+R	142.0	0.0	7.7	0.0	0.00	0.00	0.00	0.00
STD+R	142.0	180.0	7.7	120.0	0.00	0.00	0.00	0.00

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LOADING CONDITION w ==========

Seismic - Azimuth: 0° (0.9 D - 1.0 Ev + 1.0 Eh)

MAST LOADING
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LOAD	ELEV	APPLY..LOAD..AT		LOAD	......FORCES.....		......MOMENTS.....	
TYPE		RADIUS	AZI	AZI	HORIZ	DOWN	VERTICAL	TORSNAL
	ft	ft			kip	kip	ft-kip	ft-kip
C	190.0	0.00	0.0	0.0	0.32	5.28	0.00	0.00
C	187.5	0.00	0.0	0.0	0.04	0.67	0.00	0.00
C	185.0	0.00	0.0	0.0	0.01	0.16	0.00	0.00
C	179.0	0.00	0.0	0.0	0.00	0.03	0.00	0.00
C	178.0	0.00	0.0	0.0	0.20	3.52	0.00	0.00
C	172.0	0.00	0.0	0.0	0.01	0.11	0.00	0.00
C	172.0	0.00	0.0	0.0	0.01	0.27	0.00	0.00
C	170.0	0.00	0.0	0.0	0.05	0.97	0.00	0.00
C	166.0	0.00	0.0	0.0	0.19	3.52	0.00	0.00
C	163.0	0.00	0.0	0.0	0.01	0.13	0.00	0.00
C	163.0	0.00	0.0	0.0	0.01	0.13	0.00	0.00
C	157.0	0.00	0.0	0.0	0.01	0.13	0.00	0.00
C	157.0	0.00	0.0	0.0	0.01	0.13	0.00	0.00
C	154.0	0.00	0.0	0.0	0.02	0.32	0.00	0.00
C	154.0	0.00	0.0	0.0	0.02	0.32	0.00	0.00
C	150.0	0.00	0.0	0.0	0.06	1.35	0.00	0.00
C	148.0	0.00	0.0	0.0	0.01	0.27	0.00	0.00
C	148.0	0.00	0.0	0.0	0.01	0.28	0.00	0.00
C	142.0	0.00	0.0	0.0	0.01	0.32	0.00	0.00
C	142.0	0.00	0.0	0.0	0.01	0.32	0.00	0.00
C	141.0	0.00	0.0	0.0	0.00	0.04	0.00	0.00
C	141.0	0.00	0.0	0.0	0.00	0.01	0.00	0.00
C	141.0	0.00	0.0	0.0	0.00	0.05	0.00	0.00
C	130.0	0.00	0.0	0.0	0.02	0.45	0.00	0.00
C	130.0	0.00	0.0	0.0	0.07	1.62	0.00	0.00
C	130.0	0.00	0.0	0.0	0.00	0.09	0.00	0.00
C	130.0	0.00	0.0	0.0	0.02	0.48	0.00	0.00
C	110.0	0.00	0.0	0.0	0.02	0.48	0.00	0.00
C	110.0	0.00	0.0	0.0	0.00	0.09	0.00	0.00
C	110.0	0.00	0.0	0.0	0.02	0.45	0.00	0.00
C	110.0	0.00	0.0	0.0	0.06	1.79	0.00	0.00
C	90.0	0.00	0.0	0.0	0.01	0.45	0.00	0.00
C	90.0	0.00	0.0	0.0	0.00	0.09	0.00	0.00

C	90.0	0.00	0.0	0.0	0.01	0.48	0.00	0.00
C	90.0	0.00	0.0	0.0	0.06	2.09	0.00	0.00
C	70.0	0.00	0.0	0.0	0.06	2.95	0.00	0.00
C	70.0	0.00	0.0	0.0	0.01	0.48	0.00	0.00
C	70.0	0.00	0.0	0.0	0.00	0.09	0.00	0.00
C	70.0	0.00	0.0	0.0	0.01	0.45	0.00	0.00
C	50.0	0.00	0.0	0.0	0.01	0.48	0.00	0.00
C	50.0	0.00	0.0	0.0	0.00	0.09	0.00	0.00
C	50.0	0.00	0.0	0.0	0.01	0.45	0.00	0.00
C	50.0	0.00	0.0	0.0	0.05	3.21	0.00	0.00
C	30.0	0.00	0.0	0.0	0.00	0.09	0.00	0.00
C	30.0	0.00	0.0	0.0	0.00	0.45	0.00	0.00
C	30.0	0.00	0.0	0.0	0.00	0.48	0.00	0.00
C	30.0	0.00	0.0	0.0	0.03	3.60	0.00	0.00
C	10.0	0.00	0.0	0.0	0.00	0.48	0.00	0.00
C	10.0	0.00	0.0	0.0	0.00	0.45	0.00	0.00
C	10.0	0.00	0.0	0.0	0.01	3.81	0.00	0.00
C	10.0	0.00	0.0	0.0	0.00	0.09	0.00	0.00
D	195.0	0.00	180.0	180.0	0.00	0.00	0.00	0.00
D	0.0	0.00	180.0	180.0	0.00	0.00	0.00	0.00

ANTENNA LOADING
==========

.....ANTENNA.....			ATTACHMENT		.....ANTENNA FORCES.....			
TYPE	ELEV ft	AZI	RAD ft	AZI	AXIAL kip	SHEAR kip	GRAVITY kip	TORSION ft-kip
STD+R	154.0	0.0	7.0	0.0	0.00	0.00	0.00	0.00
STD+R	154.0	180.0	7.0	120.0	0.00	0.00	0.00	0.00
STD+R	142.0	0.0	7.7	0.0	0.00	0.00	0.00	0.00
STD+R	142.0	180.0	7.7	120.0	0.00	0.00	0.00	0.00

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MAXIMUM ANTENNA AND REFLECTOR ROTATIONS:
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ELEV ft	AZI deg	TYPE *	.....BEAM DEFLECTIONS (deg)..... ROLL	YAW	PITCH	TOTAL
154.0	0.0	STD+R	-0.923 G	0.061 D	-0.837 J	0.838 J
154.0	180.0	STD+R	0.923 G	0.061 D	0.837 J	0.838 J
142.0	0.0	STD+R	-0.818 G	0.055 P	-0.739 J	0.740 J
142.0	180.0	STD+R	0.818 G	0.055 P	0.739 J	0.740 J

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

ELEV ft	LEGS	DIAG	HORIZ	BRACE
195.0	----------		0.81 A	0.00 A
	0.60 G	0.98 S		
190.0	----------		0.11 G	0.00 A
	1.04 M	2.83 N		
185.0	----------		0.15 I	0.00 A
	7.39 M	2.85 H		
180.0	----------		0.07 K	0.00 A
	12.70 M	3.90 M		
175.0	----------		0.09 A	0.00 A
	20.77 M	4.57 B		
170.0	----------		0.09 A	0.00 A
	28.63 M	4.77 N		
165.0	----------		0.05 g	0.00 A
	37.26 M	6.10 B		
160.0	----------		0.14 A	0.00 A
	49.21 M	6.49 T		
153.3	----------		0.07 g	0.00 A
	61.71 M	6.79 F		
146.7	----------		0.15 I	0.00 A
	74.42 M	6.89 R		
140.0	----------		0.08 F	0.00 A
	86.27 M	7.25 F		
133.3	----------		0.10 I	0.00 A
	98.17 M	7.25 R		
126.7	----------		0.08 F	0.00 A
	109.21 M	7.11 F		
120.0	----------		0.09 I	0.00 A

	120.01 M	7.17 R		
113.3	----------		0.10 A	0.00 A
	130.19 M	7.11 F		
106.7	----------		0.08 A	0.00 A
	140.22 M	7.20 R		
100.0	----------		0.08 A	0.00 A
	151.99 M	7.87 F		
90.0	----------		0.11 A	0.00 A
	165.92 M	7.94 R		
80.0	----------		0.07 A	0.00 A
	179.10 M	7.96 F		
70.0	----------		0.08 A	0.00 A
	191.94 M	8.10 R		
60.0	----------		0.06 A	0.00 A
	204.31 M	8.18 F		
50.0	----------		0.07 A	0.00 A
	216.47 M	8.33 R		
40.0	----------		0.06 A	0.00 A
	228.23 M	8.45 F		
30.0	----------		0.06 A	0.00 A
	239.79 M	8.62 R		
20.0	----------		0.01 o	0.00 A
	251.06 M	8.75 F		
10.0	----------		0.06 A	0.00 A
	262.11 M	8.89 R		
0.0	----------		0.00 A	0.00 A

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

ELEV ft	LEGS	DIAG	HORIZ	BRACE
195.0	----------		-0.74 S	0.00 A
	-0.58 M	-1.06 A		
190.0	----------		-0.11 M	0.00 A
	-6.84 e	-2.95 H		
185.0	----------		-0.11 O	0.00 A
	-12.24 G	-2.80 N		
180.0	----------		-0.06 Q	0.00 A
	-19.36 G	-4.08 G		
175.0	----------		-0.05 S	0.00 A
	-29.12 G	-4.54 B		
170.0	----------		-0.06 S	0.00 A
	-37.85 G	-4.86 H		
165.0	----------		-0.01 X	0.00 A
	-49.24 G	-6.15 H		
160.0	----------		-0.11 S	0.00 A
	-61.80 G	-6.60 B		
153.3	----------		-0.04 X	0.00 A
	-75.49 G	-6.95 F		
146.7	----------		-0.12 S	0.00 A
	-89.06 G	-6.97 F		
140.0	----------		-0.05 X	0.00 A
	-102.19 G	-7.38 R		
133.3	----------		-0.08 S	0.00 A
	-114.95 G	-7.19 F		
126.7	----------		-0.05 W	0.00 A
	-127.01 G	-7.21 R		
120.0	----------		-0.08 S	0.00 A
	-138.76 G	-7.13 F		
113.3	----------		-0.07 W	0.00 A
	-150.01 G	-7.19 R		
106.7	----------		-0.07 S	0.00 A
	-161.09 G	-7.17 F		
100.0	----------		-0.06 S	0.00 A
	-174.26 G	-7.96 F		
90.0	----------		-0.10 S	0.00 A
	-189.91 G	-7.93 F		
80.0	----------		-0.06 S	0.00 A
	-205.04 G	-8.04 F		
70.0	----------		-0.07 S	0.00 A
	-220.00 G	-8.10 F		
60.0	----------		-0.05 S	0.00 A
	-234.57 G	-8.25 F		

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     50.0  ----------------------          -0.06 S       0.00 A
            -248.94 G      -8.34 F
     40.0  ----------------------          -0.05 S       0.00 A
            -263.03 G      -8.51 F
     30.0  ----------------------          -0.05 S       0.00 A
            -277.02 G      -8.64 F
     20.0  ----------------------           0.00 X       0.00 A
            -290.79 G      -8.80 F
     10.0  ----------------------          -0.05 S       0.00 A
            -304.32 G      -8.92 F
      0.0  ----------------------           0.00 A       0.00 A
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FORCE/RESISTANCE RATIO IN LEGS

MAST ELEV ft	-- LEG COMPRESSION - MAX COMP	COMP RESIST	FORCE/ RESIST RATIO	---- LEG TENSION --- MAX TENS	TENS RESIST	FORCE/ RESIST RATIO
195.00						
	0.58	57.62	0.01	0.60	82.45	0.01
190.00						
	6.84	57.62	0.12	1.04	82.45	0.01
185.00						
	12.24	57.62	0.21	7.39	82.45	0.09
180.00						
	19.36	83.04	0.23	12.70	108.15	0.12
175.00						
	29.12	83.04	0.35	20.77	108.15	0.19
170.00						
	37.85	83.04	0.46	28.63	108.15	0.26
165.00						
	49.24	83.04	0.59	37.26	108.15	0.34
160.00						
	61.80	93.52	0.66	49.21	129.98	0.38
153.33						
	75.49	93.52	0.81	61.71	129.98	0.47
146.67						
	89.06	93.52	0.95	74.42	129.98	0.57
140.00						
	102.19	127.08	0.80	86.27	178.48	0.48
133.33						
	114.95	127.08	0.90	98.17	178.48	0.55
126.67						
	127.01	127.08	1.00	109.21	178.48	0.61
120.00						
	138.76	170.46	0.81	120.01	208.55	0.58
113.33						
	150.01	170.46	0.88	130.19	208.55	0.62
106.67						
	161.09	170.46	0.95	140.22	208.55	0.67
100.00						
	174.26	203.00	0.86	151.99	296.33	0.51
90.00						
	189.91	203.00	0.94	165.92	296.33	0.56
80.00						
	205.04	260.96	0.79	179.10	327.10	0.55
70.00						
	220.00	260.96	0.84	191.94	327.10	0.59
60.00						
	234.57	260.96	0.90	204.31	385.58	0.53
50.00						
	248.94	260.96	0.95	216.47	385.58	0.56
40.00						
	263.03	336.31	0.78	228.23	407.40	0.56
30.00						
	277.02	336.31	0.82	239.79	407.40	0.59
20.00						
	290.79	336.31	0.86	251.06	407.40	0.62
10.00						
	304.32	336.31	0.90	262.11	407.40	0.64
0.00						

FORCE/RESISTANCE RATIO IN DIAGONALS

MAST	- DIAG COMPRESSION - FORCE/	--- DIAG TENSION -- FORCE/

ELEV ft	MAX COMP	COMP RESIST	RESIST RATIO	MAX TENS	TENS RESIST	RESIST RATIO
195.00						
	1.06	7.16	0.15	0.98	7.16	0.14
190.00						
	2.95	7.16	0.41	2.83	7.16	0.40
185.00						
	2.80	7.16	0.39	2.85	7.16	0.40
180.00						
	4.08	7.13	0.57	3.90	7.13	0.55
175.00						
	4.54	7.13	0.64	4.57	7.13	0.64
170.00						
	4.86	7.13	0.68	4.77	7.13	0.67
165.00						
	6.15	7.13	0.86	6.10	7.13	0.86
160.00						
	6.60	12.47	0.53	6.49	12.47	0.52
153.33						
	6.95	12.47	0.56	6.79	12.47	0.54
146.67						
	6.97	12.47	0.56	6.89	12.47	0.55
140.00						
	7.38	9.45	0.78	7.25	9.45	0.77
133.33						
	7.19	9.45	0.76	7.25	9.45	0.77
126.67						
	7.21	9.45	0.76	7.11	9.45	0.75
120.00						
	7.13	7.32	0.97	7.17	7.32	0.98
113.33						
	7.19	7.32	0.98	7.11	7.32	0.97
106.67						
	7.17	7.32	0.98	7.20	7.32	0.98
100.00						
	7.96	8.84	0.90	7.87	8.84	0.89
90.00						
	7.93	8.84	0.90	7.94	8.84	0.90
80.00						
	8.04	15.88	0.51	7.96	15.88	0.50
70.00						
	8.10	15.88	0.51	8.10	15.88	0.51
60.00						
	8.25	13.59	0.61	8.18	13.59	0.60
50.00						
	8.34	13.59	0.61	8.33	13.59	0.61
40.00						
	8.51	17.02	0.50	8.45	17.02	0.50
30.00						
	8.64	17.02	0.51	8.62	17.02	0.51
20.00						
	8.80	18.13	0.49	8.75	18.13	0.48
10.00						
	8.92	18.13	0.49	8.89	18.13	0.49
0.00						

MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)

LOAD---COMPONENTS				TOTAL
NORTH	EAST	DOWN	UPLIFT	SHEAR
31.28 G	26.27 K	310.64 G	-267.18 M	31.28 G

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

HORIZONTAL			DOWN	OVERTURNING			TORSION
NORTH	EAST	TOTAL @ 0.0		NORTH	EAST	TOTAL @ 0.0	
51.8 S	45.1 V	51.8 S	148.0 h	6321.1 G	5587.1 J	6321.1 G	20.9 P

Service Load Condition

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

LOADING CONDITION A

60 mph wind with no ice. Wind Azimuth: 0◆ (1.0 D + 1.0 Wo)

MAST LOADING

LOAD TYPE	ELEV	APPLY..LOAD..AT RADIUS	AZI	LOAD AZI	......FORCES...... HORIZ	DOWN	......MOMENTS..... VERTICAL	TORSNAL
	ft	ft			kip	kip	ft-kip	ft-kip
C	190.0	0.00	0.0	0.0	2.08	6.00	0.00	0.00
C	178.0	0.00	0.0	0.0	1.54	4.00	0.00	0.00
C	166.0	0.00	0.0	0.0	1.52	4.00	0.00	0.00
D	195.0	0.00	180.0	0.0	0.02	0.04	0.00	0.00
D	190.0	0.00	180.0	0.0	0.02	0.04	0.00	0.00
D	190.0	0.00	42.7	0.0	0.04	0.05	0.05	0.03
D	180.0	0.00	44.9	0.0	0.04	0.05	0.05	0.03
D	180.0	0.00	55.9	0.0	0.04	0.07	0.06	0.04
D	170.0	0.00	65.2	0.0	0.05	0.08	0.06	0.04
D	170.0	0.00	75.3	0.0	0.05	0.08	0.06	0.04
D	165.0	0.00	75.3	0.0	0.05	0.08	0.06	0.04
D	165.0	0.00	103.3	0.0	0.05	0.09	0.07	0.04
D	160.0	0.00	103.3	0.0	0.05	0.09	0.07	0.04
D	160.0	0.00	100.9	0.0	0.05	0.11	0.08	0.05
D	140.0	0.00	102.5	0.0	0.05	0.12	0.08	0.04
D	140.0	0.00	93.6	0.0	0.05	0.13	0.08	0.03
D	120.0	0.00	97.1	0.0	0.06	0.14	0.07	0.03
D	120.0	0.00	89.6	0.0	0.06	0.14	0.09	0.03
D	100.0	0.00	91.9	0.0	0.06	0.15	0.08	0.03
D	100.0	0.00	86.6	0.0	0.06	0.16	0.10	0.03
D	80.0	0.00	88.1	0.0	0.06	0.16	0.09	0.03
D	80.0	0.00	84.1	0.0	0.06	0.21	0.11	0.03
D	60.0	0.00	85.3	0.0	0.06	0.21	0.10	0.03
D	60.0	0.00	82.1	0.0	0.06	0.22	0.12	0.03
D	40.0	0.00	83.0	0.0	0.06	0.22	0.11	0.03
D	40.0	0.00	80.4	0.0	0.06	0.24	0.13	0.03
D	20.0	0.00	81.2	0.0	0.06	0.24	0.13	0.03
D	20.0	0.00	79.0	0.0	0.05	0.25	0.14	0.03
D	0.0	0.00	79.7	0.0	0.05	0.25	0.14	0.03

ANTENNA LOADING

.....ANTENNA..... TYPE	ELEV	AZI	ATTACHMENT RAD	AZI	..........ANTENNA FORCES..... AXIAL	SHEAR	GRAVITY	TORSION
	ft		ft		kip	kip	kip	ft-kip
STD+R	154.0	0.0	7.0	0.0	0.22	0.00	0.20	0.00
STD+R	154.0	180.0	7.0	120.0	-0.17	0.00	0.20	0.00
STD+R	142.0	0.0	7.7	0.0	0.22	0.00	0.20	0.00
STD+R	142.0	180.0	7.7	120.0	-0.17	0.00	0.20	0.00

MAXIMUM MAST DISPLACEMENTS:

ELEV ft	------DEFLECTIONS (ft)----- NORTH	EAST	DOWN	--TILTS (DEG)--- NORTH	EAST	TWIST DEG
195.0	0.624 G	0.563 J	0.012 G	0.355 G	0.325 J	0.021 D
190.0	0.593 G	0.534 J	0.012 G	0.355 G	0.325 J	0.021 D
185.0	0.561 G	0.505 J	0.012 G	0.354 G	0.324 J	0.021 D
180.0	0.530 G	0.477 J	0.011 G	0.350 G	0.320 J	0.021 D
175.0	0.498 G	0.448 J	0.011 G	0.345 G	0.315 J	0.021 D
170.0	0.467 G	0.420 J	0.011 G	0.338 G	0.309 J	0.021 D
165.0	0.437 G	0.392 J	0.010 G	0.329 G	0.300 J	0.021 D
160.0	0.407 G	0.365 J	0.010 G	0.318 G	0.289 J	0.020 D
153.3	0.370 G	0.331 J	0.009 G	0.302 G	0.275 J	0.020 D
146.7	0.335 G	0.299 J	0.009 G	0.284 G	0.257 J	0.019 D
140.0	0.303 G	0.270 J	0.008 G	0.263 G	0.238 J	0.018 D
133.3	0.272 G	0.242 J	0.007 G	0.247 G	0.223 J	0.016 D
126.7	0.243 G	0.216 J	0.007 G	0.230 G	0.207 J	0.015 D
120.0	0.216 G	0.192 J	0.007 G	0.211 G	0.190 J	0.013 D
113.3	0.191 G	0.170 J	0.006 G	0.195 G	0.175 J	0.012 D
106.7	0.168 G	0.150 J	0.006 G	0.178 G	0.160 J	0.011 D
100.0	0.147 G	0.131 J	0.005 G	0.161 G	0.144 J	0.009 D
90.0	0.119 G	0.106 J	0.005 G	0.142 G	0.127 J	0.008 D
80.0	0.095 G	0.084 J	0.004 G	0.123 G	0.110 J	0.006 D
70.0	0.074 G	0.065 J	0.004 G	0.108 G	0.096 J	0.005 D
60.0	0.055 G	0.049 J	0.003 G	0.092 G	0.082 J	0.005 D
50.0	0.040 G	0.035 J	0.003 G	0.077 G	0.068 J	0.004 D
40.0	0.027 G	0.023 J	0.002 A	0.061 G	0.054 J	0.003 D
30.0	0.016 G	0.014 J	0.002 H	0.046 G	0.041 J	0.002 D
20.0	0.008 G	0.007 J	0.001 B	0.031 G	0.027 J	0.001 D
10.0	0.002 G	0.002 J	0.001 H	0.015 G	0.014 J	0.001 D
0.0	0.000 A	0.000 A	0.000 A	0.000 A	0.000 A	0.000 A

MAXIMUM ANTENNA AND REFLECTOR ROTATIONS:

ELEV ft	AZI deg	TYPE *	.....BEAM DEFLECTIONS (deg)..... ROLL	YAW	PITCH	TOTAL
154.0	0.0	STD+R	-0.304 G	0.020 D	-0.276 J	0.276 J
154.0	180.0	STD+R	0.304 G	0.020 D	0.276 J	0.276 J
142.0	0.0	STD+R	-0.269 G	0.018 D	-0.244 J	0.244 J
142.0	180.0	STD+R	0.269 G	0.018 D	0.244 J	0.244 J

MAXIMUM TENSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
195.0	----------		0.28 A	0.00 A
	0.21 G	0.30 G		
190.0	----------		0.04 G	0.00 A
	0.00 A	0.90 H		
185.0	----------		0.06 I	0.00 A
	0.88 A	0.95 B		
180.0	----------		0.03 C	0.00 A
	2.06 A	1.25 A		
175.0	----------		0.04 A	0.00 A
	4.21 A	1.51 H		
170.0	----------		0.04 A	0.00 A
	6.55 A	1.54 B		
165.0	----------		0.02 F	0.00 A
	8.52 A	1.99 B		
160.0	----------		0.06 A	0.00 A
	12.31 A	2.11 H		
153.3	----------		0.03 F	0.00 A
	16.10 A	2.25 F		
146.7	----------		0.06 A	0.00 A
	20.12 A	2.21 F		
140.0	----------		0.03 F	0.00 A
	23.65 A	2.42 F		
133.3	----------		0.03 A	0.00 A
	27.42 A	2.33 F		
126.7	----------		0.03 A	0.00 A
	30.77 A	2.36 F		
120.0	----------		0.03 A	0.00 A
	34.14 A	2.32 F		
113.3	----------		0.04 A	0.00 A

	37.23 A	2.35 F		
106.7	----------		0.03 A	0.00 A
	40.33 A	2.34 F		
100.0	----------		0.03 A	0.00 A
	43.89 A	2.60 F		
90.0	----------		0.04 A	0.00 A
	48.13 A	2.59 F		
80.0	----------		0.03 A	0.00 A
	52.03 A	2.64 F		
70.0	----------		0.03 A	0.00 A
	55.81 A	2.65 F		
60.0	----------		0.03 A	0.00 A
	59.39 A	2.71 F		
50.0	----------		0.03 A	0.00 A
	62.93 A	2.74 F		
40.0	----------		0.02 A	0.00 A
	66.28 A	2.81 F		
30.0	----------		0.02 A	0.00 A
	69.59 A	2.85 F		
20.0	----------		0.00 G	0.00 A
	72.77 A	2.93 F		
10.0	----------		0.02 A	0.00 A
	75.91 A	2.95 F		
0.0	----------		0.00 A	0.00 A

MAXIMUM COMPRESSION IN MAST MEMBERS (kip)

ELEV ft	LEGS	DIAG	HORIZ	BRACE
195.0	----------		-0.23 G	0.00 A
	-0.18 A	-0.38 A		
190.0	----------		-0.03 A	0.00 A
	-3.03 G	-1.01 B		
185.0	----------		-0.02 C	0.00 A
	-5.40 G	-0.91 H		
180.0	----------		-0.02 I	0.00 A
	-8.24 G	-1.38 G		
175.0	----------		-0.01 G	0.00 A
	-11.90 G	-1.49 H		
170.0	----------		-0.01 G	0.00 A
	-14.98 G	-1.62 H		
165.0	----------		0.00 A	0.00 A
	-19.48 G	-2.03 H		
160.0	----------		-0.03 C	0.00 A
	-23.72 G	-2.19 B		
153.3	----------		0.00 L	0.00 A
	-28.51 G	-2.27 F		
146.7	----------		-0.03 C	0.00 A
	-33.10 G	-2.33 F		
140.0	----------		-0.01 L	0.00 A
	-37.72 G	-2.38 F		
133.3	----------		-0.02 C	0.00 A
	-42.02 G	-2.40 F		
126.7	----------		-0.01 K	0.00 A
	-46.21 G	-2.33 F		
120.0	----------		-0.02 C	0.00 A
	-50.21 G	-2.37 F		
113.3	----------		-0.02 G	0.00 A
	-54.13 G	-2.35 F		
106.7	----------		-0.02 G	0.00 A
	-57.94 G	-2.38 F		
100.0	----------		-0.01 G	0.00 A
	-62.56 G	-2.62 F		
90.0	----------		-0.02 G	0.00 A
	-68.03 G	-2.64 F		
80.0	----------		-0.01 G	0.00 A
	-73.42 G	-2.65 F		
70.0	----------		-0.02 G	0.00 A
	-78.77 G	-2.70 F		
60.0	----------		-0.01 G	0.00 A
	-84.04 G	-2.73 F		
50.0	----------		-0.02 G	0.00 A
	-89.22 G	-2.79 F		

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    40.0  ----------------------          -0.01 G       0.00 A
            -94.36 G      -2.83 F
    30.0  ----------------------          -0.01 G       0.00 A
            -99.49 G      -2.90 F
    20.0  ----------------------           0.00 A       0.00 A
           -104.57 G      -2.94 F
    10.0  ----------------------          -0.01 G       0.00 A
           -109.58 G      -3.01 F
     0.0  ----------------------           0.00 A       0.00 A
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MAXIMUM INDIVIDUAL FOUNDATION LOADS: (kip)
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LOAD---COMPONENTS				TOTAL
NORTH	EAST	DOWN	UPLIFT	SHEAR
10.91 G	9.18 K	111.94 G	-77.32 A	10.91 G

MAXIMUM TOTAL LOADS ON FOUNDATION : (kip & kip-ft)
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HORIZONTAL			DOWN	OVERTURNING			TORSION
NORTH	EAST	TOTAL @ 0.0		NORTH	EAST	TOTAL @ 0.0	
17.1 G	15.0 J	17.1 G	46.7 K	2086.6 G	1847.3 J	2086.6 G	6.8 D

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Seismic Load Effects
Equivalent Lateral Force Procedure
ANSI/TIA-222-H

Parameters	
Risk Category	II
R	3.000
S_S	0.170
S_1	0.094
Site Class	B
T_L (sec)	12.000
F_a	0.900
F_v	0.800
S_{MS}	0.153
S_{M1}	0.075
S_{DS}	0.102
S_{D1}	0.050
T_s	0.490
I_e	1.000
Ω	1.500
C_S	0.030
h (ft)	195.00
K_f	4,540
W_a (ft)	15.25
W_o (ft)	25.00
W (kips)	50.554
W_1 (kips)	26.394
W_2 (kips)	6.670
f_1 (Hertz)	1.627
T (sec)	0.615
k_e	1.0575
V_s (kips)	1.517
Seismic Design Category	A

Vertical Distribution of Seismic Forces

Description	h_i (ft.)	w_i (kips)	W_2 (kips)	$w_i h_i^{ke}$	F_{vi} or E_{vi} (kips)	E_V (kips)	1.2 D + 1.0 E_V (kips)	0.9 D - 1.0 E_V (kips)
Antenna Load	190.00	6.0000	6.0000	1,541.4633	0.3250	0.1224	7.3224	5.2776
Structure - Section 1	187.50	0.7560	0.4914	191.5229	0.0404	0.0154	0.9226	0.6650
Ladder/Line	185.00	0.1786	0.1786	44.6083	0.0094	0.0036	0.2179	0.1571
Ladder/Line	179.00	0.0357	0.0000	8.6111	0.0018	0.0007	0.0435	0.0314
Antenna Load	178.00	4.0000	0.0000	959.1337	0.2022	0.0816	4.8816	3.5184
Ladder/Line	172.00	0.3058	0.0000	70.7146	0.0149	0.0062	0.3732	0.2690
Ladder/Line	172.00	0.1229	0.0000	28.4199	0.0060	0.0025	0.1500	0.1081
Structure - Section 2	170.00	1.1060	0.0000	252.6125	0.0533	0.0226	1.3498	0.9728
Antenna Load	166.00	4.0000	0.0000	890.8904	0.1879	0.0816	4.8816	3.5184
Ladder/Line	163.00	0.1446	0.0000	31.5905	0.0067	0.0029	0.1764	0.1272
Ladder/Line	163.00	0.1529	0.0000	33.4038	0.0070	0.0031	0.1866	0.1345
Ladder/Line	157.00	0.1529	0.0000	32.1049	0.0068	0.0031	0.1866	0.1345
Ladder/Line	157.00	0.1446	0.0000	30.3621	0.0064	0.0029	0.1764	0.1272
Mount/Antenna Load	154.00	0.3600	0.0000	74.0637	0.0156	0.0073	0.4393	0.3167
Mount/Antenna Load	154.00	0.3600	0.0000	74.0637	0.0156	0.0073	0.4393	0.3167
Structure - Section 3	150.00	1.5300	0.0000	306.1314	0.0646	0.0312	1.8672	1.3458
Ladder/Line	148.00	0.3058	0.0000	60.3239	0.0127	0.0062	0.3732	0.2690
Ladder/Line	148.00	0.3142	0.0000	61.9809	0.0131	0.0064	0.3834	0.2764
Mount/Antenna Load	142.00	0.3600	0.0000	67.9747	0.0143	0.0073	0.4393	0.3167
Mount/Antenna Load	142.00	0.3600	0.0000	67.9747	0.0143	0.0073	0.4393	0.3167
Ladder/Line	141.00	0.0101	0.0000	1.8929	0.0004	0.0002	0.0123	0.0089
Ladder/Line	141.00	0.0544	0.0000	10.1953	0.0021	0.0011	0.0664	0.0479
Ladder/Line	141.00	0.0510	0.0000	9.5581	0.0020	0.0010	0.0622	0.0449
Ladder/Line	130.00	0.5096	0.0000	87.6445	0.0185	0.0104	0.6219	0.4482
Ladder/Line	130.00	0.5444	0.0000	93.6296	0.0197	0.0111	0.6644	0.4789
Ladder/Line	130.00	0.1008	0.0000	17.3363	0.0037	0.0021	0.1231	0.0886
Structure - Section 4	130.00	1.8380	0.0000	316.1117	0.0667	0.0375	2.2431	1.6167
Ladder/Line	110.00	0.5444	0.0000	78.4677	0.0165	0.0111	0.6644	0.4789
Ladder/Line	110.00	0.1008	0.0000	14.5289	0.0031	0.0021	0.1231	0.0886
Ladder/Line	110.00	0.5096	0.0000	73.4518	0.0155	0.0104	0.6219	0.4482
Structure - Section 5	110.00	2.0330	0.0000	293.0287	0.0618	0.0415	2.4811	1.7882
Ladder/Line	90.00	0.5096	0.0000	59.4074	0.0125	0.0104	0.6219	0.4482
Ladder/Line	90.00	0.1008	0.0000	11.7509	0.0025	0.0021	0.1231	0.0886
Ladder/Line	90.00	0.5444	0.0000	63.4643	0.0134	0.0111	0.6644	0.4789
Structure - Section 6	90.00	2.3730	0.0000	276.6363	0.0583	0.0484	2.8960	2.0873

Seismic Load Effects
Equivalent Lateral Force Procedure
ANSI/TIA-222-H

Vertical Distribution of Seismic Forces

Description	h_i (ft.)	w_i (kips)	W_p (kips)	$w_i h_i^{ke}$	F_{vi} or E_{vi} (kips)	E_v (kips)	1.2 D + 1.0 E_v (kips)	0.9 D - 1.0 E_v (kips)
Ladder/Line	70.00	0.5444	0.0000	48.6530	0.0103	0.0111	0.6644	0.4789
Ladder/Line	70.00	0.1008	0.0000	9.0085	0.0019	0.0021	0.1231	0.0886
Ladder/Line	70.00	0.5096	0.0000	45.5429	0.0096	0.0104	0.6219	0.4482
Structure - Section 7	70.00	3.3510	0.0000	299.4785	0.0631	0.0684	4.0896	2.9475
Ladder/Line	50.00	0.5444	0.0000	34.0862	0.0072	0.0111	0.6644	0.4789
Ladder/Line	50.00	0.1008	0.0000	6.3113	0.0013	0.0021	0.1231	0.0886
Ladder/Line	50.00	0.5096	0.0000	31.9073	0.0067	0.0104	0.6219	0.4482
Structure - Section 8	50.00	3.6520	0.0000	228.6607	0.0482	0.0745	4.4569	3.2123
Ladder/Line	30.00	0.5096	0.0000	18.5902	0.0039	0.0104	0.6219	0.4482
Ladder/Line	30.00	0.1008	0.0000	3.6772	0.0008	0.0021	0.1231	0.0886
Ladder/Line	30.00	0.5444	0.0000	19.8598	0.0042	0.0111	0.6644	0.4789
Structure - Section 9	30.00	4.0890	0.0000	149.1670	0.0315	0.0834	4.9902	3.5967
Ladder/Line	10.00	0.5096	0.0000	5.8174	0.0012	0.0104	0.6219	0.4482
Ladder/Line	10.00	0.5444	0.0000	6.2147	0.0013	0.0111	0.6644	0.4789
Ladder/Line	10.00	0.1008	0.0000	1.1507	0.0002	0.0021	0.1231	0.0886
Structure - Section 10	10.00	4.3290	0.0000	49.4183	0.0104	0.0883	5.2831	3.8078
	Σ	50.55	6.6700	7,192.60	1.52	1.03	61.70	44.47

Leg Connection Details												
Bottom Elevation (ft)	Top Elevation (ft)	Pipe Dimensions	Top Splice					Bottom Splice/Base				
			Bolt Qty.	Bolt Dia. (in)	Bolt Circle (in)	Plate Thickness (in)	Plate Dia. (in)	Bolt Qty.	Bolt Dia. (in)	Bolt Circle (in)	Plate Thickness (in)	Plate Dia. (in)
180	195	2.875 OD X .203						6	0.75	6.50	1.00	8.50
160	180	3.500 OD X .216	6	0.75	6.50	1.00	8.50	6	1.00	9.00	1.25	11.50
140	160	4.000 OD X .226	6	1.00	9.00	1.25	11.50	6	1.00	9.00	1.25	11.50
120	140	4.000 OD X .318	6	1.00	9.00	1.25	11.50	6	1.00	9.00	1.25	11.50
100	120	5.563 OD X .258	6	1.00	9.00	1.25	11.50	6	1.00	9.00	1.25	11.50
80	100	5.563 OD X .375	6	1.00	9.00	1.25	11.50	6	1.00	9.00	1.25	11.50
60	80	5.563 OD X .500	6	1.00	9.00	1.25	11.50	6	1.00	9.00	1.25	11.50
40	60	5.563 OD X .500	6	1.00	9.00	1.25	11.50	6	1.25	12.50	1.75	15.75
20	40	8.625 OD X .322	6	1.25	12.50	1.50	15.75	6	1.25	12.50	1.50	15.75
0	20	8.625 OD X .322	6	1.25	12.50	1.50	15.75	6	1.25	12.75	1.50	16.00

Diagonal Bracing Connection Details								
Bottom Elevation (ft)	Top Elevation (ft)	Angle Shape	Bolt Qty.	Bolt Dia. (in)	Bolt End Distance (in)	Bolt Spacing (in)	Gage Distance From Heel (in)	Gusset Plate Thickness (in)
180	195	L 2 X 2 X 1/8	1	0.625	1.500		1.125	0.375
160	180	L 2 X 2 X 1/8	1	0.625	1.500		1.125	0.375
140	160	L 2 1/2 X 2 1/2 X 3/16	1	0.625	1.500		1.375	0.375
120	140	L 2 1/2 X 2 1/2 X 3/16	1	0.625	1.500		1.375	0.375
100	120	L 2 1/2 X 2 1/2 X 3/16	1	0.750	1.500		1.375	0.375
80	100	L 3 X 3 X 3/16	1	0.750	1.625		1.750	0.375
60	80	L 3 1/2 X 3 1/2 X 1/4	1	0.750	1.625		1.750	0.375
40	60	L 3 1/2 X 3 1/2 X 1/4	1	0.750	1.625		1.750	0.375
20	40	L 4 X 4 X 1/4	1	0.750	1.625		2.000	0.375
0	20	L 4 X 4 X 1/4	2	0.625	1.625	2.1250	2.000	0.500

MAT FOUNDATION DESIGN BY SABRE INDUSTRIES

195' S3TL Series HD1 HARMONI TOWERS Lebanon Road, KY (22-4840-JAC) 2022-02-22 DJH

Overall Loads:			
Factored Moment (ft-kips)	6321.12		
Factored Axial (kips)	147.97		
Factored Shear (kips)	51.82		
Individual Leg Loads:		Tower eccentric from mat (ft)=	2
Factored Uplift (kips)	267.00		
Factored Download (kips)	311.00		
Factored Shear (kips)	31.00		
Width of Tower (ft)	25	Allowable Bearing Pressure (ksf)	4.50
Ultimate Bearing Pressure	13.50	Safety Factor	3.00
Bearing Φs	0.75		
Bearing Design Strength (ksf)	10.125	Max. Factored Net Bearing Pressure (ksf)	2.45
Water Table Below Grade (ft)	999		
Width of Mat (ft)	30.5	Minimum Mat Width (ft)	30.33
Thickness of Mat (ft)	1.5		
Depth to Bottom of Slab (ft)	5.5		
Bolt Circle Diameter (in)	12.75		
Effective Anchor Bolt Embedment	52.125		
Diameter of Pier (ft)	3	Minimum Pier Diameter (ft)	2.40
Ht. of Pier Above Ground (ft)	0.5	Equivalent Square b (ft)	2.66
Ht. of Pier Below Ground (ft)	4		
Quantity of Bars in Mat	55		
Bar Diameter in Mat (in)	0.875		
Area of Bars in Mat (in^2)	33.07		
Spacing of Bars in Mat (in)	6.65	Recommended Spacing (in)	6 to 12
Quantity of Bars Pier	16		
Bar Diameter in Pier (in)	0.875		
Tie Bar Diameter in Pier (in)	0.5		
Spacing of Ties (in)	4		
Area of Bars in Pier (in2)	9.62	Minimum Pier A_s (in^2)	5.09
Spacing of Bars in Pier (in)	5.49	Recommended Spacing (in)	5 to 12
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 (yd^3)	55.21		

MAT FOUNDATION DESIGN BY SABRE INDUSTRIES (CONTINUED)

Two-Way Shear:

Average d (in)	14.125		
ϕv_c (ksi)	0.201	v_u (ksi)	0.124
$\phi v_c = \phi(2 + 4/\beta_c)f'_c{}^{1/2}$	0.302		
$\phi v_c = \phi(\alpha_s d/b_o+2)f'_c{}^{1/2}$	0.255		
$\phi v_c = \phi 4f'_c{}^{1/2}$	0.201		
Shear perimeter, b_o (in)	184.12		
β_c	1		

Stability:

Overturning Design Strength (ft-k)	9047.3	Factored Overturning Moment (ft-k)	6632.0

One-Way Shear:

ϕV_c (kips)	520.2	V_u (kips)	305.7

Pier Design:

Design Tensile Strength (kips)	519.5	Tu (kips)	267.0

Shear:

ϕ	0.75		
V_c (kips)	66.1		
V_s (kips)	169.6	$V_{s,max}$ (kips)	556.4
ϕV_n (kips)	176.8	V_u (kips)	31.0
Maximum Spacing (in)	13.01	(Only if Shear Ties are Required)	
Actual Hook Development (in)	13.25	Req'd Hook Development l_{dh} (in) - Tension	10.96
		Req'd Hook Development l_{dc} (in) - Compression	11.81

Anchor Bolt Pull-Out:

$N_{ua} / \phi N_n$	0.62	$V_{ua} / \phi V_n$	0.14
Pier Rebar Development Length (in)	43.74	Required Length of Development (in)	23.48

Flexure in Slab:

ϕM_n (ft-kips)	1996.7	M_u (ft-kips)	1986.2
a (in)	1.42		
Steel Ratio	0.00640		
β_1	0.825		
Maximum Steel Ratio (ρ_t)	0.0197		
Minimum Steel Ratio	0.0018		

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
Interaction Diagram	1
One-Way Shear	1
Hook Development	1
Minimum Mat Depth	1
Anchor Bolt Punching Shear	1

DRILLED STRAIGHT PIER DESIGN BY SABRE INDUSTRIES

195' S3TL Series HD1 HARMONI TOWERS Lebanon Road, KY (22-4840-JAC) 2022-02-22 DJH

Factored Uplift (kips)	267
Factored Download (kips)	311
Factored Shear (kips)	31
Ultimate Bearing Pressure	30
Bearing ϕ_s	0.75
Bearing Design Strength (ksf)	22.5
Water Table Below Grade (ft)	999
Bolt Circle Diameter (in)	12.75
Effective Anchor Bolt Embedment	52.125
Pier Diameter (ft)	4.5
Ht. Above Ground (ft)	0.5
Pier Length Below Ground (ft)	13
Quantity of Bars	14
Bar Diameter (in)	1.128
Area of Bars (in^2)	13.99
Spacing of Bars (in)	10.21
Tie Bar Diameter (in)	0.5
Spacing of Ties (in)	12
f'_c (ksi)	4.5
f_y (ksi)	60
Unit Wt. of Concrete (kcf)	0.15
Volume of Concrete (yd^3)	7.95

Minimum Pier Diameter (ft): 2.40

Minimum Area of Steel (in^2): 11.45

Length to ignore download (ft): 0

Ignore bottom length in download? ☐

Depth at Bottom of Layer (ft)	Ult. Skin Friction (ksf)	(Ult. Skin Friction)*(Uplift Factor)	γ (kcf)
3	0.00	0.00	0.11
6.5	0.00	1.30	0.12
9.5	0.00	2.00	0.13
18	0.00	10.00	0.15

DRILLED STRAIGHT PIER DESIGN BY SABRE INDUSTRIES (CONTINUED)

Download:			
Φ_s, Download Friction	0.75		
Q_f, Skin Friction (kips)	0.0	W_s (kips)	26.5
Q_b, End Bearing Strength (kips)	477.1	W_c (kips)	32.2
Download Design Strength (kips)	357.8	Factored Net Download (kips)	317.9
Uplift (skin friction):			
Φ_s, Uplift (friction)	0.75		
Q_f, Skin Friction (kips)	643.9		
W_c (kips)	32.2		
W_w (kips)	0.0		
Uplift Design Strength (kips)	511.9	Factored Uplift (kips)	267.0
Uplift (cone):			
Φ_s, Uplift (cone)	0.75		
$W_{s,cone}$ (kips)	333.7		
$W_{w,cone}$ (kips)	0.0		
W_c (kips)	32.2		
$W_{w,cyl}$ (kips)	0.0		
Uplift Design Strength (kips)	279.3	Factored Uplift (kips)	267.0
Tension:			
Design Tensile Strength (kips)	755.5	T_u (kips)	267.0
Shear:			
ϕ	0.75		
V_c (kips)	240.0		
V_s (kips)	84.8	$V_{s,max}$ (kips)	1251.9
ϕV_n (kips)	243.6	V_u (kips)	31.0
Anchor Bolt Pull-Out:			
$N_{ua} / \phi N_n$	0.56	$V_{ua} / \phi V_n$	0.14
Rebar Development Length (in)	37.53	Required Length of Development (in)	30.27

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

EXHIBIT D

COMPETING UTILITIES, CORPORATIONS, OR PERSONS LIST

KY Public Service Commission

Master Utility Search

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

Utility ID	Utility Name	Address/City/Contact	Utility Type	Status
				Active

Search

	Utility ID	Utility Name	Utility Type	Class	City	State
View	4111300	2600Hz, Inc. dba ZSWITCH	Cellular	D	San Francisco	CA
View	4108300	Air Voice Wireless, LLC	Cellular	B	Houston	TX
View	4110650	Alliant Technologies of KY, L.L.C.	Cellular	D	Morristown	NJ
View	4111900	ALLNETAIR, INC.	Cellular	D	West Palm Beach	FL
View	44451184	Alltel Corporation d/b/a Verizon Wireless	Cellular	A	Lisle	IL
View	4110850	AltaWorx, LLC	Cellular	D	Fairhope	AL
View	4107800	American Broadband and Telecommunications Company	Cellular	D	Toledo	OH
View	4108650	AmeriMex Communications Corp.	Cellular	A	Safety Harbor	FL
View	4105100	AmeriVision Communications, Inc. d/b/a Affinity 4	Cellular	D	Virginia Beach	VA
View	4105700	Assurance Wireless USA, L.P.	Cellular	A	Atlanta	GA
View	4108600	BCN Telecom, Inc.	Cellular	D	Morristown	NJ
View	4106000	Best Buy Health, Inc. d/b/a GreatCall d/b/a Jitterbug	Cellular	A	San Diego	CA
View	4111050	BlueBird Communications, LLC	Cellular	D	New York	NY
View	4202300	Bluegrass Wireless, LLC	Cellular	A	Elizabethtown	KY
View	4107600	Boomerang Wireless, LLC	Cellular	C	Hiawatha	IA
View	4105500	BullsEye Telecom, Inc.	Cellular	D	Southfield	MI
View	4100700	Cellco Partnership dba Verizon Wireless	Cellular	A	Basking Ridge	NJ

View	4106600	Cintex Wireless, LLC	Cellular	D	Houston	TX
View	4111150	Comcast OTR1, LLC	Cellular	B	Phoeniexville	PA
View	4101900	Consumer Cellular, Incorporated	Cellular	A	Portland	OR
View	4112700	Cox Wireless, LLC	Cellular	C	Atlanta	GA
View	4108850	Cricket Wireless, LLC	Cellular	A	San Antonio	TX
View	4111500	CSC Wireless, LLC d/b/a Altice Wireless	Cellular	D	Long Island City	NY
View	10640	Cumberland Cellular Partnership	Cellular	A	Elizabethtown	KY
View	4111650	DataBytes, Inc.	Cellular	D	Rogers	AR
View	4112000	DISH Wireless L.L.C.	Cellular	A	Englewood	CO
View	4111200	Dynalink Communications, Inc.	Cellular	C	Brooklyn	NY
View	4111800	Earthlink, LLC	Cellular	D	Atlanta	GA
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	OK
View	4110450	Excellus Communications, LLC	Cellular	D	Chattanooga	TN
View	4112400	Excess Telecom Inc.	Cellular	D	Beverly Hills	CA
View	4105900	Flash Wireless, LLC	Cellular	D	Concord	NC
View	4104800	France Telecom Corporate Solutions L.L.C.	Cellular	D	Herndon	VA
View	4111750	Gabb Wireless, Inc.	Cellular	D	Provo	UT
View	4112300	Gen Mobile Inc.	Cellular	C	Redondo Beach	CA
View	4109350	Global Connection Inc. of America	Cellular	D	Newport	KY
View	4102200	Globalstar USA, LLC	Cellular	C	Covington	LA
View	4109600	Google North America Inc.	Cellular	A	Mountain View	CA
View	33350363	Granite Telecommunications, LLC	Cellular	D	Quincy	MA
View	4111350	HELLO MOBILE TELECOM LLC	Cellular	D	Dania Beach	FL
View	4103100	i-Wireless, LLC	Cellular	B	Newport	KY
View	4112550	IDT Domestic Telecom, Inc.	Cellular	C	Newark	NJ
View	4109800	IM Telecom, LLC d/b/a Infiniti Mobile	Cellular	D	Plano	TX
View	4112650	Insight Mobile, Inc.	Cellular	C	Los Angeles	CA
View	4111950	J Rhodes Enterprises LLC	Cellular	D	Gulf Breeze	FL
View	22215360	KDDI America, Inc.	Cellular	D	Staten Island	NY
View	10872	Kentucky RSA #1 Partnership	Cellular	A	Basking Ridge	NJ
View	10680	Kentucky RSA #3 Cellular General	Cellular	A	Elizabethtown	KY
View	10681	Kentucky RSA #4 Cellular General	Cellular	A	Elizabethtown	KY
View	4112200	Lexvor Inc.	Cellular	D	Irvine	CA

View	4111250	Liberty Mobile Wireless, LLC	Cellular	A	Sunny Isles Beach	FL
View	4111400	Locus Telecommunications, LLC	Cellular	A	Fort Lee	NJ
View	4107300	Lycamobile USA, Inc.	Cellular	D	Newark	NJ
View	4112500	Marconi Wireless Holdings, LLC	Cellular	C	Westlake Village	CA
View	4108800	MetroPCS Michigan, LLC	Cellular	A	Bellevue	WA
View	4111700	Mint Mobile, LLC	Cellular	C	Costa Mesa	CA
View	4111850	Mobi, Inc.	Cellular	D	Honolulu	HI
View	4109400	NetZero Wireless, Inc. dba magicJack Wireless	Cellular	D	West Palm Beach	FL
View	4202400	New Cingular Wireless PCS, LLC dba AT&T Mobility, PCS	Cellular	A	San Antonio	TX
View	4112350	NewPhone Wireless, L.L.C.	Cellular	D	Houston	TX
View	4000800	Nextel West Corporation	Cellular	D	Overland Park	KS
View	4110700	Norcell, LLC	Cellular	D	Buford	GA
View	4001300	NPCR, Inc. dba Nextel Partners	Cellular	D	Overland Park	KS
View	4001800	OnStar, LLC	Cellular	A	Detroit	MI
View	4110750	Onvoy Spectrum, LLC	Cellular	D	Chicago	IL
View	4109050	Patriot Mobile LLC	Cellular	D	Irving	TX
View	4110250	Plintron Technologies USA LLC	Cellular	D	Bellevue	WA
View	33351182	PNG Telecommunications, Inc. dba PowerNet Global Communications	Cellular	D	Cincinnati	OH
View	4107700	Puretalk Holdings, Inc.	Cellular	A	Covington	GA
View	4106700	Q Link Wireless, LLC	Cellular	A	Dania	FL
View	4108700	Ready Wireless, LLC	Cellular	C	Hiawatha	IA
View	4106200	Rural Cellular Corporation	Cellular	A	Basking Ridge	NJ
View	4108550	Sage Telecom Communications, LLC dba TruConnect	Cellular	A	Los Angeles	CA
View	4109150	SelecTel, Inc. d/b/a SelecTel Wireless	Cellular	D	Fremont	NE
View	4110150	Spectrotel of the South LLC dba Touch Base Communications	Cellular	D	Neptune	NJ
View	4111450	Spectrum Mobile, LLC	Cellular	A	St. Louis	MO
View	4200100	Sprint Spectrum, L.P.	Cellular	A	Atlanta	GA
View	4200500	SprintCom, LLC	Cellular	A	Atlanta	GA
View	4111600	STX Group LLC dba Twigby	Cellular	D	Murfreesboro	TN
View	4202200	T-Mobile Central, LLC dba T-Mobile	Cellular	A	Bellevue	WA
View	4002500	TAG Mobile, LLC	Cellular	D	Plano	TX
View	4109700	Telecom Management, Inc. dba Pioneer Telephone	Cellular	D	Saco	ME
View	4107200	Telefonica USA, Inc.	Cellular	D	Miami	FL
View	4112100	Tello LLC	Cellular	C	Atlanta	GA
View	4108900	Telrite Corporation	Cellular	D	Covington	GA
	4108450	Tempo Telecom, LLC	Cellular	D	Dallas	TX

View						
View	4109000	Ting, Inc.	Cellular	B	Toronto	ON
View	4110400	Torch Wireless Corp.	Cellular	D	Jacksonville	FL
View	4103300	Touchtone Communications, Inc.	Cellular	D	Cedar Knolls	NJ
View	4104200	TracFone Wireless, Inc.	Cellular	D	Miami	FL
View	4112250	TROOMI WIRELESS, Inc.	Cellular	D	Lehi	UT
View	4002000	Truphone, Inc.	Cellular	D	Durham	NC
View	4112600	Tube Incorporated dba Reach Mobile	Cellular	D	Chelmsford	MA
View	4112750	Unity Wireless, Inc.	Cellular	C	Pembroke Pines	FL
View	4110300	UVNV, Inc. d/b/a Mint Mobile	Cellular	D	Costa Mesa	CA
View	10630	Verizon Americas LLC dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
View	4110800	Visible Service LLC	Cellular	D	Basking Ridge	NJ
View	4106500	WiMacTel, Inc.	Cellular	D	Calgary, AB	CA
View	4110950	Wing Tel Inc.	Cellular	D	New York	NY
View	4112150	Zefcom, LLC	Cellular	C	Wichita Falls	TX

EXHIBIT E

FAA DETERMINATION OF NO HAZARD TO AIR NAVIGATION

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

Aeronautical Study No.
2021-ASO-37316-OE

Issued Date: 01/03/2022

Andrew Smith
RESCOM Environmental Corp
PO Box 361
Petoskey, MI 49770

**** 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 Lebanon Road
Location:	Lebanon, KY
Latitude:	37-37-55.60N NAD 83
Longitude:	85-16-05.44W
Heights:	805 feet site elevation (SE)
	207 feet above ground level (AGL)
	1012 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) 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 M, Obstruction Marking and Lighting, a med-dual system-Chapters 4,8(M-Dual),&15.

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:

__X__ 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)

See attachment for additional condition(s) or information.

This determination expires on 07/03/2023 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 is subject to review if an interested party files a petition that is received by the FAA on or before February 02, 2022. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted to the Manager of the Rules and Regulations Group. Petitions can be submitted via mail to Federal Aviation Administration, 800 Independence Ave, SW, Washington, DC 20591, via email at OEPetitions@faa.gov, or via facsimile (202) 267-9328.

This determination becomes final on February 12, 2022 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review. For any questions regarding your petition, please contact Rules and Regulations Group via telephone – 202-267-8783.

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

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

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

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

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed

structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

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 Chris Smith, at (817) 222-5928, or chris.smith@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2021-ASO-37316-OE.

Signature Control No: 495059465-506356802 (DNH)
Mike Helvey
Manager, Obstruction Evaluation Group

Attachment(s)
Additional Information
Frequency Data
Map(s)

cc: FCC

Abbreviations
AGL - Above Ground Level
AMSL - Above Mean Sea Level
CAT - Category of Aircraft
CFR - Code of Federal Regulations
DA - Decision Altitude
GPS - Global Positioning System
LNAV - Lateral Navigation
MDA - Minimum Descent Altitude
NEH - No Effect Height
nm - nautical mile
RNAV - Area Navigation
RWY - Runway
TPA - Traffic Pattern Airspace
VNAV - Vertical Navigation

Part 77 - Title 14 CFR Part 77, Safe, Efficient Use and Preservation of the Navigable Airspace

Our study has disclosed that this proposed tower, located approximately 1.5 nm southwest of the airport reference point, is within the protected surfaces at LEBANON SPRINGFIELD-GEORGE HOERTER FLD Airport (6I2), KY. At the proposed height, this structure penetrates these protected airport surfaces at 6I2:

> 77.17 (a)(3) A height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

At 1012 AMSL, 4D, Lebanon Springfield-George Hoerter Field (6I2) Springfield, KY. RNAV (GPS) RWY 11. Increase LNAV/VNAV DA from 1159 to 1223, NEH 966 AMSL. Exceeds by 46 feet.

Increase LNAV MDA from 1220 to 1320, NEH 966 AMSL. Exceeds by 46 feet.

>The structure would lie within the TPA climb and descent area for all runways for all categories of aircraft.

*Note: Aircraft categories are based on approach speed, CAT A = less than 91 knots, CAT B = 91- 120 knots, CAT C = 121-140 knots, CAT D = 141-165 knots, CAT E 165 + knots.

**The MDA / DA is the minimum altitudes to which an aircraft may descend while on the instrument approach to the airport during periods when reduced visibility and/or low cloud ceiling conditions exist. If the pilot cannot achieve visual reference to the ground upon reaching the MDA / DA, the approach must be abandoned. This results in the aircraft having to proceed to an alternate airport or waiting in a holding pattern for improved weather conditions. Any increase in the MDA / DA would have a significant adverse effect on the benefits derived from the instrument procedures.

The proposal was circularized on November 22, 2021 to all known aviation interests and to non-aeronautical interests that may be affected by the proposal. No letters of objection were received as a result of the circularization.

AERONAUTICAL STUDY FOR POSSIBLE INSTRUMENT FLIGHT RULES (IFR) EFFECT DISCLOSED THE FOLLOWING:

> Aeronautical study disclosed that the proposed structure would have an adverse effect as stated above on RNAV (GPS) RWY 11 LNAV/VNAV DA and RNAV (GPS) RWY 11 LNAV MDA; however, no information was received to indicate that this would affect a significant number of aircraft operations. The proposed structures will have no effect on any other existing or proposed arrival, departure, or en route IFR operation or procedure.

AERONAUTICAL STUDY FOR POSSIBLE VISUAL FLIGHT RULES (VFR) EFFECT DISCLOSED THE FOLLOWING:

The latest 6I2 Airport Master Plan, dated April 04, 2018, indicates that 6I2 has approximately 9,870 operations per year, although no specific information is available as to the number of operations per category of aircraft. The Airport Master Plan identifies that the following are based at 6I2: 17 single engine aircraft. The proposed tower would be located within portions of the TPA. Aircraft at normal TPA altitudes and standard rates of descent would have reasonable clearance above this proposal. Therefore, the proposed structure would not have a substantial adverse effect on VFR operations at 6I2 or any other known public use or military airports. At 207 feet AGL, the proposed structure would not have a substantial adverse effect on VFR en route flight operations.

> The proposed structure will be appropriately obstruction marked/lighted to make it more conspicuous to airmen should circumnavigation be necessary.

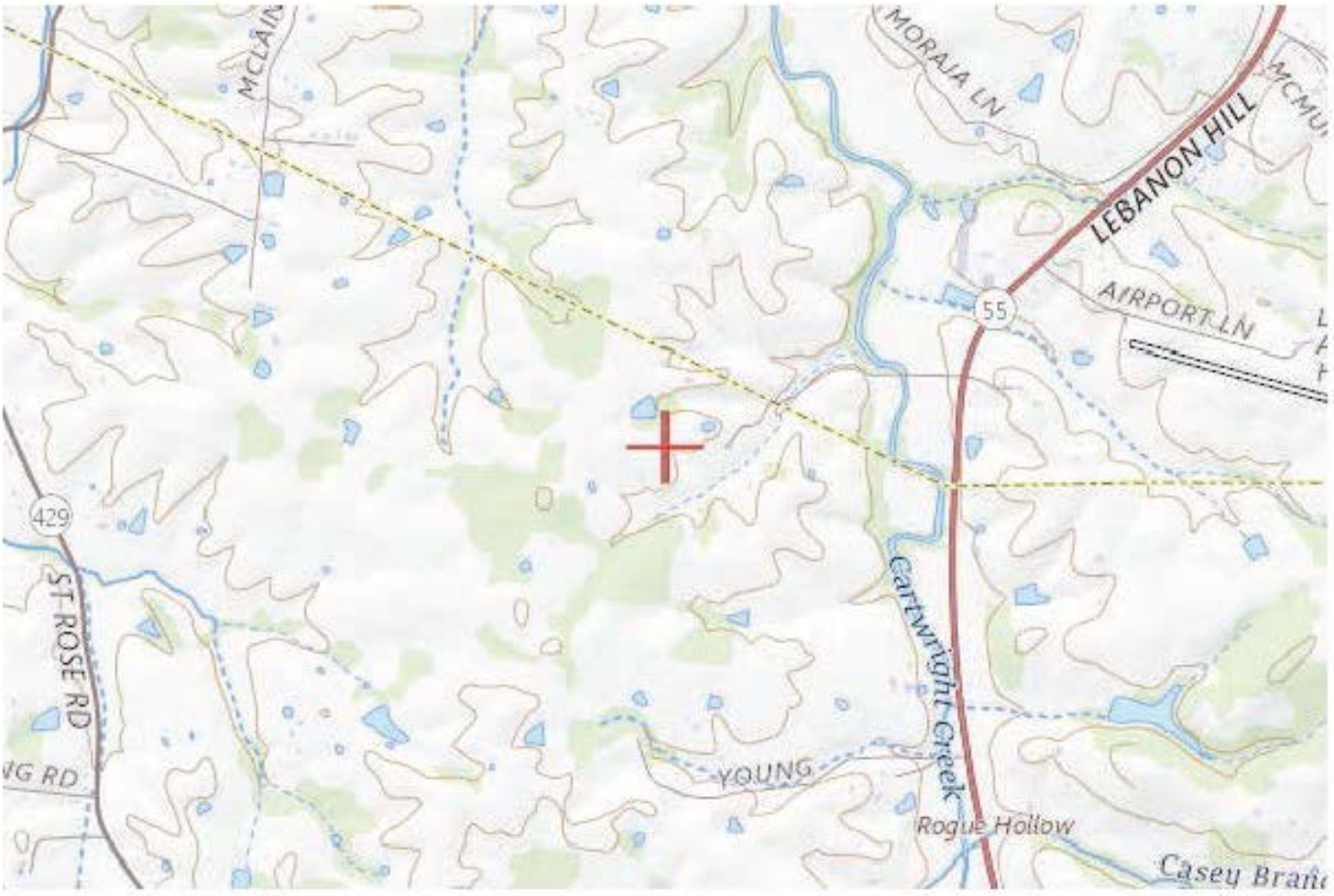
The cumulative impact of the proposed structure, when combined with other proposed and existing structures is not considered significant. Study did not disclose any significant adverse effect on existing or proposed public-use or military airports or navigational facilities. Nor would the proposal affect the capacity of any known existing or planned public-use or military airport.

Therefore, it is determined that the proposed construction would not have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on any air navigation facility and would not be a hazard to air navigation provided the conditions set forth in this determination are met.

Frequency Data for ASN 2021-ASO-37316-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

TOPO Map for ASN 2021-ASO-37316-OE




1006
(290)
1034
1147
(302)
069°
1081
(270)
Holy-Cross
SPRINGFIELD
1072
(298)
(314)
963
(206)
(Pvt)
ARNOLDS
843 = 22
LEBANON SPRINGFIELD-
GEORGE HOERTER FLD (6I2)
AWOS-3P 119.725
871 *L 50 122.8
Loretto
St. Francis
1090
(255)
St. Mary
Lebanon
1224
(284)
1270
(305)
880
(250)
1387
(340)
1178
(370)

EXHIBIT F

KENTUCKY AIRPORT ZONING COMMISSION
APPLICATION FOR APPROVAL TO CONSTRUCT

KENTUCKY TRANSPORTATION CABINET

KENTUCKY AIRPORT ZONING COMMISSION

APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE

APPLICANT (*name*) Harmoni Towers LLC	**PHONE**	**FAX**	**KY AERONAUTICAL STUDY #**	
ADDRESS (*street*) 10802 Executive Center Dr. Ste 100	**CITY** Little Rock		**STATE** AR	**ZIP** 72211
APPLICANT'S REPRESENTATIVE (*name*) B&T Group - Jeremy Siegel	**PHONE** 918-497-8821	**FAX** 918-295-0265		
ADDRESS (*street*) 1717 S Boulder Ave Ste 300	**CITY** Tulsa		**STATE** OK	**ZIP** 74119
APPLICATION FOR ☐ New Construction ☐ Alteration ☐ Existing **DURATION** ☐ Permanent ☐ Temporary (*months* *days*)			**WORK SCHEDULE** Start End	
TYPE ☐ Crane ☐ Building ☒ Antenna Tower ☐ Power Line ☐ Water Tank ☐ Landfill ☐ Other	**MARKING/PAINTING/LIGHTING PREFERRED** ☐ Red Lights & Paint ☐ White- medium intensity ☐ White- high intensity ☒ Dual- red & medium intensity white ☐ Dual- red & high intensity white ☐ Other			
LATITUDE 37 ° 37 ′ 55 .60 ″ N	**LONGITUDE** 85 ° 16 ′ 05 . 44 ″ W		**DATUM** ☒ NAD83 ☐ NAD27 ☐ Other	
NEAREST KENTUCKY City Lebanon County Marion	**NEAREST KENTUCKY PUBLIC USE OR MILITARY AIRPORT** 6I2			
SITE ELEVATION (AMSL, *feet*) 805'	**TOTAL STRUCTURE HEIGHT** (AGL, *feet*) 207'		**CURRENT** (*FAA aeronautical study #*) 2021-ASO-37316-OE	
OVERALL HEIGHT (*site elevation plus total structure height, feet*) 1012'			**PREVIOUS** (*FAA aeronautical study #*)	
DISTANCE (*from nearest Kentucky public use or Military airport to structure*) 7644.05 feet			**PREVIOUS** (*KY aeronautical study #*)	
DIRECTION (*from nearest Kentucky public use or Military airport to structure*)				

DESCRIPTION OF LOCATION (*Attach USGS 7.5 minute quadrangle map or an airport layout drawing with the precise site marked and any certified survey.*)

DESCRIPTION OF PROPOSAL

Harmoni Towers LLC proposes to construct a 207' antenna tower for the purpose of enhancing the coverage of their tenants' subscribers.

FAA Form 7460-1 (*Has the "Notice of Construction or Alteration" been filed with the Federal Aviation Administration?*)
☐ No ☐ Yes, when?

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**	**DATE**
Jeremy Siegel	Project Manager		1/16/2022

COMMISSION ACTION

☐ Chairperson, KAZC
☐ Administrator, KAZC

☐ Approved
☐ Disapproved

SIGNATURE

DATE

TOPO Map for ASN 2021-ASO-37316-OE

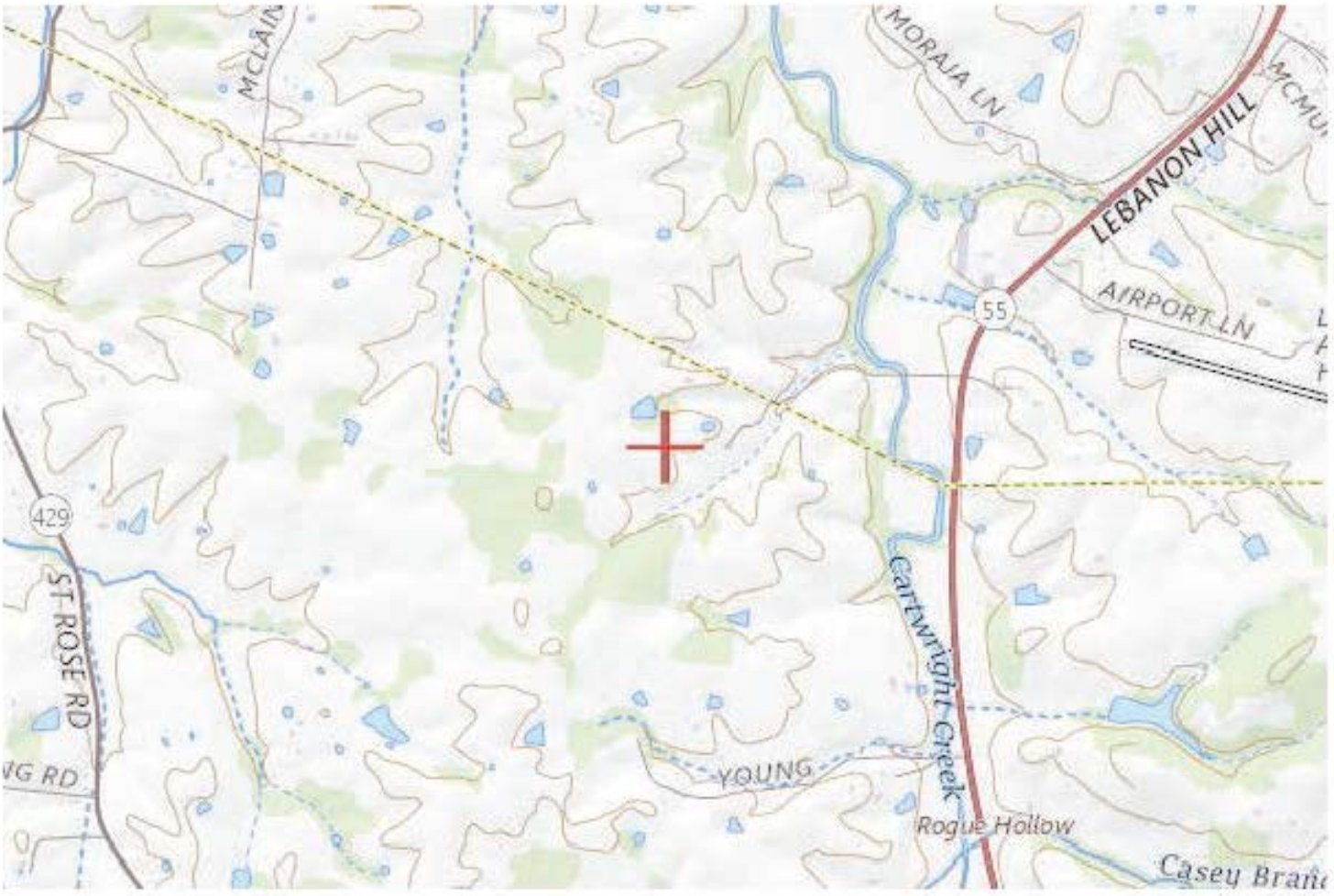


EXHIBIT G

GEOTECHNICAL REPORT

SUBSURFACE INVESTIGATION & GEOTECHNICAL RECOMMENDATIONS

HARMONI TOWER – KYLOU2014 LEBANON ROAD
LEBANON, KENTUCKY
A&W PROJECT NO: 21EV0093

PREPARED FOR:
B+T GROUP
TULSA, OKLAHOMA

PREPARED BY:
ALT & WITZIG ENGINEERING, INC.
GEOTECHNICAL DIVISION

FEBRUARY 16TH, 2021

Alt & Witzig Engineering, Inc.
6200 East Maxwell Avenue, Suite C • Evansville, Indiana 47715
Ph: (812) 422-4446 • Fax: (812) 422-8377

February 16th, 2022

B+T Group
1717 S. Boulder Ave., Suite 300
Tulsa, Oklahoma 74119
ATTN: Patricia Parr

Report of Subsurface Investigation & Geotechnical Recommendations

RE: Harmoni KYLOU2014 Tower – Lebanon Road
Lebanon, Kentucky
B+T Group # 144642.001.08
Alt & Witzig File: **21EV0093**

Dear Ms. Parr:

In compliance with your request, we have completed a subsurface investigation and geotechnical evaluation for the above referenced project. It is our pleasure to transmit herewith one (1) electronic copy of our report.

The purpose of this subsurface investigation was to determine the various soils profile components and the engineering characteristics of the materials encountered to provide design parameters for the design and construction of the proposed 195-foot-tall self-support communication tower.

Project Description

The site is located west of Kentucky Highway 55 approximately 3,000 feet west of Lebanon-Springfield Airport in Lebanon, Kentucky (Exhibit 1). The nearest street address of the adjoining property owner is 3239 St. Rose Road. The center elevation of the tower is listed on the survey provided by the client at 804.9 feet.

The ground surface at the time of our investigation consisted of an agricultural field and was surrounded by other agricultural fields and a cow pasture. No crops were present at the time of drilling operations. The subgrade was slightly sloping and well drained. The shallow soil types as mapped for this site were derived from the USDA's Web Soil Survey. A Custom Soil Resource Report for this site is included in the Appendix.

Exhibit 1: 2020 Aerial Photograph

Field Methods

The field investigation included a reconnaissance of the project site, performing one (1) soil boring near the tower center, and obtaining soil samples for laboratory testing. The apparent groundwater level at the boring location was also determined.

Laboratory Investigation

A laboratory investigation was conducted to ascertain additional pertinent engineering characteristics of the subsurface materials at the site of the proposed tower. The laboratory testing program included visual classification of all soils, and pocket penetrometer and moisture content testing of cohesive samples.

Site Specific Subsurface Conditions

At the ground surface, the boring encountered approximately eight (8) inches of topsoil. Beneath the topsoil the boring encountered medium stiff to very stiff, brown silty clay. The cohesive soil transitioned to a weathered siltstone at depth of 6.5 feet below the ground surface. (Elev. 798.4 feet).

The siltstone continued until to a depth of 9.5 feet below the ground surface (Elev. 795.4) where limestone bedrock of St. Louis Limestone formation was encountered to the termination depth of the boring (Elev. 786.9). The bedrock was inspected by downhole camera and found to contain a small void near the siltstone/sandstone interface. However, no large voids were noted in the depth investigated. Images of the core hole are presented in the appendix for reference.

Water level observations made during and upon completion of drilling operations indicated dry conditions. It should be noted that the groundwater level measurement recorded on the individual *Boring Logs* in the Appendix of this report is accurate for the specific date on which the measurements was performed. It must be understood that the groundwater level will fluctuate throughout the year. The *Boring Logs* do not indicate these fluctuations.

Seismic Parameters

An evaluation of the seismic site class has been performed for this site. The Commonwealth of Kentucky has integrated the 2015 International Building Code into the Kentucky Building Code (KBC). The seismic site class is determined by averaging soil conditions within the top 100 feet with respect to the shear wave velocity in accordance with ASCE 7. Our evaluation is based on data obtained for a single boring performed to a depth of 18 feet at this site and limited information provided by the Kentucky Geological Survey for a depth of 100 feet. A detailed report generated by data from USGS and formatted by SEAOC and OSHPD (seismicmaps.org) has been attached to this letter. Following are the summarized requested seismic parameters.

Seismic Parameters

Site Soil Classification	Site Class B
MCE Spectral Response Accelerations	$S_s = 0.186$ $S_1 = 0.102$

Geotechnical Recommendations

Information provided by B+T Group indicates that a new 195-foot-tall self-support communications tower will be constructed at this site. This investigation was conducted to provide information for use in the design and construction of the foundations for the proposed structure.

Tower Foundation Recommendations

Extended Footing or Extended Mat Foundation

The soil parameters presented in *Table 1* may be utilized for the evaluation of a shallow foundation at the tower location.

Table 1: Shallow Foundation Soil Parameters

Soil Description	Depth Below Existing Grade (feet)	Allowable Bearing Pressure (psf) FS=3	Unit Weight (pcf)	C (psf)/ Φ (°)	Adhesion (psf)
Medium Stiff to Stiff Clay	3-6.5	4,500	120	2,500	1,750

Drilled Piers

Drilled shaft foundations may be designed using the soil parameters provided in *Table 2*. Skin friction within the soil shall not be summed for support of vertical loads for foundations that are end supported on or embedded in the underlying bedrock.

Table 2: Deep Foundation Soil/Bedrock Parameters

Depth Below Grade (Feet)	Allowable Skin Friction for Gravity Loads SF=2	Design End Bearing Pressure SF=3	Effective Unit Weight (pcf)	C (psf) / Φ (°)	e50	Lateral p-y Model
3-6.5 Brown Clay	650 psf	5,000 psf	120	2,000	0.006	Stiff Clay
6.5-9.5 Siltstone	1,000 psf	6,000 psf	130	4,000	0.004	Weak Rock
9.5-18 Limestone	5,000 psf	10,000 psf	150	10k+	0.001	Bedrock

*Skin friction may be utilized in shaft compression and tension
** The unconfined compressive strength of the limestone bedrock may be assumed to be 7,500 psi for purposes of excavation evaluation.

Equipment Building Foundation Recommendations

A net allowable bearing pressure of **2,500 psf** is recommended for evaluating continuous wall footings at this site for lightly loaded ancillary buildings. The above-suggested bearing pressure is provided assuming the footings will be founded on medium stiff natural soils or properly compacted fill materials at a minimum depth of two (2) feet below grade.

Statement of Limitations

Our subsurface investigation was conducted in accordance with guidelines set forth in the scope of services and applicable industry standards.

An inherent limitation of any geotechnical engineering study is that conclusions must be drawn based on data collected at a limited number of discrete locations. The geotechnical parameters provided in this report were developed from the information obtained from the test borings that depict subsurface conditions only at these specific locations and on the date indicated on the boring logs. Soil conditions at other locations may differ from conditions encountered at these boring locations and groundwater levels shall be expected to vary with time. The nature and extent of variations between the borings may not become evident until the course of construction.

Often, because of design and construction details that occur on a project, questions rise concerning the soil conditions. If we can give further service in these matters, please contact us at your convenience.

Sincerely,

Sincerely,
ALT & WITZIG ENGINEERING, INC.

Logan M. Folz, E.I.

David C. Harness, P.E.

APPENDIX

Boring Log
General Notes
Bedrock Core Hole Images
U.S. Seismic Design Maps
Custom Soil Resource Report

BORING LOG

Alt & Witzig Engineering, Inc.

CLIENT B+T Group
PROJECT NAME Harmonl KYLOU2014 Tower-Lebanon Road
PROJECT LOCATION Lebanon

BORING # B-1
ALT & WITZIG FILE # 21EV0093
Latitude 37.632111 Longitude -85.268178

DRILLING and SAMPLING INFORMATION

Date Started 2/9/22
Date Completed 2/9/22
Boring Method HSA
Driller D. Samsel

Hammer Wt. 140 lbs.
Hammer Drop 30 in.
Spoon Sampler OD 2 in.
Rig Type Geoprobe 6712DT

STRATA ELEV.	SOIL CLASSIFICATION / SURFACE ELEVATION 804.9	Strata Depth	Depth Scale	Sample No.	Sample Type	Sampler Graphics / Recovery Graphics	Ground Water	TEST DATA: Standard Penetration Test, N - blows/foot	TEST DATA: Qu-tsf Unconfined Compressive Strength	TEST DATA: PP-tsf Pocket Penetrometer	TEST DATA: Moisture Content % / Dry Unit Weight (pcf)	Remarks
804.2	Brown, Moist TOPSOIL	0.7		1	SS			5		2.0	21.9	
	Brown, Medium Stiff Silty CLAY with trace Organics		5	2	SS			13		4.5	12.8	
798.4		6.5		3	SS			64		4.5	13.1	
	Brown and Gray Siltstone, Highly Weathered			4	RC							
795.4		9.5	10									
	Gray Limestone Wackestone		15									13.5-14.5 Feet. Air Rotary Penetration Sped Up.
786.9		18.0										
	End of Boring at 18 feet											

Sample Type
SS - Driven Split Spoon
ST - Pressed Shelby Tube
CA - Continuous Flight Auger
RC - Rock Core
CU - Cuttings
CT - Continuous Tube

Groundwater
○ During Drilling Dry ft.
▽ At Completion Dry ft.

Boring Method
HSA - Hollow Stem Augers
CFA - Continuous Flight Augers
DC - Driving Casing
MD - Mud Drilling

MATERIAL GRAPHICS LEGEND


IN SILTY CLAY
Indiana DOT: Silty Clay


LIMESTONE
Limestone


SILTSTONE
Siltstone


TOPSOIL

DRILLING AND SAMPLING SYMBOLS

GROUNDWATER SYMBOLS

Apparent water level noted upon completion.

Apparent water level noted upon delayed time.

SAMPLER SYMBOLS

SS: SPLIT SPOON

RC: ROCK CORE

MC: MACRO CORE

AS: AUGER SAMPLE

WELL GRAPHICS LEGEND

GENERAL NOTES - ENVIRO (PROJECT SPECIFIC) 21EV0093 LOGS.GPJ US EVAL.GDT 2/17/22

Alt & Witzig Engineering, Inc.
4105 West 99th St.
Carmel, IN
Telephone: (317) 875-7000
Fax: (317) 876-3705

GENERAL NOTES

Project: Harmoni KYLOU2014 Tower-Lebanon Road

Location: Lebanon

Number: 21EV0093

Photo 1

Siltstone at -6.5'

Photo 2

Void Near Silstone/Limestone Interface

Photo 3

Competent Limestone at -15’

Photo 4

Closeup of the base of the core hole at -18’

OSHPD

Lebanon, KY 40033, USA

Latitude, Longitude: 37.5697868, -85.2527381

Date	2/18/2022, 3:08:11 PM
Design Code Reference Document	IBC-2018
Risk Category	II
Site Class	B - Rock

Type	Value	Description
S_S	0.186	MCE_R ground motion. (for 0.2 second period)
S_1	0.102	MCE_R ground motion. (for 1.0s period)
S_{MS}	0.186	Site-modified spectral acceleration value
S_{M1}	0.102	Site-modified spectral acceleration value
S_{DS}	0.124	Numeric seismic design value at 0.2 second SA
S_{D1}	0.068	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	B	Seismic design category
F_a	1	Site amplification factor at 0.2 second
F_v	1	Site amplification factor at 1.0 second
PGA	0.084	MCE_G peak ground acceleration
F_{PGA}	1	Site amplification factor at PGA
PGA_M	0.084	Site modified peak ground acceleration
T_L	12	Long-period transition period in seconds
SsRT	0.186	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	0.208	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.5	Factored deterministic acceleration value. (0.2 second)
S1RT	0.102	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.116	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.6	Factored deterministic acceleration value. (1.0 second)
PGAd	0.6	Factored deterministic acceleration value. (Peak Ground Acceleration)
C_{RS}	0.909	Mapped value of the risk coefficient at short periods
C_{R1}	0.894	Mapped value of the risk coefficient at a period of 1 s

DISCLAIMER

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United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Marion County, Kentucky

February 16, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Marion County, Kentucky
Survey Area Data: Version 19, Sep 8, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 23, 2019—Oct 24, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
SaB	Sandview silt loam, 2 to 6 percent slopes	0.8	33.0%
uLfC	Lowell-Faywood silt loams, 6 to 12 percent slopes	1.7	67.0%
Totals for Area of Interest		**2.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Marion County, Kentucky

SaB—Sandview silt loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: ljsb
Elevation: 480 to 1,250 feet
Mean annual precipitation: 43 to 62 inches
Mean annual air temperature: 42 to 67 degrees F
Frost-free period: 145 to 191 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Sandview and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sandview

Setting

Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Thin fine-silty noncalcareous loess over residuum weathered from limestone and shale

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 35 inches: silty clay loam
H3 - 35 to 76 inches: silty clay
R - 76 to 86 inches: unweathered bedrock

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: 60 to 90 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 11.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Sandview, (eroded)

Percent of map unit: 2 percent

Hydric soil rating: No

Crider

Percent of map unit: 2 percent
Hydric soil rating: No

Beasley

Percent of map unit: 2 percent
Hydric soil rating: No

Lowell

Percent of map unit: 2 percent
Hydric soil rating: No

Nicholson

Percent of map unit: 2 percent
Hydric soil rating: No

uLfC—Lowell-Faywood silt loams, 6 to 12 percent slopes

Map Unit Setting

National map unit symbol: 2s2d6
Elevation: 450 to 1,130 feet
Mean annual precipitation: 36 to 66 inches
Mean annual air temperature: 40 to 68 degrees F
Frost-free period: 144 to 218 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Lowell and similar soils: 70 percent
Faywood and similar soils: 20 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lowell

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Clayey residuum weathered from limestone and shale

Typical profile

Ap - 0 to 8 inches: silt loam
Bt - 8 to 41 inches: silty clay
BC - 41 to 53 inches: silty clay
R - 53 to 63 inches: bedrock

Properties and qualities

Slope: 6 to 12 percent

Depth to restrictive feature: 40 to 57 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Hydric soil rating: No

Description of Faywood

Setting

Landform: Hills
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Clayey residuum weathered from limestone and shale

Typical profile

Ap - 0 to 7 inches: silt loam
Bt - 7 to 29 inches: silty clay
R - 29 to 39 inches: bedrock

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: 20 to 39 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Cynthiana

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope

Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Sandview

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

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EXHIBIT H

DIRECTIONS TO WCF SITE

Driving Directions to Proposed Tower Site

1. Beginning at 223 N. Spalding Avenue, Lebanon, KY 40033, head southeast toward East M.L.K. Avenue and travel approximately 151 feet.
2. Turn right onto East M.L.K. Avenue and travel approximately 226 feet.
3. Turn right onto N. Spalding Avenue and travel approximately 1.3 miles.
4. Continue onto KY-2154/KY-55 N and travel approximately 3.3 miles.
5. The access drive for this site is on the left and continues to the site location.
6. The site coordinates are
    a. 37 deg 37 min 55.60 sec N
    b. 85 deg 16 min 05.44 sec W

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EXHIBIT I

COPY OF REAL ESTATE AGREEMENT

HARMONI Site ID: KYLOU2014
Harmoni Site Name: Lebanon Road
FA No.: 15435107

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 Greg T. Morris and Ann Michelle Morris, husband and wife ("**Landlord**"), having a mailing address of 3239 St. Rose Road, Lebanon, Kentucky 40033 , and Harmoni Towers LLC, a Delaware limited liability company having a mailing address of 11101 Anderson Drive, Suite 200, Little Rock, Arkansas 72212 ("**Tenant**").

BACKGROUND

Landlord owns or controls that certain plot, parcel or tract of land, as described on **Exhibit 1,** together with all rights and privileges arising in connection therewith, located at Highway 55 a/k/a Lebanon Road, in the City/Town of Lebanon, County of Marion, State of Kentucky (collectively, the "**Property**"). 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 exclusive option (the "**Option**") to lease a certain portion of the Property containing approximately Ten Thousand (10,000) square feet including the air space above such ground space, and any access/ingress-egress easements and/or utility easements as described on attached **Exhibit 1**, (the "**Premises**"), for the placement of a Communication Facility.

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

(c) In consideration of Landlord granting Tenant the Option, Tenant agrees to pay Landlord the sum of [redacted] within thirty (30) business days after the Effective Date. The Option may be exercised during an initial term of one (1) year commencing on the Effective Date (the "**Initial Option Term**") which term may be renewed by Tenant for an additional one (1) year (the "**Renewal Option Term**") upon written notification to Landlord and the payment of an additional [redacted] no later than five (5) days prior to the expiration date of the Initial Option Term. The Initial Option Term and any Renewal Option Term are collectively referred to as the "**Option Term**."

(d) The Option may be sold, assigned or transferred at any time by Tenant without the written consent of Landlord. Upon notification to Landlord of such sale, assignment, or transfer, 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 if the Option is exercised, Landlord decides to subdivide, sell, or change the status of the zoning of the Premises, Property or up to 250' (two hundred and fifty feet) of any of Landlord's contiguous, adjoining or surrounding property to the Premises and access/ingress-egress easements and/or utility easements (the **"Surrounding Property,"**) or in the event of a threatened foreclosure, Landlord shall immediately notify Tenant in writing. Landlord agrees that during the Option Term, or during the Term if the Option is exercised, Landlord shall not initiate or consent to any change in the zoning of the Premises, Property or Surrounding Property or impose or consent to any other use or restriction that would prevent or limit Tenant from using the Premises for the Permitted Use. Any and all terms and conditions of this Agreement that by their sense and context are intended to be applicable during the Option Term shall be so applicable.

2. **PERMITTED USE.** Tenant may use the Premises for the transmission and reception of communications signals and the installation, construction, maintenance, operation, repair, replacement and upgrade of communications fixtures and related equipment, cables, accessories and improvements, which may include a suitable support structure (**"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 **the Surrounding Property** 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, install a generator 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 or equipment, install warning signs to make individuals aware of risks, install protective barriers, install any other control measures reasonably required by Tenant's safety procedures or applicable law, and undertake any other appropriate means to secure the Premises or equipment at Tenant's expense. Tenant has the right to modify, supplement, replace, upgrade, expand the Communication Facility (including, for example, increasing the number of antennas or adding microwave dishes) or relocate the Communication Facility within the Premises at any time during the Term. Tenant will be allowed to make such alterations to the Property in order to ensure that the 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, and with Landlord's consent, said consent not to be unreasonably withheld, Landlord agrees to lease to Tenant the Additional Premises, upon the same terms and conditions set forth herein, except that the Rent shall increase, in conjunction with the lease of the Additional Premises by the amount equivalent to the then-current per square foot rental rate charged by Landlord to Tenant times the square footage of the Additional Premises. Landlord agrees to take such actions and enter into and deliver to Tenant such documents as Tenant reasonably requests in order to effect and memorialize the lease of the Additional Premises to Tenant.

3. **TERM.**

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

(b) This Agreement will automatically renew for nine (9) additional five (5) year term(s) (each additional five (5) year term shall be defined as an "**Extension Term**"), upon the same terms and conditions set forth herein unless Tenant notifies Landlord in writing of Tenant's intention not to renew this Agreement at least sixty (60) days prior to the expiration of the Initial Term or then-existing Extension Term.

(c) Unless (i) Landlord or Tenant notifies the other in writing of its intention to terminate this Agreement at least six (6) months prior to the expiration of the final Extension Term, or (ii) the Agreement is terminated as otherwise permitted by this Agreement prior to the end of the final Extension Term, 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 party written notice of its intention to so terminate at least six (6) months prior to the end of any such Annual Term. Monthly rent during such Annual Terms shall be [redacted] 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**".

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, [redacted] (the "**Rent**"), at the address set forth above. In any partial month occurring after the Rent Commencement Date, Rent will be prorated. The initial Rent payment will be forwarded by Tenant to Landlord within forty-five (45) days after the Rent Commencement Date.

(b) In the first year of an Extension Term, the monthly Rent will increase by [redacted] over the Rent paid during the previous five (5) year term, effective the first day of the month in which the anniversary of the Term Commencement Date occurs.

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

5. **APPROVALS.**

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

(b) Tenant, at Tenant's sole cost and expense, 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. Tenant further agrees to not

unreasonably damage the property during the performance of these tests or investigations and to restore property in good condition.

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

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

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

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

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

(e) by Tenant upon sixty (60) days' prior written notice to Landlord for any reason or no reason, so long as Tenant pays Landlord a termination fee equal to [redacted] 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: Section 5 Approvals, Section 6(a) Termination, Section 6(b) Termination, Section 6(c) Termination, Section 6(d) Termination, Section 11(d) Environmental, Section 18 Condemnation or Section 19 Casualty.

7. **INSURANCE.** During the Option Term and throughout the Term, Tenant will purchase and maintain in full force and effect such general liability policy as Tenant may deem necessary. Said policy of general liability insurance will at a minimum provide a combined single limit of [redacted]. Such policy of general liability insurance shall include an additional insured endorsement including Landlord in connection with the activities contemplated herein and Tenant shall, prior to commencement of the Option Term, if requested by Landlord, provide Landlord with a copy of the additional insured endorsement to the certificate of insurance. Notwithstanding the foregoing, Tenant shall have the right to self-insure such general liability coverage.

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 the 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 Effective Date, 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 , costs or expenses in connection with a third party claim (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, invitees, 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 , costs or expenses in connection with a third party claim (including reasonable attorneys' fees and court costs) arising directly from the actions or failure to act of Landlord, its employees, invitees agents or independent contractors, 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) Each of Tenant and Landlord (to the extent not a natural person) acknowledge and represent that it is duly organized, validly existing and in good standing and has the right, power and authority or capacity, as applicable, to enter into this Agreement and bind itself hereto through the party or individual 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 in the form attached hereto as **Exhibit 10**(b).

11. ENVIRONMENTAL.

(a) Landlord represents and warrants, except as may be identified in **Exhibit 11** attached to this Agreement, (i) the Property, as of the Effective Date, 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 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 indemnification provisions contained in 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 materials on the Property, or any environmental, health or safety condition or matter relating to the Property, that, in Tenant's sole determination, renders the condition of the Premises or Property unsuitable for Tenant's use, or if Tenant believes that the leasing or continued leasing of the Premises would expose Tenant to undue risks of liability to a government agency or other third party, Tenant will have the right, in addition to any other rights it may have at law or in equity, to terminate this Agreement upon written notice to Landlord.

12. ACCESS. At all times throughout the Term of this Agreement, and at no additional charge to Tenant, Tenant and its employees, agents, and subcontractors, will have twenty-four (24) hour per day, seven (7) day per week pedestrian and vehicular access ("**Access**") to and over the Property, from an open and improved public road to the Premises, for the installation, maintenance and operation of the Communication Facility and any utilities serving the Premises. If Tenant elects to utilize an Unmanned Aircraft System ("UAS") in connection with its installation, construction, monitoring, site audits, inspections, maintenance, repair, modification, or alteration activities at the Property, Landlord hereby grants Tenant, or any UAS operator acting on Tenant's behalf, express permission to fly over the applicable Property and Premises, and consents to the use of audio and video navigation and recording in connection with the use of the UAS. 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, [redacted] in consideration of Tenant's damages until Landlord cures such default. The sum of [redacted] in liquidated damages shall not be paid by Landlord in the event that access cannot be granted to Tenant due to acts of God and natural disasters. Landlord and Tenant agree that Tenant's damages in the event of a denial of Access are difficult, if not impossible, to ascertain, and the liquidated damages set forth above are a reasonable approximation of such damages.

13. **REMOVAL/RESTORATION.** All portions of the Communication Facility brought onto the Property by Tenant will be and remain Tenant's personal property and, at Tenant's option, sole cost and expense, may be removed by Tenant at any time during or after the Term. Landlord covenants and agrees that no part of the Communication Facility constructed, erected or placed on the Premises by Tenant will become, or be considered as being affixed to or a part of, the Property, it being the specific intention of Landlord that all improvements of every kind and nature constructed, erected or placed by Tenant on the Premises will be and remain the property of Tenant and may be removed by Tenant, at Tenant's sole cost and expense, at any time during or after the Term. Tenant, at Tenant's sole cost and expense, 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. 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.

(b) Tenant will be responsible for paying on a monthly or quarterly basis all utilities charges for electricity, telephone service or any other utility used or consumed by Tenant on the Premises.

(c) Intentionally deleted.

(d) Tenant will have the right to install utilities, at Tenant's expense, and to improve present utilities on the Property and the Premises. Landlord hereby grants to any service company providing utility or similar services, including electric power and telecommunications, to Tenant an easement over the Property, from an open and improved public road to the Premises, and upon the Premises, for the purpose of constructing, operating and maintaining such lines, wires, circuits, and conduits, associated equipment cabinets and such appurtenances thereto, as such service companies may from time to time require in order to provide such services to the Premises. Upon Tenant's or 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 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 within twenty-four (24) hours after written notice of such failure; or (iii) Landlord's failure to perform any term, condition or breach of any warranty or covenant under this Agreement within forty-five (45) days after written notice from Tenant specifying the failure. No such failure, however, will be deemed to exist if Landlord has commenced to cure the default within such period and provided such efforts are prosecuted to completion with reasonable diligence. Delay in curing a default will be excused if due to causes beyond the reasonable control of Landlord. If Landlord remains in default beyond any applicable cure period, Tenant will have: (i) the right to cure Landlord's default and to deduct the costs of such cure from any monies due to Landlord from Tenant, and (ii) any and all other rights available to it under law and equity.

16. **ASSIGNMENT/SUBLEASE.** Tenant will have the right to assign, sell or transfer its interest under this Agreement, in whole or part, without Landlord's consent, to: (a) Tenant's Affiliate, (b) to any entity with a net worth of at least [redacted] or (c) any entity that acquires all or substantially all of the Tenant's assets in the market as defined by the Federal Communications Commission in which the Property is located. Upon notification to Landlord of such assignment, transfer or sale, Tenant will be relieved of all future performance, liabilities and obligations under this Agreement. Tenant shall have the right to sublease the Premises, in whole or in part, without Landlord's consent. Tenant may not otherwise assign this Agreement without Landlord's consent, Landlord's consent not to be unreasonably withheld, conditioned or delayed.

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:
Harmoni Towers LLC
Attn: Real Estate
11101 Anderson Drive, Suite 200
Little Rock, Arkansas 72212
REAdmin@harmonitowers.com

cc:

Harmoni Towers LLC
Attn: Director of Legal
11101 Anderson Drive, Suite 200
Little Rock, Arkansas 72212
Legal@Harmonitowers.com

For Emergencies: NOC@harmonitowers.com

If to Landlord:
Greg T. Morris and Ann Michelle Morris
3239 St. Rose Road
Lebanon, Kentucky 40033
Telephone: [redacted]

Either party hereto may change the place for the giving of notice to it by thirty (30) days' prior written notice to the other party 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 twenty-four (24) 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 *pro rata* basis.

19. **CASUALTY.** Landlord will provide notice to Tenant of any casualty or other harm affecting the Property within twenty-four (24) hours of being made aware of the casualty or other harm. In the event of a casualty, Tenant will take reasonable steps to abate any nuisance created within a reasonable time. 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 *pro rata* 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 this 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 (i) all taxes and assessments levied upon the lands, improvements and other property of Landlord including any such taxes that may be calculated by a taxing authority using any method, including the income method (ii) all sales, use, license, value added, documentary, stamp, gross receipts, registration, real estate transfer, conveyance, excise, recording, and other similar taxes and fees imposed in connection with this Agreement and (iii) all sales, use, license, value added, documentary, stamp, gross receipts, registration, real estate transfer, conveyance, excise, recording, and other similar taxes and fees imposed in connection with a sale of the Property or assignment of Rent payments by Landlord. Tenant shall be responsible for (y) 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 and (z) all sales, use, license, value added, documentary, stamp, gross receipts, registration, real estate transfer, conveyance, excise, recording, and other similar taxes and fees imposed in connection with an assignment of this Agreement or sublease by Tenant. 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 in a timely manner and Tenant's rights with respect to such taxes are prejudiced by the delay, Landlord shall reimburse Tenant for any increased costs directly resulting from the delay and 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 permitted by law. This right shall include the ability to institute any legal, regulatory or informal action in the name of Landlord, Tenant, or both, with respect to the valuation of the Premises. Landlord shall cooperate with respect to the commencement and prosecution of any such proceedings and will execute any documents required therefor. The expense of any such proceedings shall be borne by Tenant and any refunds or rebates secured as a result of Tenant's action shall belong to Tenant, to the extent the amounts were originally paid by Tenant. In the event Tenant notifies Landlord by the due date for assessment of Tenant's intent to contest the assessment, Landlord shall not pay the assessment pending conclusion of the contest, unless required by applicable law.

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

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

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

(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 may sell the Property or a portion thereof to a third party, provided: (i) the sale is made subject to the terms of this Agreement; and (ii) if the sale does not include the assignment of Landlord's full interest in this Agreement, the purchaser must agree to perform, without requiring compensation from Tenant or any subtenant, any obligation of Landlord under this Agreement, including Landlord's obligation to cooperate with Tenant as provided hereunder.

(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 Section 22(b) to Tenant. Until Tenant receives all such documents, Tenant's failure to make payments under this Agreement shall not be an event of default and Tenant 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 Tenant 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 communication 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 communication 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. RIGHT OF FIRST REFUSAL. Notwithstanding the provisions contained in Section 22, if at any time after the Effective Date, Landlord receives a bona fide written offer from a third party seeking any sale, conveyance, assignment or transfer, whether in whole or in part, of any property interest in or related to the Premises, including without limitation any offer seeking an assignment or transfer of the Rent payments associated with this Agreement or an offer to purchase an easement with respect to the Premises ("**Offer**"), Landlord shall immediately furnish Tenant with a copy of the Offer. Tenant shall have the right within ninety (90) days after it receives such copy to match the Offer and agree in writing (the "**Exercise Notice**") to match the financial terms of the Offer. For the avoidance of doubt, to exercise its rights under this Section 23, Tenant shall not be required to match any compensation due to parties unrelated Landlord, including but not limited to broker compensation. The Exercise Notice shall be in the form of a contract substantially similar to the Offer (matching the financial terms as set forth herein); provided, however, that Landlord and Tenant acknowledge and agree that the Exercise Notice is intended to be a letter of intent or similar, and the parties shall thereafter negotiate in good faith the documents reasonably required to consummate Tenant's exercise of its rights under this Section 23. Tenant may assign its rights under this Section 23. If Tenant chooses not to exercise this right or fails to provide written notice to Landlord within the ninety (90) day period, Landlord may sell, convey, assign or transfer such property interest in or related to the Premises pursuant to the Offer, subject to the terms of this Agreement. If Landlord attempts to sell, convey, assign or transfer such property interest in or related to the Premises without complying with this Section 23, the sale, conveyance, 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 23. Tenant's failure to exercise the right of first refusal shall not be deemed a waiver of the rights contained in this Section 23 with respect to any future proposed conveyances as described herein.

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.** Contemporaneously with the execution of this Agreement, the parties will execute a recordable Memorandum of Lease substantially in the form attached as **Exhibit 24b**. Either party may record this Memorandum of Lease at any time during the Term, in its absolute discretion. Thereafter during the Term, 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 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 the 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 Harmoni Towers 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 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.

(o) **Incidental Fees.** Unless specified in this Agreement, no unilateral fees or additional costs or expenses are to be applied by either party to the other party, including review of plans, structural analyses, consents, provision of documents or other communications between the parties.

(p) **Further Acts.** Upon request, Landlord will cause to be promptly and duly taken, executed, acknowledged and delivered all such further acts, documents, and assurances as Tenant may request from time to time in order to effectuate, carry out and perform all of the terms, provisions and conditions of this Agreement and all transactions and permitted use contemplated by this Agreement.

(q) **Force Majeure.** No party shall be liable or responsible to the other party, nor be deemed to have defaulted under or breached this Agreement, for any failure or delay in fulfilling or performing any term of this Agreement, when and to the extent such failure or delay is caused by or results from acts beyond the affected party's reasonable control, including, without limitation: (a) acts of God; (b) flood, fire, earthquake, or explosion; (c) war, invasion, hostilities (whether war is declared or not), terrorist threats or acts, riot, or other civil unrest; (d) government order or law; (e) embargoes, or blockades in effect on or after the date of this Agreement; (f) action by any governmental authority; (g) national or regional emergency; and (h) strikes, labor stoppages or slowdowns, or other industrial disturbances. The party suffering a force majeure event shall give written notice to the other party, stating the period of time the occurrence is expected to continue and shall use diligent efforts to end the failure or delay and ensure the effects of such force majeure event are minimized.

[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"

By: Greg T. Morris
Print Name: Greg T. Morris
Its:
Date: 03/31/2022

"LANDLORD"

By: Ann Michelle Morris
Print Name: Ann Michelle Morris
Its:
Date: 03/31/2022

"TENANT"

Harmoni Towers LLC

By: Ginger Majors
Print Name: Ginger Majors
Its: SVP, Real Estate
Date: 5-17-2022

[ACKNOWLEDGMENTS APPEAR ON NEXT PAGE]

TENANT ACKNOWLEDGMENT

STATE OF ARKANSAS

COUNTY OF PULASKI

On the 17th day of May, 2022 before me personally appeared Ginger Majors, who acknowledged under oath that he/she is the SVP Real Estate of Harmoni Towers LLC, the Tenant named in the attached instrument, and as such was authorized to execute this instrument on behalf of the Tenant.

CONSTANCE F. HELMICH COMM. # 12372326 NOTARY PUBLIC SALINE COUNTY, ARKANSAS MY COMM. EXP. JUL 2, 2023

Notary Public: Constance F. Helmich
My Commission Expires: 7-2-2024

LANDLORD ACKNOWLEDGMENT

STATE OF Kentucky

COUNTY OF Marion

BE IT REMEMBERED, that on this 31st day of March, 2022 before me, the subscriber, a person authorized to take oaths in the State of Kentucky, personally appeared Greg T. Morris, who, being duly sworn on his/her/their oath, deposed and made proof to my satisfaction that he/she/they is/are the person(s) named in the within instrument, and I, having first made known to him/her/them the contents thereof, he/she/they did acknowledge that he/she/they signed, sealed and delivered the same as his/her/their voluntary act and deed for the purposes therein contained.

Elizabeth Graves Coulter ID# KYNP31432 NOTARY PUBLIC STATE AT LARGE, KENTUCKY 9/2/2025

Notary Public:
My Commission Expires:

Land Lease
ATTN ID:

LANDLORD ACKNOWLEDGMENT

STATE OF Kentucky

COUNTY OF Marion

BE IT REMEMBERED, that on this 31st day of March, 20 22 before me, the subscriber, a person authorized to take oaths in the State of Kentucky, personally appeared Ann Michelle Morris, who, being duly sworn on his/her/their oath, deposed and made proof to my satisfaction that he/she/they is/are the person(s) named in the within instrument, and I, having first made known to him/her/them the contents thereof, he/she/they did acknowledge that he/she/they signed, sealed and delivered the same as his/her/their voluntary act and deed for the purposes therein contained.

Notary Public: _____

My Commission Expires: _____

Land Lease

EXHIBIT 1

DESCRIPTION OF PREMISES

to the Option and Lease Agreement dated May 17, 2022 by and between Greg T. Morris and Ann Michelle Morris, husband and wife, as Landlord, and Harmoni Towers LLC, a Delaware limited liability company, as Tenant.

The Property is legally described as follows:

Tract 9 of the Mackin Farms, Inc. Farm Division as per plat of record at Plat Cabinet A, Slide 552, in the office of the Washington County Court Clerk and dually recorded at Plat Cabinet 3, Slide 433 in the office of the Marion County Court Clerk.
Also granted herein to an one-third (1/3) undivided interest in the roadway parcel from Point "A" to Point "E" and an one-half (1/2) undivided interest in the roadway parcel from Point "E" to Point "F".
This property is further subject to restrictions, roadway maintenance and easement agreements as set forth in documents accompanying the plats of record at the locations referenced above.
Roadway parcel from Point "A" to Point "F" is for ingress and egress purposes only and cannot be gated or blocked in any manner.
Each of tracts 7, 8, and 9 shall own an one-third (1/3) undivided interest in the roadway from Point "A" to Point "E". Each of Tracts 8 and 9 shall own an one-half (1/2) undivided interest in the roadway from Point "E" to Point "F".
Tracts 1, 2, 3, 4, 5, 6 shall have a permanent easement for ingress and egress purposes only from Point "A" to Point "B".
Tracts 1, 5 and 6 shall have a permanent easement for ingress and egress purposes only from Point "B" to Point "C".
Tracts 5 and 6 shall have a permanent easement for ingress and egress only from Point "C" to Point "D".
Tract 6 shall have a permanent easement for ingress and egress form Point "D" to Point "E".

MAINTENANCE RESPONSIBILITY
Roadway shall be maintained to provide reasonable access by a two-wheel drive passenger automobile suitable for licensing on public roads.
Tracts 1, 2, 3, 4, 5, 6, 7, 8 and 9 will be responsible for one-ninth (1/9) share of maintenance cost from Point "A" to Point "B".
Tracts 1, 5, 6, 7, 8 and 9 will be responsible for one-sixth (1/6) share of maintenance cost from Point "B" to Point "C".
Tracts 5, 6, 7, 8 and 9 will be responsible for one-fifth (1/5) share of maintenance cost from Point "C" to Point "D". Tracts 5, 6, 7, 8 and 9 are also responsible for one-fifth (1/5) share of maintenance cost and upkeep of bridge crossing Cartwright Creek as shown on the plat between Point "C" and "D".
Tracts 6, 7, 8 and 9 will be responsible for one-fourth (1/4) share of maintenance cost from Point "D" to Point "E".
Tracts 8 and 9 will be responsible for one-half (1/2) share of maintenance cost from Point "E" to Point "F".

50 FT EASEMENT FOR TRACTS 1, 2, 3 AND 4 ADJOINING KY 55 AS SHOWN ON THE PLAT:
There is granted an easement across Tracts 1, 2 and 3 adjoining Hwy 55 and shown as a fifty (50) ft. easement for ingress and egress on the plat. Easement is for ingress and egress purposes only and cannot be gated or blocked in any manner.
Tracts 2, 3 and 4 are granted a fifty (50) ft. permanent easement across Tract 1.
Tracts 3 and 4 are granted a fifty (50) ft. permanent easement across Tract 2.
Tract 4 is granted a fifty (50) ft. permanent easement across Tract 3.
Easement shall be maintained to provide reasonable access by a 2-wheel drive passenger vehicle suitable for licensing on a public road.
Tracts 1, 2, 3 and 4 are equally responsible for maintenance where easement crosses Tract 1.

Tracts 2, 3, and 4 are equally responsible for maintenance where easement crosses Tract 2.
Tracts 3 and 4 are equally responsible for maintenance where easement crosses Tract 3.

80 FT EASEMENT FOR TRACT 5 ACROSS TRACT 6 AS SHOWN ON THE PLAT:
Tract 5 is granted an eighty (80) ft. permanent easement across Tract 6 as shown on the plat for ingress and egress purposes only and said easement cannot be gated or blocked in any manner. Tract 5 is solely responsible for maintenance of this easement and shall maintain said easement in such a manner as to avoid unreasonable damage to Tract 6.
AND BEING the same property conveyed to Greg T. Morris and Ann Michelle Morris from Michael D. Mackin, aka Michael Dunne Mackin by Deed dated July 13, 2006 and recorded July 24, 2006 in Deed Book 259, Page 11.
Tax Parcel No. 054-006

The Deed by and between Michael D. Mackin, aka Michael Dunne Mackin, Grantor, and Greg T. Morris and Ann Michelle Morris, Grantees, dated July 13, 2006 and recorded July 24, 2006 in Deed Book 259, Page 11 included the following statement:
Grantee(s) are bound by all existing easements and additional easements shown on plat and must grant to any requesting party or utility the following:
A. The right to construct, maintain, operate, replace, upgrade or rebuild pole lines, underground cable, gas systems, water lines and all appurtenances thereto.
B. The right of ingress and egress over all lots from said easement indicated.
C. The right to trim or remove any tree necessary to maintain proper service.
D. The right to keep said easements free of any structures or obstacles that the utility deems a hazard to the utility companies.
E. The right to prohibit any excavation within five feet of any underground utility or change of grade that interferes with overhead or underground lines.
F. It is sole cost and responsibility of Grantee(s) to get utilities to their tract or tracts.

The Premises are described and/or depicted as follows:

LEASE AREA
HARMONI TOWERS
LEBANON ROAD
KYLOU2014

All that tract or parcel of land lying and being in Marion County, Kentucky, and being a portion of Tract Number 9 of Mackin Farms Inc. Farm Division, as recorded in Plat Cabinet A, Slide 552, Washington County records and dually recorded in Plat Cabinet 3, Slide 433, Marion County records and being more particularly described as follows:

To find the point of beginning, COMMENCE at a 5/8-inch rebar with cap stamped "TA Phipps LS 2488" found at the northeast corner of said Tract Number 9, said rebar having a Kentucky Grid North, NAD83, Single Zone value of N: 3754323.2850 E: 5060860.4026; thence running for a tie line South 11°22'56" West 181.72 feet to a point having a Kentucky Grid North, NAD83, Single Zone value of N: 3754145.1394 E: 5060824.5397; and the true POINT OF BEGINNING; Thence running, South 03°24'32" West, 100.00 feet to a point; Thence, North 86°35'28" West, 100.00 feet to a point; Thence, North 03°24'32" East, 100.00 feet to a point; Thence, South 86°35'28" East, 100.00 feet to a point and the true POINT OF BEGINNING.

Bearings based on Kentucky Grid North, NAD83, Single Zone.

Said tract contains 0.2296 acres (10,000 square feet), more or less, as shown in a survey prepared for Harmoni Towers by POINT TO POINT LAND SURVEYORS, INC. dated March 5, 2021, and last revised July 30, 2021.

30' INGRESS-EGRESS & UTILITY EASMENT #1
HARMONI TOWERS
LEBANON ROAD
KYLOU2014

Together with a 30-foot wide ingress-egress and utility easement (lying 15 feet each side of centerline) lying and being in Marion County, Kentucky, and being a portion of Tract Number 9 of Mackin Farms Inc. Farm Division, as recorded in Plat Cabinet A, Slide 552, Washington County records and dually recorded in Plat Cabinet 3, Slide 433, Marion County records and being more particularly described by the following centerline data:

To find the point of beginning, COMMENCE at a 5/8-inch rebar with cap stamped "TA Phipps LS 2488" found at the northeast corner of said Tract Number 9, said rebar having a Kentucky Grid North, NAD83, Single Zone value of N: 3754323.2850 E: 5060860.4026; thence running for a tie line South 11°22'56" West 181.72 feet to a point located on the northeast corner of the Lease Area having a Kentucky Grid North, NAD83, Single Zone value of N: 3754145.1394 E: 5060824.5397; thence running with said Lease Area, South 03°24'32" West, 100.00 feet to a point; Thence, North 86°35'28" West, 100.00 feet to a point; Thence, North 03°24'32" East, 100.00 feet to a point; Thence South 86°35'28" East 50.00 feet to a point and the true POINT OF BEGINNING; Thence running, North 03°24'32" East, 147.10 feet to a point; Thence, North 54°25'24" East, 35.99 feet to an ENDING point on the north line of said Tract Number 9.

Bearings based on Kentucky Grid North, NAD83, Single Zone.

As shown in a survey prepared for Harmoni Towers by POINT TO POINT LAND SURVEYORS, INC. dated March 5, 2021, and last revised July 30, 2021.

30' INGRESS-EGRESS & UTILITY EASEMENT #2
HARMONI TOWERS
LEBANON ROAD
KYLOU2014

Together with a 30-foot wide ingress-egress and utility easement (lying 15 feet each side of centerline) lying and being in Washington and Marion Counties, Kentucky, and being a portion of the Roadway Parcel of Mackin Farms Inc. Farm Division, as recorded in Plat Cabinet A, Slide 552, Washington County records and dually recorded in Plat Cabinet 3, Slide 433, Marion County records and being more particularly described by the following centerline data:

To find the point of beginning, COMMENCE at a 5/8-inch rebar with cap stamped "TA Phipps LS 2488" found at the northeast corner of said Tract Number 9, said rebar having a Kentucky Grid North, NAD83, Single Zone value of N: 3754323.2850 E: 5060860.4026; thence running for a tie line South 11°22'56" West 181.72 feet to a point located on the northeast corner of the Lease Area having a Kentucky Grid North, NAD83, Single Zone value of N: 3754145.1394 E: 5060824.5397; thence running with said Lease Area, South 03°24'32" West, 100.00 feet to a point; Thence, North 86°35'28" West, 100.00 feet to a point; Thence, North 03°24'32" East, 100.00 feet to a point; Thence South 86°35'28" East 50.00 feet to a point; Thence running, North 03°24'32" East, 147.10 feet to a point; Thence, North 54°25'24" East, 35.99 feet to a point on the north line of said Tract Number 9 and the true POINT OF BEGINNING; thence running North 54°25'24" East, 56.22 feet to a point; Thence, North 75°24'46" East, 369.25 feet to a point; Thence, South 77°18'00" East, 230.93 feet to a point; Thence, North 85°12'35" East, 417.59 feet to a point; Thence, North 37°32'09" East, 218.31 feet to a point; Thence, North 57°53'10" East, 67.94 feet to a point; Thence, South 80°24'55" East, 101.00 feet to a point; Thence, North 53°04'15" East, 34.98 feet to a point; Thence, North 32°33'45" East, 66.62 feet to a point; Thence, North 49°22'12"
East, 148.33 feet to a point; Thence, North 43°01'33" East, 227.23 feet to a point; Thence, North 71°15'21" East, 362.44 feet to a point; Thence, North 87°10'37" East, 115.93 feet to a point; Thence, South 59°15'08" East; 122.19 feet to a point; Thence, South 26°44'59" East, 64.62 feet to a point; Thence, South 51°14'59" East, 88.46 feet to a point; Thence, North 84°59'47" East, 906.22 feet to an ENDING point on the westerly right-of-way line of Highway 55.

Bearings based on Kentucky Grid North, NAD83, Single Zone.

As shown in a survey prepared for Harmoni Towers by POINT TO POINT LAND SURVEYORS, INC. dated March 5, 2021, and last revised July 30, 2021.

Notes:

1. THIS EXHIBIT MAY BE REPLACED BY A LAND SURVEY AND/OR CONSTRUCTION DRAWINGS OF THE PREMISES ONCE RECEIVED BY TENANT.
2. ANY SETBACK OF THE PREMISES FROM THE PROPERTY'S BOUNDARIES SHALL BE THE DISTANCE REQUIRED BY THE APPLICABLE GOVERNMENT AUTHORITIES.
3. WIDTH OF ACCESS ROAD SHALL BE THE WIDTH REQUIRED BY THE APPLICABLE GOVERNMENT AUTHORITIES, INCLUDING POLICE AND FIRE DEPARTMENTS.
4. THE TYPE, NUMBER AND MOUNTING POSITIONS AND LOCATIONS OF ANTENNAS AND TRANSMISSION LINES ARE ILLUSTRATIVE ONLY. ACTUAL TYPES, NUMBERS AND MOUNTING POSITIONS MAY VARY FROM WHAT IS SHOWN ABOVE.

VICINITY MAP

TITLE EXCEPTIONS

GPS NOTES

SURVEYOR'S CERTIFICATE

PARENT PARCEL

GENERAL NOTES

LEGEND

GRAPHIC SCALE IN FEET

SCALE: 1" = 500'

Know what's below.
Call before you dig

STATE of KENTUCKY
G. DARRELL TAYLOR
4179
LICENSED PROFESSIONAL LAND SURVEYOR

SPECIFIC PURPOSE SURVEY PREPARED BY:

POINT TO POINT
LAND SURVEYORS
100 Governors Trace, Ste. 103
Peachtree City, GA 30269
(p) 678.565.4440 (f) 678.565.4497
(w) pointtopointsurvey.com

SPECIFIC PURPOSE SURVEY PREPARED FOR:

HARMONI

LEBANON ROAD

SITE NO.
KYLOU2014

SHEET:
1

30' INGRESS-EGRESS & UTILITY EASMENT #1

TOGETHER WITH A 30-FOOT WIDE INGRESS-EGRESS AND UTILITY EASEMENT LYING 15 FEET EACH SIDE OF CENTERLINE LYING AND BEING IN MARION COUNTY, KENTUCKY, AND BEING A PORTION OF TRACT NUMBER 9 OF MACKIN FARMS INC. FARM DIVISION, AS RECORDED IN PLAT CABINET A, SLIDE 552, WASHINGTON COUNTY RECORDS AND DUALLY RECORDED IN PLAT CABINET 3, SLIDE 433, MARION COUNTY RECORDS AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A 5/8-INCH REBAR WITH CAP STAMPED "TA PHIPPS LS 2488" FOUND AT THE NORTHEAST CORNER OF SAID TRACT NUMBER 9, SAID REBAR HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754323.2850 E: 5060860.4026; THENCE RUNNING FOR A TIE LINE SOUTH 11°22'56" WEST 181.72 FEET TO A POINT LOCATED ON THE NORTHEAST CORNER OF THE LEASE AREA HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754145.1394 E: 5060824.5397; THENCE RUNNING WITH SAID LEASE AREA, SOUTH 03°24'32" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 86°35'28" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 03°24'32" EAST, 100.00 FEET TO A POINT; THENCE SOUTH 86°35'28" EAST 50.00 FEET TO A POINT AND THE TRUE POINT OF BEGINNING; THENCE RUNNING, NORTH 03°24'32" EAST, 147.08 FEET TO A POINT; THENCE, NORTH 54°55'54" EAST, 35.99 FEET TO AN ENDING POINT ON THE NORTH LINE OF SAID TRACT NUMBER 9.

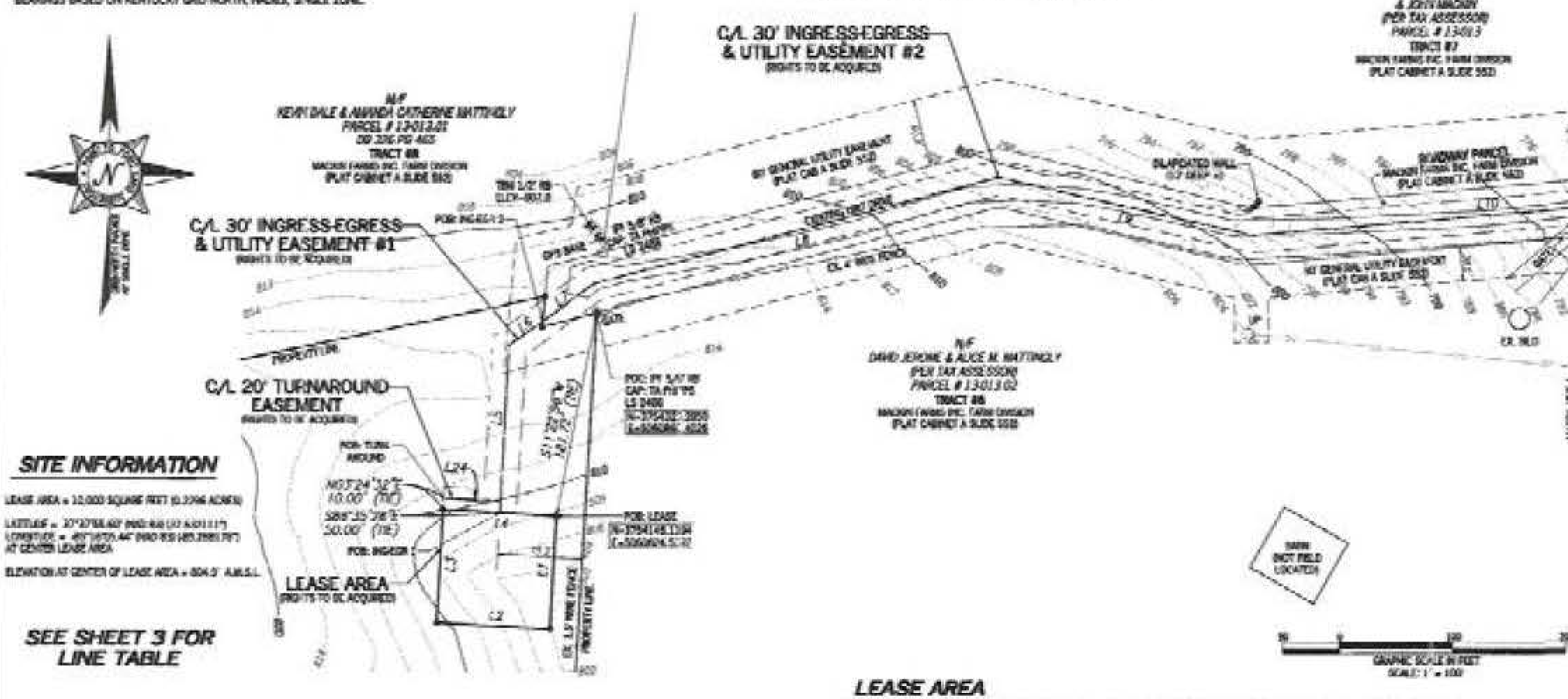
BEARINGS BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

20' TURNAROUND EASEMENT

TOGETHER WITH A 20-FOOT WIDE TURNAROUND EASEMENT LYING 10 FEET EACH SIDE OF CENTERLINE LYING AND BEING IN MARION COUNTY, KENTUCKY, AND BEING A PORTION OF TRACT NUMBER 9 OF MACKIN FARMS INC. FARM DIVISION, AS RECORDED IN PLAT CABINET A, SLIDE 552, WASHINGTON COUNTY RECORDS AND DUALLY RECORDED IN PLAT CABINET 3, SLIDE 433, MARION COUNTY RECORDS AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A 5/8-INCH REBAR WITH CAP STAMPED "TA PHIPPS LS 2488" FOUND AT THE NORTHEAST CORNER OF SAID TRACT NUMBER 9, SAID REBAR HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754323.2850 E: 5060860.4026; THENCE RUNNING FOR A TIE LINE SOUTH 11°22'56" WEST 181.72 FEET TO A POINT LOCATED ON THE NORTHEAST CORNER OF THE LEASE AREA HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754145.1394 E: 5060824.5397; THENCE RUNNING WITH SAID LEASE AREA, SOUTH 03°24'32" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 86°35'28" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 03°24'32" EAST, 100.00 FEET TO A POINT; THENCE LEAVING SAID LEASE AREA AND RUNNING, NORTH 03°24'32" EAST, 10.00 FEET TO A POINT AND THE TRUE POINT OF BEGINNING; THENCE RUNNING, SOUTH 86°35'28" EAST, 50.00 FEET TO THE ENDING POINT.

BEARINGS BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.



SITE INFORMATION

LEASE AREA = 10,000 SQUARE FEET (0.2296 ACRES)

LATITUDE = 37°37'58.60" (NAD 83)
LONGITUDE = -85°16'20.44" (NAD 83)
AT CENTER LEASE AREA

ELEVATION AT CENTER OF LEASE AREA = 804.0' A.M.S.L.

SEE SHEET 3 FOR LINE TABLE

LEGEND

LEASE AREA

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN MARION COUNTY, KENTUCKY, AND BEING A PORTION OF TRACT NUMBER 9 OF MACKIN FARMS INC. FARM DIVISION, AS RECORDED IN PLAT CABINET A, SLIDE 552, WASHINGTON COUNTY RECORDS AND DUALLY RECORDED IN PLAT CABINET 3, SLIDE 433, MARION COUNTY RECORDS AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A 5/8-INCH REBAR WITH CAP STAMPED "TA PHIPPS LS 2488" FOUND AT THE NORTHEAST CORNER OF SAID TRACT NUMBER 9, SAID REBAR HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754323.2850 E: 5060860.4026; THENCE RUNNING FOR A TIE LINE SOUTH 11°22'56" WEST 181.72 FEET TO A POINT HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754145.1394 E: 5060824.5397; AND THE TRUE POINT OF BEGINNING; THENCE RUNNING, SOUTH 03°24'32" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 86°35'28" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 03°24'32" EAST, 100.00 FEET TO A POINT; THENCE, SOUTH 86°35'28" EAST, 100.00 FEET TO A POINT AND THE TRUE POINT OF BEGINNING.

BEARINGS BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

SAID TRACT CONTAINS 0.2296 ACRES (10,000 SQUARE FEET), MORE OR LESS.

STATE of KENTUCKY
G. DARRELL TAYLOR
4179
LICENSED PROFESSIONAL LAND SURVEYOR

NO.	DATE	REVISION
1	2/30/21	LEASE AREA
2	9/1/21	COMMENTS

"SPECIFIC PURPOSE SURVEY" PREPARED BY:

POINT TO POINT LAND SURVEYORS
100 Governors Trace, Ste. 103
Peachtree City, GA 30269
(p) 678.565.4440 (f) 678.565.4497
(w) pointtopointsurvey.com

SPECIFIC PURPOSE SURVEY PREPARED FOR:

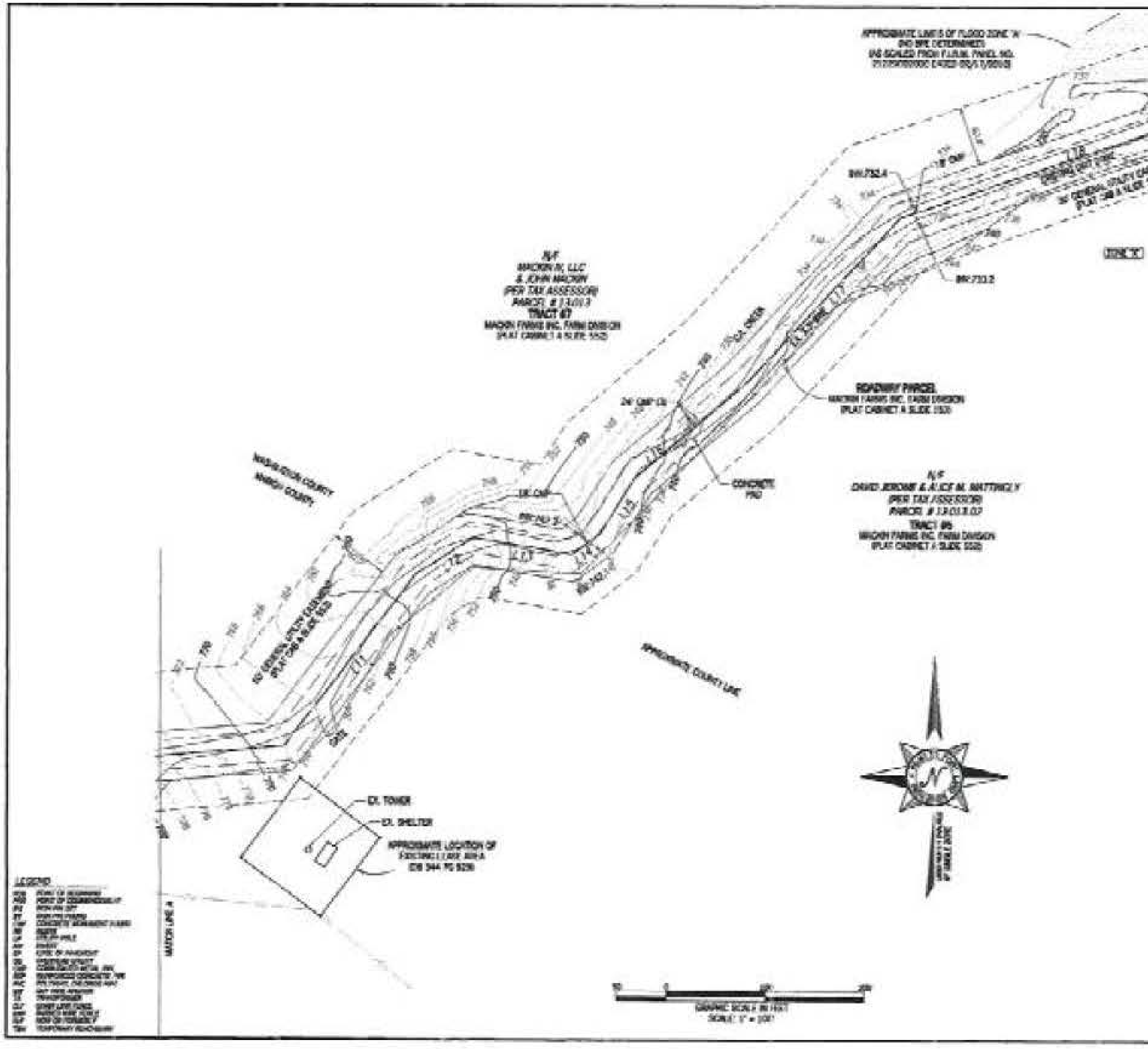
HARMONI
10801 EXECUTIVE CENTER DRIVE
SHANNON BLDG., STE. 100
LITTLE ROCK, AR 72211

LEBANON ROAD

SITE NO.
KYLOU2014
WASHINGTON & MARION COUNTIES
KENTUCKY

DRAWN BY: DL
CHECKED BY: JK
APPROVED: B. MILLER
DATE: MARCH 5, 2021

SHEET
2
OF 4



LINE TABLE

LINE	BEARING	DISTANCE
L1	S03°24'32"W	100.00'
L2	N86°35'28"W	100.00'
L3	N03°24'32"E	100.00'
L4	S86°35'28"E	100.00'
L5	N03°24'32"E	147.10'
L6	N54°25'24"E	35.98'
L7	N54°25'24"E	56.22'
L8	N75°24'46"E	369.25'
L9	S77°16'00"E	330.93'
L10	N85°17'35"E	417.59'
L11	N37°32'09"E	218.31'
L12	N57°53'10"E	87.94'
L13	S80°24'55"E	101.00'
L14	N53°04'15"E	34.98'
L15	N37°33'45"E	88.67'
L16	N49°32'12"E	148.33'
L17	N43°01'33"E	227.23'
L18	N71°15'21"E	362.44'
L19	N87°10'37"E	115.93'
L20	S59°15'08"E	122.19'
L21	S38°44'59"E	64.82'
L22	S51°14'59"E	88.46'
L23	N84°50'47"E	906.22'
L24	S86°35'28"E	20.00'

STATE of KENTUCKY
G. DARRELL
TAYLOR
4179
LICENSED
PROFESSIONAL
LAND SURVEYOR

NO.	DATE	REVISION
1	7/30/21	LEASE AREA
2	9/2/21	COMMENTS

* SPECIFIC PURPOSE SURVEY PREPARED BY:

POINT TO POINT
LAND SURVEYORS
100 Governors Trace, Ste. 103
Peachtree City, GA 30269
(p) 678.565.4440 (f) 678.565.4497
(w) pointtopointsurvey.com

SPECIFIC PURPOSE SURVEY PREPARED FOR:

HARMONI

LEBANON ROAD

SITE NO.
KYLOU2014
WASHINGTON &
MARION COUNTIES
KENTUCKY

DRAWN BY: DL
CHECKED BY: JK
APPROVED: D. MILLER
DATE: MARCH 5, 2021

SHEET
3
OF 4

30' INGRESS-EGRESS & UTILITY EASEMENT #2

TOGETHER WITH A 30-FOOT WIDE INGRESS-EGRESS AND UTILITY EASEMENT LYING 15 FEET EACH SIDE OF CENTERLINE LYING AND BEING IN WASHINGTON AND MARION COUNTIES, KENTUCKY, AND BEING A PORTION OF THE ROADWAY PARCEL OF MACKIN FARMS INC. FARM DIVISION, AS RECORDED IN PLAT CABINET A, SLIDE 552, WASHINGTON COUNTY RECORDS AND DUALLY RECORDED IN PLAT CABINET 3, SLIDE 433, MARION COUNTY RECORDS AND BEING MORE PARTICULARLY DESCRIBED BY THE FOLLOWING CENTERLINE DATA:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A 5/8-INCH REBAR WITH CAP STAMPED "TA PHIPPS LS 2488" FOUND AT THE NORTHEAST CORNER OF SAID TRACT NUMBER 9, SAID REBAR HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754373.2958 E: 5060860.4026; THENCE RUNNING FOR A TIE LINE SOUTH 11°22'56" WEST 181.72 FEET TO A POINT LOCATED ON THE NORTHEAST CORNER OF THE LEASE AREA HAVING A KENTUCKY GRID NORTH, NAD83, SINGLE ZONE VALUE OF N: 3754145.1394 E: 5060824.5397; THENCE RUNNING WITH SAID LEASE AREA, SOUTH 03°24'32" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 86°35'28" WEST, 100.00 FEET TO A POINT; THENCE, NORTH 03°24'32" EAST, 100.00 FEET TO A POINT; THENCE SOUTH 86°35'28" EAST 50.00 FEET TO A POINT; THENCE RUNNING, NORTH 03°24'32" EAST, 147.10 FEET TO A POINT; THENCE, NORTH 54°25'24" EAST, 35.99 FEET TO A POINT ON THE NORTH LINE OF SAID TRACT NUMBER 9 AND THE TRUE POINT OF BEGINNING; THENCE RUNNING NORTH 54°25'24" EAST, 56.22 FEET TO A POINT; THENCE, NORTH 73°24'48" EAST, 369.25 FEET TO A POINT; THENCE, SOUTH 77°18'00" EAST, 230.93 FEET TO A POINT; THENCE, NORTH 85°12'35" EAST, 417.59 FEET TO A POINT; THENCE, NORTH 57°32'00" EAST, 218.31 FEET TO A POINT; THENCE, NORTH 57°53'10" EAST, 67.94 FEET TO A POINT; THENCE, SOUTH 80°24'55" EAST, 101.00 FEET TO A POINT; THENCE, NORTH 53°04'15" EAST, 34.98 FEET TO A POINT; THENCE, NORTH 32°33'45" EAST, 66.62 FEET TO A POINT; THENCE, NORTH 49°22'12" EAST, 148.33 FEET TO A POINT; THENCE, NORTH 43°01'43" EAST, 227.23 FEET TO A POINT; THENCE, NORTH 71°15'21" EAST, 302.44 FEET TO A POINT; THENCE, NORTH 87°10'37" EAST, 115.93 FEET TO A POINT; THENCE, SOUTH 59°15'08" EAST, 122.19 FEET TO A POINT; THENCE, SOUTH 25°44'59" EAST, 54.62 FEET TO A POINT; THENCE, SOUTH 51°14'59" EAST, 88.48 FEET TO A POINT; THENCE, NORTH 84°51'47" EAST, 506.22 FEET TO AN ENDING POINT ON THE WESTERLY RIGHT-OF-WAY LINE OF HIGHWAY 55.

BEARINGS BASED ON KENTUCKY GRID NORTH, NAD83, SINGLE ZONE.

PARENT PARCEL LEGAL DESCRIPTION

PER FIDELITY NATIONAL TITLE INSURANCE COMPANY COMMITMENT 33549269

TRACT 9 OF THE MACKIN FARMS, INC. FARM DIVISION AS PER PLAT OF RECORD AT PLAT CABINET A, SLIDE 552, IN THE OFFICE OF THE WASHINGTON COUNTY COURT CLERK AND DUALLY RECORDED AT PLAT CABINET 3, SLIDE 433 IN THE OFFICE OF THE MARION COUNTY COURT CLERK.

ALSO GRANTED HEREIN TO AN ONE-THIRD (1/3) UNDIVIDED INTEREST IN THE ROADWAY PARCEL FROM POINT "A" TO POINT "E" AND AN ONE-HALF (1/2) UNDIVIDED INTEREST IN THE ROADWAY PARCEL FROM POINT "E" TO POINT "F".

THIS PROPERTY IS FURTHER SUBJECT TO RESTRICTIONS, ROADWAY MAINTENANCE AND EASEMENT AGREEMENTS AS SET FORTH IN DOCUMENTS ACCOMPANYING THE PLATS OF RECORD AT THE LOCATIONS REFERENCED ABOVE.

ROADWAY PARCEL FROM POINT "A" TO POINT "F" IS FOR INGRESS AND EGRESS PURPOSES ONLY AND CANNOT BE GATED OR BLOCKED IN ANY MANNER.

EACH OF TRACTS 7, 8, AND 9 SHALL OWN AN ONE-THIRD (1/3) UNDIVIDED INTEREST IN THE ROADWAY FROM POINT "A" TO POINT "E". EACH OF TRACTS 8 AND 9 SHALL OWN AN ONE-HALF (1/2) UNDIVIDED INTEREST IN THE ROADWAY FROM POINT "E" TO POINT "F".

TRACTS 1, 2, 3, 4, 5, 6 SHALL HAVE A PERMANENT EASEMENT FOR INGRESS AND EGRESS PURPOSES ONLY FROM POINT "A" TO POINT "B".

TRACTS 1, 5 AND 6 SHALL HAVE A PERMANENT EASEMENT FOR INGRESS AND EGRESS PURPOSES ONLY FROM POINT "B" TO POINT "C".

TRACTS 5 AND 6 SHALL HAVE A PERMANENT EASEMENT FOR INGRESS AND EGRESS ONLY FROM POINT "C" TO POINT "D".

TRACT 6 SHALL HAVE A PERMANENT EASEMENT FOR INGRESS AND EGRESS FORM POINT "D" TO POINT "E".

MAINTENANCE RESPONSIBILITY

ROADWAY SHALL BE MAINTAINED TO PROVIDE REASONABLE ACCESS BY A TWO-WHEEL DRIVE PASSENGER AUTOMOBILE SUITABLE FOR LICENSING ON PUBLIC ROADS.

TRACTS 1, 2, 3, 4, 5, 6, 7, 8 AND 9 WILL BE RESPONSIBLE FOR ONE-NINTH (1/9) SHARE OF MAINTENANCE COST FROM POINT "A" TO POINT "B".

TRACTS 1, 5, 6, 7, 8 AND 9 WILL BE RESPONSIBLE FOR ONE-SIXTH (1/6) SHARE OF MAINTENANCE COST FROM POINT "B" TO POINT "C".

TRACTS 5, 6, 7, 8 AND 9 WILL BE RESPONSIBLE FOR ONE-FIFTH (1/5) SHARE OF MAINTENANCE COST FROM POINT "C" TO POINT "D". TRACTS 5, 6, 7, 8 AND 9 ARE ALSO RESPONSIBLE FOR ONE-FIFTH (1/5) SHARE OF MAINTENANCE COST AND UPKEEP OF BRIDGE CROSSING CARTWRIGHT CREEK AS SHOWN ON THE PLAT BETWEEN POINT "C" AND "D".

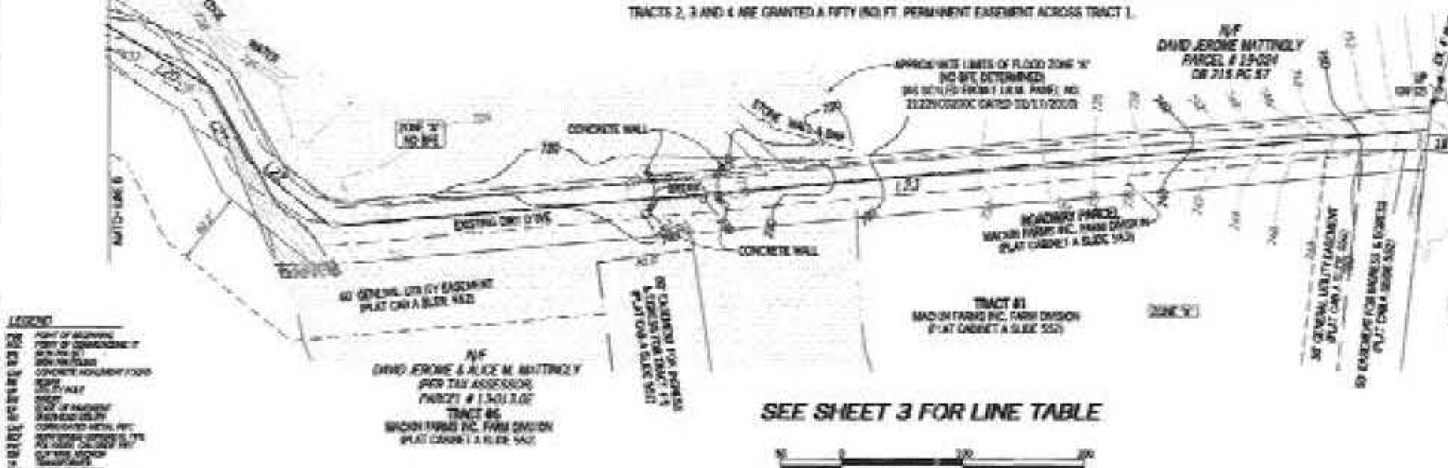
TRACTS 6, 7, 8 AND 9 WILL BE RESPONSIBLE FOR ONE-FOURTH (1/4) SHARE OF MAINTENANCE COST FROM POINT "D" TO POINT "E".

TRACTS 8 AND 9 WILL BE RESPONSIBLE FOR ONE-HALF (1/2) SHARE OF MAINTENANCE COST FROM POINT "E" TO POINT "F".

50 FT EASEMENT FOR TRACTS 1, 2, 3 AND 4 ADJOINING KY 55 AS SHOWN ON THE PLAT:

THERE IS GRANTED AN EASEMENT ACROSS TRACTS 1, 2 AND 3 ADJOINING HWY 55 AND SHOWN AS A FIFTY (50) FT. EASEMENT FOR INGRESS AND EGRESS ON THE PLAT. EASEMENT IS FOR INGRESS AND EGRESS PURPOSES ONLY AND CANNOT BE GATED OR BLOCKED IN ANY MANNER.

TRACTS 2, 3 AND 4 ARE GRANTED A FIFTY (50) FT. PERMANENT EASEMENT ACROSS TRACT 1.



SEE SHEET 3 FOR LINE TABLE

GRAPHIC SCALE IN FEET
SCALE: 1" = 100'

LEGEND

STATE of KENTUCKY
G. DARRELL TAYLOR
4179
LICENSED PROFESSIONAL LAND SURVEYOR

NO.	DATE	REVISION
1	7/30/21	LEASE AREA
2	9/1/21	COMMENTS

SPECIFIC PURPOSE SURVEY PREPARED BY:

POINT TO POINT
LAND SURVEYORS
100 Governors Trace, Ste. 103
Peachtree City, GA 30269
(p) 678.565.4440 (f) 678.565.4497
(w) pointtopointsurvey.com

SPECIFIC PURPOSE SURVEY PREPARED FOR:

HARMONI
10801 EXECUTIVE CENTER DRIVE
SHANNON BLDG., STE. 100
LITTLE ROCK, AR 72211

LEBANON ROAD
SITE NO.
KYLOU2014
WASHINGTON & MARION COUNTIES
KENTUCKY

DRAWN BY: DL
CHECKED BY: JKL
APPROVED: G. MILLER
DATE: MARCH 8, 2021
P2P JOB #: 2020297

SHEET:
4
OF 4

EXHIBIT J

NOTIFICATION LISTING
CERTIFIED GREEN CARD RECEIPTS

Lebanon Road – Notice List

Morris Gregory Thomas & Ann Michelle
3239 St Rose Rd
Lebanon, KY 40033

Reynolds James Michael & Delores C
4355 St Rose Rd
Lebanon, KY 40033

Mattingly Kevin Dale & Amanda Catherine
750 St Rose-Lebanon Rd
Springfield, KY 40069

Mackin IV LLC % John Mackin
5133 Harding Pike Ste B10-284
Nashville, TN 37205

Mackin IV LLC % John Mackin
P.O. Box 29607
San Francisco, CA 94129

Mattingly David Jerome
4000 Springfield Rd
Springfield, KY 40069

Ford Kevin Glenn & Ellen Hamilton
1799 St Rose Rd
Lebanon, KY 40033-

38 World, LLC Attn: Barbara Mackin
Mezone De 103 2-24-29 Ohara
Setagaya Ku
Tokyo Japan 156-0041,

Mattingly David Jerome & Alice M
4000 Springfield Rd
Springfield, KY 40069-

Mattingly David J
4000 Springfield Hwy
Springfield, KY 40069

Nally Mark Raymond
3780 Springfield Rd
Springfield, KY 40069

Nally Mark Raymond
3780 Springfield Rd
Springfiled, KY 40069

7018 1130 0001 7727 4902

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For delivery information, visit our website at www.usps.com®.

SHEPHERDSVILLE
MAY 19 2022
KY 40165

David R Daugherty
County Judge Executive
223 North Spaulding Avenue, Suite 201
Lebanon, KY 40033

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7018 1130 0001 7727 4568

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SHEPHERDSVILLE
MAY 19 2022
KY 40165

Nally Mark Raymond
3780 Springfield Rd
Springfiled, KY 40069

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7018 1130 0001 7727 4360

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SHEPHERDSVILLE
MAY 19 2022
KY 40165

Mattingly David J
4000 Springfield Hwy
Springfield, KY 40069

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7018 1130 0001 7727 4377

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SHEPHERDSVILLE
MAY 19 2022
KY 40165

Nally Mark Raymond
3780 Springfield Rd
Springfield, KY 40069

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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SHEPHERDSVILLE
MAY 19 2022
KY 40165

38 World, LLC Attn: Barbara Mackin
Mezone De 103 2-24-29 Ohara
Setagaya Ku
Tokyo Japan 156-0041

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7018 1130 0001 7727 4841

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SHEPHERDSVILLE
MAY 19 2022
KY 40165

Mattingly David Jerome & Alice
4000 Springfield Rd
Springfield, KY 40069

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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7018 1130 0001 7727 4308

SHEPHERDSVILLE
MAY 19 2022
KY 40165

Mattingly David Jerome
4000 Springfield Rd
Springfield, KY 40069

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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7018 1130 0001 7727 4292

SHEPHERDSVILLE
MAY 19 2022
KY 40165

Ford Kevin Glenn & Ellen Hamilton
1799 St Rose Rd
Lebanon, KY 40033

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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7018 1130 0001 7727 4322

SHEPHERDSVILLE
MAY 19 2022
KY 40165

Mackin IV LLC % John Mackin
5133 Harding Pike Ste B10-284
Nashville, TN 37205

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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7018 1130 0001 7727 4315

SHEPHERDSVILLE
MAY 19 2022
KY 40165

Mackin IV LLC % John Mackin
P.O. Box 29607
San Francisco, CA 94129

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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7018 1130 0001 7727 4353

SHEPHERDSVILLE
MAY 19 2022
KY 40165

Morris Gregory Thomas & Michelle
3239 St Rose Rd
Lebanon, KY 40033

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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For delivery information, visit our website at www.usps.com®.

7018 1130 0001 7727 4346

SHEPHERDSVILLE
MAY 19 2022
KY 40165

Mattingly Kevin Dale & Amanda Catherine
750 St Rose-Lebanon Rd
Springfield, KY 40069

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7018 1130 0001 7727 4339

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
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For delivery information, visit our website at www.usps.com®

SHEPHERDSVILLE
MAY 13 2022
KY 40165

Reynolds James Michael & Delores
C
4355 St Rose Rd
Lebanon, KY 40033

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

EXHIBIT K

COPY OF PROPERTY OWNER NOTIFICATION

PIKE LEGAL

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: Lebanon Road

Dear Landowner:

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility and Harmoni Towers LLC, a Delaware limited liability company have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 4098 Springfield Highway, Springfield, KY 40069 (E-911) / Springfield Highway, Springfield, KY 40069 (PARCEL) (37° 37' 55.60" North latitude, 85° 16' 05.44" West longitude). The proposed facility will include a 195-foot tall tower, with an approximately 12-foot tall lightning arrestor attached at the top, for a total height of 207-feet, plus 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 2022-00144 in any correspondence sent in connection with this matter.

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

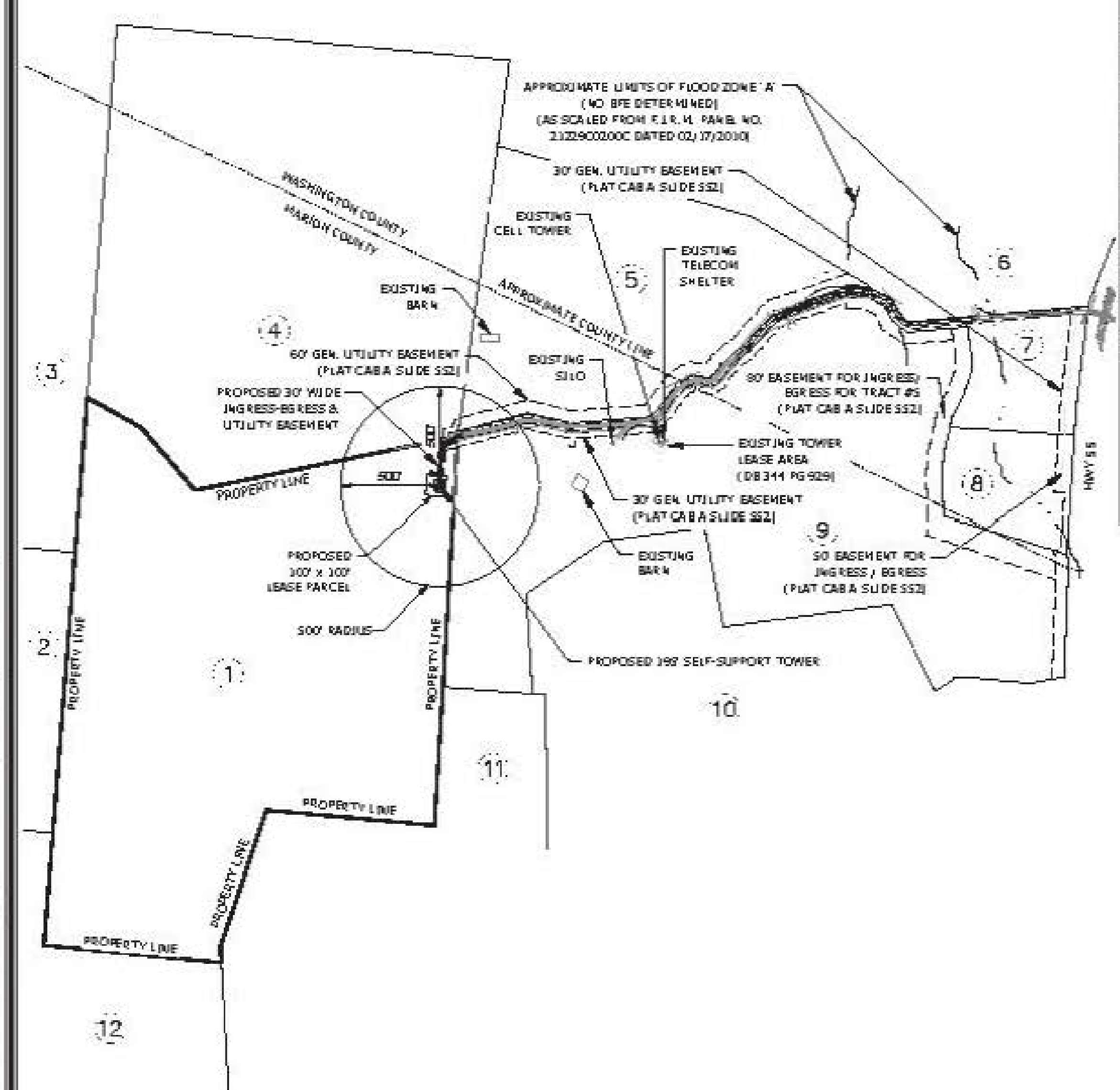
Sincerely,
David A. Pike
Attorney for Applicants

enclosures

Driving Directions to Proposed Tower Site

1. Beginning at 223 N. Spalding Avenue, Lebanon, KY 40033, head southeast toward East M.L.K. Avenue and travel approximately 151 feet.
2. Turn right onto East M.L.K. Avenue and travel approximately 226 feet.
3. Turn right onto N. Spalding Avenue and travel approximately 1.3 miles.
4. Continue onto KY-2154/KY-55 N and travel approximately 3.3 miles.
5. The access drive for this site is on the left and continues to the site location.
6. The site coordinates are
    a. 37 deg 37 min 55.60 sec N
    b. 85 deg 16 min 05.44 sec W

Prepared by:
Aaron L. 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



#	OWNER	ADDRESS	PID	REF
1	GREGORY THOMAS & ANN MICHELLE MORRIS	3239 ST ROSE RD LEBANON, KY 40033	034-006	DB 259 PG 11
2	JAMES MICHAEL & DELORES C REYNOLDS	4355 ST ROSE RD LEBANON, KY 40033	034-007	DB 143 PG 81
3	KEVIN DALE & AMANDA CATHERINE MATTINGLY	750 ST ROSE LEBANON RD SPRINGFIELD, KY 40069	054-006-02	DB 286 PG 508
4	KEVIN DALE & AMANDA CATHERINE MATTINGLY	750 ST ROSE LEBANON RD SPRINGFIELD, KY 40069	13-013.01	DB 326 PG 465
5	MACKIN IV, LLC % JOHN MACKIN	P.O. BOX 29607 SAN FRANCISCO, CA 94129	13-013	DB 305 PG 636
6	DAVID JEROME MATTINGLY	4000 SPRINGFIELD RD SPRINGFIELD, KY 40069	39-024	DB 215 PG 57
7	KEVIN GLENN FORD & ELLEN HAMILTON	1798 ST ROSE RD LEBANON, KY 40033	13-013.04	DB 306 PG 330
8	38 WORLD, LLC ATTN: BARBARA MACKIN	[illegible] SETAGAYA KU TOKYO JAPAN [illegible]	13-013.03	DB 305 PG 469
9	DAVID JEROME & ALICE M MATTINGLY	4000 SPRINGFIELD RD SPRINGFIELD, KY 40069	13-013.02	DB 305 PG 332
10	DAVID J MATTINGLY	4000 SPRINGFIELD RD SPRINGFIELD, KY 40069	034-011	DB 146 PG 627
11	MARK RAYMOND NALLY	3780 SPRINGFIELD RD SPRINGFIELD, KY 40069	034-010	DB 305 PG 350
12	GREGORY THOMAS & ANN MICHELLE MORRIS	3239 ST ROSE RD LEBANON, KY 40033	034-009	DB 305 PG 611

NOTE:

1. PVA INFORMATION WAS OBTAINED ON 4/1/2022 FROM THE OFFICIAL RECORDS OF THE COUNTY'S PROPERTY VALUATION ADMINISTRATOR.
2. THIS MAP IS FOR GENERAL INFORMATION PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY.
3. NOT FOR RECORDING OR PROPERTY TRANSFER.

1 OVERALL ADJOINER'S DRAWING

SCALE: 1"=600'

0' 300' 600' 900' 1200'

N

CALL KENTUCKY ONE CALL
(800) 752-6007
CALL 3 WORKING DAYS BEFORE YOU DIG!

811

B+T GRP

at&t

HARMONI TOWERS

HARMONI TOWERS
LEBANON ROAD
FA # 15435110
FACE# MRTNK052245
FT# 2451A0XDDL
(PROPERTY)
SPRINGFIELD HWY
SPRINGFIELD, KY 40069
MARION COUNTY

PROPOSED 199' SELF-SUPPORT TOWER

PROJECT NO: C00447700201

CHECKED BY: MAS

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
3	4/7/22	DLS	FINAL
4	4/19/22	DLS	FINAL
5	4/22/22	AJB	FINAL

B&T ENGINEERING, INC.
4011
Expires 12/31/22

STATE OF KENTUCKY
BRAD S. ILAKOWSKI
25311
LICENSED PROFESSIONAL ENGINEER

[illegible]

4/27/22

OVERALL ADJOINER'S DRAWING

SHEET NUMBER:
C-1.1

EXHIBIT L

COPY OF COUNTY JUDGE/EXECUTIVE NOTICE

PIKE
LEGAL

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 R. Daugherty
County Judge Executive
223 North Spalding Avenue, Suite 201
Lebanon, KY 40033

RE: Notice of Proposal to Construct Wireless Communications Facility
Kentucky Public Service Commission Docket No. 2022-00144
Site Name: Lebanon Road

Dear Judge/Executive:

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility and Harmoni Towers LLC, a Delaware limited liability company have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 4098 Springfield Highway, Springfield, KY 40069 (E-911) / Springfield Highway, Springfield, KY 40069 (PARCEL) (37° 37' 55.60" North latitude, 85° 16' 05.44" West longitude). The proposed facility will include a 195-foot tall tower, with an approximately 12-foot tall lightning arrestor attached at the top, for a total height of 207-feet, plus related ground facilities. This facility is needed to provide improved coverage for wireless communications in the area.

You have a right to submit comments to the PSC or to request intervention in the PSC's proceedings on the application. You may contact the PSC at: Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2022-00144 in any correspondence sent in connection with this matter.

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

Sincerely,
David A. Pike
Attorney for Applicants
enclosures

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    a. 37 deg 37 min 55.60 sec N
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Prepared by:
Aaron L. Roof
Pike Legal Group PLLC
1578 Highway 44 East, Suite 6
P.O. Box 369
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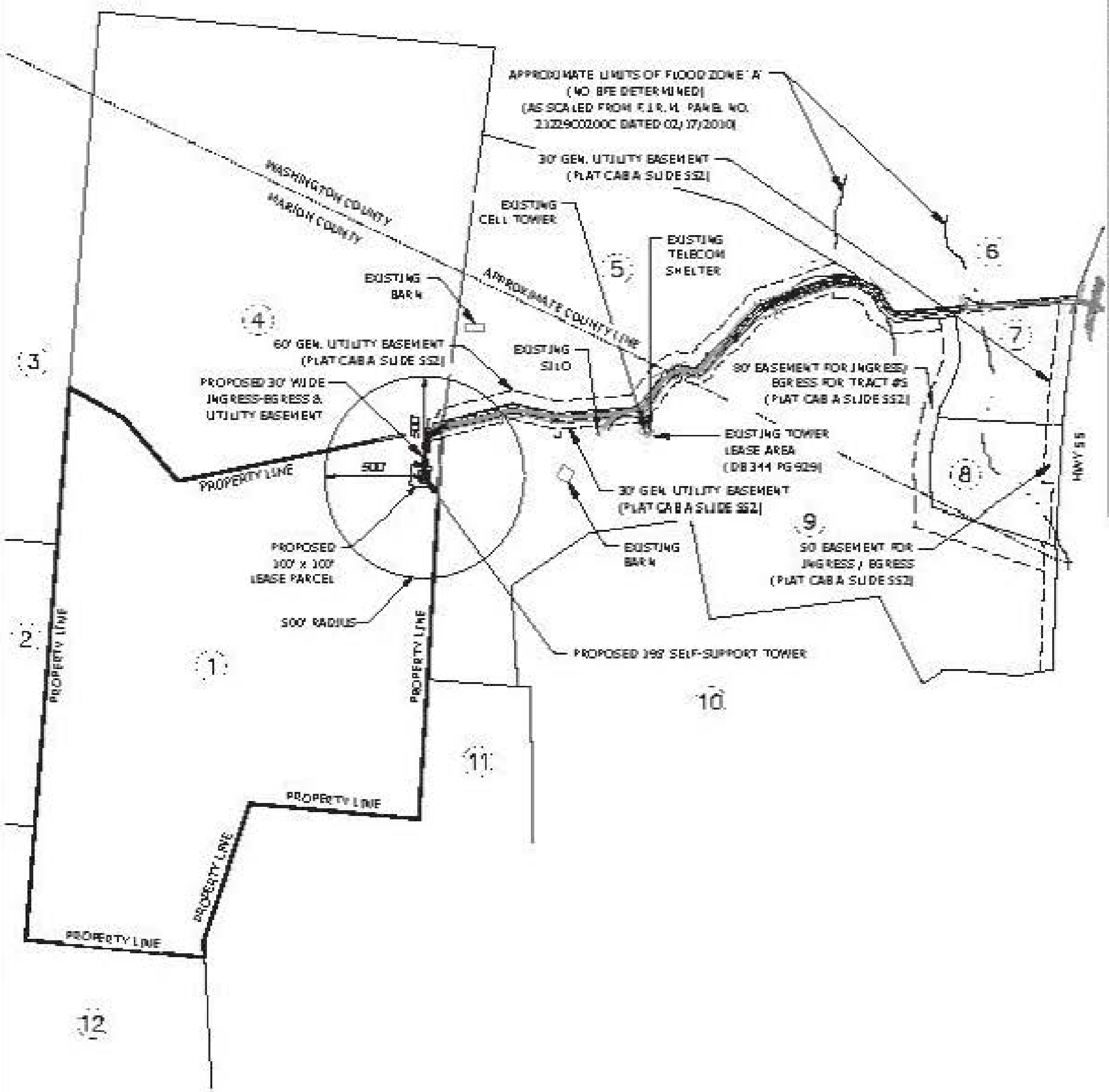
Telephone: 502-955-4400 or 800-516-4293



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3	KEVIN DALE & AMANDA CATHERINE MATTINGLY	750 ST ROSE LEBANON RD SPRINGFIELD, KY 40069	054-005-02	DB 286 PG 508
4	KEVIN DALE & AMANDA CATHERINE MATTINGLY	750 ST ROSE LEBANON RD SPRINGFIELD, KY 40069	13-013.01	DB 326 PG 465
5	MACKIN IV, LLC % JOHN MACKIN	P.O. BOX 29607 SAN FRANCISCO, CA 94129	13-013	DB 305 PG 636
6	DAVID JEROME MATTINGLY	4000 SPRINGFIELD RD SPRINGFIELD, KY 40069	19-024	DB 215 PG 57
7	KEVIN GLENN FORD & ELLEN HAMILTON	1799 ST ROSE RD LEBANON, KY 40033	13-013.04	DB 306 PG 330
8	38 WORLD, LLC ATTN: BARBARA MACKIN	MEZONE DE 303 2-24-18 CHIHAYA, SETAGAYA KU TOKYO JAPAN 158-0041	13-013.03	DB 305 PG 469
9	DAVID JEROME & ALICE M MATTINGLY	4000 SPRINGFIELD RD SPRINGFIELD, KY 40069	13-013.02	DB 305 PG 332
10	DAVID J MATTINGLY	4000 SPRINGFIELD RD SPRINGFIELD, KY 40069	014-011	DB 146 PG 637
11	MARK RAYMOND NALLY	3780 SPRINGFIELD RD SPRINGFIELD, KY 40069	014-010	DB 305 PG 350
12	GREGORY THOMAS & ANN MICHELLE MORRIS	3239 ST ROSE RD LEBANON, KY 40033	014-009	DB 305 PG 631

NOTE:

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1 OVERALL ADJOINER'S DRAWING

SCALE: 0' 300' 600' 900' 1200' 1"=600'

N

CALL KENTUCKY ONE CALL
(800) 752-6007
CALL 3 WORKING DAYS BEFORE YOU DIG!

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B+T GRP

at&t

HARMONI TOWERS

HARMONI TOWERS
LEBANON ROAD
FA # 15435110
PACE# MRTNK052245
PT# 2451A0XDDL
(PROPERTY)
SPRINGFIELD HWY
SPRINGFIELD, KY 40069
MARION COUNTY
PROPOSED 199' SELF-SUPPORT TOWER

PROJECT NO:	C0144270020
CHECKED BY:	MAS

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
3	4/1/22	DLS	FINAL
4	4/21/22	DLS	FINAL
5	4/27/22	AJB	FINAL

B&T ENGINEERING, INC.
4011
Expires 12/31/22

STATE OF KENTUCKY
BRAD S. MILAKOWSKI
25311
LICENSED PROFESSIONAL ENGINEER
[illegible]
4/27/22

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

OVERALL ADJOINER'S DRAWING

SHEET NUMBER
C-1.1

EXHIBIT M

COPY OF POSTED NOTICES
AND NEWSPAPER NOTICE ADVERTISEMENT

SITE NAME: LEBANON ROAD
NOTICE SIGNS

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

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility and Harmoni Towers LLC, a Delaware limited liability company propose 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 2022-00144 in your correspondence.

New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility and Harmoni Towers LLC, a Delaware limited liability company propose 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 2022-00144 in your correspondence.

PIKE LEGAL

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

VIA TELEPHONE: (270) 692-6026

The Lebanon Enterprise
Attn: Legal Notice Ads
119 South Proctor Knott Avenue
Lebanon, KY 40033

RE: Legal Notice Advertisement
Site Name: Lebanon Road

Dear Staff:

Please publish the following legal notice advertisement in the next edition of *The Lebanon Enterprise*:

NOTICE

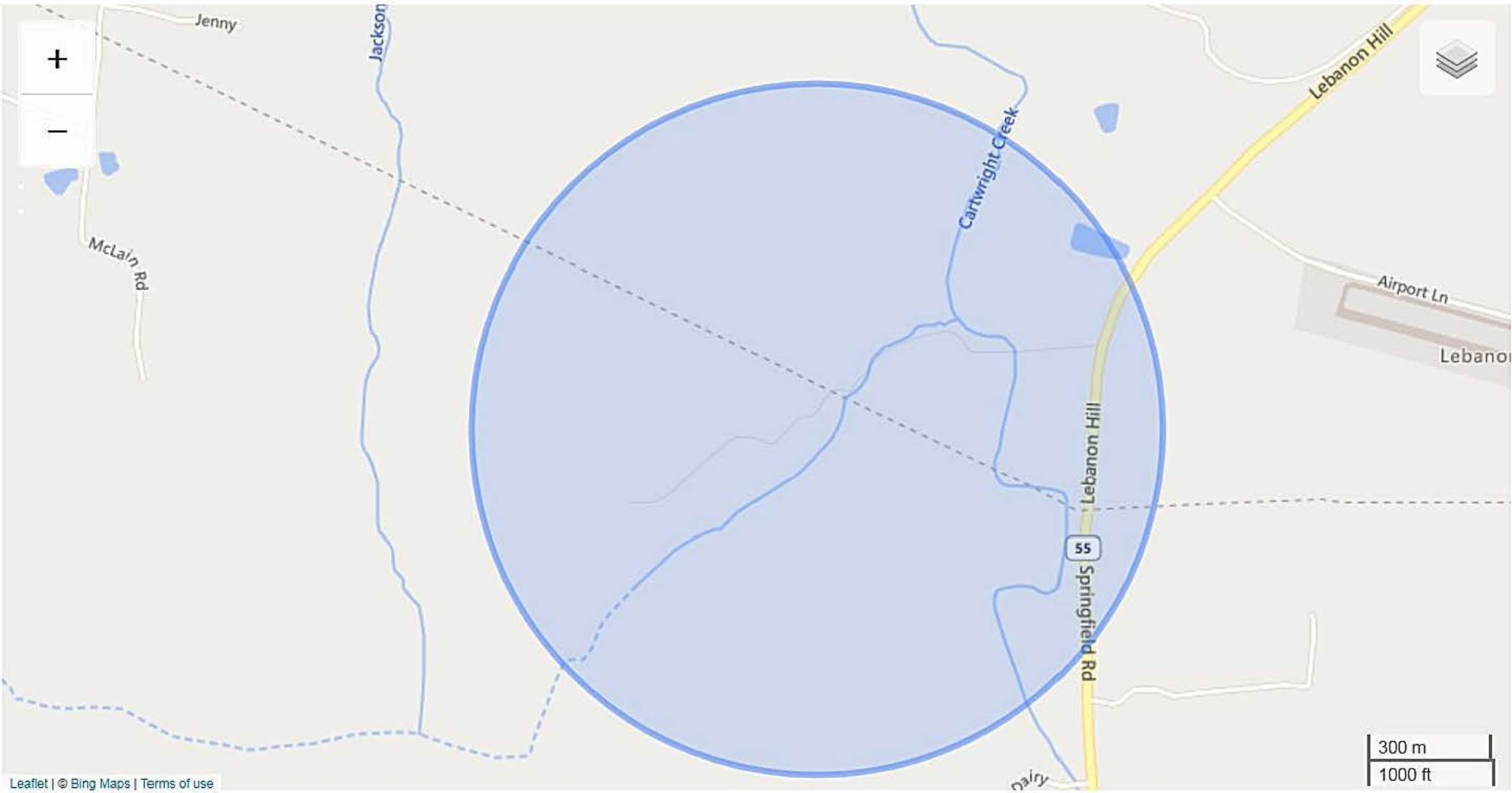
New Cingular Wireless PCS, LLC, a Delaware limited liability company, d/b/a AT&T Mobility and Harmoni Towers LLC, a Delaware limited liability company have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located at 4098 Springfield Highway, Springfield, KY 40069 (E-911) / Springfield Highway, Springfield, KY 40069 (PARCEL) (37° 37' 55.60" North latitude, 85° 16' 05.44" 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 2022-00144 in any correspondence sent in connection with this matter.

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

Sincerely,
Aaron L. Roof
Pike Legal Group, PLLC

EXHIBIT N

COPY OF RADIO FREQUENCY DESIGN SEARCH AREA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