

# BRIGGS LAW OFFICE, PSC

---

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

RECEIVED

November 11, 2019

NOV 13 2019

**Via FedEx Overnight Delivery**

PUBLIC SERVICE  
COMMISSION

Gwen R. Pinson  
Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
Frankfort, KY 40602

**RE: Application to Construct Wireless Communications Facility - Case Number: 2019-00359**

Dear Ms. Pinson,

On behalf of my client(s), Vertical Bridge Development, LLC and Powertel/Memphis, Inc., we are hereby submitting an original and five (5) copies of an Application for Certificate of Public Convenience and Necessity to Construct a Wireless Communications Facility.

Please contact me if you require any further documentation or have any questions concerning this application.

Sincerely,



Todd R. Briggs

Enclosures

RECEIVE

NOV 13 2019

PUBLIC SERVICE  
COMMISSION

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

In the Matter of:

APPLICATION OF VERTICAL BRIDGE DEVELOPMENT, LLC )  
AND POWERTEL/MEMPHIS, INC. )  
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC )  
CONVENIENCE AND NECESSITY TO CONSTRUCT ) **CASE NO:**  
A WIRELESS COMMUNICATIONS FACILITY AT ) **2019-00359**  
5698 WINCHESTER ROAD (AKA KY HWY 89) )  
IRVINE, 40336 ESTILL COUNTY )

SITE NAME: US-KY-5051 / WINCHESTER

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

Vertical Bridge Development, LLC, a Delaware limited liability company, and Powertel/Memphis, Inc. a Delaware corporation ("Applicant"), by counsel, pursuant to (i) KRS §§ 278.020, 278.040, 278.665 and the rules and regulations applicable thereto, and (ii) the Telecommunications Act of 1996, respectfully submits this Application requesting the issuance of a Certificate of Public Convenience and Necessity ("CPCN") from the Kentucky Public Service Commission ("PSC") to construct, maintain and operate a Wireless Communications Facility ("WCF") to serve the customers of the Applicant with wireless telecommunication services. In support of this Application, Applicant respectfully provides and states the following:

1. The complete name and addresses of the Applicant are: Vertical Bridge Development, LLC, a Delaware limited liability company, 750 Park of Commerce Drive, Suite 200, Boca Raton, FL 33487 and Powertel/Memphis, Inc. a Delaware corporation, 11509 Commonwealth Drive, Louisville, KY 40299.

2. A copy of the Certificate of Authorization for Powertel/Memphis, Inc. is attached as **Exhibit A**. A copy of the Certificate of Authority filed with the Kentucky Secretary of State for Vertical Bridge Development, LLC is also included as part of **Exhibit A**.

3. Applicant proposes construction of an antenna tower in Estill County, Kentucky, in an area which is outside the jurisdiction of a planning commission and Applicant submits the Application to the PSC for a CPCN pursuant to KRS §§ 278.020(1), 278.040, 278.650, and 278.665, and other statutory authority.

4. The public convenience and necessity require the construction of the proposed WCF. The construction of the WCF will bring or improve the Applicant's services to an area currently not served or not adequately served by the Applicant by enhancing coverage and/or capacity and thereby increasing the public's access to wireless communication services. A statement from Applicant's RF Deployment Engineer outlining said need is attached as **Exhibit N**. The WCF is an integral link in the Applicant's network design that must be in place to provide adequate coverage to the service area.

5. To address the above-described service needs, Applicant proposes to construct a WCF at 5698 Winchester Road (KY Hwy 89), Irvine, Kentucky 40336 (37° 46' 56.75" North Latitude, 84° 00' 01.12" West Longitude (NAD 83)), in an area entirely within Estill County. The property in which the WCF will be located is currently owned by Jimmie R. Wise, pursuant to Deed of record in Deed Book 124, Page 352 in the Office of the Estill County Clerk and subject to the Option and Lease Agreement dated November 12, 2018 found in **Exhibit I**. The proposed WCF will consist of a 280-foot self-support tower with an approximately 10-foot tall lightning arrestor attached to the top of the tower for a total height of 290 feet. The WCF will also include concrete foundations to accommodate the placement of a prefabricated equipment platform. The WCF

compound will be fenced and all access gates will be secured. A detailed site development plan and survey, signed and sealed by a professional land surveyor registered in Kentucky is attached as **Exhibit B**.

6. A detailed description of the manner in which the WCF will be constructed is included in the site plan and a vertical tower profile signed and sealed by a professional engineer registered in Kentucky is attached as **Exhibit C**. Foundation design plans and a description of the standards according to which the tower was designed which have been signed and sealed by a professional engineer registered in Kentucky are attached as **Exhibit D**.

7. A geotechnical engineering report was performed at the WCF site by EGSci Consulting, Inc. of Atlanta, Georgia, dated October 22, 2019 and is attached as **Exhibit E**. The name and address of the geotechnical engineering firm and the professional engineer registered in Kentucky who prepared the report is included as **Exhibit E**.

8. A list of public utilities, corporations, and/or persons with whom the proposed WCF is likely to compete is attached as **Exhibit F**.

9. The Federal Aviation Administration Determination of No Hazard dated August 20, 2019 is attached as **Exhibit G**. The Kentucky Airport Zoning Commission Application for Permit to Construct or Alter a Structure and the Approval of Application dated October 24, 2019 are also included as part of **Exhibit G**.

10. The Applicant operates on frequencies licensed by the Federal Communications Commission ("FCC") pursuant to applicable federal requirements. Copies of the license(s) are attached as **Exhibit H**. The WCF has been designed, and will be built and operated in accordance with all applicable FCC and FAA regulations as indicated in the statement from Applicant's RF

Deployment Engineer included as **Exhibit N**. Appropriate FCC required signage will be posted on the site.

11. Based on the review of Federal Emergency Management Agency Flood Insurance Rate Map, the licensed, professional land surveyor has noted in **Exhibit B** that the Flood Insurance Rate Map (FIRM) No. 21065C0020D dated May 24, 2011, indicates that the proposed WCF is not located within any flood hazard area.

12. Personnel directly responsible for the design and construction of the proposed WCF are well qualified and experienced. The Construction Manager for the WCF is Andy Smith and his credentials are included in **Exhibit D**.

13. Clear directions to the proposed WCF site from the county seat are attached as **Exhibit B**, including the name and telephone number of the preparer. A copy of the Option and Lease Agreement for the property on which the tower is proposed to be located is attached as **Exhibit I**.

14. Applicant has notified, by certified mail, return receipt requested, every person of the proposed construction who, according to the records of the Estill County Property Valuation Administrators, owns property which is within 500 feet of the proposed tower or is contiguous to the site property as shown on scaled drawing attached as **Exhibit J**. Applicant included in said notices the docket number under which the Application will be processed and informed each person of his or her right to request intervention. A list of the property owners who received notices along with the notices are attached as **Exhibit J**. The drawing found in **Exhibit J** also depicts every structure and easement within 500' of the proposed tower and/or 200' within the access road including the intersection with the public right of way.

15. Applicant has notified the Estill County Judge Executive by certified mail, return receipt requested, of the proposed construction. The notice included the docket number under which the Application will be processed and informed the Estill County Judge Executive of his right to request intervention. A copy of the notice is attached as **Exhibit K**.

16. Pursuant to 807 KAR 5:063, Applicant affirms that two notice signs measuring at least two feet by four feet in size with all required language in letters of required height have been posted in a visible location on the proposed site and on the nearest road. A copy of the posted text found on the signs is attached as **Exhibit L**. Such signs shall remain posted for at least two weeks after filing the Application. Notice of the proposed construction has been posted in a newspaper of general circulation in the county in which the construction is proposed (*Citizens Voice & Times*)

17. The site of the proposed WCF is located in a forested area near Hargett, Kentucky. The current use of the property is mixed use.

18. Applicant has considered the likely effects of the proposed construction on nearby land uses and values and has concluded that there is no more suitable location reasonably available from which adequate service to the area can be provided. Applicant carefully evaluated locations within the search area for co-location opportunities and found no suitable towers or other existing structures that met the requirements necessary in providing adequate service to the area. A statement from Applicant's RF Deployment Engineer is attached as **Exhibit N**. When suitable towers or structures exist, Applicant has attempted to co-locate on towers designed to host multiple wireless service providers' facilities or existing structures, such as a telecommunications tower or another suitable structure capable of supporting the Applicant's facilities. Note: an East Kentucky Network, Inc. aka Appalachian Wireless tower is adjacent to the WCF site and

was evaluated for colocation. The Appalachian Wireless tower is not structurally sufficient for Powertel/Memphis Inc's proposed loading.

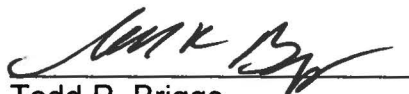
19. A map of the area in which the proposed WCF is located, that is drawn to scale and that clearly depicts the search area in which a site should, pursuant to radio frequency requirements, be located is attached as **Exhibit M**.

20. Correspondence and communication regarding this Application should be directed to:

Todd R. Briggs  
Briggs Law Office, PSC  
10200 Forest Green Blvd  
Suite 112  
Louisville, KY 40223  
(844) 331-3402  
[todd@briggslawoffice.net](mailto:todd@briggslawoffice.net)

WHEREFORE, Applicant respectfully requests that the PSC accept the foregoing application for filing and enter an order granting a Certificate of Public Convenience and Necessity to Applicant for construction and operation of the proposed WCF and providing for such other relief as is necessary and appropriate.

Respectfully submitted,



Todd R. Briggs  
Briggs Law Office, PSC  
10200 Forest Green Blvd  
Suite 112  
Louisville, KY 40223  
Telephone (844) 331-3402  
Counsel for Applicant

## LIST OF EXHIBITS

Exhibit A	Certificate of Authorization Certificate of Authority
Exhibit B	Site Development Plan and Survey Directions to Site
Exhibit C	Vertical Tower Profile
Exhibit D	Tower and Foundation Design Report Construction Manager Qualification Letter
Exhibit E	Geotechnical Engineering Report
Exhibit F	Competing Utilities List
Exhibit G	FAA Determination of No Hazard KAZC Application and Approval of Application
Exhibit H	FCC Documentation
Exhibit I	Copy of Option and Lease Agreement
Exhibit J	Notification Listing Abutter's Map Copy of Property Owner Notices
Exhibit K	Copy of County Judge Executive Notice
Exhibit L	Copy of Posted Notices
Exhibit M	Map of Search Area
Exhibit N	RF Deployment Engineer Statement



# Exhibit A

**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: 213503  
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,

**POWERTEL/MEMPHIS, INC.**

, a corporation organized 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 February 23, 1996.

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 12<sup>th</sup> day of March, 2019, in the 227<sup>th</sup> year of the Commonwealth.



*Alison Lundergan Grimes*

Alison Lundergan Grimes  
Secretary of State  
Commonwealth of Kentucky  
213503/0412295

**1061433.06** amcray  
ADD  
Alison Lundergan Grimes  
Kentucky Secretary of State  
Received and Filed:  
6/10/2019 2:25 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	<b>Certificate of Authority</b> (Foreign Business Entity)	<b>FBE</b>
-------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------	------------

Pursuant to the provisions of KRS 14A and KRS 271B, 273, 274, 275, 382 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)  ltd cooperative assn. (KRS)  statutory trust  
 non-profit llc (KRS 273)  cooperative assn. (KRS)

2 The name of the entity is Vertical Bridge Development, 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): Vertical Bridge Development, LLC  
(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 January 28, 2014 and the period of duration is Perpetual  
(If left blank, the period of duration is considered perpetual.)

6 The mailing address of the entity's principal office is 750 Park of Commerce Drive, Suite 200 Boca Raton FL 33487  
Street Address City State Zip Code

7 The street address of the entity's registered office in Kentucky is 828 Lone Allen Road, Suite 219 Lexington KY 40504  
Street Address (No P.O. Box Numbers) City State Zip Code

and the name of the registered agent at that office is COGENCY GLOBAL INC.

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

Name	<u>Alex Getlman-CEO</u>	<u>750 Park of Commerce Drive Suite 200</u>	<u>Boca Raton</u>	<u>FL</u>	<u>33487</u>
		<small>Street or P.O. Box</small>	<small>City</small>	<small>State</small>	<small>Zip Code</small>
Name	<u>Daniel Marinberg, Esq.-SVP</u>	<u>750 Park of Commerce Drive Suite 200</u>	<u>Boca Raton</u>	<u>FL</u>	<u>33487</u>
		<small>Street or P.O. Box</small>	<small>City</small>	<small>State</small>	<small>Zip Code</small>
Name	<u>Michael Romanhw-CFO</u>	<u>750 Park of Commerce Drive, Suite 200</u>	<u>Boca Raton</u>	<u>FL</u>	<u>33487</u>
		<small>Street or P.O. Box</small>	<small>City</small>	<small>State</small>	<small>Zip Code</small>

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 Upon Filing

Please indicate the Kentucky county in which your business operates:  
County Jefferson

*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:

<input type="checkbox"/> Agriculture	<input type="checkbox"/> Mining	<input type="checkbox"/> Services	<input type="checkbox"/> Construction
<input type="checkbox"/> Wholesale Trade	<input type="checkbox"/> Retail Trade	<input type="checkbox"/> Manufacturing	<input type="checkbox"/> Finance, Insurance, Real Estate
<input type="checkbox"/> Public Administration	<input type="checkbox"/> Transportation, Communications, Electric, Gas, Sanitary Services		
<input type="checkbox"/> Other			

Signature of Authorized Representative Daniel Marinberg 6/7/2019  
Printed Name & Title Date  
COGENCY GLOBAL INC. SVP and General Counsel  
Signature of Registered Agent Title Date  
Merritt Walker Asst. Secretary 6/10/2019  
Signature of Registered Agent Printed Name Title Date  
(05/17)

## Exhibit B

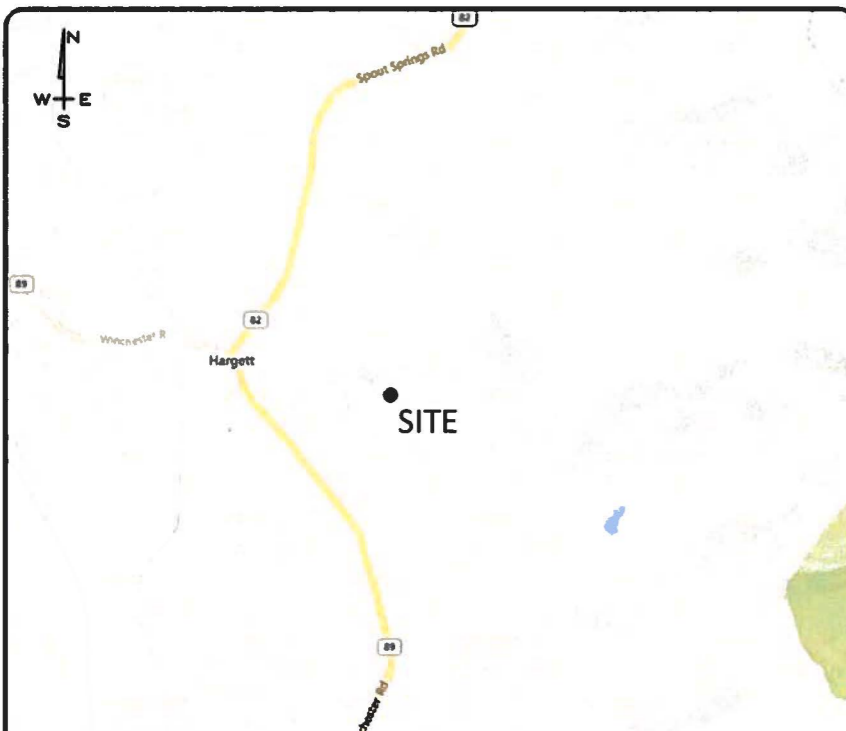
# T-Mobile

SITE NAME:  
**WINCHESTER**

SITE NUMBER:  
**US-KY-5051**

T-MOBILE SITE NUMBER: 9LV3232C

PROPOSED RAW LAND SITE WITH 280' SELF-SUPPORT TOWER WITH A 10' LIGHTNING ARRESTOR AND INSTALLATION OF AN 8'-0" X 8'-0" PLATFORM



VICINITY MAP

SCALE: NONE

### DRIVE DIRECTIONS

**T-MOBILE OFFICE:**  
STARTING AT THE LOUISVILLE T-MOBILE OFFICE, COMMONWEALTH DRIVE, JEFFERSONTOWN, KY 4029

GET ON I-64 W FROM BLANKENBAKER PKWY 1.0 MI  
MERGE ONTO I-64 E 63.6 MI  
KEEP LEFT AT THE FORK TO STAY ON I-64 E, FOLLOW SIGNS FOR WINCHESTER/ASHLAND 16.4 MI  
USE THE RIGHT 2 LANES TO TAKE EXIT 98 TOWARD MOUNTAIN PKWY 0.3 MI  
CONTINUE ONTO BERT T COMBS MOUNTAIN PKWY E 15.8 MI  
TAKE EXIT 16 FOR KY-15 TOWARD KY-82/CLAY CITY/IRVINE 0.2 MI  
TURN LEFT ONTO KY-15 S/WINCHESTER RD 0.1 MI  
TURN RIGHT ONTO KY-82/IRVINE RD 6.8 MI  
TURN LEFT ONTO KY-89 /WINCHESTER ROAD 0.3 MI

ARRIVE AT SITE ON THE LEFT

**COUNTY SEAT:**  
STARTING AT THE ESTILL COUNTY CLERK, 130 MAIN ST #207, IRVINE, KY 40336

HEAD NORTH ON MAIN ST TOWARD BROADWAY ST 0.8 MI  
CONTINUE ONTO KY-89 N/WINCHESTER RD 5.6 MI

ARRIVE AT SITE ON THE RIGHT

### SCOPE OF WORK:

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

SITE WORK: NEW TOWER, UNMANNED EQUIPMENT PLATFORM, AND UTILITY INSTALLATIONS.

### PROJECT INFORMATION

COUNTY: ESTILL  
SITE ADDRESS: KY-89  
A.K.A. WINCHESTER ROAD  
IRVINE, KY 40336  
APPLICANT: T-MOBILE  
5209 LINBAR DRIVE  
SUITE 625  
NASHVILLE, TN 37211  
LATITUDE: 37° 46' 56.75"N  
LONGITUDE: 84° 00' 01.12"W  
EMERGENCY: CALL 911  
E911 ADDRESS NOT VERIFIED



Know what's below.  
Call before you dig.  
Call Monday thru Friday : 7 am. to 6 pm.  
**1-800-752-6007**

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

### SHEET INDEX

T-1	TITLE SHEET & PROJECT INFORMATION
<b>SURVEY:</b>	
B-1 TO B-1.6	SITE SURVEY
<b>GENERAL:</b>	
GN-1	GENERAL NOTES & SPECIFICATIONS
<b>GRADING &amp; DRAINAGE:</b>	
GD-1	SITE GRADING PLAN
GD-2	SURFACE & DRAINAGE DETAILS
GD-3	EROSION CONTROL DETAILS
<b>CIVIL:</b>	
C-1	OVERALL SITE LAYOUT
C-2	ENLARGED COMPOUND LAYOUT
C-3	TOWER ELEVATION & ANTENNA LAYOUT
C-4	RF DESIGN PROVIDED BY T-MOBILE
C-5	T-MOBILE EQUIPMENT PLAN
C-6	EQUIPMENT ELEVATION
C-7	AMOB RACK DETAILS
C-8	CABINET DETAILS
C-9	EQUIPMENT ELEVATIONS & DETAILS
C-10	EQUIPMENT DETAILS
C-11	FENCE DETAILS
<b>ELECTRICAL:</b>	
E-1	UTILITY PLAN
E-2	ELECTRICAL DETAILS
E-3	H-FRAME DETAILS & ONE LINE DIAGRAM
E-4	ELECTRICAL NOTES
<b>GROUNDING:</b>	
G-1	SITE GROUNDING PLAN
G-2	PLATFORM GROUNDING PLAN & NOTES
G-3	GROUNDING DETAILS
G-4	GROUNDING DETAILS
G-5	GROUNDING NOTES

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

PREPARED FOR:  
**verticalbridge**

PREPARED FOR:  
**T-Mobile**

MARK E. PATTERSON  
16,300  
PROFESSIONAL ENGINEER

16, 2019  
EN PERMIT: 3594

### CONSTRUCTION DRAWINGS

REV	DATE	DESCRIPTION
A	10.10.19	ISSUED FOR REVIEW
0	10.16.19	ISSUED AS FINAL

### BUILDING CODES AND STANDARDS

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

- CONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:
- AMERICAN CONCRETE INSTITUTE 318
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL OF STEEL CONSTRUCTION
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION TIA-222
- STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND SUPPORTING STRUCTURES TIA-601
- COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS
- INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS IEEE-81, IEEE 1100, IEEE C62.41
- ANSI T1.311, FOR TELECOM - DC POWER SYSTEMS - TELECOM, ENVIRONMENTAL PROTECTION
- 2018 KBC
- 2014 NEC

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

SITE INFORMATION:  
**WINCHESTER**  
KY-89  
A.K.A. WINCHESTER ROAD  
IRVINE, KY 40336  
ESTILL COUNTY

SITE NUMBER:  
**US-KY-5051**

T-MOBILE SITE NUMBER:  
**9LV3232C**

POD NUMBER: 18-26959  
DRAWN BY: JER  
CHECKED BY: MEP  
DATE: 10.8.19

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

SHEET NUMBER:  
**T-1**

TRUE NORTH  
GRID NORTH  
N  
1° 04' 27"  
BASED ON KENTUCKY STATE PLANE SINGLE ZONE AND DETERMINED BY GPS OBSERVATIONS COMPLETED ON DECEMBER 26, 2018.

LINE	BEARING	DISTANCE
L1	S34°24'56"W	50.47'
L2	N39°34'55"W	250.24'
L3	N60°43'48"E	52.05'
L4	N56°38'23"E	52.74'
L5	N52°45'41"E	94.80'
L6	N63°44'56"E	64.11'
L7	N50°12'09"E	45.08'
L8	N36°33'05"E	112.17'
L9	N40°17'51"E	273.97'
L10	N52°17'30"W	228.33'
L11	N65°07'29"W	227.06'
L12	N69°31'55"W	158.62'
L13	N67°18'21"W	79.87'
L14	N51°29'57"W	210.26'
L15	S30°26'04"W	153.49'

FAA COORDINATE POINT  
NAD 83  
LATITUDE: 37°46'56.75"  
LONGITUDE: -84°00'01.12"  
NAVD 88  
ELEVATION: 1230± AMSL  
NORTHING: 3,813,211.0090  
EASTING: 5,426,855.9437

TEMPORARY BENCHMARK  
NORTHING: 3,813,037.0150  
EASTING: 5,426,838.3700  
ELEVATION: 1,204.62'  
LOCATION: A SET 60-D NAIL S12°13'27"W 105.8± FROM THE SOUTHERN CORNER OF THE TOWER AREA.

**GENERAL NOTES**

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED BY POD GROUP TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE SUBJECT PROPERTY.

THIS SURVEY IS FOR THE TOWER AREA AND THE ACCESS & UTILITY EASEMENT ONLY, AND ONLY A PARTIAL BOUNDARY SURVEY OF THE PARENT TRACT HAS BEEN PERFORMED. THERE WERE NO VISIBLE ENCROACHMENTS AFFECTING THE TOWER AREA OR ANY OF THE EASEMENTS, AT THE TIME THE SURVEY WAS COMPLETED.

30' ACCESS AND UTILITY EASEMENT IS CONTIGUOUS WITH KENTUCKY HIGHWAY 89 a.k.a. WINCHESTER ROAD, WHICH IS A 70' WIDE PUBLIC RIGHT OF WAY.

TOWER AREA AND MOST OF THE 30' ACCESS AND UTILITY EASEMENT LAY ENTIRELY WITHIN THE PARENT PARCEL AS DESCRIBED IN DEED BOOK 124, PAGE 352, PARCEL ID: 053-00-00-008.00, BUT PART OF THE ACCESS & UTILITY EASEMENT IS ON ESTILL COUNTY WATER DISTRICT NO. 1 AS RECORDED IN DEED BOOK 167, PAGE 630, PARCEL ID: 053-00-00-005.00.

A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. UNADJUSTED CLOSURE EQUALS 0.1', FOR A PRECISION OF 1:44,440 AND HAS NOT BEEN ADJUSTED.

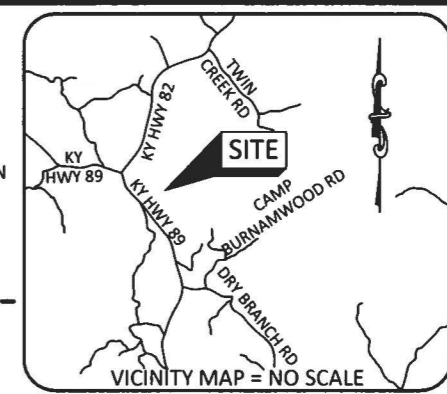
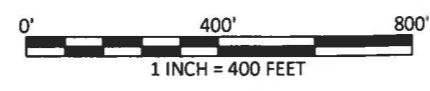
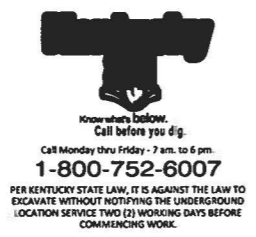
THIS PROPERTY IS SUBJECT TO ANY RECORDED EASEMENTS AND/OR RIGHTS OF WAY SHOWN HEREON OR NOT.

THIS PLAT IS NOT INTENDED FOR LAND TRANSFER.

THE TOWER AREA AND THE ACCESS & UTILITY EASEMENT SHOWN HEREON ARE NOT LOCATED IN A 100-YEAR FLOOD PLAIN (ZONE X) PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NUMBER 21065C0020D, DATED MAY 24, 2011. THE PARENT PARCEL IS IN COMMUNITY-PANEL NUMBER 21065C0020D AND 21065C0040D, DATED MAY 24, 2011 (ZONE X).

**LEGEND**  
P.O.C. POINT OF COMMENCEMENT  
P.O.R. POINT OF REFERENCE  
P.O.B. POINT OF BEGINNING  
EOP EDGE OF PAVEMENT  
ROW EXISTING RIGHT OF WAY  
EX. EXISTING

—○— SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136"  
—●— FOUND 1/2" REBAR 18" LONG WITH RED CAP STAMPED "SPENCER, PLS 4068" UNLESS OTHERWISE NOTED  
— — — PROPERTY LINE  
— — — ADJACENT PROPERTY LINE



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

PREPARED FOR:  
**verticalbridge**  
750 PARK OF COMMERCE DRIVE  
BOCA RATON, FLORIDA 33487  
(561) 948-6367

**SURVEY**

REV.	DATE	DESCRIPTION
A	9.18.19	PRELIM ISSUE WITH TITLE
0	9.20.19	ISSUED AS FINAL

**SITE INFORMATION:**  
**WINCHESTER**  
KENTUCKY HIGHWAY 89  
a.k.a. WINCHESTER ROAD  
IRVINE, KY 40336  
ESTILL COUNTY

**TAX PARCEL NUMBER:**  
053-00-00-008.00

**PROPERTY OWNER:**  
JIMMIE R. WISE  
P.O. BOX 479  
IRVINE, KY 40336

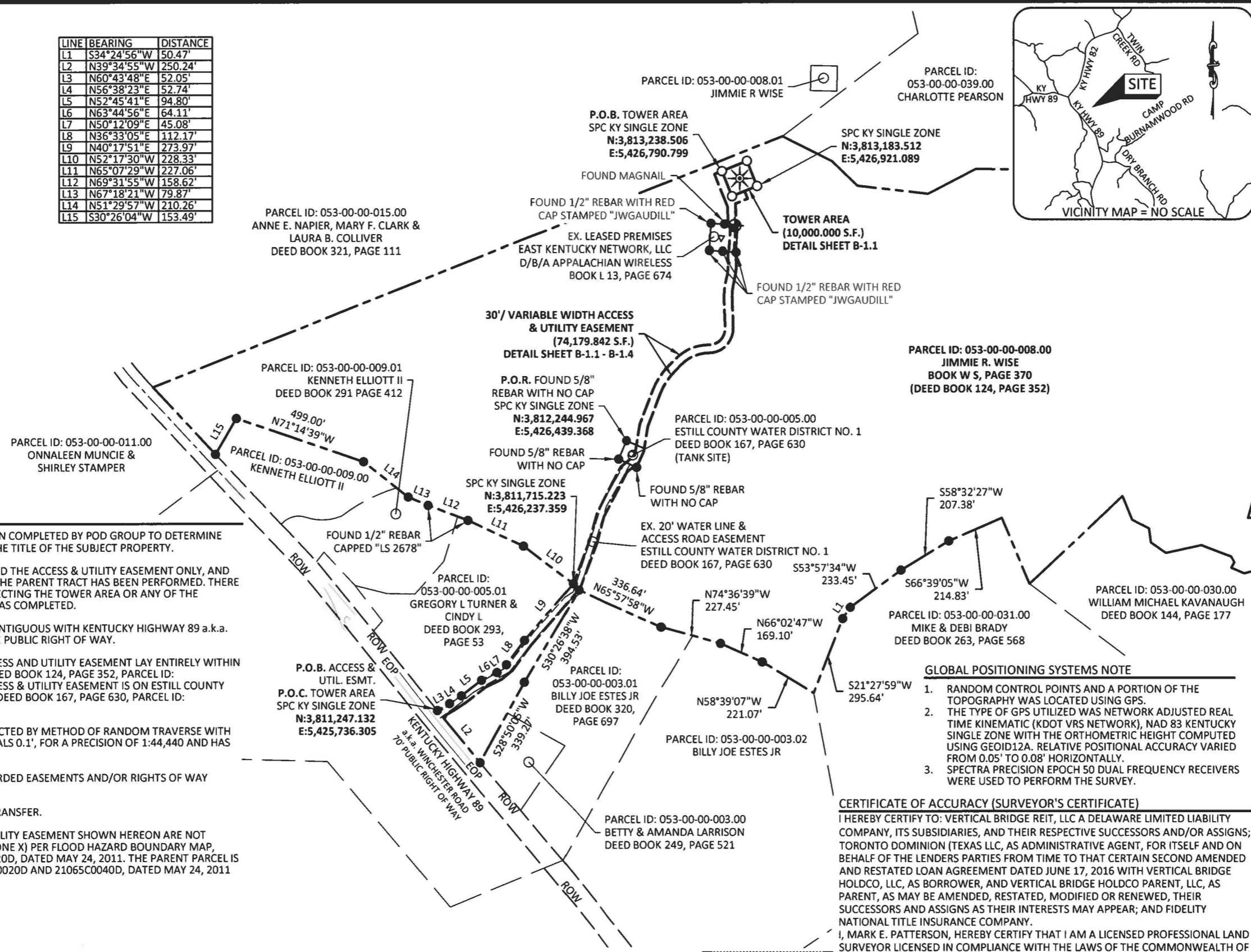
**SOURCE OF TITLE:**  
BOOK W S, PAGE 370  
(DEED BOOK 124, PAGE 352)

**SITE NUMBER:**  
US-KY-5051

**POD NUMBER:** 18-26957  
**DRAWN BY:** JRS  
**CHECKED BY:** MEP  
**SURVEY DATE:** 12.26.18  
**PLAT DATE:** 9.18.19

**SHEET TITLE:**  
**SITE SURVEY**  
THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

**SHEET NUMBER:** (7 pages)  
**B-1**



**GLOBAL POSITIONING SYSTEMS NOTE**

1. RANDOM CONTROL POINTS AND A PORTION OF THE TOPOGRAPHY WAS LOCATED USING GPS.
2. THE TYPE OF GPS UTILIZED WAS NETWORK ADJUSTED REAL TIME KINEMATIC (KDOT VRS NETWORK), NAD 83 KENTUCKY SINGLE ZONE WITH THE ORTHOMETRIC HEIGHT COMPUTED USING GEOID12A. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.05' TO 0.08' HORIZONTALLY.
3. SPECTRA PRECISION EPOCH 50 DUAL FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.

**CERTIFICATE OF ACCURACY (SURVEYOR'S CERTIFICATE)**

I HEREBY CERTIFY TO: VERTICAL BRIDGE REIT, LLC A DELAWARE LIMITED LIABILITY COMPANY, ITS SUBSIDIARIES, AND THEIR RESPECTIVE SUCCESSORS AND/OR ASSIGNS; TORONTO DOMINION (TEXAS LLC, AS ADMINISTRATIVE AGENT, FOR ITSELF AND ON BEHALF OF THE LENDERS PARTIES FROM TIME TO THAT CERTAIN SECOND AMENDED AND RESTATED LOAN AGREEMENT DATED JUNE 17, 2016 WITH VERTICAL BRIDGE HOLDCO, LLC, AS BORROWER, AND VERTICAL BRIDGE HOLDCO PARENT, LLC, AS PARENT, AS MAY BE AMENDED, RESTATED, MODIFIED OR RENEWED, THEIR SUCCESSORS AND ASSIGNS AS THEIR INTERESTS MAY APPEAR; AND FIDELITY NATIONAL TITLE INSURANCE COMPANY.

I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.

Oct 16, 2019  
DATE  
MARK E. PATTERSON, PLS #3136

TRUE NORTH  
GRID NORTH  
N  
1° 04' 27"  
BASED ON KENTUCKY STATE PLANE SINGLE ZONE AND DETERMINED BY GPS OBSERVATIONS COMPLETED ON DECEMBER 26, 2018.

**FAA COORDINATE POINT**  
NAD 83  
LATITUDE: 37°46'56.75"  
LONGITUDE: -84°00'01.12"  
NAVD 88  
ELEVATION: 1230'± AMSL  
NORTHING: 3,813,211.0090  
EASTING: 5,426,855.9437

**TEMPORARY BENCHMARK**  
NORTHING: 3,813,037.0150  
EASTING: 5,426,838.3700  
ELEVATION: 1,204.62'  
LOCATION: A SET 60-D NAIL S12°13'27"W 105.8± FROM THE SOUTHERN CORNER OF THE TOWER AREA.

PARCEL ID: 053-00-00-015.00  
ANNE E. NAPIER, MARY F. CLARK & LAURA B. COLLIVER  
DEED BOOK 321, PAGE 111

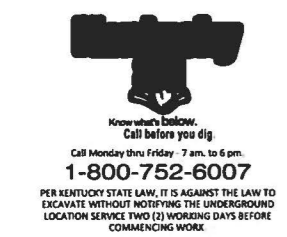
P.O.B. TOWER AREA  
SPC KY SINGLE ZONE  
N:3,813,238.506  
E:5,426,790.799

SPC KY SINGLE ZONE  
N:3,813,276.154  
E:5,426,883.441

SPC KY SINGLE ZONE  
N:3,813,183.512  
E:5,426,921.089

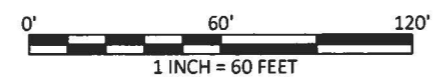
PARCEL ID: 053-00-00-008.00  
JIMMIE R. WISE  
BOOK W S, PAGE 370  
(DEED BOOK 124, PAGE 352)

P.O.R. FOUND 1/2" REBAR WITH RED CAP STAMPED "JWGAUDILL"  
SPC KY SINGLE ZONE  
N:3,812,943.968  
E:5,426,793.593  
P.O.R. TIE  
S85°15'09"E 19.69'

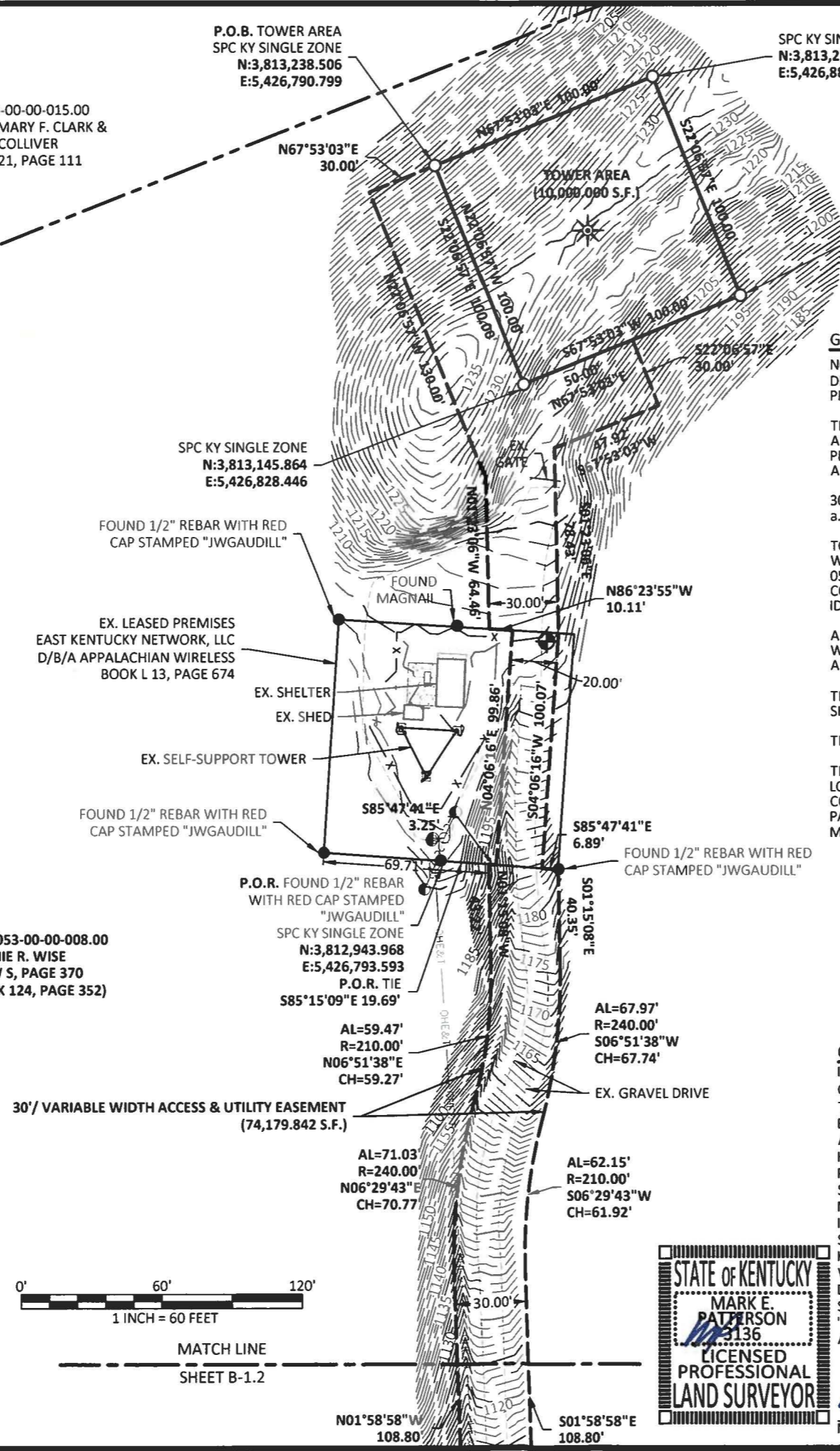


- LEGEND**
- EX. UTILITY POLE
  - EX. GUY ANCHOR
  - EX. EXISTING
  - P.O.R. POINT OF REFERENCE
  - P.O.B. POINT OF BEGINNING
  - 
  - 
  - 
  - 
  -

SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136"  
FOUND 1/2" REBAR 18" LONG WITH RED CAP STAMPED "SPENCER, PLS 4068" UNLESS OTHERWISE NOTED  
PROPERTY LINE  
EX. FENCE  
EX. OVERHEAD ELECTRIC & TELEPHONE



MATCH LINE  
SHEET B-1.2



**GENERAL NOTES**

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED BY POD GROUP TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE SUBJECT PROPERTY.

THIS SURVEY IS FOR THE TOWER AREA AND THE ACCESS & UTILITY EASEMENT ONLY, AND ONLY A PARTIAL BOUNDARY SURVEY OF THE PARENT TRACT HAS BEEN PERFORMED. THERE WERE NO VISIBLE ENCROACHMENTS AFFECTING THE TOWER AREA OR ANY OF THE EASEMENTS, AT THE TIME THE SURVEY WAS COMPLETED.

30' ACCESS AND UTILITY EASEMENT IS CONTIGUOUS WITH KENTUCKY HIGHWAY 89 a.k.a. WINCHESTER ROAD, WHICH IS A 70' WIDE PUBLIC RIGHT OF WAY.

TOWER AREA AND MOST OF THE 30' ACCESS AND UTILITY EASEMENT LAY ENTIRELY WITHIN THE PARENT PARCEL AS DESCRIBED IN DEED BOOK 124, PAGE 352, PARCEL ID: 053-00-00-008.00, BUT PART OF THE ACCESS & UTILITY EASEMENT IS ON ESTILL COUNTY WATER DISTRICT NO. 1 AS RECORDED IN DEED BOOK 167, PAGE 630, PARCEL ID: 053-00-00-005.00.

A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. UNADJUSTED CLOSURE EQUALS 0.1', FOR A PRECISION OF 1:44,440 AND HAS NOT BEEN ADJUSTED.

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

THIS PLAT IS NOT INTENDED FOR LAND TRANSFER.

**GLOBAL POSITIONING SYSTEMS NOTE**

1. RANDOM CONTROL POINTS AND A PORTION OF THE TOPOGRAPHY WAS LOCATED USING GPS.
2. THE TYPE OF GPS UTILIZED WAS NETWORK ADJUSTED REAL TIME KINEMATIC (KDOT VRS NETWORK), NAD 83 KENTUCKY SINGLE ZONE WITH THE ORTHOMETRIC HEIGHT COMPUTED USING GEOID12A. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.05' TO 0.08' HORIZONTALLY.
3. SPECTRA PRECISION EPOCH 50 DUAL FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.

**CERTIFICATE OF ACCURACY (SURVEYOR'S CERTIFICATE)**

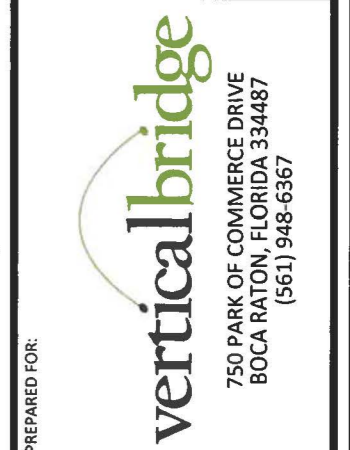
I HEREBY CERTIFY TO: VERTICAL BRIDGE REIT, LLC A DELAWARE LIMITED LIABILITY COMPANY, ITS SUBSIDIARIES, AND THEIR RESPECTIVE SUCCESSORS AND/OR ASSIGNS; TORONTO DOMINION (TEXAS LLC, AS ADMINISTRATIVE AGENT, FOR ITSELF AND ON BEHALF OF THE LENDERS PARTIES FROM TIME TO TIME TO THAT CERTAIN SECOND AMENDED AND RESTATED LOAN AGREEMENT DATED JUNE 17, 2016 WITH VERTICAL BRIDGE HOLDCO, LLC, AS BORROWER, AND VERTICAL BRIDGE HOLDCO PARENT, LLC, AS PARENT, AS MAY BE AMENDED, RESTATED, MODIFIED OR RENEWED, THEIR SUCCESSORS AND ASSIGNS AS THEIR INTERESTS MAY APPEAR; AND FIDELITY NATIONAL TITLE INSURANCE COMPANY.

I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.



*Mark Patterson*  
MARK E. PATTERSON, PLS #3136

Oct 16, 2019  
DATE



PREPARED FOR:

**SURVEY**

REV.	DATE	DESCRIPTION
A	9.18.19	PRELIM ISSUE WITH TITLE
0	9.20.19	ISSUED AS FINAL

**SITE INFORMATION:**  
**WINCHESTER**  
KENTUCKY HIGHWAY 89  
a.k.a. WINCHESTER ROAD  
IRVINE, KY 40336  
ESTILL COUNTY

**TAX PARCEL NUMBER:**  
053-00-00-008.00

**PROPERTY OWNER:**  
JIMMIE R. WISE  
P.O. BOX 479  
IRVINE, KY 40336

**SOURCE OF TITLE:**  
BOOK W S, PAGE 370  
(DEED BOOK 124, PAGE 352)

**SITE NUMBER:**  
US-KY-5051

**POD NUMBER:** 18-26957

**DRAWN BY:** JRS  
**CHECKED BY:** MEP  
**SURVEY DATE:** 12.26.18  
**PLAT DATE:** 9.18.19

**SHEET TITLE:**  
**SITE SURVEY**  
THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

**SHEET NUMBER:** (7 pages)  
**B-1.1**

1° 04' 27"
   
 BASED ON KENTUCKY STATE PLANE SINGLE ZONE AND DETERMINED BY GPS OBSERVATIONS COMPLETED ON DECEMBER 26, 2018.

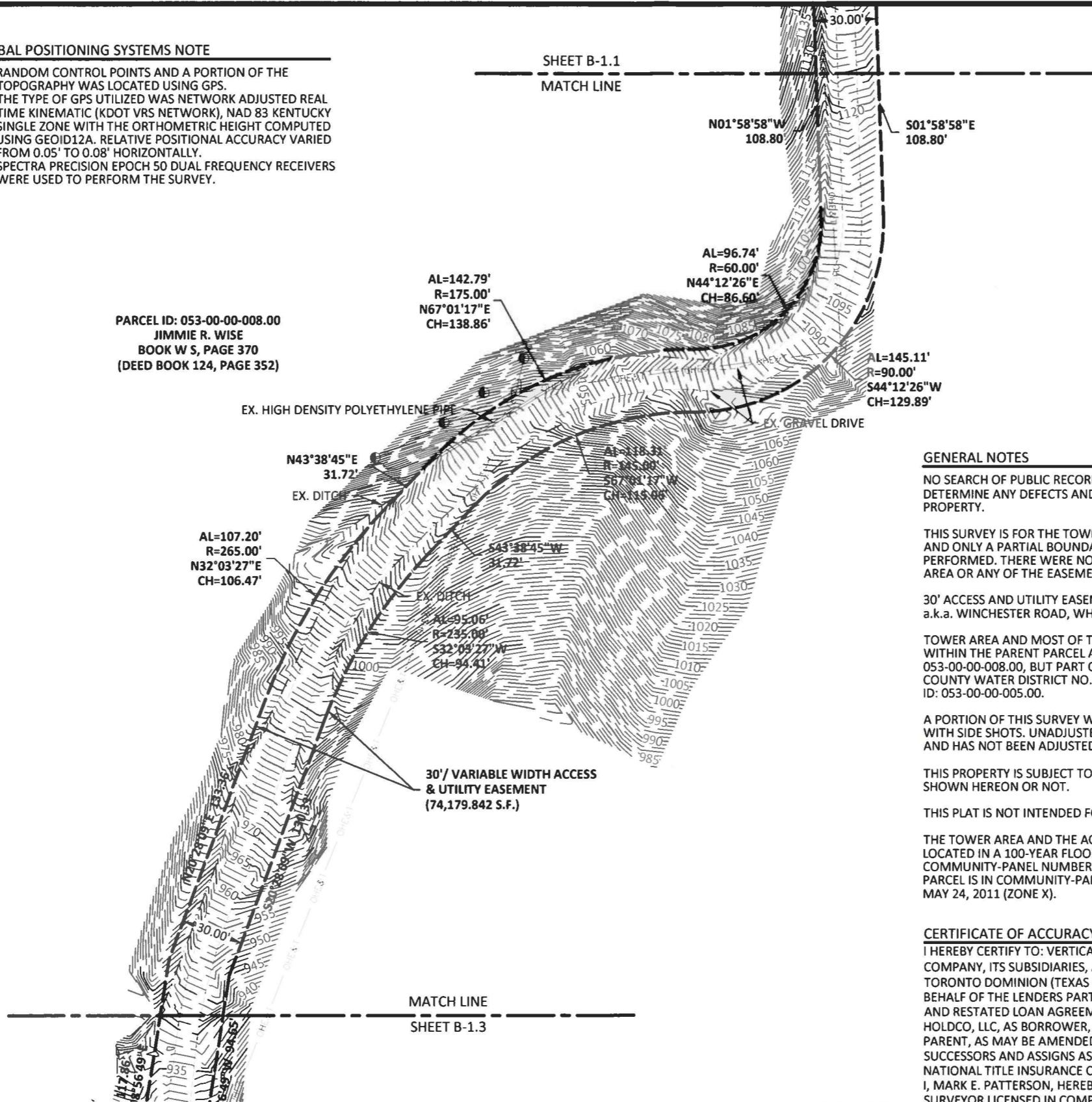
**FAA COORDINATE POINT**
  
 NAD 83
   
 LATITUDE: 37°46'56.75"
   
 LONGITUDE: -84°00'01.12"
   
 NAVD 88
   
 ELEVATION: 1230± AMSL
   
 NORTHING: 3,813,211.0090
   
 EASTING: 5,426,855.9437

**TEMPORARY BENCHMARK**
  
 NORTHING: 3,813,037.0150
   
 EASTING: 5,426,838.3700
   
 ELEVATION: 1,204.62'
   
 LOCATION: A SET 60-D NAIL S12°13'27"W 105.8± FROM THE SOUTHERN CORNER OF THE TOWER AREA.

**GLOBAL POSITIONING SYSTEMS NOTE**

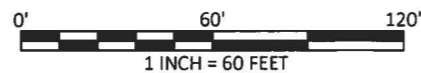
1. RANDOM CONTROL POINTS AND A PORTION OF THE TOPOGRAPHY WAS LOCATED USING GPS.
2. THE TYPE OF GPS UTILIZED WAS NETWORK ADJUSTED REAL TIME KINEMATIC (KDOT VRS NETWORK), NAD 83 KENTUCKY SINGLE ZONE WITH THE ORTHOMETRIC HEIGHT COMPUTED USING GEOID12A. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.05' TO 0.08' HORIZONTALLY.
3. SPECTRA PRECISION EPOCH 50 DUAL FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.

PARCEL ID: 053-00-00-008.00  
 JIMMIE R. WISE  
 BOOK W S, PAGE 370  
 (DEED BOOK 124, PAGE 352)



SHEET B-1.1  
MATCH LINE

MATCH LINE  
SHEET B-1.3



**GENERAL NOTES**

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED BY POD GROUP TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE SUBJECT PROPERTY.

THIS SURVEY IS FOR THE TOWER AREA AND THE ACCESS & UTILITY EASEMENT ONLY, AND ONLY A PARTIAL BOUNDARY SURVEY OF THE PARENT TRACT HAS BEEN PERFORMED. THERE WERE NO VISIBLE ENCROACHMENTS AFFECTING THE TOWER AREA OR ANY OF THE EASEMENTS, AT THE TIME THE SURVEY WAS COMPLETED.

30' ACCESS AND UTILITY EASEMENT IS CONTIGUOUS WITH KENTUCKY HIGHWAY 89 a.k.a. WINCHESTER ROAD, WHICH IS A 70' WIDE PUBLIC RIGHT OF WAY.

TOWER AREA AND MOST OF THE 30' ACCESS AND UTILITY EASEMENT LAY ENTIRELY WITHIN THE PARENT PARCEL AS DESCRIBED IN DEED BOOK 124, PAGE 352, PARCEL ID: 053-00-00-008.00, BUT PART OF THE ACCESS & UTILITY EASEMENT IS ON ESTILL COUNTY WATER DISTRICT NO. 1 AS RECORDED IN DEED BOOK 167, PAGE 630, PARCEL ID: 053-00-00-005.00.

A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. UNADJUSTED CLOSURE EQUALS 0.1', FOR A PRECISION OF 1:44,440 AND HAS NOT BEEN ADJUSTED.

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

THIS PLAT IS NOT INTENDED FOR LAND TRANSFER.

THE TOWER AREA AND THE ACCESS & UTILITY EASEMENT SHOWN HEREON ARE NOT LOCATED IN A 100-YEAR FLOOD PLAIN (ZONE X) PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NUMBER 21065C0020D, DATED MAY 24, 2011. THE PARENT PARCEL IS IN COMMUNITY-PANEL NUMBER 21065C0020D AND 21065C0040D, DATED MAY 24, 2011 (ZONE X).

**CERTIFICATE OF ACCURACY (SURVEYOR'S CERTIFICATE)**

I HEREBY CERTIFY TO: VERTICAL BRIDGE REIT, LLC A DELAWARE LIMITED LIABILITY COMPANY, ITS SUBSIDIARIES, AND THEIR RESPECTIVE SUCCESSORS AND/OR ASSIGNS; TORONTO DOMINION (TEXAS LLC, AS ADMINISTRATIVE AGENT, FOR ITSELF AND ON BEHALF OF THE LENDERS PARTIES FROM TIME TO THAT CERTAIN SECOND AMENDED AND RESTATED LOAN AGREEMENT DATED JUNE 17, 2016 WITH VERTICAL BRIDGE HOLDCO, LLC, AS BORROWER, AND VERTICAL BRIDGE HOLDCO PARENT, LLC, AS PARENT, AS MAY BE AMENDED, RESTATED, MODIFIED OR RENEWED, THEIR SUCCESSORS AND ASSIGNS AS THEIR INTERESTS MAY APPEAR; AND FIDELITY NATIONAL TITLE INSURANCE COMPANY.

I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.



MARK E. PATTERSON, PLS #3136

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

PREPARED FOR:
   
  
 750 PARK OF COMMERCE DRIVE
   
 BOCA RATON, FLORIDA 33487
   
 (561) 948-6367

**SURVEY**

REV.	DATE	DESCRIPTION
A	9.18.19	PRELIM ISSUE WITH TITLE
0	9.20.19	ISSUED AS FINAL

SITE INFORMATION:
   
**WINCHESTER**
  
 KENTUCKY HIGHWAY 89
   
 a.k.a. WINCHESTER ROAD
   
 IRVINE, KY 40336
   
 ESTILL COUNTY
   
 TAX PARCEL NUMBER:
   
 053-00-00-008.00
   
 PROPERTY OWNER:
   
 JIMMIE R. WISE
   
 P.O. BOX 479
   
 IRVINE, KY 40336
   
 SOURCE OF TITLE:
   
 BOOK W S, PAGE 370
   
 (DEED BOOK 124, PAGE 352)

SITE NUMBER:
   
 US-KY-5051

POD NUMBER: 18-26957
   
 DRAWN BY: JRS
   
 CHECKED BY: MEP
   
 SURVEY DATE: 12.26.18
   
 PLAT DATE: 9.18.19

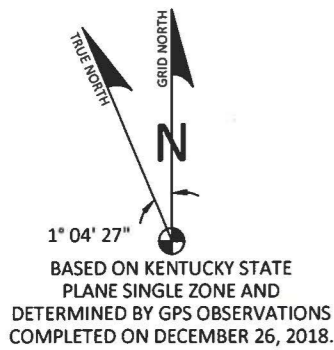
SHEET TITLE:
   
**SITE SURVEY**
  
 THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

SHEET NUMBER: (7 pages)
   
**B-1.2**

- LEGEND**
- EX. UTILITY POLE
  - EX. GUY ANCHOR
  - EX. EXISTING
  - EX. OVERHEAD ELECTRIC & TELEPHONE

Oct 16, 2019  
DATE





**FAA COORDINATE POINT**  
 NAD 83  
 LATITUDE: 37°46'56.75"  
 LONGITUDE: -84°00'01.12"  
 NAVD 88  
 ELEVATION: 1230± AMSL  
 NORTHING: 3,813,211.0090  
 EASTING: 5,426,855.9437

**TEMPORARY BENCHMARK**  
 NORTHING: 3,813,037.0150  
 EASTING: 5,426,838.3700  
 ELEVATION: 1,204.62'  
 LOCATION: A SET 60-D NAIL  
 S12°13'27"W 105.8± FROM  
 THE SOUTHERN CORNER OF  
 THE TOWER AREA.

**GLOBAL POSITIONING SYSTEMS NOTE**

1. RANDOM CONTROL POINTS AND A PORTION OF THE TOPOGRAPHY WAS LOCATED USING GPS.
2. THE TYPE OF GPS UTILIZED WAS NETWORK ADJUSTED REAL TIME KINEMATIC (KDOT VRS NETWORK), NAD 83 KENTUCKY SINGLE ZONE WITH THE ORTHOMETRIC HEIGHT COMPUTED USING GEOID12A. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.05' TO 0.08' HORIZONTALLY.
3. SPECTRA PRECISION EPOCH 50 DUAL FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.

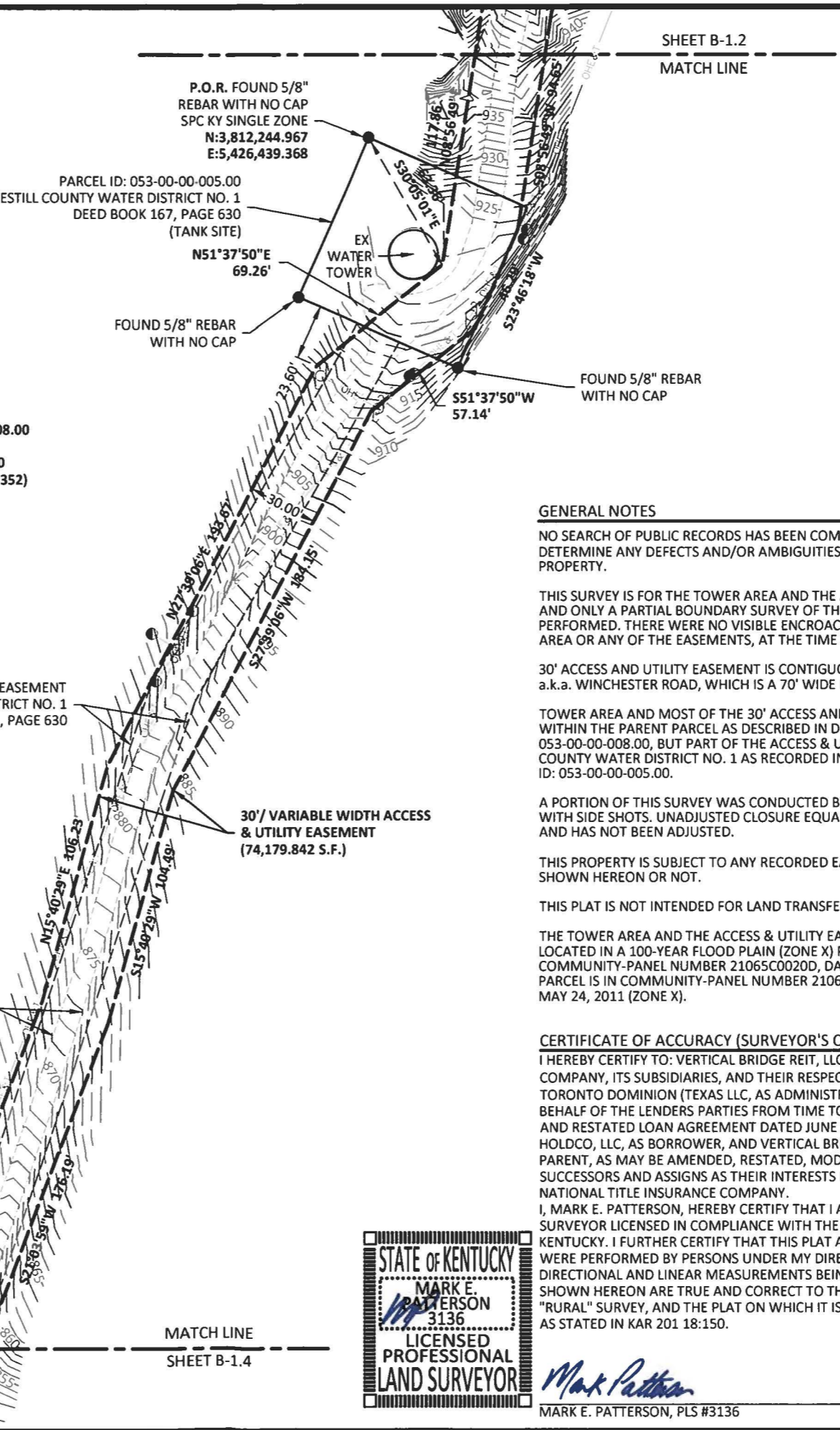
SHEET B-1.2  
 MATCH LINE

PARCEL ID: 053-00-00-008.00  
 JIMMIE R. WISE  
 BOOK W S, PAGE 370  
 (DEED BOOK 124, PAGE 352)

PARCEL ID: 053-00-00-005.01  
 GREGORY L TURNER & CINDY L  
 DEED BOOK 293,  
 PAGE 53

FOUND 1/2" REBAR 18" LONG WITH RED  
 CAP STAMPED "SPENCER, PLS 4068"  
 UNLESS OTHERWISE NOTED  
 PROPERTY LINE  
 EX. OVERHEAD ELECTRIC  
 EX. OVERHEAD ELECTRIC & TELEPHONE

SPC KY SINGLE ZONE  
 N:3,811,715.223  
 E:5,426,237.359



**GENERAL NOTES**

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED BY POD GROUP TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE SUBJECT PROPERTY.

THIS SURVEY IS FOR THE TOWER AREA AND THE ACCESS & UTILITY EASEMENT ONLY, AND ONLY A PARTIAL BOUNDARY SURVEY OF THE PARENT TRACT HAS BEEN PERFORMED. THERE WERE NO VISIBLE ENCROACHMENTS AFFECTING THE TOWER AREA OR ANY OF THE EASEMENTS, AT THE TIME THE SURVEY WAS COMPLETED.

30' ACCESS AND UTILITY EASEMENT IS CONTIGUOUS WITH KENTUCKY HIGHWAY 89 a.k.a. WINCHESTER ROAD, WHICH IS A 70' WIDE PUBLIC RIGHT OF WAY.

TOWER AREA AND MOST OF THE 30' ACCESS AND UTILITY EASEMENT LAY ENTIRELY WITHIN THE PARENT PARCEL AS DESCRIBED IN DEED BOOK 124, PAGE 352, PARCEL ID: 053-00-00-008.00, BUT PART OF THE ACCESS & UTILITY EASEMENT IS ON ESTILL COUNTY WATER DISTRICT NO. 1 AS RECORDED IN DEED BOOK 167, PAGE 630, PARCEL ID: 053-00-00-005.00.

A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. UNADJUSTED CLOSURE EQUALS 0.1', FOR A PRECISION OF 1:44,440 AND HAS NOT BEEN ADJUSTED.

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

THIS PLAT IS NOT INTENDED FOR LAND TRANSFER.

THE TOWER AREA AND THE ACCESS & UTILITY EASEMENT SHOWN HEREON ARE NOT LOCATED IN A 100-YEAR FLOOD PLAIN (ZONE X) PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NUMBER 21065C0020D, DATED MAY 24, 2011. THE PARENT PARCEL IS IN COMMUNITY-PANEL NUMBER 21065C0020D AND 21065C0040D, DATED MAY 24, 2011 (ZONE X).

**CERTIFICATE OF ACCURACY (SURVEYOR'S CERTIFICATE)**

I HEREBY CERTIFY TO: VERTICAL BRIDGE REIT, LLC A DELAWARE LIMITED LIABILITY COMPANY, ITS SUBSIDIARIES, AND THEIR RESPECTIVE SUCCESSORS AND/OR ASSIGNS; TORONTO DOMINION (TEXAS LLC, AS ADMINISTRATIVE AGENT, FOR ITSELF AND ON BEHALF OF THE LENDERS PARTIES FROM TIME TO THAT CERTAIN SECOND AMENDED AND RESTATED LOAN AGREEMENT DATED JUNE 17, 2016 WITH VERTICAL BRIDGE HOLDCO, LLC, AS BORROWER, AND VERTICAL BRIDGE HOLDCO PARENT, LLC, AS PARENT, AS MAY BE AMENDED, RESTATED, MODIFIED OR RENEWED, THEIR SUCCESSORS AND ASSIGNS AS THEIR INTERESTS MAY APPEAR; AND FIDELITY NATIONAL TITLE INSURANCE COMPANY.  
 I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.



*Mark Patterson*  
 MARK E. PATTERSON, PLS #3136

Oct 16, 2019  
 DATE

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

verticalbridge  
 750 PARK OF COMMERCE DRIVE  
 BOCA RATON, FLORIDA 334487  
 (561) 948-6367

PREPARED FOR:  
**SURVEY**

REV.	DATE	DESCRIPTION
A	9.18.19	PRELIM ISSUE WITH TITLE
0	9.20.19	ISSUED AS FINAL

**SITE INFORMATION:**  
**WINCHESTER**  
 KENTUCKY HIGHWAY 89  
 a.k.a. WINCHESTER ROAD  
 IRVINE, KY 40336  
 ESTILL COUNTY

**TAX PARCEL NUMBER:**  
 053-00-00-008.00

**PROPERTY OWNER:**  
 JIMMIE R. WISE  
 P.O. BOX 479  
 IRVINE, KY 40336

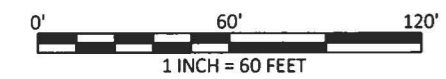
**SOURCE OF TITLE:**  
 BOOK W S, PAGE 370  
 (DEED BOOK 124, PAGE 352)

**SITE NUMBER:**  
 US-KY-5051

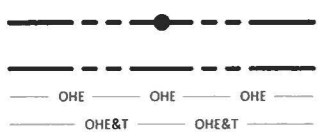
**POD NUMBER:** 18-26957  
**DRAWN BY:** JRS  
**CHECKED BY:** MEP  
**SURVEY DATE:** 12.26.18  
**PLAT DATE:** 9.18.19

**SHEET TITLE:**  
**SITE SURVEY**  
 THIS DOES NOT REPRESENT A  
 BOUNDARY SURVEY OF THE  
 PARENT PARCEL

**SHEET NUMBER:** (7 pages)  
**B-1.3**



- LEGEND**
- EX. UTILITY POLE
  - EX. GUY ANCHOR
  - EX. EXISTING
  - P.O.R. POINT OF REFERENCE



**GENERAL NOTES**

NO SEARCH OF PUBLIC RECORDS HAS BEEN COMPLETED BY POD GROUP TO DETERMINE ANY DEFECTS AND/OR AMBIGUITIES IN THE TITLE OF THE SUBJECT PROPERTY.

THIS SURVEY IS FOR THE TOWER AREA AND THE ACCESS & UTILITY EASEMENT ONLY, AND ONLY A PARTIAL BOUNDARY SURVEY OF THE PARENT TRACT HAS BEEN PERFORMED. THERE WERE NO VISIBLE ENCROACHMENTS AFFECTING THE TOWER AREA OR ANY OF THE EASEMENTS, AT THE TIME THE SURVEY WAS COMPLETED.

30' ACCESS AND UTILITY EASEMENT IS CONTIGUOUS WITH KENTUCKY HIGHWAY 89 a.k.a. WINCHESTER ROAD, WHICH IS A 70' WIDE PUBLIC RIGHT OF WAY.

TOWER AREA AND MOST OF THE 30' ACCESS AND UTILITY EASEMENT LAY ENTIRELY WITHIN THE PARENT PARCEL AS DESCRIBED IN DEED BOOK 124, PAGE 352, PARCEL ID: 053-00-00-008.00, BUT PART OF THE ACCESS & UTILITY EASEMENT IS ON ESTILL COUNTY WATER DISTRICT NO. 1 AS RECORDED IN DEED BOOK 167, PAGE 630, PARCEL ID: 053-00-00-005.00.

A PORTION OF THIS SURVEY WAS CONDUCTED BY METHOD OF RANDOM TRAVERSE WITH SIDE SHOTS. UNADJUSTED CLOSURE EQUALS 0.1', FOR A PRECISION OF 1:44,440 AND HAS NOT BEEN ADJUSTED.

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

THIS PLAT IS NOT INTENDED FOR LAND TRANSFER.

THE TOWER AREA AND THE ACCESS & UTILITY EASEMENT SHOWN HEREON ARE NOT LOCATED IN A 100-YEAR FLOOD PLAIN (ZONE X) PER FLOOD HAZARD BOUNDARY MAP, COMMUNITY-PANEL NUMBER 21065C0020D, DATED MAY 24, 2011. THE PARENT PARCEL IS IN COMMUNITY-PANEL NUMBER 21065C0020D AND 21065C0040D, DATED MAY 24, 2011 (ZONE X).

**GLOBAL POSITIONING SYSTEMS NOTE**

1. RANDOM CONTROL POINTS AND A PORTION OF THE TOPOGRAPHY WAS LOCATED USING GPS.
2. THE TYPE OF GPS UTILIZED WAS NETWORK ADJUSTED REAL TIME KINEMATIC (KDOT VRS NETWORK), NAD 83 KENTUCKY SINGLE ZONE WITH THE ORTHOMETRIC HEIGHT COMPUTED USING GEOID12A. RELATIVE POSITIONAL ACCURACY VARIED FROM 0.05' TO 0.08' HORIZONTALLY.
3. SPECTRA PRECISION EPOCH 50 DUAL FREQUENCY RECEIVERS WERE USED TO PERFORM THE SURVEY.



1° 04' 27"  
 BASED ON KENTUCKY STATE PLANE SINGLE ZONE AND DETERMINED BY GPS OBSERVATIONS COMPLETED ON DECEMBER 26, 2018.

**FAA COORDINATE POINT**

NAD 83  
 LATITUDE: 37°46'56.75"  
 LONGITUDE: -84°00'01.12"  
 NAVD 88  
 ELEVATION: 1230± AMSL  
 NORTHING: 3,813,211.0090  
 EASTING: 5,426,855.9437

**TEMPORARY BENCHMARK**

NORTHING: 3,813,037.0150  
 EASTING: 5,426,838.3700  
 ELEVATION: 1,204.62'  
 LOCATION: A SET 60-D NAIL S12°13'27"W 105.8± FROM THE SOUTHERN CORNER OF THE TOWER AREA.

PARCEL ID: 053-00-00-005.01  
 GREGORY L TURNER & CINDY L DEED BOOK 293, PAGE 53

EX. 20' WATER LINE & ACCESS ROAD EASEMENT  
 ESTILL COUNTY WATER DISTRICT NO. 1  
 DEED BOOK 167, PAGE 630

EX. GRAVEL DRIVE

30' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT  
 (74,179.842 S.F.)

EX. (2) 15" CORRUGATED METAL PIPE

P.O.B. ACCESS & UTIL. ESMT.  
 P.O.C. TOWER AREA  
 SPC KY SINGLE ZONE  
 N:3,811,247.132  
 E:5,425,736.305

PARCEL ID: 053-00-00-008.00  
 JIMMIE R. WISE  
 BOOK W S, PAGE 370  
 IDEED BOOK 124, PAGE 352)

SHEET B-1.3  
 MATCH LINE

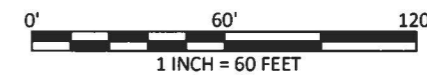
SPC KY SINGLE ZONE  
 N:3,811,715.223  
 E:5,426,237.359

EX. 15" CORRUGATED METAL PIPE

PARCEL ID: 053-00-00-003.01  
 BILLY JOE ESTES JR  
 DEED BOOK 320,  
 PAGE 697

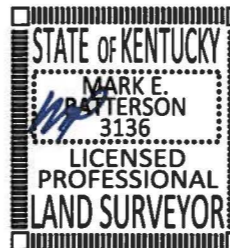
**LEGEND**

- EX. UTILITY POLE
- EX. GUY ANCHOR
- EX. EXISTING
- P.O.C. POINT OF COMMENCEMENT
- P.O.B. POINT OF BEGINNING
- FOUND 1/2" REBAR 18" LONG WITH RED CAP STAMPED "SPENCER, PLS 4068" UNLESS OTHERWISE NOTED
- PROPERTY LINE
- EX. OVERHEAD ELECTRIC & TELEPHONE



**CERTIFICATE OF ACCURACY (SURVEYOR'S CERTIFICATE)**

I HEREBY CERTIFY TO: VERTICAL BRIDGE REIT, LLC A DELAWARE LIMITED LIABILITY COMPANY, ITS SUBSIDIARIES, AND THEIR RESPECTIVE SUCCESSORS AND/OR ASSIGNS; TORONTO DOMINION (TEXAS LLC, AS ADMINISTRATIVE AGENT, FOR ITSELF AND ON BEHALF OF THE LENDERS PARTIES FROM TIME TO THAT CERTAIN SECOND AMENDED AND RESTATED LOAN AGREEMENT DATED JUNE 17, 2016 WITH VERTICAL BRIDGE HOLDCO, LLC, AS BORROWER, AND VERTICAL BRIDGE HOLDCO PARENT, LLC, AS PARENT, AS MAY BE AMENDED, RESTATED, MODIFIED OR RENEWED, THEIR SUCCESSORS AND ASSIGNS AS THEIR INTERESTS MAY APPEAR; AND FIDELITY NATIONAL TITLE INSURANCE COMPANY.  
 I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.



*Mark Patterson*  
 MARK E. PATTERSON, PLS #3136

Oct 16, 2019  
 DATE

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

verticalbridge  
 750 PARK OF COMMERCE DRIVE  
 BOCA RATON, FLORIDA 334487  
 (561) 948-6367

**SURVEY**

REV.	DATE	DESCRIPTION
A	9.18.19	PRELIM ISSUE WITH TITLE
0	9.20.19	ISSUED AS FINAL

**SITE INFORMATION:**  
**WINCHESTER**  
 KENTUCKY HIGHWAY 89  
 a.k.a. WINCHESTER ROAD  
 IRVINE, KY 40336  
 ESTILL COUNTY  
**TAX PARCEL NUMBER:**  
 053-00-00-008.00  
**PROPERTY OWNER:**  
 JIMMIE R. WISE  
 P.O. BOX 479  
 IRVINE, KY 40336  
**SOURCE OF TITLE:**  
 BOOK W S, PAGE 370  
 (DEED BOOK 124, PAGE 352)

**SITE NUMBER:**  
 US-KY-5051

**POD NUMBER:** 18-26957  
**DRAWN BY:** JRS  
**CHECKED BY:** MEP  
**SURVEY DATE:** 12.26.18  
**PLAT DATE:** 9.18.19

**SHEET TITLE:**  
**SITE SURVEY**  
 THIS DOES NOT REPRESENT A  
 BOUNDARY SURVEY OF THE  
 PARENT PARCEL

**SHEET NUMBER:** (7 pages)

**B-1.4**



Know what's below.  
 Call before you dig.  
 Call Monday thru Friday - 7 am. to 6 pm.  
**1-800-752-6007**

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

LEGAL DESCRIPTIONS

TOWER AREA

THE FOLLOWING IS A DESCRIPTION OF THE TOWER AREA, BEING A PART OF THE PARENT PARCEL CONVEYED TO JIMMY R. WISE AS RECORDED IN BOOK W S, PAGE 370, AND FURTHER DESCRIBED AS TRACT #4 OF DEED BOOK 124, PAGE 352, PARCEL ID: 053-00-00-008.00, RECORDS OF ESTILL COUNTY, KENTUCKY CLERKS OFFICE, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON DECEMBER 26, 2018.

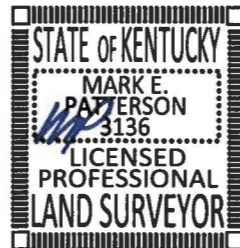
COMMENCING AT A FOUND 1/2" REBAR, 18" LONG, WITH RED CAP STAMPED "SPENCER, PLS 4068", HEREAFTER REFERRED TO AS A "FOUND IPC" IN THE NORTHERN RIGHT OF WAY LINE OF KENTUCKY HIGHWAY 89 - WINCHESTER ROAD, ALSO THE BOUNDARY CORNER PER SURVEY BY SPENCER LAND SURVEYING DATED AUGUST 3, 2019 OF THE PARCEL CONVEYED TO JIMMIE R. WISE AS RECORDED IN W S, PAGE 370, PARCEL ID: 053-00-00-008.00, AND FURTHER DESCRIBED AS TRACT #4 OF DEED BOOK 124, PAGE 352, SAID REBAR HAVING A KENTUCKY STATE PLANE SINGLE ZONE COORDINATE VALUE OF N:3,811,247.132, E:5,425,736.305; THENCE LEAVING SAID RIGHT OF WAY LINE AND WITH SAID WISE PROPERTY AS ESTABLISHED BY SURVEY BY SPENCER LAND SURVEYING DATED AUGUST 3, 2019, N60°43'48"E 52.05' TO A FOUND IPC; THENCE N56°38'23"E 52.74' TO A FOUND IPC; THENCE N52°45'41"E 94.80' TO A FOUND IPC; THENCE N63°44'56"E 64.11' TO A FOUND IPC; THENCE N50°12'09"E 45.08' TO A FOUND IPC; THENCE N36°33'05"E 112.17' TO A FOUND IPC; THENCE N40°17'51"E 273.97' TO A FOUND IPC, HAVING A KENTUCKY STATE PLANE SINGLE ZONE COORDINATE VALUE OF N:3,811,715.223, E:5,426,237.359; THENCE LEAVING SAID WISE BOUNDARY LINE, TRAVERSING ACROSS SAID WISE PARCEL, N21°03'59"E 169.70'; THENCE N15°40'29"E 106.23'; THENCE N27°39'06"E 193.67'; THENCE ENTERING THE PROPERTY OF ESTILL COUNTY WATER DISTRICT NO. 1 AS DESCRIBED IN DEED BOOK 167, PAGE 630, N51°37'50"E 69.26', FOR REFERENCE, SAID POINT IS S30°17'26"E 63.19' FROM A FOUND 5/8" REBAR WITH NO CAP AT THE NORTHWEST CORNER OF THE PARCEL CONVEYED TO ESTILL COUNTY WATER DISTRICT NO. 1 AFOREMENTIONED, HAVING A KENTUCKY STATE PLANE SINGLE ZONE COORDINATE VALUE OF N:3,812,244.967, E:5,426,439.368; THENCE CONTINUING THROUGH AND LEAVING SAID ESTILL COUNTY WATER DISTRICT PROPERTY, N08°56'49"E 117.86'; THENCE N20°28'09"E 133.36'; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT WITH AN ARC LENGTH OF 107.20', HAVING A RADIUS OF 265.00', SAID CURVE HAVING A CHORD LENGTH OF 106.47' BEARING N32°03'27"E; THENCE N43°38'45"E 31.72'; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT WITH AN ARC LENGTH OF 142.79', HAVING A RADIUS OF 175.00', SAID CURVE HAVING A CHORD LENGTH OF 138.86' BEARING N67°01'17"E; THENCE ALONG THE ARC OF A REVERSE CURVE TO THE LEFT WITH AN ARC LENGTH OF 96.74', HAVING A RADIUS OF 60.00', SAID CURVE HAVING A CHORD LENGTH OF 86.60' BEARING N44°12'26"E; THENCE N01°58'58"W 108.80'; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT WITH AN ARC LENGTH OF 71.03', HAVING A RADIUS OF 240.00', SAID CURVE HAVING A CHORD LENGTH OF 70.77' BEARING N06°29'43"E; THENCE ALONG THE ARC OF A REVERSE CURVE TO THE LEFT WITH AN ARC LENGTH OF 59.47', HAVING A RADIUS OF 210.00', SAID CURVE HAVING A CHORD LENGTH OF 59.27' BEARING N06°51'38"E; THENCE N01°15'08"W 43.22' TO THE SOUTH LINE OF EAST KENTUCKY NETWORK, LLC LEASED PREMISES AS DESCRIBED BY BOOK L13, PAGE 674, FOR REFERENCE, SAID POINT IS S85°15'09"E 19.69' FROM A FOUND 1/2" REBAR WITH RED CAP STAMPED "JWGAUDILL" HAVING A KENTUCKY STATE PLANE SINGLE ZONE COORDINATE VALUE OF N:3,812,943.968, E:5,426,793.593; THENCE ALONG SAID SOUTH LINE, S85°47'41"E 3.25'; THENCE TRAVERSING ACROSS SAID EAST KENTUCKY NETWORK, LLC LEASED PREMISES, N04°06'16"E 99.86' TO THE NORTH LINE OF SAID LEASED PREMISES; THENCE N86°23'55"W 10.11'; THENCE LEAVING SAID LEASED PREMISES, N01°23'06"W 64.46'; THENCE N22°06'57"W 130.00'; THENCE N67°53'03"E 30.00' TO A SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136", HEREAFTER REFERRED TO AS A "SET IPC", IN THE NORTHWEST CORNER OF THE TOWER AREA, HAVING A KENTUCKY STATE PLANE COORDINATE VALUE OF N:3,813,238.506, E:5,426,790.799 AND BEING THE TRUE POINT OF BEGINNING; THENCE N67°53'03"E 100.00' TO A SET IPC HAVING A KENTUCKY STATE PLANE SINGLE ZONE COORDINATE VALUE OF N:3,813,276.154, E:5,426,883.441; THENCE S22°06'57"E 100.00' TO A SET IPC HAVING A KENTUCKY STATE PLANE SINGLE ZONE COORDINATE VALUE OF N:3,813,183.512, E:5,426,921.089; THENCE S67°53'03"W 100.00' TO A SET IPC HAVING A KENTUCKY STATE PLANE SINGLE ZONE COORDINATE VALUE OF N:3,813,145.864, E:5,426,828.446; THENCE N22°06'57"W 100.00' TO THE POINT OF BEGINNING CONTAINING 10,000.000 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED DECEMBER 26, 2018.

30' / VARIABLE WIDTH ACCESS AND UTILITY EASEMENT

THE FOLLOWING IS A DESCRIPTION OF THE 30' / VARIABLE WIDTH ACCESS & UTILITY EASEMENT, BEING A PART OF THE PARENT PARCEL CONVEYED TO JIMMY R. WISE AS RECORDED IN BOOK W S, PAGE 370, AND FURTHER DESCRIBED AS TRACT #4 OF DEED BOOK 124, PAGE 352, PARCEL ID: 053-00-00-008.00, RECORDS OF ESTILL COUNTY, KENTUCKY CLERKS OFFICE, WHICH IS MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARING DATUM USED HEREIN IS BASED UPON KENTUCKY STATE PLANE COORDINATE SYSTEM, SINGLE ZONE, NAD 83, FROM A REAL TIME KINEMATIC GLOBAL POSITIONING SYSTEM OBSERVATION USING THE KENTUCKY TRANSPORTATION CABINET REAL TIME GPS NETWORK COMPLETED ON DECEMBER 26, 2018.

BEGINNING AT A FOUND 1/2" REBAR, 18" LONG, WITH RED CAP STAMPED "SPENCER, PLS 4068", HEREAFTER REFERRED TO AS A "FOUND IPC" IN THE NORTHERN RIGHT OF WAY LINE OF KENTUCKY HIGHWAY 89 - WINCHESTER ROAD, ALSO THE BOUNDARY CORNER PER SURVEY BY SPENCER LAND SURVEYING DATED AUGUST 3, 2019 OF THE PARCEL CONVEYED TO JIMMIE R. WISE AS RECORDED IN W S, PAGE 370, PARCEL ID: 053-00-00-008.00, AND FURTHER DESCRIBED AS TRACT #4 OF DEED BOOK 124, PAGE 352, SAID REBAR HAVING A KENTUCKY STATE PLANE SINGLE ZONE COORDINATE VALUE OF N:3,811,247.132, E:5,425,736.305; THENCE LEAVING SAID RIGHT OF WAY LINE AND WITH SAID WISE PROPERTY AS ESTABLISHED BY SURVEY BY SPENCER LAND SURVEYING DATED AUGUST 3, 2019, N60°43'48"E 52.05' TO A FOUND IPC; THENCE N56°38'23"E 52.74' TO A FOUND IPC; THENCE N52°45'41"E 94.80' TO A FOUND IPC; THENCE N63°44'56"E 64.11' TO A FOUND IPC; THENCE N50°12'09"E 45.08' TO A FOUND IPC; THENCE N36°33'05"E 112.17' TO A FOUND IPC; THENCE N40°17'51"E 273.97' TO A FOUND IPC, HAVING A KENTUCKY STATE PLANE SINGLE ZONE COORDINATE VALUE OF N:3,811,715.223, E:5,426,237.359; THENCE LEAVING SAID WISE BOUNDARY LINE, TRAVERSING ACROSS SAID WISE PARCEL, N21°03'59"E 169.70'; THENCE N15°40'29"E 106.23'; THENCE N27°39'06"E 193.67'; THENCE ENTERING THE PROPERTY OF ESTILL COUNTY WATER DISTRICT NO. 1 AS DESCRIBED IN DEED BOOK 167, PAGE 630, N51°37'50"E 69.26', FOR REFERENCE, SAID POINT IS S30°17'26"E 63.19' FROM A FOUND 5/8" REBAR WITH NO CAP AT THE NORTHWEST CORNER OF THE PARCEL CONVEYED TO ESTILL COUNTY WATER DISTRICT NO. 1 AFOREMENTIONED, HAVING A KENTUCKY STATE PLANE SINGLE ZONE COORDINATE VALUE OF N:3,812,244.967, E:5,426,439.368; THENCE CONTINUING THROUGH AND LEAVING SAID ESTILL COUNTY WATER DISTRICT PROPERTY, N08°56'49"E 117.86'; THENCE N20°28'09"E 133.36'; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT WITH AN ARC LENGTH OF 107.20', HAVING A RADIUS OF 265.00', SAID CURVE HAVING A CHORD LENGTH OF 106.47' BEARING N32°03'27"E; THENCE N43°38'45"E 31.72'; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT WITH AN ARC LENGTH OF 142.79', HAVING A RADIUS OF 175.00', SAID CURVE HAVING A CHORD LENGTH OF 138.86' BEARING N67°01'17"E; THENCE ALONG THE ARC OF A REVERSE CURVE TO THE LEFT WITH AN ARC LENGTH OF 96.74', HAVING A RADIUS OF 60.00', SAID CURVE HAVING A CHORD LENGTH OF 86.60' BEARING N44°12'26"E; THENCE N01°58'58"W 108.80'; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT WITH AN ARC LENGTH OF 71.03', HAVING A RADIUS OF 240.00', SAID CURVE HAVING A CHORD LENGTH OF 70.77' BEARING N06°29'43"E; THENCE ALONG THE ARC OF A REVERSE CURVE TO THE LEFT WITH AN ARC LENGTH OF 59.47', HAVING A RADIUS OF 210.00', SAID CURVE HAVING A CHORD LENGTH OF 59.27' BEARING N06°51'38"E; THENCE N01°15'08"W 43.22' TO THE SOUTH LINE OF EAST KENTUCKY NETWORK, LLC LEASED PREMISES AS DESCRIBED BY BOOK L13, PAGE 674, FOR REFERENCE, SAID POINT IS S85°15'09"E 19.69' FROM A FOUND 1/2" REBAR WITH RED CAP STAMPED "JWGAUDILL" HAVING A KENTUCKY STATE PLANE SINGLE ZONE COORDINATE VALUE OF N:3,812,943.968, E:5,426,793.593; THENCE ALONG SAID SOUTH LINE, S85°47'41"E 3.25'; THENCE TRAVERSING ACROSS SAID EAST KENTUCKY NETWORK, LLC LEASED PREMISES, N04°06'16"E 99.86' TO THE NORTH LINE OF SAID LEASED PREMISES; THENCE N86°23'55"W 10.11'; THENCE LEAVING SAID LEASED PREMISES, N01°23'06"W 64.46'; THENCE N22°06'57"W 130.00'; THENCE N67°53'03"E 30.00' TO A SET 1/2" REBAR 18" LONG CAPPED "PATTERSON PLS 3136", HEREAFTER REFERRED TO AS A "SET IPC", IN THE NORTHWEST CORNER OF THE TOWER AREA, HAVING A KENTUCKY STATE PLANE COORDINATE VALUE OF N:3,813,238.506, E:5,426,790.799; THENCE S22°06'57"E 100.00' TO A SET IPC HAVING A KENTUCKY STATE PLANE SINGLE ZONE COORDINATE VALUE OF N:3,813,145.864, E:5,426,828.446; THENCE N67°53'03"E 50.00'; THENCE LEAVING SAID TOWER AREA, S22°06'57"E 30.00'; THENCE S04°06'16"W 100.07' TO A POINT ON THE SOUTH LINE OF SAID LEASED PREMISES; THENCE CONTINUING ALONG SAID SOUTH LINE, S85°47'41"E 6.89' TO A FOUND 1/2" REBAR WITH RED CAP STAMPED "JWGAUDILL"; THENCE LEAVING SAID SOUTH LINE, S01°15'08"E 40.35'; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT WITH AN ARC LENGTH OF 67.97', HAVING A RADIUS OF 240.00', SAID CURVE HAVING A CHORD LENGTH OF 67.74' BEARING N06°51'38"W; THENCE ALONG THE ARC OF A REVERSE CURVE TO THE LEFT WITH AN ARC LENGTH OF 62.15', HAVING A RADIUS OF 210.00', SAID CURVE HAVING A CHORD LENGTH OF 61.92' BEARING S06°29'43"W; THENCE S01°58'58"E 108.80'; THENCE ALONG THE ARC OF A CURVE TO THE RIGHT WITH AN ARC LENGTH OF 145.11', HAVING A RADIUS OF 90.00', SAID CURVE HAVING A CHORD LENGTH OF 129.89' BEARING S44°12'26"W; THENCE ALONG THE ARC OF A REVERSE CURVE TO THE LEFT WITH AN ARC LENGTH OF 118.31', HAVING A RADIUS OF 145.00', SAID CURVE HAVING A CHORD LENGTH OF 115.06' BEARING S67°01'17"W; THENCE S43°38'45"W 31.72'; THENCE ALONG THE ARC OF A CURVE TO THE LEFT WITH AN ARC LENGTH OF 95.06', HAVING A RADIUS OF 235.00', SAID CURVE HAVING A CHORD LENGTH OF 94.41' BEARING S32°03'27"W; THENCE S20°28'09"W 130.33'; THENCE S08°56'49"W 94.65' TO A POINT ON THE EAST LINE OF SAID ESTILL COUNTY WATER DISTRICT NO. 1 PROPERTY; THENCE ALONG LINE S23°46'18"W 46.29'; THENCE LEAVING SAID LINE S51°37'50"W 57.14'; THENCE S27°39'06"W 184.15'; THENCE S15°40'29"W 104.49'; THENCE S21°03'59"W 176.19'; THENCE S40°17'51"W 278.07'; THENCE S36°33'05"W 114.78'; THENCE S50°12'09"W 52.24'; THENCE S63°44'56"W 64.79'; THENCE S52°45'41"W 92.93'; THENCE S56°38'23"W 54.83'; THENCE S60°43'48"W 32.58'; THENCE S25°50'15"W 16.31' TO THE NORTH RIGHT OF WAY LINE OF KENTUCKY HIGHWAY 89 - WINCHESTER ROAD; THENCE N39°34'55"W 39.98' TO THE POINT OF BEGINNING CONTAINING 74,179.842 SQUARE FEET AS PER SURVEY BY MARK E. PATTERSON, PLS #3136 DATED DECEMBER 26, 2018.



CERTIFICATE OF ACCURACY (SURVEYOR'S CERTIFICATE)

I HEREBY CERTIFY TO: VERTICAL BRIDGE REIT, LLC A DELAWARE LIMITED LIABILITY COMPANY, ITS SUBSIDIARIES, AND THEIR RESPECTIVE SUCCESSORS AND/OR ASSIGNS; TORONTO DOMINION (TEXAS LLC, AS ADMINISTRATIVE AGENT, FOR ITSELF AND ON BEHALF OF THE LENDERS PARTIES FROM TIME TO THAT CERTAIN SECOND AMENDED AND RESTATED LOAN AGREEMENT DATED JUNE 17, 2016 WITH VERTICAL BRIDGE HOLDCO, LLC, AS BORROWER, AND VERTICAL BRIDGE HOLDCO PARENT, LLC, AS PARENT, AS MAY BE AMENDED, RESTATED, MODIFIED OR RENEWED, THEIR SUCCESSORS AND ASSIGNS AS THEIR INTERESTS MAY APPEAR; AND FIDELITY NATIONAL TITLE INSURANCE COMPANY. I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.

Mark E. Patterson
MARK E. PATTERSON, PLS #3136

Oct 16, 2019
DATE



Table with 3 columns: REV., DATE, DESCRIPTION. Row 1: A, 9.18.19, PRELIM ISSUE WITH TITLE. Row 2: 0, 9.20.19, ISSUED AS FINAL.

SITE INFORMATION: WINCHESTER KENTUCKY HIGHWAY 89 a.k.a. WINCHESTER ROAD IRVINE, KY 40336 ESTILL COUNTY TAX PARCEL NUMBER: 053-00-00-008.00 PROPERTY OWNER: JIMMIE R. WISE P.O. BOX 479 IRVINE, KY 40336 SOURCE OF TITLE: BOOK W S, PAGE 370 (DEED BOOK 124, PAGE 352)

SITE NUMBER: US-KY-5051 POD NUMBER: 18-26957 DRAWN BY: JRS CHECKED BY: MEP SURVEY DATE: 12.26.18 PLAT DATE: 9.18.19

SHEET TITLE: SITE SURVEY THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

SHEET NUMBER: (7 pages) B-1.5

TITLE OF COMMITMENT

THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY POD GROUP, LLC AND AS SUCH WE ARE NOT RESPONSIBLE FOR THE INVESTIGATION OR INDEPENDENT SEARCH FOR EASEMENTS OF RECORD, ENCUMBRANCES, RESTRICTIVE COVENANTS, OWNERSHIP TITLE EVIDENCE, UNRECORDED EASEMENTS, AUGMENTING EASEMENTS, IMPLIED OR PRESCRIPTIVE EASEMENTS, OR ANY OTHER FACTS THAT AN ACCURATE AND CURRENT TITLE SEARCH MAY DISCLOSE.

POD GROUP, LLC HAS RECEIVED AND REVIEWED THE TITLE COMMITMENT PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, DATED EFFECTIVE AUGUST 9, 2018 AT 8:00 AM, BEING COMMITMENT NO. 27743327 FOR THE PARENT PARCEL, TO DETERMINE THE IMPACTS OF EXISTING TITLE EXCEPTIONS.

SCHEDULE B - SECTION II

- 1. DEFECTS, LIENS, ENCUMBRANCES, ADVERSE CLAIMS OR OTHER MATTERS, IF ANY, CREATED, FIRST APPEARING IN THE PUBLIC RECORDS OR ATTACHING SUBSEQUENT TO THE EFFECTIVE DATE HEREOF BUT PRIOR TO THE DATE THE PROPOSED INSURED ACQUIRES FOR VALUE OF RECORD THE ESTATE OR INTEREST OR MORTGAGE THEREON COVERED BY THIS COMMITMENT.
2. RIGHTS OR CLAIMS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORDS.
3. EASEMENTS, OR CLAIMS OF EASEMENTS, NOT SHOWN BY THE PUBLIC RECORDS.
4. ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR, OR MATERIAL HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS.
5. ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION, OR ADVERSE CIRCUMSTANCE AFFECTING THE TITLE THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND.
6. TAXES AND SPECIAL ASSESSMENTS WHICH ARE NOT SHOWN AS EXISTING LIENS BY THE PUBLIC RECORDS.
7. TAXES FOR THE YEAR 2018 AND SUBSEQUENT YEARS, A LIEN NOT YET DUE AND PAYABLE.
8. EXCEPT THE COAL, OIL, GAS AND OTHER MINERALS UNDERLYING THE SURFACE OF SAID LAND AND ALL RIGHTS AND EASEMENTS IN FAVOR OF THE ESTATE OF SAID COAL, OIL, GAS AND OTHER MINERALS; INCLUDING, BUT NOT LIMITED TO, EXPRESS OR IMPLIED EASEMENTS IN, OVER AND UNDER THAT ESTATE FOR THE ENTRY AND REMOVAL OF MINERALS.
9. RIGHT-OF-WAY EASEMENT FOR WATER LINE AND ACCESS ROAD IN FAVOR OF ESTILL COUNTY WATER DISTRICT NO. 1.
10. RIGHT-OF-WAY EASEMENT IN FAVOR OF ESTILL COUNTY WATER DISTRICT NO. 1.
11. EASEMENT AGREEMENT IN FAVOR OF THE TRUSTEES OF PENNSYLVANIA PRESBYTERY (U.S.A.), INC., A KENTUCKY CORPORATION.
12. TERMS AND CONDITIONS OF LEASE AGREEMENT DATED 08/14/2007 BY AND BETWEEN JIMMIE R. WISE AND SHELIA H. WISE, AND EAST KENTUCKY NETWORK, LLC, D/B/A APPALACHIAN WIRELESS.

PARENT PARCEL, LEGAL DESCRIPTION (NOT FIELD SURVEYED) DEED BOOK 124, PAGE 352

AN INTEREST IN LAND, SAID INTEREST BEING OVER A PORTION OF THE FOLLOWING DESCRIBED PARENT PARCEL:

PARCEL 1: BEGINNING AT A STONE CORNER ON HIGHWAY 89, THIS STONE BEING NEAR A MARKED BLACK JACK OAK THAT IS LOCATED 73 FEET SOUTHEAST FROM A FORKED MAPLE THAT STANDS NEAR THE HIGHWAY RIGHT OF WAY LINE ON THE NORTHEAST SIDE OF THE DRAIN THAT COMES DOWN FROM IRON MOUNTAIN; THENCE A NORTH, NORTHEAST DIRECTION UP A BLUFF AND OUT THE RIDGE WITH A MARKED LINE TO A TWIN MARKED WHITE OAK, THIS WHITE OAK BEING 18 FEET SOUTHEAST FROM A MARKED WHITE OAK THAT IS STANDING NEAR THE OLD L. B. MCINTOSH ROAD THAT COMES AROUND THE SIDE OF IRON MOUNTAIN; THENCE IN A NORTHEASTERN DIRECTION, 34 FEET, 6 INCHES TO A MARKED WHITE OAK; THENCE ACROSS THE OLD L. B. MCINTOSH ROAD TO THE JAMES OWENS PROPERTY; THENCE WITH JAMES OWEN'S LINE TO KY. HIGHWAY 89; THENCE WITH HIGHWAY 89 A SOUTHWESTERN DIRECTION TO THE BEGINNING, CONTAINING 5 ACRES, MORE OR LESS.

PARCEL 2: ON CALLOWAY'S CREEK, BEGINNING ON JOHN SAM'S LINE AT A SMALL BRANCH IN THE WINCHESTER & IRVINE ROAD AT 1. ON THE PLAT OF THE SURVEY; THENCE N. 66 E. 144 PO. TO A PINE ON TOP OF IRON MOUNTAIN CORNER TO JOHN SAM'S; THENCE WITH THE DIVIDE OF THE RIDGE S 64 1/2 E 10 PO. SO. 47 E 8 PO. S. 84 E. 16 PO. N. 62 E. 12 PO. E. 16 PO. N. 78 1/2 E. 20 PO. N. 49 1/2 E. 12 PO. N. 20 E. 10 PO. N. 53 E. 18 PO. TO A STONE IN THE DIVIDE OF CALLOWAYS & TWIN CREEK; THENCE N. 58 E. 113 PO. TO THE TOP OF THE SUGAR LOAN AT 4 ON THE PLAT; THENCE WITH THE DIVIDE OF THE RIDGE S. 33 1/4 E. 10 PO. S. 20 W. 18 PO. S. 32 1/2 E. 18 PO. S. 65 1/2 E. 26 PO. S. 55 E. 7 PO. S. 71 E. 20 PO. S. 66 E. 9 PO. TO A STONE CORNER BETWEEN BLANTON & ENDES AT 5; THENCE S. 63 1/2 E. 20 PO. S. 61 1/2 E. 6 PO. S. 16 1/2 E. 23 PO. S. 36 E. 24 PO. S. 43 1/2 E. 26 PO. S. 30 E. 17 PO. TO THE TOP OF THE GRASSEY MOUNTAIN AT 6; THENCE N. 50 E. 10 PO. N. 60 E. 13 PO. N. 63 E. 30 PO. N. 54 E. 36 PO. S. 73 E. 30 PO. S. 80 1/2 E. 20 PO. N. 67 1/2 E. 16 PO. ; THENCE DOWN THE MOUNTAIN S. 35 W. 300 PO. TO JOHN W. COOPER'S LINE; THENCE WITH HIS LINE N. 55 W. 100 PO. TO A WHITE OAK CORNER TO BALES MCINTOSH & JOHN W. COOPER AT 20; THENCE N. 5 E. 146 PO. TO A MAPLE NEAR THE FORKS OF A BRANCH, CORNER TO BUGLE MCINTOSH; THENCE N. 77 W. 23 PO. N. 81 W. 8 PO. N. 77 1/2 W. 10 PO. N. 56 W. 11 PO. S. 50 W. 11 PO. S. 72 W. 6 PO. S. 8 1/2 W. 11 PO. S. 39 W. 4 PO. S. 33 E. 3 PO. S. 41 W. 4 PO. S. 15 1/2 W. 3 PO. S. 88 E. 3 PO. S. 44 E. 3 PO. S. 84 1/2 E. 9 PO. S. 11 W. 9 PO. S. 69 W. 6 PO. S. 1 E. 3 PO. N. 81 W. 4 PO. S. 32 W. 4 PO. S. 87 W. 7 PO. N. 31 E. 3 PO. N. 73 W. 8 PO. S. 79 W. 8 PO. S. 63 W. 5 PO. N. 18 E. 2 PO. N. 50 W. 8 PO.; THENCE S. 41 W. 30 PO.; THENCE UP THE BRANCH N. 17 W. 12 PO. N. 28 W. 6 PO. SO AS TO INCLUDE THE YARD FENCE OF OLD HOME AT 27 S. 58 1/2 W. 6 PO. S. 65 1/2 W. 7 PO. S. 50 W. 10 PO. S. 55 W. 11 PO. S. 23 W. 7 PO. S. 21 W. 15 PO. OPPOSITE FRANK MCINTOSH HICKORY CORNER SO AS TO INCLUDE PASSWAY AT 28; THENCE N. 65 W. 122 PO. TO A CHESTNUT SAPLING; THENCE WITH THE EDGE OF THE FENCE 20 W. N. 81 W. 7 PO. N. 68 W. 11 PO. N. 20 PO. N. 78 W. 8 PO. S. 14 1/2 W. 15 PO. TO THE ROAD, A CEDAR; AND THENCE WITH THE ROAD TO THE BEGINNING, CONTAINING 426 ACRES, MORE OR LESS. BEING THE SAME PROPERTY CONVEYED FROM TRACY WALLACE AND C. C. WALLACE, EXECUTORS OF JAMES A. WALLACE TO HOOD WISE AND MILLIE ANN WISE BY DEED DATED MAY 23, 1935, AND RECORDED IN DEED BOOK 69, PAGE 321, ESTILL COUNTY CLERK'S OFFICE.

PARCEL 3: A ROAD FIFTEEN FEET WIDE ALONG THE LINE OF L. B. MCINTOSH AND BETTIE MCINTOSH AND THROUGH THEIR FARM AS FOLLOWS, TO-WIT: BEGINNING AT IRVINE AND WINCHESTER ROAD; THENCE WITH HOOD WISE LINE EAST TO WHERE THE ROAD LEAVES HIS LINE; THENCE AS THE ROAD NOW RUNS TO HOOD WISE LINE; THENCE WITH THE SAID HOOD WISE LINE TO THE L. B. MCINTOSH AND PETTIE MCINTOSH CORNER, CONTAINING ONE HALF ACRE, MORE OR LESS. BEING THE SAME LAND CONVEYED FROM L. B. MCINTOSH AND BETTIE MCINTOSH, HIS WIFE, TO HOOD WISE AND MILLIE ANN WISE BY DEED DATED JANUARY 20, 1937, AND RECORDED IN DEED BOOK NO. 81, PAGE 187, ESTILL COUNTY CLERK'S OFFICE.

PARCEL 4: BEGINNING ON A BLACK OAK IN HOOD WISE LINE; THENCE SOUTH WITH SAID WISE LINE TO OWENS AND WISE CORNER; THENCE WITH HOOD WISE LINE NORTH TO L. B. MCINTOSH ROAD; THENCE WEST WITH SAID ROAD TO A BLACK OAK, THE BEGINNING, CONTAINING ONE HALF ACRE, MORE OR LESS. BEING THE SAME LAND CONVEYED FROM JAMES OWENS AND NELLIE OWENS TO HOOD WISE BY DEED DATED FEBRUARY 12, 1924, AND RECORDED IN DEED BOOK NO. 56, PAGE 184, ESTILL COUNTY CLERK'S OFFICE.

PARCEL 5: ON THE IRVINE & WINCHESTER ROAD AND BEING WILLIAM TUTTLE'S PART OF THE SITE OF THE OLD DRY RIDGE MEETING HOUSE, CONTAINING 1/4 ACRE, MORE OR LESS. BEING THE SAME LAND CONVEYED FROM WILLIAM TUTTLE AND CATHERINE TUTTLE, HIS WIFE, TO HOOD WISE BY DEED DATED NOVEMBER 06, 1909, AND RECORDED IN DEED BOOK 31, PAGE 495, ESTILL COUNTY CLERK'S OFFICE.

LESS AND EXCEPT THAT PORTION OF PROPERTY CONVEYED TO ESTILL COUNTY WATER DISTRICT NO. 1 FROM OTHA E. WISE AND HIS WIFE, RUTH WISE BY DEED DATED FEBRUARY 22, 1984 AND RECORDED MAY 03, 1984 IN DEED BOOK 167, PAGE 630.

AND BEING A PORTION OF THE SAME PROPERTY CONVEYED TO OTHA E. WISE FROM MILLIE ANN WISE BY DEED DATED MAY 10, 1969 AND RECORDED JULY 24, 1969 IN DEED BOOK 124, PAGE 352; AND FURTHER CONVEYED TO JIMMIE WISE FROM THE LAST WILL AND TESTAMENT OF OTHA E. (ELMER) WISE RECORDED ON JANUARY 16, 2003 IN DEED BOOK WS, PAGE 370.

TAX PARCEL NO. 053-00-00-008.00

CERTIFICATE OF ACCURACY (SURVEYOR'S CERTIFICATE)

I HEREBY CERTIFY TO: VERTICAL BRIDGE REIT, LLC A DELAWARE LIMITED LIABILITY COMPANY, ITS SUBSIDIARIES, AND THEIR RESPECTIVE SUCCESSORS AND/OR ASSIGNS; TORONTO DOMINION (TEXAS LLC, AS ADMINISTRATIVE AGENT, FOR ITSELF AND ON BEHALF OF THE LENDERS PARTIES FROM TIME TO THAT CERTAIN SECOND AMENDED AND RESTATED LOAN AGREEMENT DATED JUNE 17, 2016 WITH VERTICAL BRIDGE HOLDCO, LLC, AS BORROWER, AND VERTICAL BRIDGE HOLDCO PARENT, LLC, AS PARENT, AS MAY BE AMENDED, RESTATED, MODIFIED OR RENEWED, THEIR SUCCESSORS AND ASSIGNS AS THEIR INTERESTS MAY APPEAR; AND FIDELITY NATIONAL TITLE INSURANCE COMPANY. I, MARK E. PATTERSON, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR LICENSED IN COMPLIANCE WITH THE LAWS OF THE COMMONWEALTH OF KENTUCKY. I FURTHER CERTIFY THAT THIS PLAT AND THE SURVEY ON THE GROUND WERE PERFORMED BY PERSONS UNDER MY DIRECT SUPERVISION, AND THAT THE DIRECTIONAL AND LINEAR MEASUREMENTS BEING WITNESSED BY MONUMENTS SHOWN HEREON ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE "RURAL" SURVEY, AND THE PLAT ON WHICH IT IS BASED, MEETS ALL SPECIFICATIONS AS STATED IN KAR 201 18:150.



Signature of Mark E. Patterson, Mark E. Patterson, PLS #3136

Oct 16, 2019 DATE

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

verticalbridge 750 PARK OF COMMERCE DRIVE BOCA RATON, FLORIDA 334487 (561) 948-6367

Table with 3 columns: REV., DATE, DESCRIPTION. Row 1: A, 9.18.19, PRELIM ISSUE WITH TITLE. Row 2: 0, 9.20.19, ISSUED AS FINAL.

SITE INFORMATION: WINCHESTER KENTUCKY HIGHWAY 89 a.k.a. WINCHESTER ROAD IRVINE, KY 40336 ESTILL COUNTY TAX PARCEL NUMBER: 053-00-00-008.00 PROPERTY OWNER: JIMMIE R. WISE P.O. BOX 479 IRVINE, KY 40336 SOURCE OF TITLE: BOOK W S, PAGE 370 (DEED BOOK 124, PAGE 352)

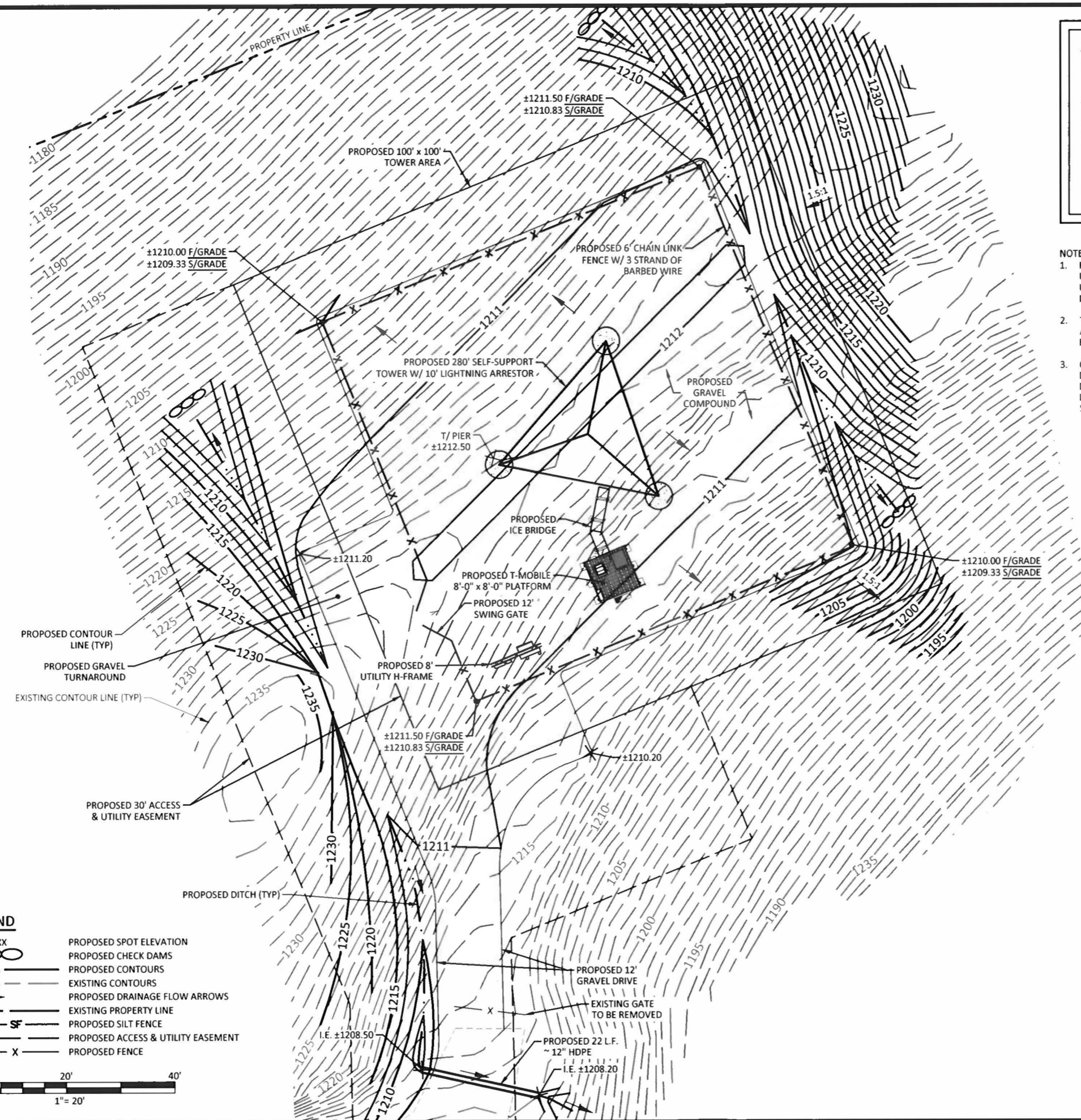
SITE NUMBER: US-KY-5051

POD NUMBER: 18-26957 DRAWN BY: JRS CHECKED BY: MEP SURVEY DATE: 12.26.18 PLAT DATE: 9.18.19

SHEET TITLE: SITE SURVEY THIS DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT PARCEL

SHEET NUMBER: (7 pages) B-1.6





**LEGEND**

- +XXX.XX PROPOSED SPOT ELEVATION
- PROPOSED CHECK DAMS
- 905 — PROPOSED CONTOURS
- - - 905 - - - EXISTING CONTOURS
- PROPOSED DRAINAGE FLOW ARROWS
- — — EXISTING PROPERTY LINE
- SF SF PROPOSED SILT FENCE
- — — PROPOSED ACCESS & UTILITY EASEMENT
- X X PROPOSED FENCE

**NOTE:**  
 CONTRACTOR REQUIRED TO PROVIDE POSITIVE DRAINAGE "OFF" LEASE AREA.

- GRADING NOTES:**
1. ALL ELEVATIONS ARE FINISHED GRADE.
  2. ENSURE POSITIVE DRAINAGE FROM SITE AT ALL TIMES.
  3. PLACE GEOTEXTILE FILTER UNDER COMPOUND.
  4. USE MIRAFI (#500X) OR EQUIVALENT. SLOPES 2:1 OR STEEPER MUST BE LINED WITH GEO FABRIC, MIRAFI 60 MIL OR EQUIVALENT, AND HEAVY RIP-RAP STONE PLACED ON TOP OF FABRIC TO STABILIZE SLOPE.
  5. ALL AGGREGATE SHALL BE COMPACTED AND PROOF ROLLED.

- NOTES:**
1. REMOVE FROM SITE/OWNERS'S PROPERTY ALL WASTE MATERIALS UNUSED EXCAVATED MATERIAL INCLUDING MATERIAL CLASSIFIED UNSATISFACTORY, CONTAMINATED OR DANGEROUS TRASH AND DEBRIS AND DISPOSE OF IN A LEGAL MANNER.
  2. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY ACCESS DRIVE OR FENCED COMPOUND, SHALL BE GRADED TO A UNIFORM SLOPE, FERTILIZED AND SEED.
  3. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL AND IBC 2009 STANDARD GUIDELINES FOR EROSION AND SEDIMENT CONTROL.



1-800-752-6007  
 PER KENTUCKY STATE LAW, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

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

PREPARED FOR:

PREPARED FOR:

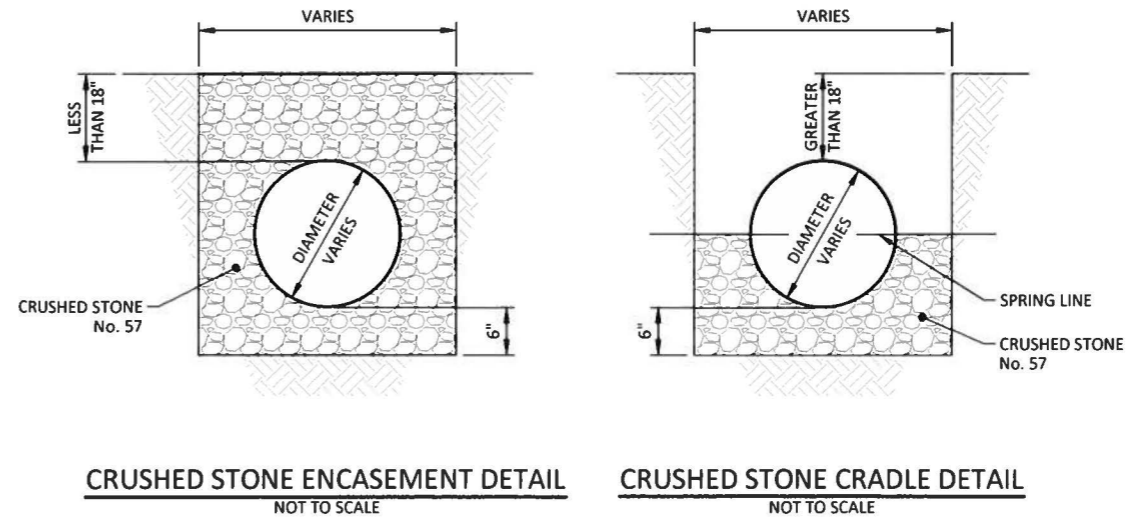
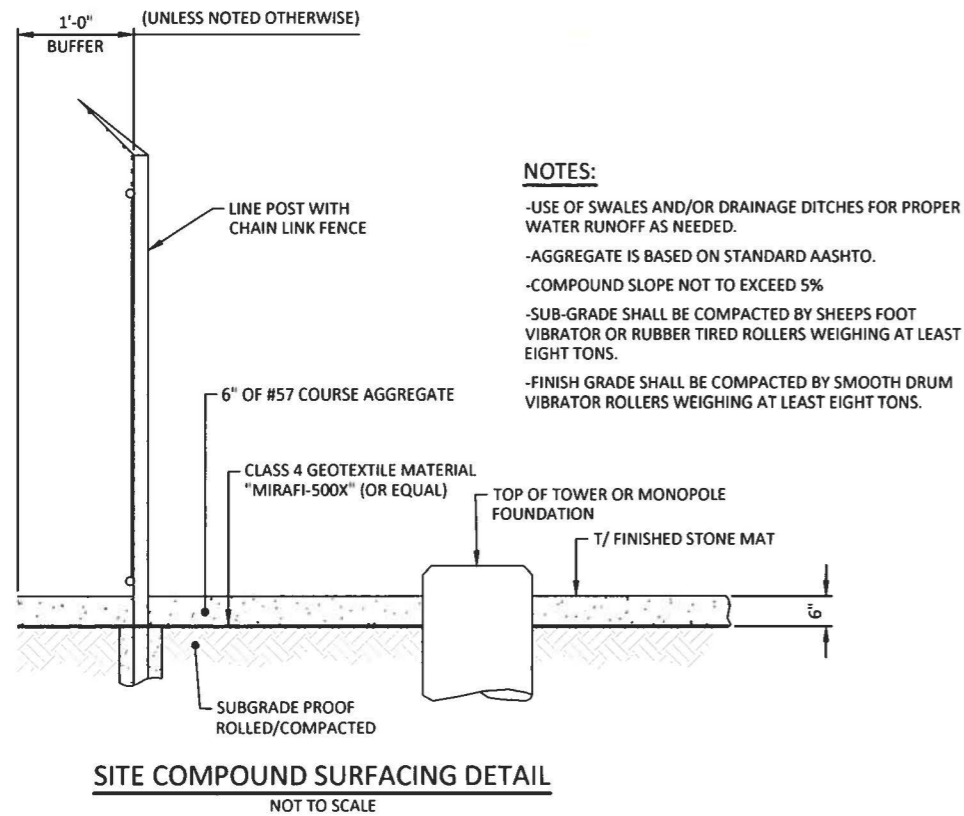
EN PERMIT: 3594

**CONSTRUCTION DRAWINGS**

REV	DATE	DESCRIPTION
A	10.10.19	ISSUED FOR REVIEW
0	10.16.19	ISSUED AS FINAL

**SITE INFORMATION:**  
**WINCHESTER**  
 KY-89  
 A.K.A. WINCHESTER ROAD  
 IRVINE, KY 40336  
 ESTILL COUNTY  
 SITE NUMBER:  
 US-KY-5051  
 T-MOBILE SITE NUMBER:  
 9LV3232C  
 POD NUMBER: 18-26959  
 DRAWN BY: JER  
 CHECKED BY: MEP  
 DATE: 10.8.19

SHEET TITLE:  
**SITE GRADING PLAN**  
 SHEET NUMBER:  
**GD-1**

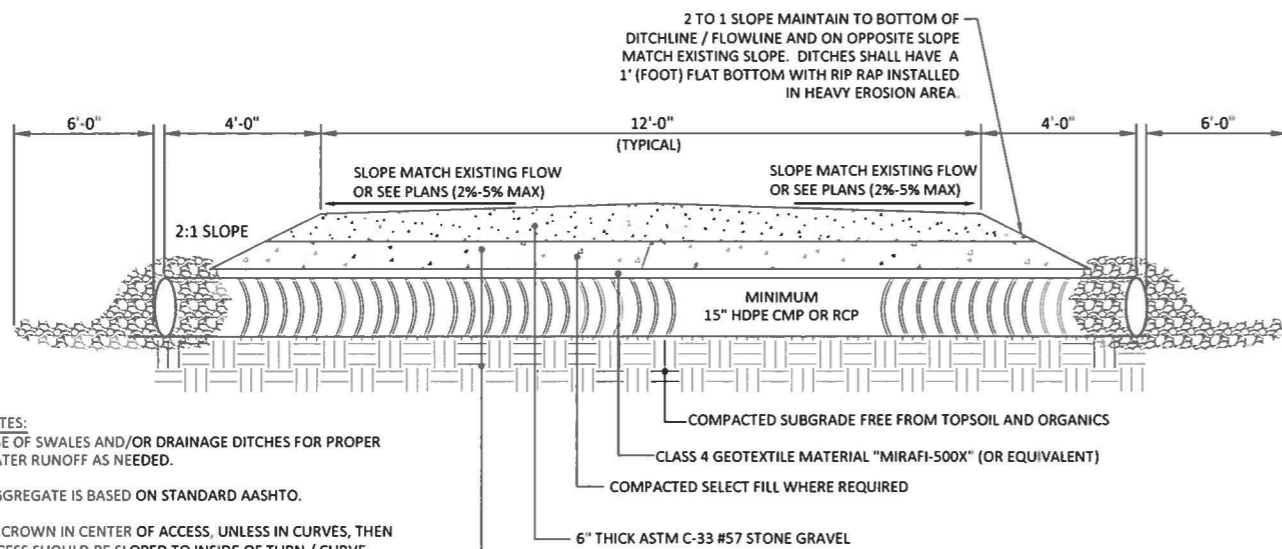


NOTE: ENCASEMENT USED WITH 18" OF COVER OR LESS.

NOTE: CRADLE USED WITH MORE THAN 18" OF COVER.

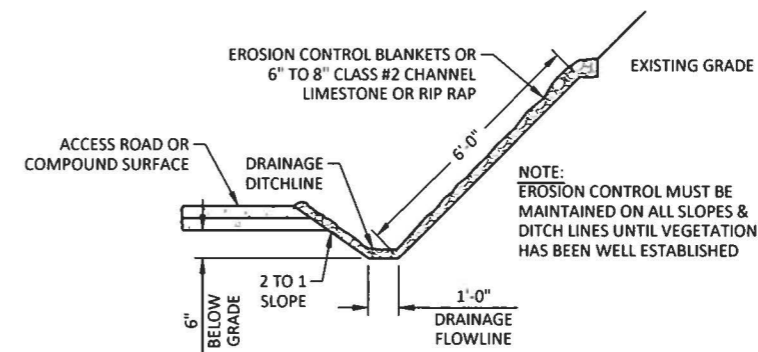
**CULVERT NOTES**

1. INSTALL CULVERTS WITH THE INLETS AT OR BELOW NATURAL GRADE.
2. OUTLET THE CULVERTS AT OR BEYOND THE TOE OF THE SLOPE. EROSION PROTECTION, SUCH AS RIP-RAP IS OFTEN NECESSARY AT THE OUTLET OF CULVERTS. NEVER OUTLET A CULVERT INTO FILL MATERIAL WITHOUT PROTECTIVE MEASURES.



- NOTES:**
- USE OF SWALES AND/OR DRAINAGE DITCHES FOR PROPER WATER RUNOFF AS NEEDED.
  - AGGREGATE IS BASED ON STANDARD AASHTO.
  - 2" CROWN IN CENTER OF ACCESS, UNLESS IN CURVES, THEN ACCESS SHOULD BE SLOPED TO INSIDE OF TURN / CURVE
  - PIPE SHALL BE AT A MINIMUM OF 4' LONGER THEN ACCESS ROAD WIDTH ON EACH SIDE FOR PROPER SHOULDERING.
  - ALL CROSSDRAINS SHALL BE INSTALLED ON A 45° ANGLE WITH THE FALL OF THE GRADE.
  - SUB-GRADE SHALL BE COMPACTED BY SHEEPS FOOT VIBRATOR OR RUBBER TIRED ROLLERS WEIGHING AT LEAST EIGHT TONS.
  - FINISH GRADE SHALL BE COMPACTED BY SMOOTH DRUM VIBRATOR ROLLERS WEIGHING AT LEAST EIGHT TONS.

**GRAVEL ACCESS ROAD SECTION**  
NOT TO SCALE



**NOTES:**

1. WHEN FACED WITH SLOPES LESS THAN 2 TO 1 SLOPES, ALL SLOPES SHOULD BE DOZER TRACKED PRIOR TO SEEDING. ALL SLOPES SHOULD HAVE EROSION CONTROL BLANKETS OR RIP RAP EMBEDDED ON SLOPES SURFACES TO REDUCE EROSION.
2. ALL FLOWLINES MUST BE INSTALLED BELOW SUB-GRADE OF COMPOUND. (AT MINIMUM OF 6" BELOW)

**DRAINAGE DITCHLINE DETAIL (SWALE)**  
NOT TO SCALE

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

PREPARED FOR:

PREPARED FOR:

EN PERMIT: 3594

**CONSTRUCTION DRAWINGS**

REV	DATE	DESCRIPTION
A	10.10.19	ISSUED FOR REVIEW
0	10.16.19	ISSUED AS FINAL

**SITE INFORMATION:**  
**WINCHESTER**  
 KY-89  
 A.K.A. WINCHESTER ROAD  
 IRVINE, KY 40336  
 ESTILL COUNTY

**SITE NUMBER:**  
 US-KY-5051

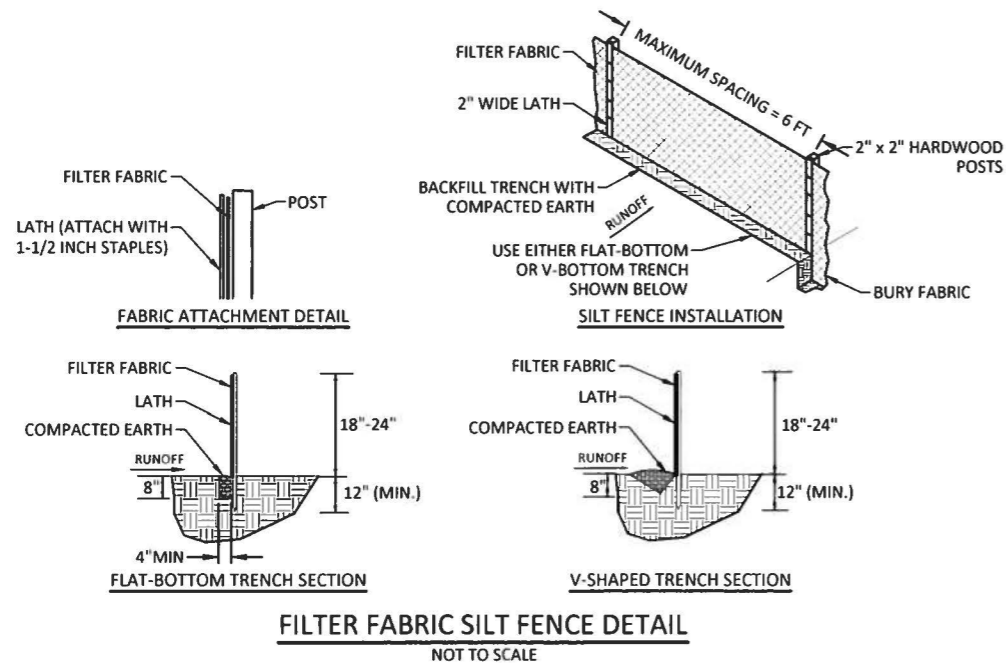
**T-MOBILE SITE NUMBER:**  
 9LV3232C

**POD NUMBER:** 18-26959  
**DRAWN BY:** JER  
**CHECKED BY:** MEP  
**DATE:** 10.8.19

**SHEET TITLE:**

**SURFACE & DRAINAGE DETAILS**

**SHEET NUMBER:**  
**GD-2**



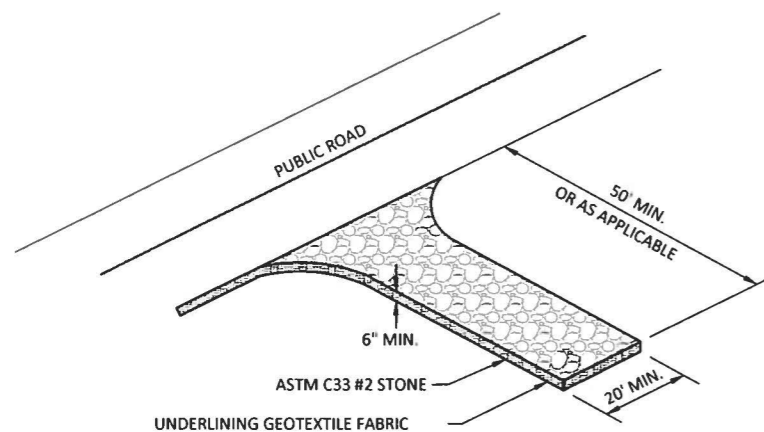
**NOTES:**

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. (9" MAX. RECOMMENDED STORAGE HEIGHT).
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

**EROSION MAINTENANCE AND CLEAN-OUT**

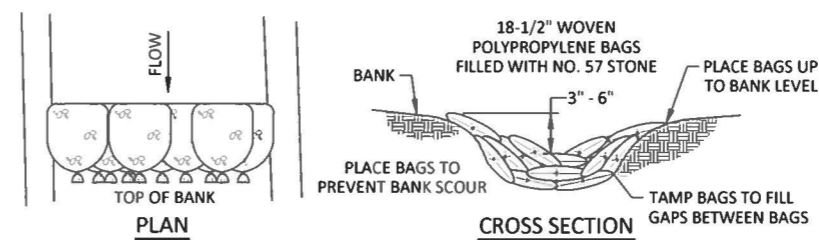
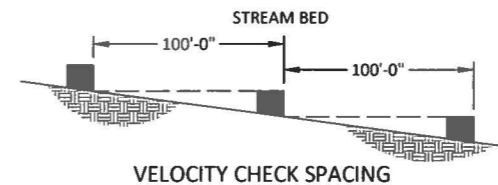
MAINTENANCE AND CLEAN-OUT SHALL BE PERFORMED BY THE SITE CONTRACTOR UNDER THE FOLLOWING GUIDELINES:

1. ROUTINE CHECKS OF THE EROSION CONTROL DEVICES SHALL BE PERFORMED AT A MINIMUM OF 7 DAYS OR AFTER EVERY ONE INCH OF RAINFALL.
2. ANY FAILURES OF EROSION CONTROL DEVICES SHOULD IMMEDIATELY BE ADDRESSED AND THE APPROPRIATE STEPS TAKEN TO REPAIR THE FAILURE.
3. THE CONTRACTOR SHALL MAINTAIN AN ACCURATE LOG OF THE EROSION SITE CONDITIONS.
4. THE CONTRACTOR IS TO REMOVE ANY DIRT OR MUD ON THE PUBLIC STREETS.
5. SILT FENCING SHALL REMAIN IN PLACE DURING ALL CONSTRUCTION ACTIVITIES AND MUST BE CLEANED OUT IF MORE THAN 1/3 FULL.
6. REMOVE THE FENCE AFTER ITS CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED. REMOVE THE FENCE AND SEDIMENT DEPOSITS, BRING THE DISTURBED AREA TO GRADE, AND STABILIZE IT USING THE APPROPRIATE PERMANENT STABILIZATION METHOD.



INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHEN NEEDED TO PROVIDE POSITIVE DRAINAGE.

DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN OR OTHER SEDIMENT TRAPPING STRUCTURE.



\*NOTE:  
STRAW BALES MAY BE USED IN LIEU OF STONE BAGS AS APPROVED BY CITY ENGINEER

**EROSION PREVENTION & SEDIMENT CONTROL NOTES**

TO PREVENT EROSION, ALL SILT CONTROLS SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL BE ADEQUATE FOR THE SITE. ANY MODIFICATIONS TO SILT CONTROLS SHOWN ON THE APPROVED PLANS AS A RESULT OF ACTUAL FIELD CONDITIONS OR CONSTRUCTION PRACTICES SHALL BE INSTALLED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES PER THE EPA'S "STORM WATER MANAGEMENT FOR CONSTRUCTION ACTIVITIES" MANUAL (LATEST EDITION).

ANY SUCH MODIFICATIONS SHALL BE THE RESPONSIBILITY OF THE OWNER AND SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER.

ACTIONS MUST BE TAKEN TO MINIMIZE THE TRACKING OF MUD AND SOIL FROM CONSTRUCTION AREAS ONTO PUBLIC ROADWAYS. SOIL TRACKED ONTO THE ROADWAY SHALL BE REMOVED DAILY.

SOIL STOCKPILES SHALL BE LOCATED AWAY FROM STREAMS, PONDS, SWALES AND CATCH BASINS. STOCKPILES SHALL BE SEEDED, MULCHED AND ADEQUATELY CONTAINED THROUGH THE USE OF SILT FENCE.

WHERE CONSTRUCTION OR LAND DISTURBANCE ACTIVITY WILL OR HAS TEMPORARILY CEASED ON ANY PORTION OF A SITE, TEMPORARY SITE STABILIZATION MEASURES SHALL BE REQUIRED AS SOON AS PRACTICABLE, BUT NO LATER THAN 14 DAYS AFTER THE ACTIVITY HAS CEASED.

SEDIMENT-LADEN GROUNDWATER ENCOUNTERED DURING TRENCHING, BORING OR OTHER ACTIVITIES SHALL BE PUMPED TO A SEDIMENT TRAPPING DEVICE PRIOR TO BEING DISCHARGED INTO A STREAM, POND, SWALE OR CATCH BASIN.

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

PREPARED FOR:

PREPARED FOR:

STATE OF KENTUCKY  
  
 MARK E. MARTENS  
 16,300  
 LICENSED PROFESSIONAL ENGINEER  
 EN PERMIT: 3594

**CONSTRUCTION DRAWINGS**

REV	DATE	DESCRIPTION
A	10.10.19	ISSUED FOR REVIEW
0	10.16.19	ISSUED AS FINAL

SITE INFORMATION:  
**WINCHESTER**  
 KY-89  
 A.K.A. WINCHESTER ROAD  
 IRVINE, KY 40336  
 ESTILL COUNTY  
 SITE NUMBER:  
 US-KY-5051  
 T-MOBILE SITE NUMBER:  
 9LV3232C  
 POD NUMBER: 18-26959  
 DRAWN BY: JER  
 CHECKED BY: MEP  
 DATE: 10.8.19

SHEET TITLE:  
**EROSION CONTROL DETAILS**

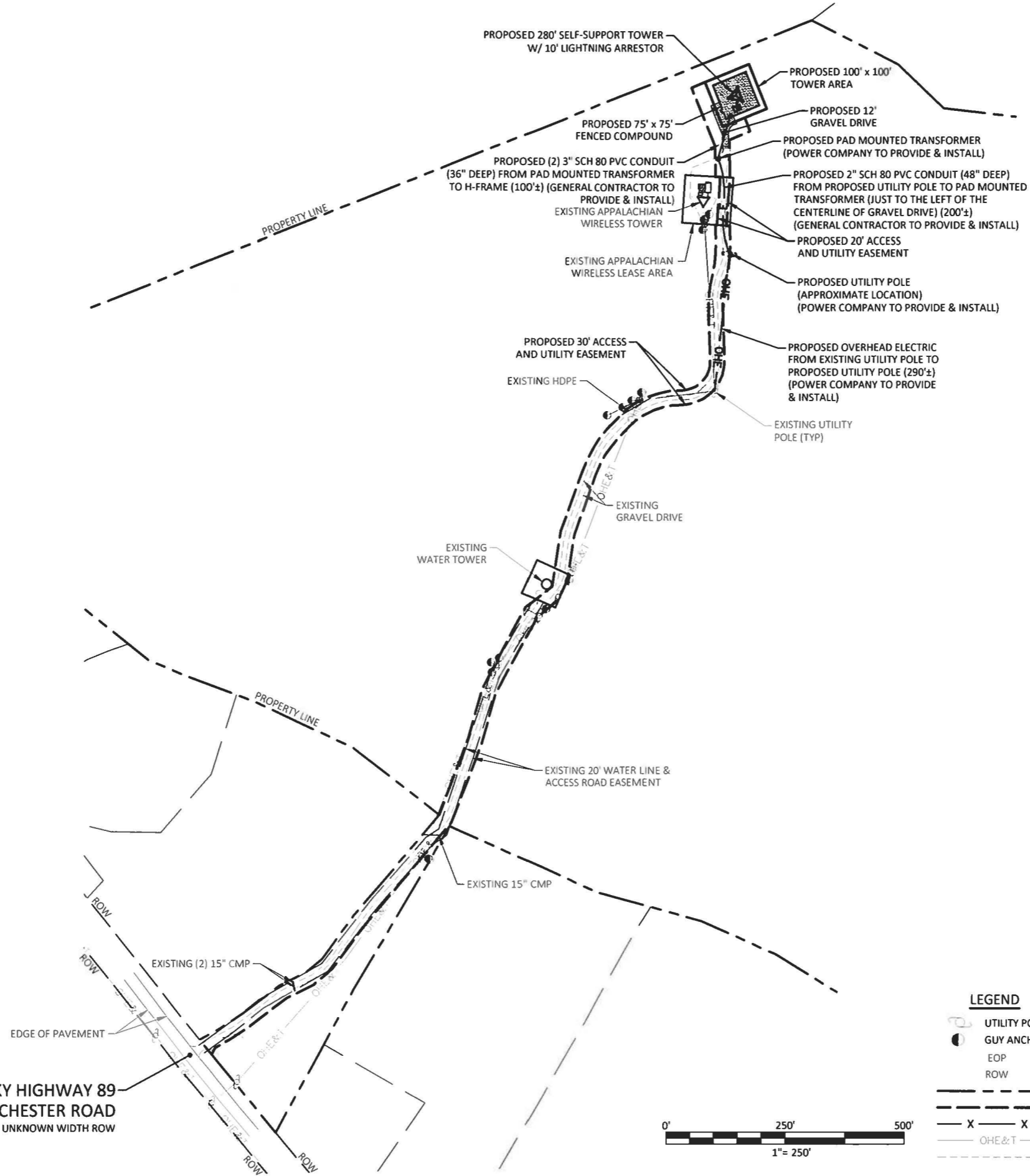
SHEET NUMBER:  
**GD-3**





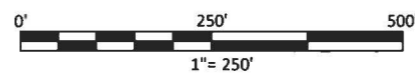
1-800-752-6007  
Call Monday thru Friday - 7 am to 6 pm

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



**LEGEND**

	UTILITY POLE		EDGE OF PAVEMENT
	GUY ANCHOR		RIGHT OF WAY
	EOP		EXISTING PROPERTY LINE
	ROW		PROPOSED ACCESS & UTILITY EASEMENT
	PROPOSED FENCE LINE		EXISTING OVERHEAD ELECTRIC AND TELEPHONE
	OHE&T		EXISTING GRAVEL



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

PREPARED FOR:  
**verticalbridge**

PREPARED FOR:  
**T-Mobile**



EN PERMIT: 3594

**CONSTRUCTION DRAWINGS**

REV	DATE	DESCRIPTION
A	10.10.19	ISSUED FOR REVIEW
0	10.16.19	ISSUED AS FINAL

SITE INFORMATION:  
**WINCHESTER**  
KY-89  
A.K.A. WINCHESTER ROAD  
IRVINE, KY 40336  
ESTILL COUNTY

SITE NUMBER:  
US-KY-5051

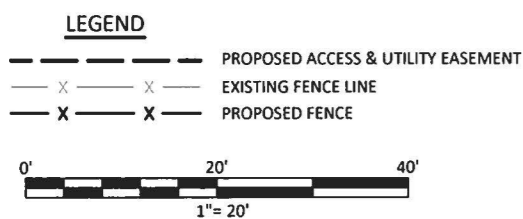
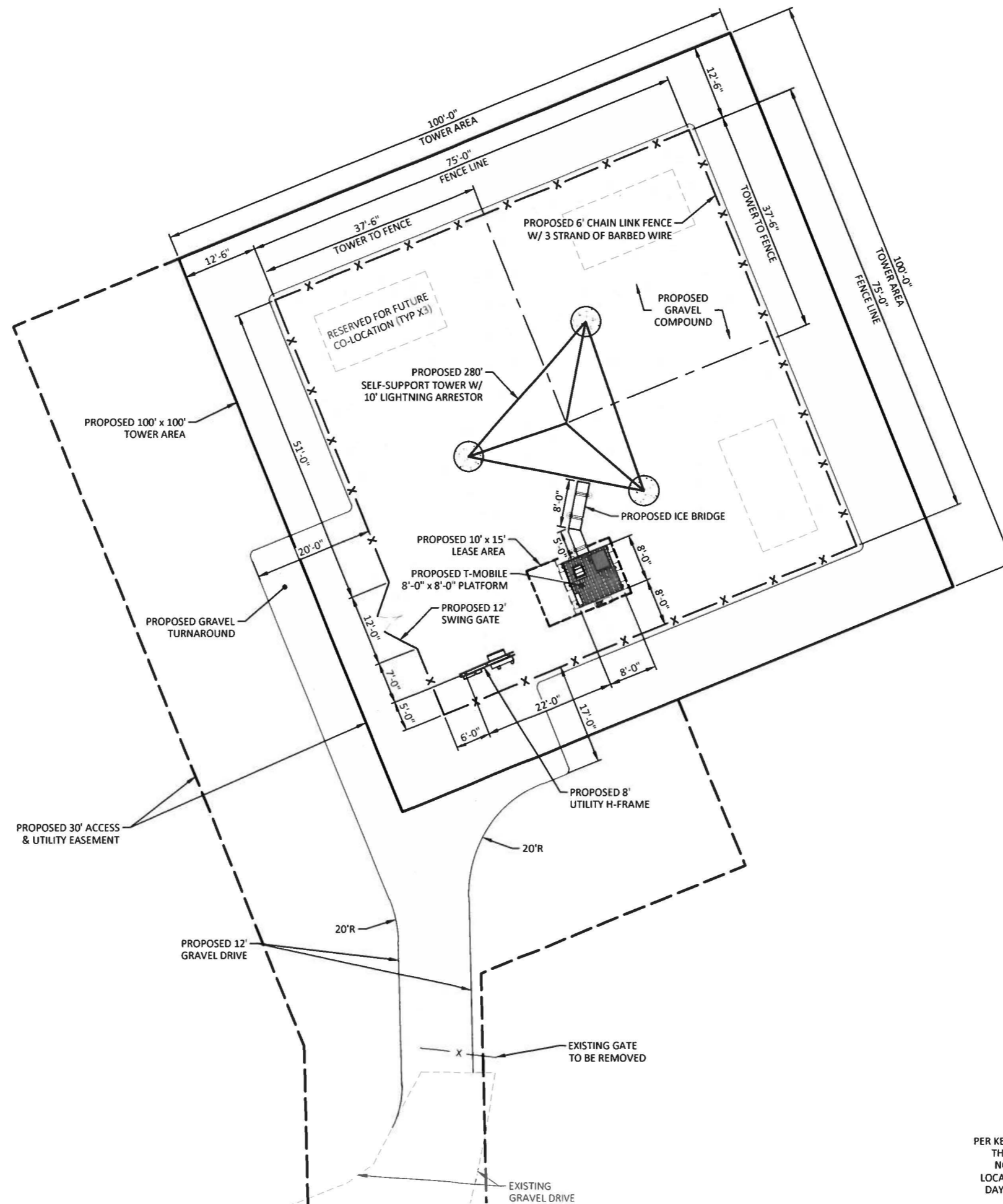
T-MOBILE SITE NUMBER:  
9LV3232C

POD NUMBER: 18-26959  
DRAWN BY: JER  
CHECKED BY: MEP  
DATE: 10.8.19

SHEET TITLE:

**OVERALL SITE LAYOUT**

SHEET NUMBER:  
**C-1**



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

PREPARED FOR:

PREPARED FOR:



EN PERMIT: 3594

**CONSTRUCTION DRAWINGS**

REV	DATE	DESCRIPTION
A	10.10.19	ISSUED FOR REVIEW
0	10.16.19	ISSUED AS FINAL

SITE INFORMATION:  
**WINCHESTER**  
 KY-89  
 A.K.A. WINCHESTER ROAD  
 IRVINE, KY 40336  
 ESTILL COUNTY

SITE NUMBER:  
 US-KY-5051

T-MOBILE SITE NUMBER:  
 9LV3232C

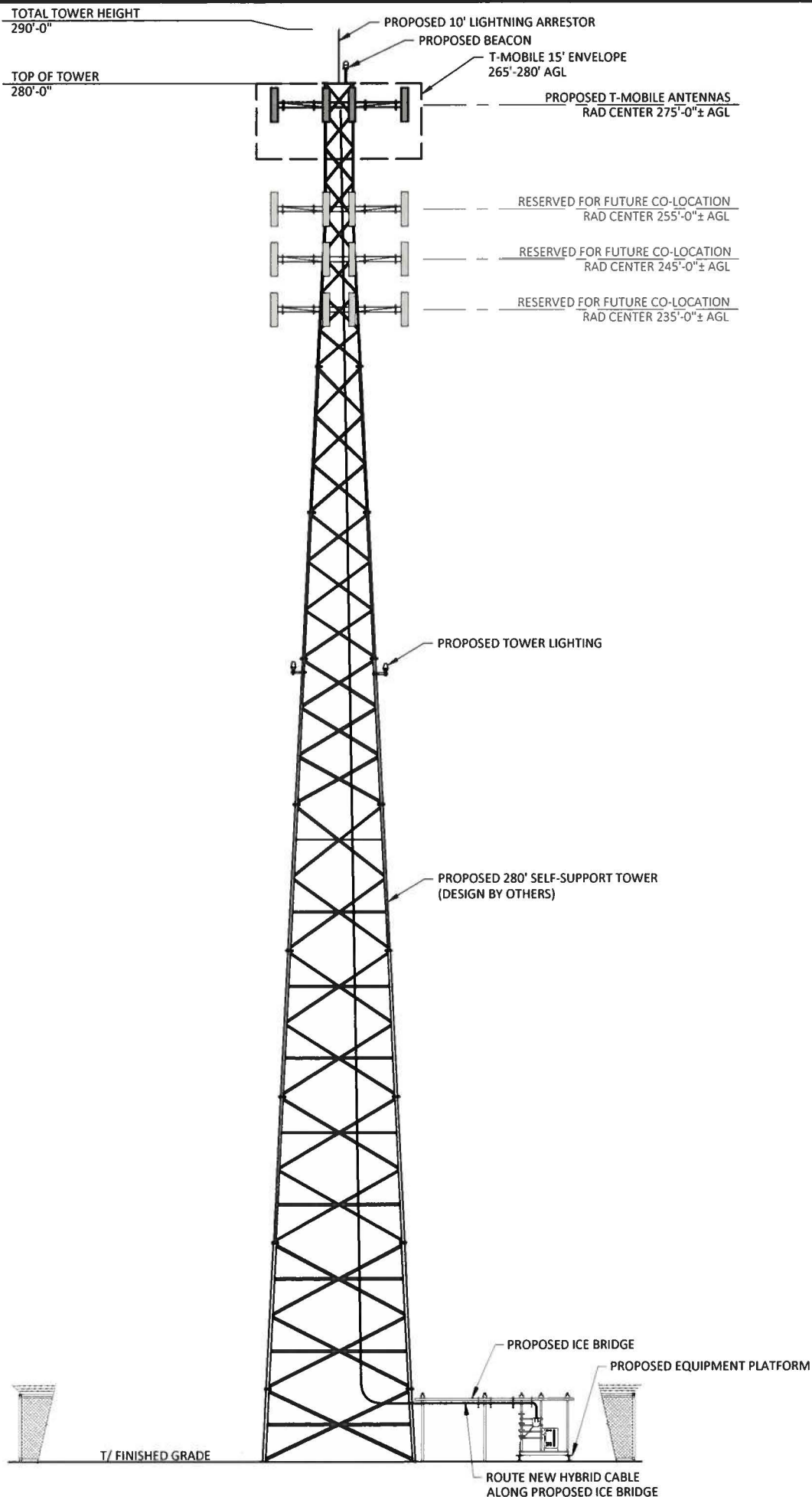
POD NUMBER: 18-26959  
 DRAWN BY: JER  
 CHECKED BY: MEP  
 DATE: 10.8.19

SHEET TITLE:  
**ENLARGED COMPOUND LAYOUT**

SHEET NUMBER:  
**C-2**

Know what's below.  
 Call before you dig.  
 Call Monday thru Friday 7am to 6pm  
**1-800-752-6007**  
 PER KENTUCKY STATE LAW, IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

## Exhibit C

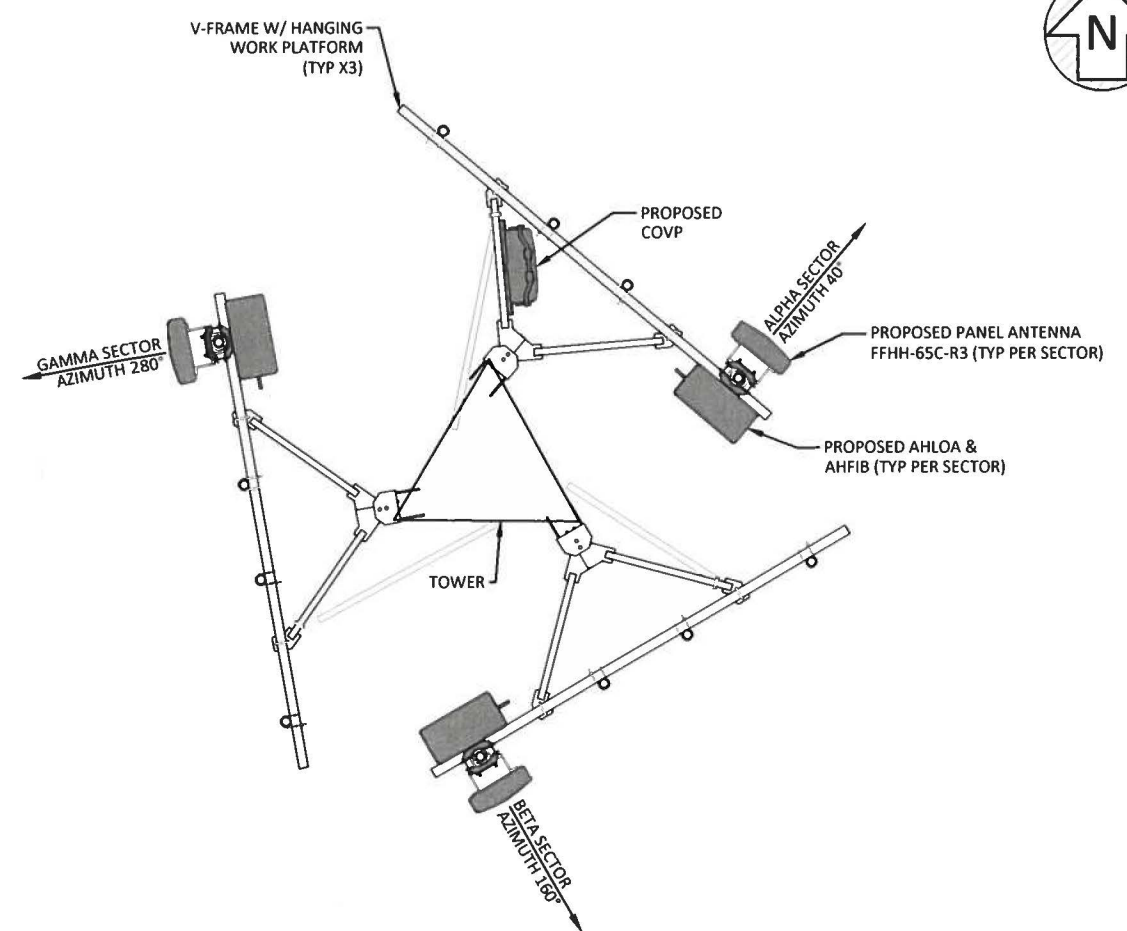


**TOWER NOTES:**

1. THE PROPOSED TOWER, FOUNDATION, ANTENNA MOUNTS, AND ANTENNAS WERE DESIGNED BY OTHERS.
2. THE TOWER ELEVATION SHOWN IS FOR REFERENCE ONLY.
3. CONTRACTOR TO FIELD VERIFY ANTENNA MOUNT CONFIGURATION WITH T-MOBILE. ALL ANTENNAS AND MOUNTING HARDWARE SHALL CONFORM TO DESIGN REQUIREMENTS PER INTERNATIONAL BUILDING CODE (LATEST EDITION) AND EIA/TIA-222-G STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES, BASIC WIND SPEED AS LISTED IN TOWER DRAWINGS.
4. SEE TOWER MANUFACTURER'S DRAWINGS FOR TOWER AND FOUNDATION DETAILS & SPECIFICATIONS.
5. MANUFACTURER'S DRAWINGS SUPERCEDE A&E DRAWINGS.
6. SEE RFDS AND PLUMBING DIAGRAMS PROVIDED BY T-MOBILE FOR ANTENNA, CABLING, AND EQUIPMENT INFORMATION.

**GENERAL NOTES:**

1. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE IN PERFORMANCE OF WORK SIMILAR TO THAT DESCRIBED HEREIN. BY ACCEPTANCE OF THIS ASSIGNMENT: THE CONTRACTOR IS ATTESTING THAT HE DOES HAVE SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND PROPERLY REGISTERED TO DO THIS WORK IN THE STATE AND/OR COUNTY IN WHICH IT IS TO BE PERFORMED.
2. ALL MATERIALS AND EQUIPMENT FURNISHED SHALL BE NEW AND OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY AND ALL SUBSTITUTIONS MUST BE PROPERLY APPROVED AND AUTHORIZED IN WRITING BY THE OWNER AND ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND AND QUALITY OF THE MATERIALS AND EQUIPMENT BEING SUBSTITUTED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT THIS PROJECT AND RELATED WORK COMPLIES WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS GOVERNING THIS WORK.
4. ALL DIMENSIONS SHALL BE VERIFIED WITH THE PLANS (LATEST REVISION) PRIOR TO COMMENCING CONSTRUCTION. NOTIFY THE OWNER IMMEDIATELY IF DISCREPANCIES ARE DISCOVERED.
5. ALL MATERIALS AND WORKMANSHIP SHALL BE WARRANTED FOR ONE (1) YEAR FROM THE DATE OF ACCEPTANCE.



**PROPOSED ANTENNA LAYOUT**  
NOT TO SCALE

**NOTE:**  
ANTENNA ORIENTATION PER T-MOBILE RF DATA SHEETS



PREPARED BY:

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

PREPARED FOR:

PREPARED FOR:

STATE OF KENTUCKY  
MARK E. PATTERSON  
16,300  
PROFESSIONAL ENGINEER  
16, 2019

EN PERMIT: 3594

**CONSTRUCTION DRAWINGS**

REV	DATE	DESCRIPTION
A	10.10.19	ISSUED FOR REVIEW
0	10.16.19	ISSUED AS FINAL

**SITE INFORMATION:**  
**WINCHESTER**  
KY-89  
A.K.A. WINCHESTER ROAD  
IRVINE, KY 40336  
ESTILL COUNTY

SITE NUMBER:  
US-KY-5051

T-MOBILE SITE NUMBER:  
9LV3232C

POD NUMBER: 18-26959

DRAWN BY: JER

CHECKED BY: MEP

DATE: 10.8.19

**SHEET TITLE:**  
**TOWER ELEVATION & ANTENNA LAYOUT**

SHEET NUMBER:  
**C-3**

## Exhibit D



October 2, 2019

RE: **Case No.: 2019-00359**  
Proposed Wireless Communications Facility  
37° 46' 56.75" N, 84° 00' 01.12" W  
Estill County, KY  
**US-KY-5051 Winchester**

Dear Commissioners:

The Project / Construction Manager for the proposed Wireless Communications Facility will be **Andy Smith**. His contact information is:

**Andy Smith**  
**Construction Manager**  
**Vertical Bridge Development, LLC**  
**M: 843-412-9109**  
**[ASmith@verticalbridge.com](mailto:ASmith@verticalbridge.com)**

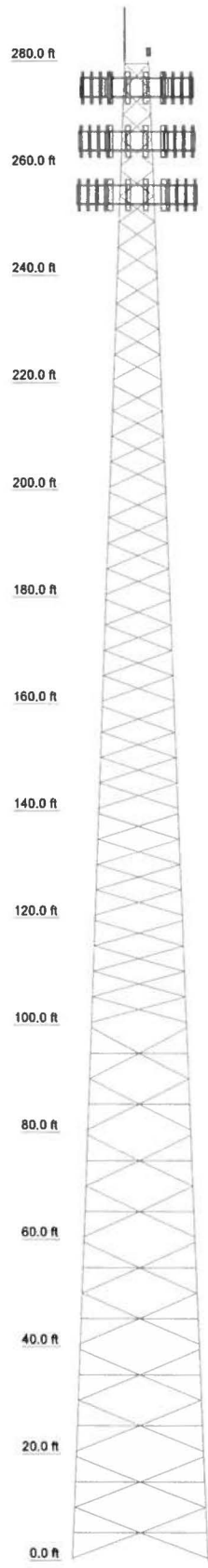
Mr. Smith has been in the industry completing civil construction and tower construction management for NSB projects (New Site Build) since 2004. Mr. Smith has been employed with Vertical Bridge Development since 2015.

Thank you,

*Andy Smith*

Andy Smith, Construction Manager – TN/KY Market  
Vertical Bridge Development, LLC

Section	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14
Legs	SR 1 3/4	SR 2 1/4	SR 2 1/2	SR 2 3/4	SR 3	SR 3 1/4	SR 3 1/2	SR 3 1/4	SR 3 1/2	SR 3 3/4	SR 3 3/4	SR 4	SR 4 1/4	
Leg Grade	L1 3/4x1 3/4x3/16													
Diagonals				L2x2x3/16	L2 1/2x2 1/2x3/16	L3x3x3/16	L3x3x1/4			2L2 1/2x2 1/2x3/16x3/8			2L3x3x3/16x3/8	
Diagonal Grade														
Top Girts	A													
Horizontals					N.A.					B			2L2x2x3/16x3/8	
Inner Bracing					N.A.							L1 3/4x1 3/4x3/16		
Face Width (ft)	4.5	6	7.5	9	10.5	12	13.5	15	16.5	18	19.5	21	22.5	24
# Panels @ (ft)								56 @ 4.75						
Weight (K)	0.9	1.2	1.6	1.6	2.3	2.4	3.0	3.4	4.1	4.4	4.6	5.1	5.6	6.3



**DESIGNED APPURTENANCE LOADING**

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod 1"x10'	280	Sector2(CaAa=10000 Sq.in)No Ice (Carrier 2)	265
Top Beacon	280	Sector3(CaAa=10000 Sq.in)No Ice (Carrier 2)	265
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 1)	275	Sector1(CaAa=10000 Sq.in)No Ice (Carrier 3)	255
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 1)	275	Sector2(CaAa=10000 Sq.in)No Ice (Carrier 3)	255
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 1)	275	Sector3(CaAa=10000 Sq.in)No Ice (Carrier 3)	255
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 2)	265	Sector3(CaAa=10000 Sq.in)No Ice (Carrier 3)	255

**SYMBOL LIST**

MARK	SIZE	MARK	SIZE
A	L1 3/4x1 3/4x3/16	B	2L1 3/4x1 3/4x3/16x3/8

**MATERIAL STRENGTH**

GRADE	Fy	Fu	GRADE	Fy	Fu
A529-50	50 ksi	65 ksi	A36M-50	50 ksi	65 ksi

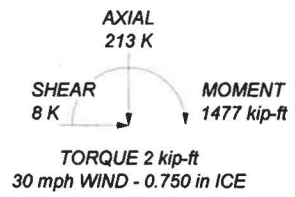
**TOWER DESIGN NOTES**

1. Tower is located in Estill County, Kentucky.
2. Tower designed for Exposure C to the TIA-222-G Standard.
3. Tower designed for a 81 mph basic wind in accordance with the TIA-222-G Standard.
4. Tower is also designed for a 30 mph basic wind with 0.75 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Structure Class II.
7. Topographic Category 1 with Crest Height of 0.000 ft
8. Please see feedline plan for proper feedline placement. Deviation from plan may reduce tower capacity.
9. Tower is also designed for an ultimate windspeed of 105 mph per ASCE 7-16.

ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:  
DOWN: 457 K  
SHEAR: 34 K

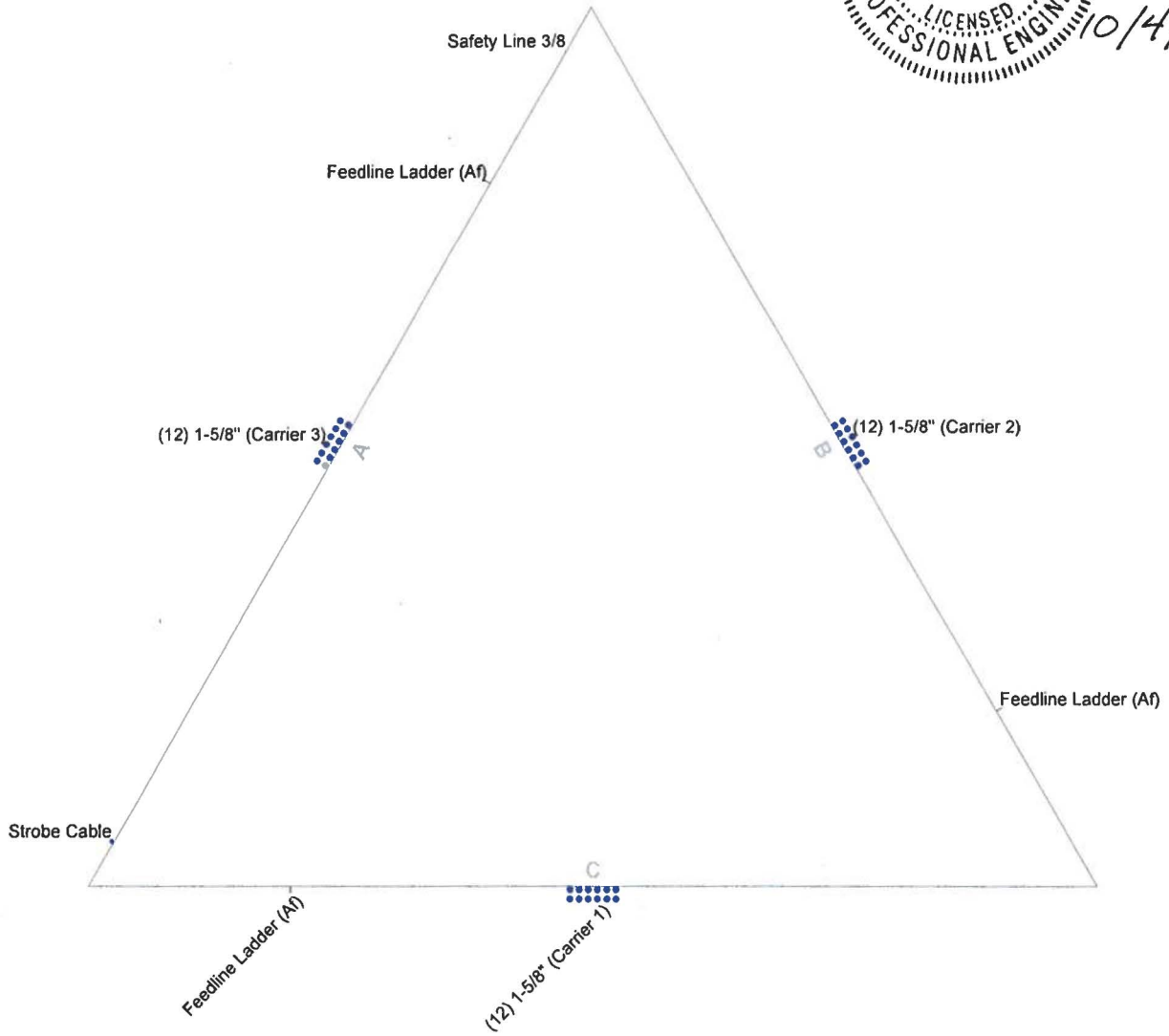
UPLIFT: -384 K  
SHEAR: 30 K



<p><b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265</p>	<p>Job: <b>EII # 8032 - Winchester (Site# US-KY-505)</b></p>
	<p>Project: <b>280' SST - Estill County, KY</b></p>
	<p>Client: <b>Vertical Bridge</b>      Drawn by: <b>T. Cheriyan</b>      App'd:</p>
	<p>Code: <b>TIA-222-G</b>      Date: <b>10/04/19</b>      Scale: <b>1/4" = 1'-0"</b></p>
	<p>Path:      Dwg No.</p>

# Feed Line Plan

Round      Flat      App In Face      App Out Face

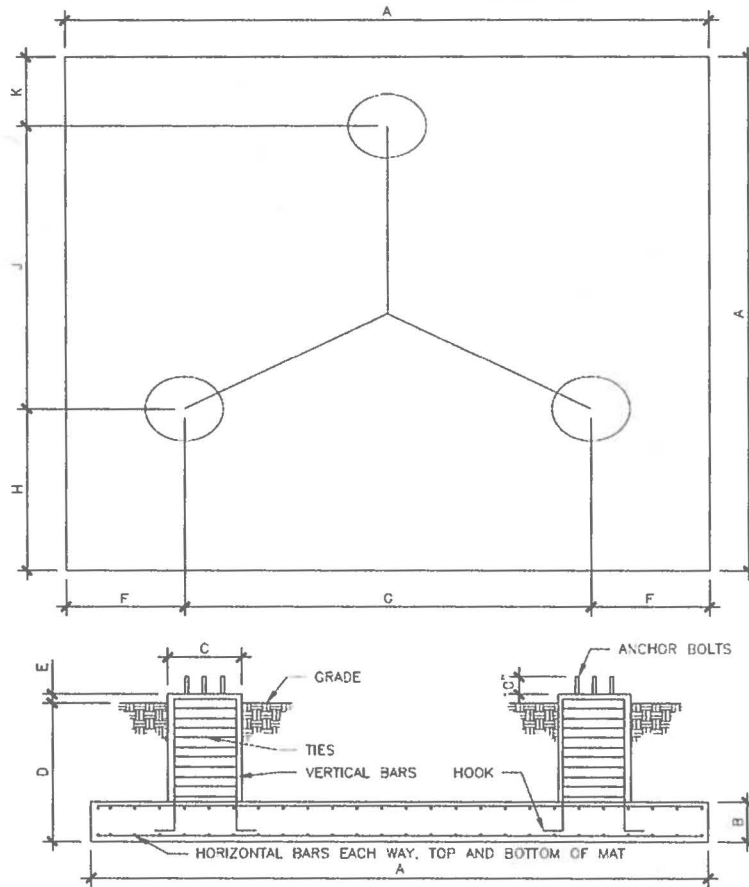


STATE OF KENTUCKY  
 BRAD R. MILANOWSKI  
 25311  
 LICENSED PROFESSIONAL ENGINEER  
 10/4/19

 <b>B+T GRP</b>	<b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	Job: <b>EII # 8032 - Winchester (Site# US-KY-5051)</b> Project: <b>280' SST - Estill County, KY</b> Client: Vertical Bridge Code: TIA-222-G Path:	Drawn by: T. Cheriyan Date: 10/04/19	App'd Scale: N Dwg No. E
--------------------	---------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------	--------------------------------



# COMBINED FOOTING DESIGN



A (ft)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	J (in)	K (in)
36	24	42	78	6	63	306	127 11/16	265	39 5/16
<b>Rebar Schedule</b>									
<b>Each Pier (3 req'd)</b>		Use (11) #8 vertical bars w/ 16" hook w/ #4 ties @ 6" c/c.							
<b>Pad</b>		Use (35) #8 bars equally spaced, each way, top and bottom of mat. (140 bars total)							

**General Notes:**

1. Concrete shall be placed in accordance with ACI 318-14 Latest Revision.
2. Concrete shall have a minimum 28 day compressive strength of 4,000 PSI, in accordance with ACI 318-14.
3. Rebar to conform to ASTM specification A615 grade 60, except ties may be grade 40.
4. All rebar to have a minimum of 4" clear cover.
5. Bottom and front surfaces shall rest on undisturbed soil.
6. Backfill shall be compacted to 95% of maximum proctor density.
7. Contractor shall be responsible to review and follow all recommendations of the geotechnical report.
8. Concrete mixtures shall meet the durability requirements of Chapter 19 of the ACI 318-14.
9. Total estimated concrete volume: 101.35 cubic yards.

**Supplemental Notes:**

Soil values obtained from EGSci Consulting Inc., Project No. 19-US-KY-5051, Dated: October 22, 2019

Anchor bolts provided by others

<p><b>B+T GRP</b></p>	B+T Group 1717 S. Boulder, Suite 300 Tulsa, OK 74159 (918) 587-4630	Date: 10/28/2019 Site: 8032 - Winchester Project: 280' - Self-Supporter Job: 139036.002	Scale: NTS Drawn By: TTC	<p><b>Eastpointe Industries</b></p>	Eastpointe Industries 4020 Tull Ave. Muskogee, Ok 74403 (918) 683-2169	

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 1 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

## Tower Input Data

The main tower is a 3x free standing tower with an overall height of 280.000 ft above the ground line.

The base of the tower is set at an elevation of 0.000 ft above the ground line.

The face width of the tower is 4.500 ft at the top and 25.500 ft at the base.

This tower is designed using the TIA-222-G standard.

The following design criteria apply:

Tower is located in Estill County, Kentucky.

Basic wind speed of 81 mph.

Structure Class II.

Exposure Category C.

Topographic Category 1.

Crest Height 0.000 ft.

Nominal ice thickness of 0.750 in.

Ice thickness is considered to increase with height.

Ice density of 56.000 pcf.

A wind speed of 30 mph is used in combination with ice.

Temperature drop of 50.000 °F.

Deflections calculated using a wind speed of 60 mph.

Please see feedline plan for proper feedline placement. Deviation from plan may reduce tower capacity..

Tower is also designed for an ultimate windspeed of 105 mph per ASCE 7-16..

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

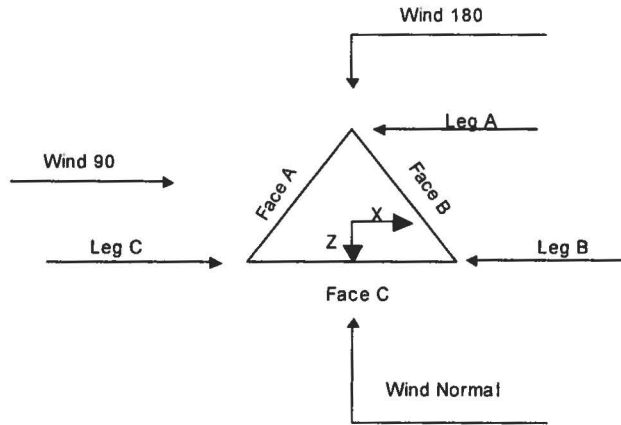
Stress ratio used in tower member design is 1.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

## Options

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>Consider Moments - Legs</li> <li>Consider Moments - Horizontals</li> <li>Consider Moments - Diagonals</li> <li>Use Moment Magnification</li> <li>√ Use Code Stress Ratios</li> <li>√ Use Code Safety Factors - Guys</li> <li>Escalate Ice</li> <li>Always Use Max Kz</li> <li>Use Special Wind Profile</li> <li>√ Include Bolts In Member Capacity</li> <li>√ Leg Bolts Are At Top Of Section</li> <li>√ Secondary Horizontal Braces Leg</li> <li>Use Diamond Inner Bracing (4 Sided)</li> <li>SR Members Have Cut Ends</li> <li>SR Members Are Concentric</li> </ul> | <ul style="list-style-type: none"> <li>Distribute Leg Loads As Uniform</li> <li>Assume Legs Pinned</li> <li>√ Assume Rigid Index Plate</li> <li>√ Use Clear Spans For Wind Area</li> <li>√ Use Clear Spans For KL/r</li> <li>Retension Guys To Initial Tension</li> <li>√ Bypass Mast Stability Checks</li> <li>√ Use Azimuth Dish Coefficients</li> <li>√ Project Wind Area of Appurt.</li> <li>Autocalc Torque Arm Areas</li> <li>Add IBC .6D+W Combination</li> <li>√ Sort Capacity Reports By Component</li> <li>Triangulate Diamond Inner Bracing</li> <li>Treat Feed Line Bundles As Cylinder</li> <li>Ignore KL/ry For 60 Deg. Angle Legs</li> </ul> | <ul style="list-style-type: none"> <li>Use ASCE 10 X-Brace Ly Rules</li> <li>√ Calculate Redundant Bracing Forces</li> <li>Ignore Redundant Members in FEA</li> <li>√ SR Leg Bolts Resist Compression</li> <li>All Leg Panels Have Same Allowable</li> <li>Offset Girt At Foundation</li> <li>√ Consider Feed Line Torque</li> <li>√ Include Angle Block Shear Check</li> <li>Use TIA-222-G Bracing Resist. Exemption</li> <li>Use TIA-222-G Tension Splice Exemption</li> <li style="text-align: center;"><b>Poles</b></li> <li>Include Shear-Torsion Interaction</li> <li>Always Use Sub-Critical Flow</li> <li>Use Top Mounted Sockets</li> <li>Pole Without Linear Attachments</li> <li>Pole With Shroud Or No Appurtenances</li> <li>Outside and Inside Corner Radii Are Known</li> </ul> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 2 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan



Triangular Tower

**Tower Section Geometry**

Tower Section	Tower Elevation	Assembly Database	Description	Section Width	Number of Sections	Section Length
	ft			ft		ft
T1	280.000-260.000			4.500	1	20.000
T2	260.000-240.000			6.000	1	20.000
T3	240.000-220.000			7.500	1	20.000
T4	220.000-200.000			9.000	1	20.000
T5	200.000-180.000			10.500	1	20.000
T6	180.000-160.000			12.000	1	20.000
T7	160.000-140.000			13.500	1	20.000
T8	140.000-120.000			15.000	1	20.000
T9	120.000-100.000			16.500	1	20.000
T10	100.000-80.000			18.000	1	20.000
T11	80.000-60.000			19.500	1	20.000
T12	60.000-40.000			21.000	1	20.000
T13	40.000-20.000			22.500	1	20.000
T14	20.000-0.000			24.000	1	20.000

**Tower Section Geometry (cont'd)**

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T1	280.000-260.000	4.750	X Brace	No	No	6.000	6.000

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b>	<b>Page</b>	
	EII # 8032 - Winchester (Site# US-KY-5051)		3 of 32
	<b>Project</b>	280' SST - Estill County, KY	<b>Date</b>
	<b>Client</b>	Vertical Bridge	12:58:01 10/04/19
			<b>Designed by</b>
			T. Cheriyan

Tower Section	Tower Elevation	Diagonal Spacing	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset	Bottom Girt Offset
	ft	ft				in	in
T2	260.000-240.000	4.750	X Brace	No	No	6.000	6.000
T3	240.000-220.000	4.750	X Brace	No	No	6.000	6.000
T4	220.000-200.000	4.750	X Brace	No	No	6.000	6.000
T5	200.000-180.000	4.750	X Brace	No	No	6.000	6.000
T6	180.000-160.000	4.750	X Brace	No	No	6.000	6.000
T7	160.000-140.000	4.750	X Brace	No	No	6.000	6.000
T8	140.000-120.000	4.750	X Brace	No	No	6.000	6.000
T9	120.000-100.000	4.750	X Brace	No	No	6.000	6.000
T10	100.000-80.000	4.750	Double K	No	Yes	6.000	6.000
T11	80.000-60.000	4.750	Double K	No	Yes	6.000	6.000
T12	60.000-40.000	4.750	Double K	No	Yes	6.000	6.000
T13	40.000-20.000	4.750	Double K	No	Yes	6.000	6.000
T14	20.000-0.000	4.750	Double K	No	Yes	6.000	6.000

### Tower Section Geometry (cont'd)

Tower Elevation	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade	
ft							
280.000-260.000	T1	Solid Round	1 3/4	A529-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
260.000-240.000	T2	Solid Round	2 1/4	A529-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
240.000-220.000	T3	Solid Round	2 1/2	A529-50 (50 ksi)	Equal Angle	L2x2x3/16	A36M-50 (50 ksi)
220.000-200.000	T4	Solid Round	2 3/4	A529-50 (50 ksi)	Equal Angle	L2x2x3/16	A36M-50 (50 ksi)
200.000-180.000	T5	Solid Round	3	A529-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36M-50 (50 ksi)
180.000-160.000	T6	Solid Round	3	A529-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36M-50 (50 ksi)
160.000-140.000	T7	Solid Round	3 1/4	A529-50 (50 ksi)	Equal Angle	L3x3x3/16	A36M-50 (50 ksi)
140.000-120.000	T8	Solid Round	3 1/2	A529-50 (50 ksi)	Equal Angle	L3x3x3/16	A36M-50 (50 ksi)
120.000-100.000	T9	Solid Round	3 1/2	A529-50 (50 ksi)	Equal Angle	L3x3x1/4	A36M-50 (50 ksi)
100.000-80.000	T10	Solid Round	3 3/4	A529-50 (50 ksi)	Double Angle	2L2 1/2x2 1/2x3/16x3/8	A36M-50 (50 ksi)
80.000-60.000	T11	Solid Round	3 3/4	A529-50 (50 ksi)	Double Angle	2L2 1/2x2 1/2x3/16x3/8	A36M-50 (50 ksi)
60.000-40.000	T12	Solid Round	4	A529-50 (50 ksi)	Double Angle	2L2 1/2x2 1/2x3/16x3/8	A36M-50 (50 ksi)
40.000-20.000	T13	Solid Round	4	A529-50 (50 ksi)	Double Angle	2L3x3x3/16x3/8	A36M-50 (50 ksi)
20.000-0.000	T14	Solid Round	4 1/4	A529-50 (50 ksi)	Double Angle	2L3x3x3/16x3/8	A36M-50 (50 ksi)

### Tower Section Geometry (cont'd)

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 4 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 280.000-260.000	Equal Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)	Solid Round		A529-50 (50 ksi)

### Tower Section Geometry (cont'd)

Tower Elevation ft	No. of Mid Girts	Mid Girt Type	Mid Girt Size	Mid Girt Grade	Horizontal Type	Horizontal Size	Horizontal Grade
T10 100.000-80.000	None	Flat Bar		A36 (36 ksi)	Double Angle	2L1 3/4x1 3/4x3/16x3/8	A36M-50 (50 ksi)
T11 80.000-60.000	None	Flat Bar		A36 (36 ksi)	Double Angle	2L2x2x3/16x3/8	A36M-50 (50 ksi)
T12 60.000-40.000	None	Flat Bar		A36 (36 ksi)	Double Angle	2L2x2x3/16x3/8	A36M-50 (50 ksi)
T13 40.000-20.000	None	Flat Bar		A36 (36 ksi)	Double Angle	2L2 1/2x2 1/2x3/16x3/8	A36M-50 (50 ksi)
T14 20.000-0.000	None	Flat Bar		A36 (36 ksi)	Double Angle	2L2 1/2x2 1/2x3/16x3/8	A36M-50 (50 ksi)

### Tower Section Geometry (cont'd)

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T10 100.000-80.000	Solid Round		A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
T11 80.000-60.000	Solid Round		A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
T12 60.000-40.000	Solid Round		A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
T13 40.000-20.000	Solid Round		A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)
T14 20.000-0.000	Solid Round		A572-50 (50 ksi)	Single Angle	L1 3/4x1 3/4x3/16	A36M-50 (50 ksi)

### Tower Section Geometry (cont'd)

Tower Elevation ft	Gusset Area (per face) ft <sup>2</sup>	Gusset Thickness in	Gusset Grade	Adjust. Factor A <sub>f</sub>	Adjust. Factor A <sub>r</sub>	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontal in	Double Angle Stitch Bolt Spacing Redundants in
T1 280.000-260.000	0.000	0.375	A36M-50 (50 ksi)	1	1	1	36.000	36.000	36.000





<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 7 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Tower Elevation ft	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U	Net Width Deduct in	U
T6 180.000-160.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T7 160.000-140.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T8 140.000-120.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T9 120.000-100.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T10 100.000-80.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T11 80.000-60.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T12 60.000-40.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T13 40.000-20.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75
T14 20.000-0.000	0.000	1	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75	0.000	0.75

### Tower Section Geometry (cont'd)

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 280.000-260.000	Flange	0.000 A325N	0	0.625 A325X	1	0.625 A325X	1	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T2 260.000-240.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T3 240.000-220.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T4 220.000-200.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T5 200.000-180.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T6 180.000-160.000	Flange	0.750 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0
T7 160.000-140.000	Flange	1.000 A325N	6	0.625 A325X	1	0.000 A325N	0	0.000 A325N	0	0.625 A325N	0	0.000 A325X	0	0.625 A325N	0





<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 9 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Tower Section	Tower Elevation ft	Face	$A_R$ ft <sup>2</sup>	$A_F$ ft <sup>2</sup>	$C_A A_A$ In Face ft <sup>2</sup>	$C_A A_A$ Out Face ft <sup>2</sup>	Weight K
T1	280.000-260.000	A	0.000	0.000	3.250	0.000	0.018
		B	0.000	0.000	12.088	0.000	0.085
		C	0.000	0.000	36.265	0.000	0.256
T2	260.000-240.000	A	0.000	0.000	39.515	0.000	0.274
		B	0.000	0.000	48.353	0.000	0.341
		C	0.000	0.000	48.353	0.000	0.341
T3	240.000-220.000	A	0.000	0.000	51.603	0.000	0.359
		B	0.000	0.000	48.353	0.000	0.341
		C	0.000	0.000	48.353	0.000	0.341
T4	220.000-200.000	A	0.000	0.000	51.603	0.000	0.359
		B	0.000	0.000	48.353	0.000	0.341
		C	0.000	0.000	48.353	0.000	0.341
T5	200.000-180.000	A	0.000	0.000	51.603	0.000	0.359
		B	0.000	0.000	48.353	0.000	0.341
		C	0.000	0.000	48.353	0.000	0.341
T6	180.000-160.000	A	0.000	0.000	51.603	0.000	0.359
		B	0.000	0.000	48.353	0.000	0.341
		C	0.000	0.000	48.353	0.000	0.341
T7	160.000-140.000	A	0.000	0.000	51.603	0.000	0.359
		B	0.000	0.000	48.353	0.000	0.341
		C	0.000	0.000	48.353	0.000	0.341
T8	140.000-120.000	A	0.000	0.000	51.603	0.000	0.359
		B	0.000	0.000	48.353	0.000	0.341
		C	0.000	0.000	48.353	0.000	0.341
T9	120.000-100.000	A	0.000	0.000	51.603	0.000	0.359
		B	0.000	0.000	48.353	0.000	0.341
		C	0.000	0.000	48.353	0.000	0.341
T10	100.000-80.000	A	0.000	0.000	51.603	0.000	0.359
		B	0.000	0.000	48.353	0.000	0.341
		C	0.000	0.000	48.353	0.000	0.341
T11	80.000-60.000	A	0.000	0.000	51.603	0.000	0.359
		B	0.000	0.000	48.353	0.000	0.341
		C	0.000	0.000	48.353	0.000	0.341
T12	60.000-40.000	A	0.000	0.000	51.603	0.000	0.359
		B	0.000	0.000	48.353	0.000	0.341
		C	0.000	0.000	48.353	0.000	0.341
T13	40.000-20.000	A	0.000	0.000	51.603	0.000	0.359
		B	0.000	0.000	48.353	0.000	0.341
		C	0.000	0.000	48.353	0.000	0.341
T14	20.000-0.000	A	0.000	0.000	25.802	0.000	0.180
		B	0.000	0.000	24.177	0.000	0.170
		C	0.000	0.000	24.177	0.000	0.170

### Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	$A_R$ ft <sup>2</sup>	$A_F$ ft <sup>2</sup>	$C_A A_A$ In Face ft <sup>2</sup>	$C_A A_A$ Out Face ft <sup>2</sup>	Weight K
T1	280.000-260.000	A	1.851	0.000	0.000	18.057	0.000	0.259
		B		0.000	0.000	15.236	0.000	0.357
		C		0.000	0.000	45.707	0.000	1.072
T2	260.000-240.000	A	1.837	0.000	0.000	63.538	0.000	1.323
		B		0.000	0.000	60.793	0.000	1.422
		C		0.000	0.000	60.793	0.000	1.422
T3	240.000-220.000	A	1.821	0.000	0.000	78.453	0.000	1.667
		B		0.000	0.000	60.632	0.000	1.414
		C		0.000	0.000	60.632	0.000	1.414
T4	220.000-200.000	A	1.805	0.000	0.000	78.147	0.000	1.655

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 10 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	$A_R$ ft <sup>2</sup>	$A_F$ ft <sup>2</sup>	$C_{dA_1}$ In Face ft <sup>2</sup>	$C_{dA_1}$ Out Face ft <sup>2</sup>	Weight K
		B		0.000	0.000	60.457	0.000	1.405
		C		0.000	0.000	60.457	0.000	1.405
T5	200.000-180.000	A	1.787	0.000	0.000	77.813	0.000	1.641
		B		0.000	0.000	60.267	0.000	1.396
		C		0.000	0.000	60.267	0.000	1.396
T6	180.000-160.000	A	1.767	0.000	0.000	77.446	0.000	1.627
		B		0.000	0.000	60.058	0.000	1.385
		C		0.000	0.000	60.058	0.000	1.385
T7	160.000-140.000	A	1.745	0.000	0.000	77.038	0.000	1.610
		B		0.000	0.000	59.826	0.000	1.374
		C		0.000	0.000	59.826	0.000	1.374
T8	140.000-120.000	A	1.720	0.000	0.000	76.577	0.000	1.592
		B		0.000	0.000	59.564	0.000	1.361
		C		0.000	0.000	59.564	0.000	1.361
T9	120.000-100.000	A	1.692	0.000	0.000	76.048	0.000	1.571
		B		0.000	0.000	59.263	0.000	1.346
		C		0.000	0.000	59.263	0.000	1.346
T10	100.000-80.000	A	1.658	0.000	0.000	75.425	0.000	1.547
		B		0.000	0.000	58.908	0.000	1.328
		C		0.000	0.000	58.908	0.000	1.328
T11	80.000-60.000	A	1.617	0.000	0.000	74.661	0.000	1.518
		B		0.000	0.000	58.474	0.000	1.307
		C		0.000	0.000	58.474	0.000	1.307
T12	60.000-40.000	A	1.564	0.000	0.000	73.669	0.000	1.480
		B		0.000	0.000	57.910	0.000	1.280
		C		0.000	0.000	57.910	0.000	1.280
T13	40.000-20.000	A	1.486	0.000	0.000	72.226	0.000	1.426
		B		0.000	0.000	57.089	0.000	1.241
		C		0.000	0.000	57.089	0.000	1.241
T14	20.000-0.000	A	1.331	0.000	0.000	34.681	0.000	0.661
		B		0.000	0.000	27.732	0.000	0.583
		C		0.000	0.000	27.732	0.000	0.583

### Feed Line Center of Pressure

Section	Elevation ft	$CP_x$ in	$CP_z$ in	$CP_x$ Ice m	$CP_z$ Ice m
T1	280.000-260.000	0.105	1.724	-1.348	1.459
T2	260.000-240.000	0.024	-3.086	-0.930	-1.986
T3	240.000-220.000	-0.701	-3.955	-1.679	-2.913
T4	220.000-200.000	-0.773	-4.337	-1.858	-3.222
T5	200.000-180.000	-0.768	-4.326	-1.937	-3.383
T6	180.000-160.000	-0.820	-4.616	-2.068	-3.625
T7	160.000-140.000	-0.792	-4.483	-2.087	-3.696
T8	140.000-120.000	-0.822	-4.651	-2.169	-3.868
T9	120.000-100.000	-0.853	-4.829	-2.245	-4.036
T10	100.000-80.000	-1.126	-6.243	-2.713	-4.864
T11	80.000-60.000	-1.154	-6.413	-2.777	-5.046
T12	60.000-40.000	-1.187	-6.595	-2.831	-5.232
T13	40.000-20.000	-1.112	-6.230	-2.719	-5.191
T14	20.000-0.000	-0.647	-3.685	-1.542	-3.144

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 11 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

### Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
T1	1	1-5/8"	260.00 - 275.00	0.6000	0.6000
T1	3	1-5/8"	260.00 - 265.00	0.6000	0.6000
T1	7	Safety Line 3/8	260.00 - 280.00	0.6000	0.6000
T1	8	Strobe Cable	260.00 - 280.00	0.6000	0.6000
T1	10	Feedline Ladder (Af)	260.00 - 275.00	0.6000	0.6000
T1	11	Feedline Ladder (Af)	260.00 - 265.00	0.6000	0.6000
T2	1	1-5/8"	240.00 - 260.00	0.6000	0.6000
T2	3	1-5/8"	240.00 - 260.00	0.6000	0.6000
T2	5	1-5/8"	240.00 - 255.00	0.6000	0.6000
T2	7	Safety Line 3/8	240.00 - 260.00	0.6000	0.6000
T2	8	Strobe Cable	240.00 - 260.00	0.6000	0.6000
T2	10	Feedline Ladder (Af)	240.00 - 260.00	0.6000	0.6000
T2	11	Feedline Ladder (Af)	240.00 - 260.00	0.6000	0.6000
T2	12	Feedline Ladder (Af)	240.00 - 255.00	0.6000	0.6000
T3	1	1-5/8"	220.00 - 240.00	0.6000	0.6000
T3	3	1-5/8"	220.00 - 240.00	0.6000	0.6000
T3	5	1-5/8"	220.00 - 240.00	0.6000	0.6000
T3	7	Safety Line 3/8	220.00 - 240.00	0.6000	0.6000
T3	8	Strobe Cable	220.00 - 240.00	0.6000	0.6000
T3	10	Feedline Ladder (Af)	220.00 - 240.00	0.6000	0.6000
T3	11	Feedline Ladder (Af)	220.00 - 240.00	0.6000	0.6000
T3	12	Feedline Ladder (Af)	220.00 - 240.00	0.6000	0.6000
T4	1	1-5/8"	200.00 - 220.00	0.6000	0.6000
T4	3	1-5/8"	200.00 - 220.00	0.6000	0.6000
T4	5	1-5/8"	200.00 - 220.00	0.6000	0.6000
T4	7	Safety Line 3/8	200.00 - 220.00	0.6000	0.6000
T4	8	Strobe Cable	200.00 - 220.00	0.6000	0.6000
T4	10	Feedline Ladder (Af)	200.00 - 220.00	0.6000	0.6000
T4	11	Feedline Ladder (Af)	200.00 - 220.00	0.6000	0.6000

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 12 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
			220.00		
T4	12	Feedline Ladder (Af)	200.00 -	0.6000	0.6000
			220.00		
T5	1	1-5/8"	180.00 -	0.6000	0.6000
			200.00		
T5	3	1-5/8"	180.00 -	0.6000	0.6000
			200.00		
T5	5	1-5/8"	180.00 -	0.6000	0.6000
			200.00		
T5	7	Safety Line 3/8	180.00 -	0.6000	0.6000
			200.00		
T5	8	Strobe Cable	180.00 -	0.6000	0.6000
			200.00		
T5	10	Feedline Ladder (Af)	180.00 -	0.6000	0.6000
			200.00		
T5	11	Feedline Ladder (Af)	180.00 -	0.6000	0.6000
			200.00		
T5	12	Feedline Ladder (Af)	180.00 -	0.6000	0.6000
			200.00		
T6	1	1-5/8"	160.00 -	0.6000	0.6000
			180.00		
T6	3	1-5/8"	160.00 -	0.6000	0.6000
			180.00		
T6	5	1-5/8"	160.00 -	0.6000	0.6000
			180.00		
T6	7	Safety Line 3/8	160.00 -	0.6000	0.6000
			180.00		
T6	8	Strobe Cable	160.00 -	0.6000	0.6000
			180.00		
T6	10	Feedline Ladder (Af)	160.00 -	0.6000	0.6000
			180.00		
T6	11	Feedline Ladder (Af)	160.00 -	0.6000	0.6000
			180.00		
T6	12	Feedline Ladder (Af)	160.00 -	0.6000	0.6000
			180.00		
T7	1	1-5/8"	140.00 -	0.6000	0.6000
			160.00		
T7	3	1-5/8"	140.00 -	0.6000	0.6000
			160.00		
T7	5	1-5/8"	140.00 -	0.6000	0.6000
			160.00		
T7	7	Safety Line 3/8	140.00 -	0.6000	0.6000
			160.00		
T7	8	Strobe Cable	140.00 -	0.6000	0.6000
			160.00		
T7	10	Feedline Ladder (Af)	140.00 -	0.6000	0.6000
			160.00		
T7	11	Feedline Ladder (Af)	140.00 -	0.6000	0.6000
			160.00		
T7	12	Feedline Ladder (Af)	140.00 -	0.6000	0.6000
			160.00		
T8	1	1-5/8"	120.00 -	0.6000	0.6000
			140.00		
T8	3	1-5/8"	120.00 -	0.6000	0.6000
			140.00		
T8	5	1-5/8"	120.00 -	0.6000	0.6000
			140.00		
T8	7	Safety Line 3/8	120.00 -	0.6000	0.6000
			140.00		
T8	8	Strobe Cable	120.00 -	0.6000	0.6000
			140.00		
T8	10	Feedline Ladder (Af)	120.00 -	0.6000	0.6000

<b>tnxTower</b>  <b>B-T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 13 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K <sub>a</sub> No Ice	K <sub>a</sub> Ice
T8	11	Feedline Ladder (Af)	140.00 - 120.00	0.6000	0.6000
T8	12	Feedline Ladder (Af)	140.00 - 120.00	0.6000	0.6000
T9	1	1-5/8"	100.00 - 120.00	0.6000	0.6000
T9	3	1-5/8"	100.00 - 120.00	0.6000	0.6000
T9	5	1-5/8"	100.00 - 120.00	0.6000	0.6000
T9	7	Safety Line 3/8	100.00 - 120.00	0.6000	0.6000
T9	8	Strobe Cable	100.00 - 120.00	0.6000	0.6000
T9	10	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T9	11	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T9	12	Feedline Ladder (Af)	100.00 - 120.00	0.6000	0.6000
T10	1	1-5/8"	80.00 - 100.00	0.6000	0.6000
T10	3	1-5/8"	80.00 - 100.00	0.6000	0.6000
T10	5	1-5/8"	80.00 - 100.00	0.6000	0.6000
T10	7	Safety Line 3/8	80.00 - 100.00	0.6000	0.6000
T10	8	Strobe Cable	80.00 - 100.00	0.6000	0.6000
T10	10	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T10	11	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T10	12	Feedline Ladder (Af)	80.00 - 100.00	0.6000	0.6000
T11	1	1-5/8"	60.00 - 80.00	0.6000	0.6000
T11	3	1-5/8"	60.00 - 80.00	0.6000	0.6000
T11	5	1-5/8"	60.00 - 80.00	0.6000	0.6000
T11	7	Safety Line 3/8	60.00 - 80.00	0.6000	0.6000
T11	8	Strobe Cable	60.00 - 80.00	0.6000	0.6000
T11	10	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T11	11	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T11	12	Feedline Ladder (Af)	60.00 - 80.00	0.6000	0.6000
T12	1	1-5/8"	40.00 - 60.00	0.6000	0.6000
T12	3	1-5/8"	40.00 - 60.00	0.6000	0.6000
T12	5	1-5/8"	40.00 - 60.00	0.6000	0.6000
T12	7	Safety Line 3/8	40.00 - 60.00	0.6000	0.6000
T12	8	Strobe Cable	40.00 - 60.00	0.6000	0.6000
T12	10	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T12	11	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T12	12	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T13	1	1-5/8"	20.00 - 40.00	0.6000	0.6000
T13	3	1-5/8"	20.00 - 40.00	0.6000	0.6000
T13	5	1-5/8"	20.00 - 40.00	0.6000	0.6000
T13	7	Safety Line 3/8	20.00 - 40.00	0.6000	0.6000
T13	8	Strobe Cable	20.00 - 40.00	0.6000	0.6000
T13	10	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T13	11	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T13	12	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T14	1	1-5/8"	10.00 - 20.00	0.6000	0.6000
T14	3	1-5/8"	10.00 - 20.00	0.6000	0.6000
T14	5	1-5/8"	10.00 - 20.00	0.6000	0.6000
T14	7	Safety Line 3/8	10.00 - 20.00	0.6000	0.6000
T14	8	Strobe Cable	10.00 - 20.00	0.6000	0.6000
T14	10	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000
T14	11	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000
T14	12	Feedline Ladder (Af)	10.00 - 20.00	0.6000	0.6000

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b>	<b>Page</b>
	EII # 8032 - Winchester (Site# US-KY-5051)	14 of 32
	<b>Project</b>	<b>Date</b>
	280' SST - Estill County, KY	12:58:01 10/04/19
	<b>Client</b>	<b>Designed by</b>
	Vertical Bridge	T. Cheriyan

### Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>i</sub> A <sub>i</sub> Front	C <sub>i</sub> A <sub>i</sub> Side	Weight	
			Horz	Lateral						
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K	
Lightning Rod 1"x10'	C	From Leg	0.000	0.000	0.000	280.000	No Ice	1.000	1.000	0.040
			0.000				1/2" Ice	2.017	2.017	0.049
			5.000				1" Ice	3.050	3.050	0.065
Top Beacon	B	From Leg	0.000	0.000	0.000	280.000	No Ice	2.700	2.700	0.050
			0.000				1/2" Ice	3.100	3.100	0.070
			1.000				1" Ice	3.500	3.500	0.090
**										
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 1)	A	From Leg	4.000	0.000	0.000	275.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 1)	B	From Leg	4.000	0.000	0.000	275.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 1)	C	From Leg	4.000	0.000	0.000	275.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
**										
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 2)	A	From Leg	4.000	0.000	0.000	265.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 2)	B	From Leg	4.000	0.000	0.000	265.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 2)	C	From Leg	4.000	0.000	0.000	265.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
**										
Sector1(CaAa=10000 Sq.in)No Ice (Carrier 3)	A	From Leg	4.000	0.000	0.000	255.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
Sector2(CaAa=10000 Sq.in)No Ice (Carrier 3)	B	From Leg	4.000	0.000	0.000	255.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
Sector3(CaAa=10000 Sq.in)No Ice (Carrier 3)	C	From Leg	4.000	0.000	0.000	255.000	No Ice	69.440	46.525	0.700
			0.000				1/2" Ice	86.800	58.156	1.400
			0.000				1" Ice	104.160	69.787	2.100
**										

### Load Combinations

Comb. No.	Description
-----------	-------------

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 15 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.6 Wind 0 deg - No Ice
3	0.9 Dead+1.6 Wind 0 deg - No Ice
4	1.2 Dead+1.6 Wind 30 deg - No Ice
5	0.9 Dead+1.6 Wind 30 deg - No Ice
6	1.2 Dead+1.6 Wind 60 deg - No Ice
7	0.9 Dead+1.6 Wind 60 deg - No Ice
8	1.2 Dead+1.6 Wind 90 deg - No Ice
9	0.9 Dead+1.6 Wind 90 deg - No Ice
10	1.2 Dead+1.6 Wind 120 deg - No Ice
11	0.9 Dead+1.6 Wind 120 deg - No Ice
12	1.2 Dead+1.6 Wind 150 deg - No Ice
13	0.9 Dead+1.6 Wind 150 deg - No Ice
14	1.2 Dead+1.6 Wind 180 deg - No Ice
15	0.9 Dead+1.6 Wind 180 deg - No Ice
16	1.2 Dead+1.6 Wind 210 deg - No Ice
17	0.9 Dead+1.6 Wind 210 deg - No Ice
18	1.2 Dead+1.6 Wind 240 deg - No Ice
19	0.9 Dead+1.6 Wind 240 deg - No Ice
20	1.2 Dead+1.6 Wind 270 deg - No Ice
21	0.9 Dead+1.6 Wind 270 deg - No Ice
22	1.2 Dead+1.6 Wind 300 deg - No Ice
23	0.9 Dead+1.6 Wind 300 deg - No Ice
24	1.2 Dead+1.6 Wind 330 deg - No Ice
25	0.9 Dead+1.6 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

### Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T1	280 - 260	Leg	Max Tension	15	18.358	1.141	-0.004
			Max. Compression	2	-21.995	0.868	-0.003
			Max. Mx	2	-21.993	-1.315	0.004



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 16 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T2	260 - 240	Diagonal	Max. My	4	-2.218	-0.032	-0.705
			Max. Vy	2	-4.363	0.868	-0.003
			Max. Vx	4	2.030	-0.032	-0.705
			Max Tension	8	4.231	0.000	0.000
			Max. Compression	8	-3.913	0.000	0.000
			Max. Mx	2	-0.513	0.056	-0.002
			Max. My	8	-3.906	-0.007	-0.048
			Max. Vy	29	0.024	0.026	-0.001
			Max. Vx	8	0.013	0.000	0.000
			Max Tension	14	1.955	0.000	0.000
		Top Girt	Max. Compression	2	-1.768	0.000	0.000
			Max. Mx	26	0.117	-0.032	0.000
			Max. My	32	0.121	0.000	0.001
			Max. Vy	26	-0.028	0.000	0.000
			Max. Vx	32	0.001	0.000	0.000
			Max Tension	15	58.403	2.254	-0.004
			Max. Compression	2	-65.748	0.581	-0.001
			Max. Mx	2	-22.011	3.031	-0.009
			Max. My	4	-2.231	-0.058	-1.720
			Max. Vy	2	-6.813	0.581	-0.001
Diagonal	Max. Vx	4	2.793	-0.033	-0.433		
	Max Tension	4	5.884	0.000	0.000		
	Max. Compression	4	-5.360	0.000	0.000		
	Max. Mx	34	0.463	0.030	-0.003		
	Max. My	20	-5.325	-0.007	0.022		
	Max. Vy	34	0.028	0.025	-0.002		
	Max. Vx	20	-0.005	0.000	0.000		
	Max Tension	15	94.225	2.260	-0.000		
	Max. Compression	2	-104.557	0.623	0.001		
	Max. Mx	2	-65.762	3.974	-0.007		
T3	240 - 220	Leg	Max. My	4	-3.972	-0.041	-1.831
			Max. Vy	2	-7.086	0.623	0.001
			Max. Vx	4	2.948	-0.020	-0.309
			Max Tension	4	5.714	0.000	0.000
			Max. Compression	4	-6.101	0.000	0.000
		Diagonal	Max. Mx	35	0.704	0.038	-0.003
			Max. My	8	-5.176	-0.006	-0.010
			Max. Vy	34	0.037	0.038	-0.004
			Max. Vx	8	0.002	0.000	0.000
			Max Tension	15	125.552	2.420	0.004
T4	220 - 200	Leg	Max. Compression	2	-139.232	0.660	0.002
			Max. Mx	2	-104.572	4.148	0.003
			Max. My	4	-5.026	-0.039	-1.785
			Max. Vy	2	-7.597	0.660	0.002
			Max. Vx	24	-3.059	-0.014	0.349
		Diagonal	Max Tension	4	5.747	0.000	0.000
			Max. Compression	4	-5.951	0.000	0.000
			Max. Mx	34	0.318	0.050	-0.005
			Max. My	18	-5.830	-0.006	0.009
			Max. Vy	34	0.043	0.050	-0.005
T5	200 - 180	Leg	Max. Vx	18	-0.002	0.000	0.000
			Max Tension	15	154.528	3.131	0.009
			Max. Compression	2	-172.114	0.084	0.001
			Max. Mx	2	-139.249	4.440	0.010
			Max. My	24	-6.259	-0.038	1.881
		Diagonal	Max. Vy	2	-8.451	0.084	0.001
			Max. Vx	24	-3.310	-0.007	0.099
			Max Tension	4	6.220	0.000	0.000
			Max. Compression	4	-6.093	0.000	0.000
			Max. Mx	32	0.351	0.074	0.007
			Max. My	10	-5.973	-0.008	-0.009

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 17 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T6	180 - 160	Leg	Max. Vy	32	0.057	0.074	0.007
			Max. Vx	38	-0.002	0.000	0.000
			Max Tension	15	182.040	2.915	0.010
			Max. Compression	2	-203.833	0.780	0.003
			Max. Mx	2	-172.129	4.310	0.014
			Max. My	24	-7.621	-0.028	1.757
			Max. Vy	2	-9.435	0.780	0.003
		Diagonal	Max. Vx	24	-3.570	-0.007	0.391
			Max Tension	4	6.542	0.000	0.000
			Max. Compression	4	-6.392	0.000	0.000
			Max. Mx	32	0.347	0.091	0.009
			Max. My	38	-0.417	0.086	0.010
			Max. Vy	38	0.064	0.091	-0.009
			Max. Vx	38	0.003	0.000	0.000
T7	160 - 140	Leg	Max Tension	15	208.977	3.352	0.014
			Max. Compression	2	-235.690	0.784	0.003
			Max. Mx	2	-203.853	5.475	0.021
			Max. My	24	-9.027	-0.023	2.179
			Max. Vy	2	-10.496	0.784	0.003
			Max. Vx	24	-3.870	-0.004	0.356
			Max Tension	4	7.144	0.000	0.000
		Diagonal	Max. Compression	4	-6.999	0.000	0.000
			Max. Mx	38	0.347	0.124	-0.012
			Max. My	38	-0.352	0.119	0.013
			Max. Vy	38	0.080	0.124	-0.012
			Max. Vx	38	0.003	0.000	0.000
			Max Tension	15	235.791	4.171	0.018
			Max. Compression	2	-267.965	0.222	0.002
T8	140 - 120	Leg	Max. Mx	2	-235.712	6.014	0.025
			Max. My	24	-10.655	-0.004	2.295
			Max. Vy	2	-11.650	0.222	0.002
			Max. Vx	24	-4.269	-0.006	0.282
			Max Tension	4	7.867	0.000	0.000
			Max. Compression	4	-7.565	0.000	0.000
			Max. Mx	38	0.378	0.146	-0.014
		Diagonal	Max. My	38	-0.321	0.140	0.015
			Max. Vy	38	0.087	0.146	-0.014
			Max. Vx	38	0.003	0.000	0.000
			Max Tension	15	262.283	4.055	0.017
			Max. Compression	2	-300.584	0.709	0.006
			Max. Mx	2	-267.986	6.044	0.028
			Max. My	24	-12.427	0.004	2.419
T9	120 - 100	Leg	Max. Vy	2	-12.464	0.709	0.006
			Max. Vx	24	-5.001	-0.027	0.840
			Max Tension	2	8.663	0.000	0.000
			Max. Compression	2	-8.326	0.000	0.000
			Max. Mx	34	0.522	0.187	-0.016
			Max. My	38	-0.109	0.171	0.018
			Max. Vy	38	0.101	0.177	-0.017
		Diagonal	Max. Vx	38	0.004	0.000	0.000
			Max Tension	15	288.497	5.248	0.023
			Max. Compression	2	-333.297	-0.392	0.001
			Max. Mx	2	-333.274	-6.992	-0.031
			Max. My	24	-14.476	0.008	3.343
			Max. Vy	2	-13.190	-0.392	0.001
			Max. Vx	24	-5.145	-0.020	0.351
T10	100 - 80	Leg	Max Tension	3	9.726	0.000	0.000
			Max. Compression	2	-10.123	0.000	0.000
			Max. Mx	34	1.376	0.285	0.000
			Max. My	27	-0.187	0.000	0.007
			Max. Vy	34	-0.105	0.000	0.000
			Max Tension	15	288.497	5.248	0.023
			Max. Compression	2	-333.297	-0.392	0.001
		Diagonal	Max. Mx	2	-333.274	-6.992	-0.031
			Max. My	24	-14.476	0.008	3.343
			Max. Vy	2	-13.190	-0.392	0.001
			Max. Vx	24	-5.145	-0.020	0.351
			Max Tension	3	9.726	0.000	0.000
			Max. Compression	2	-10.123	0.000	0.000
			Max. Mx	34	1.376	0.285	0.000

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b>	<b>Page</b>	
	EII # 8032 - Winchester (Site# US-KY-5051)		18 of 32
	<b>Project</b>	280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b>	Vertical Bridge	<b>Designed by</b> T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft		
T11	80 - 60	Horizontal	Max. Vx	27	-0.003	0.000	0.000		
			Max Tension	2	5.687	0.000	0.000		
			Max. Compression	2	-5.687	-0.058	0.000		
			Max. Mx	31	0.410	-0.183	0.004		
			Max. My	14	2.857	-0.050	0.004		
			Max. Vy	31	-0.097	-0.183	0.004		
			Max. Vx	27	-0.002	-0.183	0.004		
			Inner Bracing	Max Tension	1	0.000	0.000	0.000	
				Max. Compression	33	-0.011	0.000	0.000	
				Max. Mx	26	-0.009	-0.124	0.000	
				Max. My	2	-0.004	0.000	-0.000	
				Max. Vy	26	-0.052	0.000	0.000	
				Max. Vx	2	0.000	0.000	0.000	
				Leg	Max Tension	15	313.733	5.014	0.023
					Max. Compression	2	-365.145	0.332	0.005
		Max. Mx			2	-365.122	-6.711	-0.030	
		Max. My	24		-16.657	0.012	2.927		
		Max. Vy	2		-14.076	0.332	0.005		
		Max. Vx	24		-5.291	-0.011	0.645		
		Diagonal	Max Tension		3	9.859	0.000	0.000	
			Max. Compression		3	-10.166	0.000	0.000	
			Max. Mx		34	1.396	0.319	0.000	
			Max. My	27	-0.158	0.000	0.008		
			Max. Vy	34	-0.111	0.000	0.000		
			Max. Vx	27	-0.003	0.000	0.000		
			Horizontal	Max Tension	2	6.246	0.000	0.000	
				Max. Compression	2	-6.246	-0.078	0.001	
				Max. Mx	31	0.467	-0.228	0.005	
		Max. My		29	1.385	-0.222	0.005		
		Max. Vy		31	-0.113	-0.228	0.005		
		Max. Vx		27	-0.003	-0.228	0.005		
		Inner Bracing		Max Tension	1	0.000	0.000	0.000	
				Max. Compression	33	-0.011	0.000	0.000	
Max. Mx	26			-0.010	-0.141	0.000			
Max. My	2		-0.004	0.000	-0.000				
Max. Vy	26		0.055	0.000	0.000				
Max. Vx	2		0.000	0.000	0.000				
T12	60 - 40		Leg	Max Tension	15	338.322	5.828	0.027	
				Max. Compression	2	-396.684	-0.371	0.002	
				Max. Mx	2	-396.658	-7.804	-0.035	
		Max. My		24	-18.931	0.025	3.293		
		Max. Vy		2	-14.855	-0.371	0.002		
		Max. Vx		24	-5.426	-0.009	0.472		
		Diagonal		Max Tension	5	10.239	0.000	0.000	
				Max. Compression	3	-10.513	0.000	0.000	
				Max. Mx	34	1.523	0.353	0.000	
			Max. My	27	-0.051	0.000	0.008		
			Max. Vy	34	-0.116	0.000	0.000		
			Max. Vx	27	0.003	0.000	0.000		
			Horizontal	Max Tension	2	6.732	0.000	0.000	
				Max. Compression	2	-6.732	-0.089	0.001	
				Max. Mx	31	0.526	-0.253	0.005	
		Max. My		29	1.503	-0.252	0.006		
		Max. Vy		31	-0.118	-0.253	0.005		
		Max. Vx		35	-0.003	-0.253	0.006		
		Inner Bracing		Max Tension	1	0.000	0.000	0.000	
				Max. Compression	33	-0.011	0.000	0.000	
				Max. Mx	26	-0.011	-0.157	0.000	
			Max. My	2	-0.004	0.000	-0.000		
			Max. Vy	26	-0.057	0.000	0.000		
			Max. Vx	2	0.000	0.000	0.000		

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b>	<b>Page</b>
	EII # 8032 - Winchester (Site# US-KY-5051)	19 of 32
	<b>Project</b>	<b>Date</b>
	280' SST - Estill County, KY	12:58:01 10/04/19
	<b>Client</b>	<b>Designed by</b>
	Vertical Bridge	T. Cheriyan

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
T13	40 - 20	Leg	Max Tension	15	362.024	5.621	0.027
			Max. Compression	2	-427.849	0.348	0.004
			Max. Mx	2	-427.823	-7.548	-0.034
			Max. My	24	-21.379	0.048	3.188
			Max. Vy	2	-15.779	0.348	0.004
			Max. Vx	24	-5.522	-0.006	0.561
		Diagonal	Max Tension	5	10.513	0.000	0.000
			Max. Compression	3	-10.742	0.000	0.000
			Max. Mx	34	1.708	0.447	0.000
			Max. My	27	0.163	0.000	0.010
			Max. Vy	34	-0.139	0.000	0.000
			Max. Vx	27	0.003	0.000	0.000
		Horizontal	Max Tension	2	7.273	0.000	0.000
			Max. Compression	2	-7.273	-0.129	0.002
			Max. Mx	27	-0.586	-0.344	0.007
			Max. My	29	1.642	-0.343	0.009
			Max. Vy	37	-0.144	-0.319	0.006
			Max. Vx	29	0.003	-0.343	0.009
		Inner Bracing	Max Tension	1	0.000	0.000	0.000
			Max. Compression	33	-0.013	0.000	0.000
			Max. Mx	31	-0.012	-0.169	0.000
Max. My	2		-0.006	0.000	-0.000		
Max. Vy	31		0.057	0.000	0.000		
Max. Vx	2		0.000	0.000	0.000		
T14	20 - 0	Leg	Max Tension	15	385.047	6.155	0.030
			Max. Compression	2	-458.381	0.000	-0.000
			Max. Mx	2	-427.878	8.245	0.043
			Max. My	24	-24.118	0.059	3.325
			Max. Vy	2	-16.451	0.000	-0.000
			Max. Vx	24	-5.525	0.059	3.325
		Diagonal	Max Tension	5	10.720	0.000	0.000
			Max. Compression	4	-10.989	0.000	0.000
			Max. Mx	27	2.037	0.464	0.000
			Max. My	27	0.700	0.000	0.011
			Max. Vy	27	-0.136	0.000	0.000
			Max. Vx	27	-0.003	0.000	0.000
		Horizontal	Max Tension	2	7.801	0.000	0.000
			Max. Compression	2	-7.801	-0.148	0.002
			Max. Mx	27	-0.655	-0.368	0.008
			Max. My	29	1.776	-0.366	0.009
			Max. Vy	27	0.141	-0.368	0.008
			Max. Vx	29	0.003	-0.366	0.009
		Inner Bracing	Max Tension	1	0.000	0.000	0.000
			Max. Compression	29	-0.012	0.000	0.000
			Max. Mx	35	-0.012	-0.172	0.000
Max. My	35		-0.012	0.000	-0.000		
Max. Vy	35		0.055	0.000	0.000		
Max. Vx	35		0.000	0.000	0.000		

### Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg C	Max. Vert	18	455.251	29.585	-17.097
	Max. H <sub>x</sub>	18	455.251	29.585	-17.097
	Max. H <sub>z</sub>	5	-335.636	-21.965	15.193

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave. Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b>	<b>Page</b>	
	EII # 8032 - Winchester (Site# US-KY-5051)		20 of 32
	<b>Project</b>	280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b>	Vertical Bridge	<b>Designed by</b> T. Cheriyan

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Leg B	Min. Vert	7	-381.664	-26.078	15.074
	Min. H <sub>x</sub>	7	-381.664	-26.078	15.074
	Min. H <sub>z</sub>	18	455.251	29.585	-17.097
	Max. Vert	10	452.959	-29.524	-16.976
	Max. H <sub>x</sub>	23	-379.585	26.016	14.944
	Max. H <sub>z</sub>	25	-333.829	21.937	15.026
Leg A	Min. Vert	23	-379.585	26.016	14.944
	Min. H <sub>x</sub>	10	452.959	-29.524	-16.976
	Min. H <sub>z</sub>	10	452.959	-29.524	-16.976
	Max. Vert	2	457.393	-0.063	34.282
	Max. H <sub>x</sub>	21	19.993	5.154	0.877
	Max. H <sub>z</sub>	2	457.393	-0.063	34.282
	Min. Vert	15	-384.033	0.069	-30.245
	Min. H <sub>x</sub>	9	19.993	-5.156	0.877
Min. H <sub>z</sub>	15	-384.033	0.069	-30.245	

### Tower Mast Reaction Summary

Load Combination	Vertical	Shear <sub>x</sub>	Shear <sub>z</sub>	Overturing Moment, M <sub>x</sub>	Overturing Moment, M <sub>z</sub>	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
Dead Only	66.750	-0.000	0.000	0.899	1.253	0.000
1.2 Dead+1.6 Wind 0 deg - No Ice	80.100	0.000	-57.865	-9511.264	1.525	-2.936
0.9 Dead+1.6 Wind 0 deg - No Ice	60.075	0.000	-57.866	-9491.096	1.144	-2.933
1.2 Dead+1.6 Wind 30 deg - No Ice	80.100	27.234	-47.170	-7871.536	-4543.870	15.209
0.9 Dead+1.6 Wind 30 deg - No Ice	60.075	27.234	-47.170	-7854.755	-4534.417	15.210
1.2 Dead+1.6 Wind 60 deg - No Ice	80.100	45.981	-26.547	-4444.919	-7699.220	-0.653
0.9 Dead+1.6 Wind 60 deg - No Ice	60.075	45.979	-26.546	-4435.248	-7682.370	-0.656
1.2 Dead+1.6 Wind 90 deg - No Ice	80.100	54.096	-0.000	1.007	-8989.814	-16.040
0.9 Dead+1.6 Wind 90 deg - No Ice	60.075	54.097	-0.000	0.717	-8970.772	-16.046
1.2 Dead+1.6 Wind 120 deg - No Ice	80.100	49.795	28.749	4708.167	-8151.335	2.809
0.9 Dead+1.6 Wind 120 deg - No Ice	60.075	49.796	28.750	4697.799	-8134.238	2.803
1.2 Dead+1.6 Wind 150 deg - No Ice	80.100	27.141	47.010	7831.841	-4519.432	20.606
0.9 Dead+1.6 Wind 150 deg - No Ice	60.075	27.141	47.011	7814.630	-4510.021	20.602
1.2 Dead+1.6 Wind 180 deg - No Ice	80.100	0.000	53.278	8943.386	1.526	2.938
0.9 Dead+1.6 Wind 180 deg - No Ice	60.075	0.000	53.276	8923.071	1.145	2.935
1.2 Dead+1.6 Wind 210 deg - No Ice	80.100	-27.233	47.170	7873.828	4546.725	-15.210
0.9 Dead+1.6 Wind 210 deg - No Ice	60.075	-27.234	47.171	7856.506	4536.487	-15.210
1.2 Dead+1.6 Wind 240 deg - No Ice	80.100	-49.953	28.841	4732.155	8195.940	0.653
0.9 Dead+1.6 Wind 240 deg - No Ice	60.075	-49.954	28.841	4721.723	8177.972	0.656

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave. Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 21 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Load Combination	Vertical K	Shear <sub>x</sub> K	Shear <sub>y</sub> K	Overturing Moment, M <sub>x</sub> kip-ft	Overturing Moment, M <sub>y</sub> kip-ft	Torque kip-ft
No Ice						
1.2 Dead+1.6 Wind 270 deg - No Ice	80.100	-54.096	-0.000	1.008	8992.843	16.040
0.9 Dead+1.6 Wind 270 deg - No Ice	60.075	-54.097	-0.000	0.718	8973.039	16.046
1.2 Dead+1.6 Wind 300 deg - No Ice	80.100	-45.823	-26.456	-4420.908	7660.684	-2.809
0.9 Dead+1.6 Wind 300 deg - No Ice	60.075	-45.821	-26.455	-4411.303	7643.186	-2.803
1.2 Dead+1.6 Wind 330 deg - No Ice	80.100	-27.141	-47.010	-7829.532	4522.669	-20.607
0.9 Dead+1.6 Wind 330 deg - No Ice	60.075	-27.142	-47.011	-7812.862	4512.518	-20.602
1.2 Dead+1.0 Ice+1.0 Temp	213.447	0.000	-0.000	-0.229	12.396	0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	213.447	0.000	-8.383	-1470.809	12.722	-1.126
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	213.447	4.068	-7.046	-1247.537	-707.467	0.356
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	213.447	6.961	-4.019	-713.073	-1222.131	-0.832
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	213.447	8.105	-0.000	-0.129	-1418.930	-1.797
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	213.447	7.232	4.176	730.848	-1253.369	0.294
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	213.447	4.060	7.033	1243.586	-705.339	2.306
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	213.447	0.000	8.054	1430.223	12.722	1.125
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	213.447	-4.068	7.046	1247.277	732.916	-0.355
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	213.447	-7.246	4.184	732.976	1282.498	0.832
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	213.447	-8.105	-0.000	-0.127	1444.374	1.797
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	213.447	-6.948	-4.011	-710.941	1243.884	-0.294
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	213.447	-4.060	-7.033	-1243.846	730.780	-2.306
Dead+Wind 0 deg - Service	66.750	0.000	-19.844	-3256.749	1.262	-1.007
Dead+Wind 30 deg - Service	66.750	9.339	-16.176	-2695.168	-1555.331	5.236
Dead+Wind 60 deg - Service	66.750	15.769	-9.104	-1521.666	-2635.918	-0.225
Dead+Wind 90 deg - Service	66.750	18.552	-0.000	0.904	-3077.920	-5.521
Dead+Wind 120 deg - Service	66.750	17.077	9.859	1612.922	-2790.820	0.962
Dead+Wind 150 deg - Service	66.750	9.308	16.122	2682.619	-1547.012	7.085
Dead+Wind 180 deg - Service	66.750	0.000	18.271	3063.269	1.262	1.007
Dead+Wind 210 deg - Service	66.750	-9.339	16.176	2696.998	1557.839	-5.236
Dead+Wind 240 deg - Service	66.750	-17.131	9.891	1621.138	2807.577	0.224
Dead+Wind 270 deg - Service	66.750	-18.552	-0.000	0.904	3080.442	5.521
Dead+Wind 300 deg - Service	66.750	-15.714	-9.073	-1513.445	2624.208	-0.962
Dead+Wind 330 deg - Service	66.750	-9.308	-16.122	-2680.787	1549.552	-7.085

### Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.000	-66.750	0.000	0.000	66.750	-0.000	0.000%
2	0.000	-80.100	-57.870	-0.000	80.100	57.865	0.005%

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b>	<b>Page</b>
	EII # 8032 - Winchester (Site# US-KY-5051)	22 of 32
	<b>Project</b>	<b>Date</b>
	280' SST - Estill County, KY	12:58:01 10/04/19
	<b>Client</b>	<b>Designed by</b>
	Vertical Bridge	T. Cheriyan

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
3	0.000	-60.075	-57.870	-0.000	60.075	57.866	0.004%
4	27.235	-80.100	-47.173	-27.234	80.100	47.170	0.004%
5	27.235	-60.075	-47.173	-27.234	60.075	47.170	0.004%
6	45.984	-80.100	-26.549	-45.981	80.100	26.547	0.004%
7	45.984	-60.075	-26.549	-45.979	60.075	26.546	0.007%
8	54.100	-80.100	0.000	-54.096	80.100	0.000	0.004%
9	54.100	-60.075	0.000	-54.097	60.075	0.000	0.004%
10	49.799	-80.100	28.751	-49.795	80.100	-28.749	0.005%
11	49.799	-60.075	28.751	-49.796	60.075	-28.750	0.004%
12	27.143	-80.100	47.013	-27.141	80.100	-47.010	0.004%
13	27.143	-60.075	47.013	-27.141	60.075	-47.011	0.004%
14	0.000	-80.100	53.282	-0.000	80.100	-53.278	0.004%
15	0.000	-60.075	53.282	-0.000	60.075	-53.276	0.007%
16	-27.235	-80.100	47.173	27.233	80.100	-47.170	0.004%
17	-27.235	-60.075	47.173	27.234	60.075	-47.171	0.004%
18	-49.957	-80.100	28.843	49.953	80.100	-28.841	0.005%
19	-49.957	-60.075	28.843	49.954	60.075	-28.841	0.004%
20	-54.100	-80.100	0.000	54.096	80.100	0.000	0.004%
21	-54.100	-60.075	0.000	54.097	60.075	0.000	0.004%
22	-45.826	-80.100	-26.458	45.823	80.100	26.456	0.004%
23	-45.826	-60.075	-26.458	45.821	60.075	26.455	0.007%
24	-27.143	-80.100	-47.013	27.141	80.100	47.010	0.004%
25	-27.143	-60.075	-47.013	27.142	60.075	47.011	0.004%
26	0.000	-213.447	0.000	-0.000	213.447	0.000	0.000%
27	0.000	-213.447	-8.384	-0.000	213.447	8.383	0.001%
28	4.069	-213.447	-7.047	-4.068	213.447	7.046	0.001%
29	6.963	-213.447	-4.020	-6.961	213.447	4.019	0.001%
30	8.106	-213.447	0.000	-8.105	213.447	0.000	0.001%
31	7.234	-213.447	4.176	-7.232	213.447	-4.176	0.001%
32	4.061	-213.447	7.034	-4.060	213.447	-7.033	0.001%
33	0.000	-213.447	8.056	-0.000	213.447	-8.054	0.001%
34	-4.069	-213.447	7.047	4.068	213.447	-7.046	0.001%
35	-7.247	-213.447	4.184	7.246	213.447	-4.184	0.001%
36	-8.106	-213.447	0.000	8.105	213.447	0.000	0.001%
37	-6.949	-213.447	-4.012	6.948	213.447	4.011	0.001%
38	-4.061	-213.447	-7.034	4.060	213.447	7.033	0.001%
39	0.000	-66.750	-19.846	-0.000	66.750	19.844	0.002%
40	9.340	-66.750	-16.177	-9.339	66.750	16.176	0.002%
41	15.770	-66.750	-9.105	-15.769	66.750	9.104	0.002%
42	18.553	-66.750	0.000	-18.552	66.750	0.000	0.002%
43	17.078	-66.750	9.860	-17.077	66.750	-9.859	0.002%
44	9.308	-66.750	16.123	-9.308	66.750	-16.122	0.002%
45	0.000	-66.750	18.272	-0.000	66.750	-18.271	0.002%
46	-9.340	-66.750	16.177	9.339	66.750	-16.176	0.002%
47	-17.132	-66.750	9.891	17.131	66.750	-9.891	0.002%
48	-18.553	-66.750	0.000	18.552	66.750	0.000	0.002%
49	-15.715	-66.750	-9.073	15.714	66.750	9.073	0.002%
50	-9.308	-66.750	-16.123	9.308	66.750	16.122	0.002%

### Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	6	0.00000001	0.00000001
2	Yes	14	0.00005896	0.00011537
3	Yes	14	0.00004442	0.00008731

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b>	Ell # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b>	23 of 32	
	<b>Project</b>	280' SST - Estill County, KY		<b>Date</b>	12:58:01 10/04/19
	<b>Client</b>	Vertical Bridge		<b>Designed by</b>	T. Cheriyan

4	Yes	14	0.00005562	0.00010920
5	Yes	14	0.00004122	0.00008131
6	Yes	14	0.00005226	0.00010288
7	Yes	13	0.00007580	0.00014476
8	Yes	14	0.00005556	0.00010903
9	Yes	14	0.00004118	0.00008117
10	Yes	14	0.00005886	0.00011512
11	Yes	14	0.00004433	0.00008710
12	Yes	14	0.00005559	0.00010913
13	Yes	14	0.00004120	0.00008125
14	Yes	14	0.00005227	0.00010294
15	Yes	13	0.00007581	0.00014483
16	Yes	14	0.00005562	0.00010921
17	Yes	14	0.00004122	0.00008131
18	Yes	14	0.00005891	0.00011524
19	Yes	14	0.00004437	0.00008719
20	Yes	14	0.00005556	0.00010902
21	Yes	14	0.00004118	0.00008117
22	Yes	14	0.00005226	0.00010285
23	Yes	13	0.00007580	0.00014473
24	Yes	14	0.00005559	0.00010911
25	Yes	14	0.00004120	0.00008124
26	Yes	6	0.00000001	0.00001523
27	Yes	15	0.00000001	0.00012685
28	Yes	15	0.00000001	0.00012509
29	Yes	15	0.00000001	0.00012380
30	Yes	15	0.00000001	0.00012430
31	Yes	15	0.00000001	0.00012602
32	Yes	15	0.00000001	0.00012530
33	Yes	15	0.00000001	0.00012526
34	Yes	15	0.00000001	0.00012635
35	Yes	15	0.00000001	0.00012754
36	Yes	15	0.00000001	0.00012572
37	Yes	15	0.00000001	0.00012471
38	Yes	15	0.00000001	0.00012547
39	Yes	14	0.00000001	0.00008966
40	Yes	14	0.00000001	0.00008774
41	Yes	14	0.00000001	0.00008572
42	Yes	14	0.00000001	0.00008760
43	Yes	14	0.00000001	0.00008951
44	Yes	14	0.00000001	0.00008770
45	Yes	14	0.00000001	0.00008581
46	Yes	14	0.00000001	0.00008777
47	Yes	14	0.00000001	0.00008958
48	Yes	14	0.00000001	0.00008760
49	Yes	14	0.00000001	0.00008567
50	Yes	14	0.00000001	0.00008768

### Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	280 - 260	15.016	39	0.474	0.040
T2	260 - 240	12.981	39	0.466	0.039
T3	240 - 220	10.970	39	0.437	0.036
T4	220 - 200	9.127	39	0.395	0.033
T5	200 - 180	7.474	39	0.351	0.028
T6	180 - 160	6.010	39	0.310	0.025
T7	160 - 140	4.719	39	0.265	0.020



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 24 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T8	140 - 120	3.608	39	0.226	0.016
T9	120 - 100	2.644	39	0.191	0.012
T10	100 - 80	1.837	39	0.154	0.009
T11	80 - 60	1.204	39	0.121	0.007
T12	60 - 40	0.708	39	0.087	0.005
T13	40 - 20	0.344	39	0.057	0.003
T14	20 - 0	0.113	39	0.027	0.002

### Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
280.000	Lightning Rod 1"x10'	39	15.016	0.474	0.040	Inf
275.000	Sector I (CaAa=10000 Sq in) No Ice	39	14.508	0.473	0.040	Inf
265.000	Sector I (CaAa=10000 Sq in) No Ice	39	13.490	0.469	0.040	369375
255.000	Sector I (CaAa=10000 Sq in) No Ice	39	12.471	0.461	0.039	110980

### Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	280 - 260	43.923	2	1.387	0.117
T2	260 - 240	37.965	2	1.363	0.114
T3	240 - 220	32.080	2	1.279	0.106
T4	220 - 200	26.687	2	1.154	0.095
T5	200 - 180	21.853	2	1.026	0.083
T6	180 - 160	17.573	2	0.905	0.071
T7	160 - 140	13.798	2	0.776	0.059
T8	140 - 120	10.549	2	0.660	0.048
T9	120 - 100	7.731	2	0.557	0.036
T10	100 - 80	5.373	2	0.450	0.026
T11	80 - 60	3.519	2	0.354	0.021
T12	60 - 40	2.072	2	0.255	0.015
T13	40 - 20	1.007	2	0.168	0.009
T14	20 - 0	0.329	2	0.079	0.005

### Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
280.000	Lightning Rod 1"x10'	2	43.923	1.387	0.117	404777
275.000	Sector I (CaAa=10000 Sq in) No Ice	2	42.435	1.384	0.117	404777
265.000	Sector I (CaAa=10000 Sq in) No Ice	2	39.457	1.374	0.116	134926
255.000	Sector I (CaAa=10000 Sq in) No Ice	2	36.472	1.348	0.113	38722

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 25 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

### Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load Allowable	Allowable Ratio	Criteria
T1	280	Diagonal	A325X	0.625	1	4.231	9.598	0.441 ✓	1	Member Block Shear
		Top Girt	A325X	0.625	1	1.955	9.598	0.204 ✓	1	Member Block Shear
T2	260	Leg	A325N	0.750	6	3.058	29.821	0.103 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	5.884	9.598	0.613 ✓	1	Member Block Shear
T3	240	Leg	A325N	0.750	6	9.732	29.821	0.326 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	5.714	10.740	0.532 ✓	1	Member Block Shear
T4	220	Leg	A325N	0.750	6	15.703	29.821	0.527 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	5.747	10.740	0.535 ✓	1	Member Block Shear
T5	200	Leg	A325N	0.750	6	20.924	29.821	0.702 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	6.220	13.025	0.478 ✓	1	Member Block Shear
T6	180	Leg	A325N	0.750	6	25.753	29.821	0.864 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	6.542	13.025	0.502 ✓	1	Member Block Shear
T7	160	Leg	A325N	1.000	6	30.338	53.014	0.572 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	7.144	14.168	0.504 ✓	1	Member Block Shear
T8	140	Leg	A325N	1.000	6	34.827	53.014	0.657 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	7.867	14.168	0.555 ✓	1	Member Block Shear
T9	120	Leg	A325N	1.000	6	39.296	53.014	0.741 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	8.663	15.186	0.570 ✓	1	Bolt Shear
T10	100	Leg	A325N	1.000	6	43.711	53.014	0.825 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	9.726	26.051	0.373 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	5.687	19.195	0.296 ✓	1	Member Block Shear
T11	80	Leg	A325N	1.000	6	48.080	53.014	0.907 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	9.859	26.051	0.378 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	6.246	21.480	0.291 ✓	1	Member Block Shear
T12	60	Leg	A325N	1.000	6	52.286	53.014	0.986 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	10.239	26.051	0.393 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	6.732	21.480	0.313 ✓	1	Member Block Shear
T13	40	Leg	A325N	1.250	6	56.384	82.835	0.681 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	10.513	28.336	0.371 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	7.273	26.051	0.279 ✓	1	Member Block Shear

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 26 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt K	Allowable Load per Bolt K	Ratio Load Allowable	Allowable Ratio	Criteria
T14	20	Leg	A325N	1.250	6	60.334	82.835	0.728 ✓	1	Bolt Tension
		Diagonal	A325X	0.625	1	10.720	28.336	0.378 ✓	1	Member Block Shear
		Horizontal	A325X	0.625	1	7.801	26.051	0.299 ✓	1	Member Block Shear

### Compression Checks

### Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio P <sub>u</sub> / φP <sub>n</sub>
T1	280 - 260	1 3/4	20.019	4.754	130.4 K=1.00	2.405	-17.787	31.952	0.557 <sup>1</sup> ✓
T2	260 - 240	2 1/4	20.019	4.754	101.4 K=1.00	3.976	-60.565	84.331	0.718 <sup>1</sup> ✓
T3	240 - 220	2 1/2	20.019	4.754	91.3 K=1.00	4.909	-100.081	120.108	0.833 <sup>1</sup> ✓
T4	220 - 200	2 3/4	20.019	4.754	83.0 K=1.00	5.940	-135.016	161.540	0.836 <sup>1</sup> ✓
T5	200 - 180	3	20.019	4.754	76.1 K=1.00	7.069	-167.916	208.347	0.806 <sup>1</sup> ✓
T6	180 - 160	3	20.019	4.754	76.1 K=1.00	7.069	-199.721	208.347	0.959 <sup>1</sup> ✓
T7	160 - 140	3 1/4	20.019	4.754	70.2 K=1.00	8.296	-231.418	260.312	0.889 <sup>1</sup> ✓
T8	140 - 120	3 1/2	20.019	4.754	65.2 K=1.00	9.621	-263.528	317.273	0.831 <sup>1</sup> ✓
T9	120 - 100	3 1/2	20.019	4.754	65.2 K=1.00	9.621	-296.231	317.273	0.934 <sup>1</sup> ✓
T10	100 - 80	3 3/4	20.019	4.754	60.9 K=1.00	11.045	-324.993	379.106	0.857 <sup>1</sup> ✓
T11	80 - 60	3 3/4	20.019	4.754	60.9 K=1.00	11.045	-356.959	379.106	0.942 <sup>1</sup> ✓
T12	60 - 40	4	20.019	4.754	57.1 K=1.00	12.566	-388.396	445.717	0.871 <sup>1</sup> ✓
T13	40 - 20	4	20.019	4.754	57.1 K=1.00	12.566	-419.600	445.717	0.941 <sup>1</sup> ✓
T14	20 - 0	4 1/4	20.019	4.754	53.7 K=1.00	14.186	-450.102	517.034	0.871 <sup>1</sup> ✓

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 27 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

### Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T1	280 - 260	L1 3/4x1 3/4x3/16	7.485	3.764	131.5 K=1.00	0.621	-3.913	8.114	0.482 <sup>1</sup> ✓
T2	260 - 240	L1 3/4x1 3/4x3/16	8.697	4.343	151.7 K=1.00	0.621	-5.331	6.094	0.875 <sup>1</sup> ✓
T3	240 - 220	L2x2x3/16	9.987	4.976	151.6 K=1.00	0.715	-5.191	7.032	0.738 <sup>1</sup> ✓
T4	220 - 200	L2x2x3/16	11.329	5.636	171.7 K=1.00	0.715	-5.349	5.481	0.976 <sup>1</sup> ✓
T5	200 - 180	L2 1/2x2 1/2x3/16	12.706	6.314	153.1 K=1.00	0.902	-5.786	8.696	0.665 <sup>1</sup> ✓
T6	180 - 160	L2 1/2x2 1/2x3/16	14.108	7.016	170.1 K=1.00	0.902	-6.131	7.044	0.870 <sup>1</sup> ✓
T7	160 - 140	L3x3x3/16	15.529	7.716	155.4 K=1.00	1.090	-6.791	10.203	0.666 <sup>1</sup> ✓
T8	140 - 120	L3x3x3/16	16.963	8.422	169.6 K=1.00	1.090	-7.565	8.563	0.883 <sup>1</sup> ✓
T9	120 - 100	L3x3x1/4	18.408	9.145	185.4 K=1.00	1.440	-8.121	9.466	0.858 <sup>1</sup> ✓
T10	100 - 80	2L2 1/2x2 1/2x3/16x3/8	10.829	10.655	168.6 K=1.00	1.800	-9.416	14.307	0.658 <sup>1</sup> ✓
T11	80 - 60	2L 'a' > 61.014 in - 257 2L2 1/2x2 1/2x3/16x3/8	11.508	11.336	179.4 K=1.00	1.800	-9.704	12.640	0.768 <sup>1</sup> ✓
T12	60 - 40	2L 'a' > 64.914 in - 296 2L2 1/2x2 1/2x3/16x3/8	12.195	12.014	190.1 K=1.00	1.800	-10.226	11.254	0.909 <sup>1</sup> ✓
T13	40 - 20	2L 'a' > 68.794 in - 335 2L3x3x3/16x3/8	12.889	12.710	169.1 K=1.00	2.180	-10.549	17.229	0.612 <sup>1</sup> ✓
T14	20 - 0	2L 'a' > 72.603 in - 374 2L3x3x3/16x3/8  2L 'a' > 76.546 in - 413	13.589	13.400	178.3 K=1.00	2.180	-10.989	15.499	0.709 <sup>1</sup> ✓

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T10	100 - 80	2L1 3/4x1 3/4x3/16x3/8	19.106	9.397	210.0 K=1.00	1.242	-5.687	6.363	0.894 <sup>1</sup> ✓
T11	80 - 60	2L 'a' > 54.095 in - 253 2L2x2x3/16x3/8	20.606	10.147	198.5 K=1.00	1.430	-6.246	8.197	0.762 <sup>1</sup> ✓
T12	60 - 40	2L 'a' > 58.316 in - 292 2L2x2x3/16x3/8	22.106	10.886	213.0	1.430	-6.732	7.121	0.945 <sup>1</sup>

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 28 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
					K=1.00				✓
T13	40 - 20	2L 'a' > 62.566 in - 331 2L2 1/2x2 1/2x3/16x3/8	23.606	11.636	184.1 K=1.00	1.800	-7.273	11.996	0.606 <sup>1</sup> ✓
T14	20 - 0	2L 'a' > 66.633 in - 370 2L2 1/2x2 1/2x3/16x3/8	25.106	12.376	195.8 K=1.00	1.800	-7.801	10.605	0.736 <sup>1</sup> ✓
		2L 'a' > 70.868 in - 409							✓

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T1	280 - 260	L1 3/4x1 3/4x3/16	4.538	4.392	153.4 K=1.00	0.621	-1.769	5.959	0.297 <sup>1</sup> ✓

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Inner Bracing Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T10	100 - 80	L1 3/4x1 3/4x3/16	9.553	9.553	333.8 K=1.00	0.621	-0.011	1.259	0.008 <sup>1</sup> ✓
T11	80 - 60	KL/R > 250 (C) - 260 L1 3/4x1 3/4x3/16	10.303	10.303	360.0 K=1.00	0.621	-0.011	1.083	0.010 <sup>1</sup> ✓
T12	60 - 40	KL/R > 250 (C) - 299 L1 3/4x1 3/4x3/16	11.053	11.053	386.2 K=1.00	0.621	-0.011	0.941	0.012 <sup>1</sup> ✓
T13	40 - 20	KL/R > 250 (C) - 338 L1 3/4x1 3/4x3/16	11.803	11.803	412.4 K=1.00	0.621	-0.013	0.825	0.016 <sup>1</sup> ✓
T14	20 - 0	KL/R > 250 (C) - 377 L1 3/4x1 3/4x3/16	12.553	12.553	438.6 K=1.00	0.621	-0.012	0.729	0.017 <sup>1</sup> ✓
		KL/R > 250 (C) - 417							✓

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> Ell # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 29 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

**Tension Checks**

**Leg Design Data (Tension)**

Section No.	Elevation ft	Size	L ft	L <sub>w</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T1	280 - 260	1 3/4	20.019	0.500	13.7	2.405	18.358	108.238	0.170 <sup>1</sup>
T2	260 - 240	2 1/4	20.019	0.500	10.7	3.976	58.403	178.924	0.326 <sup>1</sup>
T3	240 - 220	2 1/2	20.019	0.500	9.6	4.909	94.225	220.893	0.427 <sup>1</sup>
T4	220 - 200	2 3/4	20.019	0.500	8.7	5.940	125.552	267.281	0.470 <sup>1</sup>
T5	200 - 180	3	20.019	0.500	8.0	7.069	154.528	318.086	0.486 <sup>1</sup>
T6	180 - 160	3	20.019	0.500	8.0	7.069	182.040	318.086	0.572 <sup>1</sup>
T7	160 - 140	3 1/4	20.019	0.500	7.4	8.296	208.977	373.310	0.560 <sup>1</sup>
T8	140 - 120	3 1/2	20.019	0.500	6.9	9.621	235.791	432.951	0.545 <sup>1</sup>
T9	120 - 100	3 1/2	20.019	0.500	6.9	9.621	262.283	432.951	0.606 <sup>1</sup>
T10	100 - 80	3 3/4	20.019	0.500	6.4	11.045	288.497	497.010	0.580 <sup>1</sup>
T11	80 - 60	3 3/4	20.019	0.500	6.4	11.045	313.733	497.010	0.631 <sup>1</sup>
T12	60 - 40	4	20.019	0.500	6.0	12.566	338.322	565.487	0.598 <sup>1</sup>
T13	40 - 20	4	20.019	0.500	6.0	12.566	362.024	565.487	0.640 <sup>1</sup>
T14	20 - 0	4 1/4	20.019	0.500	5.7	14.186	385.047	638.381	0.603 <sup>1</sup>

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

**Diagonal Design Data (Tension)**

Section No.	Elevation ft	Size	L ft	L <sub>w</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T1	280 - 260	L1 3/4x1 3/4x3/16	7.485	3.764	84.1	0.360	4.231	17.567	0.241 <sup>1</sup>
T2	260 - 240	L1 3/4x1 3/4x3/16	8.697	4.343	97.1	0.360	5.884	17.567	0.335 <sup>1</sup>
T3	240 - 220	L2x2x3/16	9.987	4.976	96.8	0.431	5.714	21.001	0.272 <sup>1</sup>
T4	220 - 200	L2x2x3/16	11.329	5.636	109.6	0.431	5.747	21.001	0.274 <sup>1</sup>

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 30 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	KI/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T5	200 - 180	L2 1/2x2 1/2x3/16	12.706	6.314	97.4	0.571	6.220	27.838	0.223 <sup>1</sup> ✓
T6	180 - 160	L2 1/2x2 1/2x3/16	14.108	7.016	108.2	0.571	6.542	27.838	0.235 <sup>1</sup> ✓
T7	160 - 140	L3x3x3/16	15.529	7.716	98.6	0.712	7.144	34.712	0.206 <sup>1</sup> ✓
T8	140 - 120	L3x3x3/16	16.963	8.422	107.6	0.712	7.867	34.712	0.227 <sup>1</sup> ✓
T9	120 - 100	L3x3x1/4	18.408	9.145	118.0	0.939	8.663	45.794	0.189 <sup>1</sup> ✓
T10	100 - 80	2L2 1/2x2 1/2x3/16x3/8	10.829	10.655	164.3	1.139	9.726	55.529	0.175 <sup>1</sup> ✓
T11	80 - 60	2L 'a' > 61.014 in - 258 2L2 1/2x2 1/2x3/16x3/8	11.508	11.336	174.9	1.139	9.859	55.529	0.178 <sup>1</sup> ✓
T12	60 - 40	2L 'a' > 64.914 in - 297 2L2 1/2x2 1/2x3/16x3/8	12.195	12.014	185.3	1.139	10.239	55.529	0.184 <sup>1</sup> ✓
T13	40 - 20	2L 'a' > 68.794 in - 336 2L3x3x3/16x3/8	12.889	12.710	162.4	1.424	10.513	69.423	0.151 <sup>1</sup> ✓
T14	20 - 0	2L 'a' > 72.603 in - 375 2L3x3x3/16x3/8	13.589	13.400	171.2	1.424	10.720	69.423	0.154 <sup>1</sup> ✓
		2L 'a' > 76.546 in - 414							✓

<sup>1</sup> P<sub>u</sub> / φP<sub>n</sub> controls

### Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	KI/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
T10	100 - 80	2L1 3/4x1 3/4x3/16x3/8	19.106	9.397	210.0	0.721	5.687	35.134	0.162 <sup>1</sup> ✓
T11	80 - 60	2L 'a' > 54.095 in - 256 2L2x2x3/16x3/8	20.606	10.147	197.3	0.862	6.246	42.001	0.149 <sup>1</sup> ✓
T12	60 - 40	2L 'a' > 58.316 in - 295 2L2x2x3/16x3/8	22.106	10.886	211.7	0.862	6.732	42.001	0.160 <sup>1</sup> ✓
T13	40 - 20	2L 'a' > 62.566 in - 331 2L2 1/2x2 1/2x3/16x3/8	23.606	11.636	179.5	1.139	7.273	55.529	0.131 <sup>1</sup> ✓
T14	20 - 0	2L 'a' > 66.633 in - 373 2L2 1/2x2 1/2x3/16x3/8	25.106	12.376	190.9	1.139	7.801	55.529	0.140 <sup>1</sup> ✓
		2L 'a' > 70.868 in - 409							✓

<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 31 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

<sup>1</sup>  $P_u / \phi P_n$  controls

### Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	$L_u$ ft	$Kl/r$	A in <sup>2</sup>	$P_u$ K	$\phi P_n$ K	Ratio $\frac{P_u}{\phi P_n}$
T1	280 - 260	L1 3/4x1 3/4x3/16	4.538	4.392	98.1	0.360	1.955	17.567	0.111 <sup>1</sup> ✓

<sup>1</sup>  $P_u / \phi P_n$  controls

### Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$\phi P_{allow}$ K	% Capacity	Pass Fail
T1	280 - 260	Leg	1 3/4	3	-17.787	31.952	55.7	Pass
T2	260 - 240	Leg	2 1/4	33	-60.565	84.331	71.8	Pass
T3	240 - 220	Leg	2 1/2	60	-100.081	120.108	83.3	Pass
T4	220 - 200	Leg	2 3/4	87	-135.016	161.540	83.6	Pass
T5	200 - 180	Leg	3	114	-167.916	208.347	80.6	Pass
T6	180 - 160	Leg	3	141	-199.721	208.347	95.9	Pass
T7	160 - 140	Leg	3 1/4	168	-231.418	260.312	88.9	Pass
T8	140 - 120	Leg	3 1/2	195	-263.528	317.273	83.1	Pass
T9	120 - 100	Leg	3 1/2	222	-296.231	317.273	93.4	Pass
T10	100 - 80	Leg	3 3/4	249	-324.993	379.106	85.7	Pass
T11	80 - 60	Leg	3 3/4	288	-356.959	379.106	94.2	Pass
T12	60 - 40	Leg	4	327	-388.396	445.717	87.1	Pass
							98.6 (b)	
T13	40 - 20	Leg	4	366	-419.600	445.717	94.1	Pass
T14	20 - 0	Leg	4 1/4	405	-450.102	517.034	87.1	Pass
T1	280 - 260	Diagonal	L1 3/4x1 3/4x3/16	8	-3.913	8.114	48.2	Pass
T2	260 - 240	Diagonal	L1 3/4x1 3/4x3/16	34	-5.331	6.094	87.5	Pass
T3	240 - 220	Diagonal	L2x2x3/16	65	-5.191	7.032	73.8	Pass
T4	220 - 200	Diagonal	L2x2x3/16	92	-5.349	5.481	97.6	Pass
T5	200 - 180	Diagonal	L2 1/2x2 1/2x3/16	119	-5.786	8.696	66.5	Pass
T6	180 - 160	Diagonal	L2 1/2x2 1/2x3/16	146	-6.131	7.044	87.0	Pass
T7	160 - 140	Diagonal	L3x3x3/16	173	-6.791	10.203	66.6	Pass
T8	140 - 120	Diagonal	L3x3x3/16	200	-7.565	8.563	88.3	Pass
T9	120 - 100	Diagonal	L3x3x1/4	227	-8.121	9.466	85.8	Pass
T10	100 - 80	Diagonal	2L2 1/2x2 1/2x3/16x3/8	257	-9.416	14.307	65.8	Pass
T11	80 - 60	Diagonal	2L2 1/2x2 1/2x3/16x3/8	296	-9.704	12.640	76.8	Pass
T12	60 - 40	Diagonal	2L2 1/2x2 1/2x3/16x3/8	335	-10.226	11.254	90.9	Pass
T13	40 - 20	Diagonal	2L3x3x3/16x3/8	374	-10.549	17.229	61.2	Pass
T14	20 - 0	Diagonal	2L3x3x3/16x3/8	413	-10.989	15.499	70.9	Pass
T10	100 - 80	Horizontal	2L1 3/4x1 3/4x3/16x3/8	253	-5.687	6.363	89.4	Pass
T11	80 - 60	Horizontal	2L2x2x3/16x3/8	292	-6.246	8.197	76.2	Pass
T12	60 - 40	Horizontal	2L2x2x3/16x3/8	331	-6.732	7.121	94.5	Pass
T13	40 - 20	Horizontal	2L2 1/2x2 1/2x3/16x3/8	370	-7.273	11.996	60.6	Pass
T14	20 - 0	Horizontal	2L2 1/2x2 1/2x3/16x3/8	409	-7.801	10.605	73.6	Pass
T1	280 - 260	Top Girt	L1 3/4x1 3/4x3/16	4	-1.769	5.959	29.7	Pass
T10	100 - 80	Inner Bracing	L1 3/4x1 3/4x3/16	260	-0.011	1.259	0.8	Pass
T11	80 - 60	Inner Bracing	L1 3/4x1 3/4x3/16	299	-0.011	1.083	1.0	Pass
T12	60 - 40	Inner Bracing	L1 3/4x1 3/4x3/16	338	-0.011	0.941	1.2	Pass
T13	40 - 20	Inner Bracing	L1 3/4x1 3/4x3/16	377	-0.013	0.825	1.6	Pass



<b>tnxTower</b>  <b>B+T Group</b> 1717 S. Boulder Ave, Ste 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265	<b>Job</b> EII # 8032 - Winchester (Site# US-KY-5051)	<b>Page</b> 32 of 32
	<b>Project</b> 280' SST - Estill County, KY	<b>Date</b> 12:58:01 10/04/19
	<b>Client</b> Vertical Bridge	<b>Designed by</b> T. Cheriyan

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$\sigma P_{allow}$ K	% Capacity	Pass Fail
T14	20 - 0	Inner Bracing	L1 3/4x1 3/4x3/16	417	-0.012	0.729	1.7	Pass
							Summary	
						Leg (T12)	98.6	Pass
						Diagonal (T4)	97.6	Pass
						Horizontal (T12)	94.5	Pass
						Top Girt (T1)	29.7	Pass
						Inner Bracing (T14)	1.7	Pass
						Bolt Checks	98.6	Pass
						<b>RATING =</b>	<b>98.6</b>	<b>Pass</b>

Program Version 8.0.5.0

## Exhibit E



Engineering, Geophysics & Geosciences

1455 LINCOLN PARKWAY, SUITE 500  
ATLANTA, GEORGIA 30346  
PHONE: (770) 379-8590  
FAX: (770) 379-8594  
WWW.EGSCI.COM

October 22, 2019

*EGSci Project #: 19-US-KY-5051*

Vertical Bridge Development, LLC  
750 Park of Commerce Drive  
Suite 200  
Boca Raton, FL 33487

Re: Geotechnical Investigation  
Site: US-KY-5051 Winchester  
Winchester Road  
Irvine, KY 40336  
Latitude: N37.782431  
Longitude: W84.000311

Type of Tower: Proposed Self-Support

EGSci Consulting Inc. (EGSci) is pleased to submit to Vertical Bridge Development, LLC (Vertical Bridge) this letter report summarizing our limited geotechnical investigation of a proposed telecommunications site (referenced herein as project site) in Estill County, Kentucky. The objective of the investigation was to conduct a subsurface exploration at the project site to characterize and evaluate the subsurface conditions in support of the foundation design analysis for a proposed telecommunications tower.

### **PROJECT AND SITE DESCRIPTION**

The project site is located east of Winchester Road (Kentucky Highway 89), approximately 0.5 miles east of the intersection of Winchester Road and Kentucky Route 82, in Irvine, Estill County, Kentucky. At the time of this investigation, the project site consisted of a heavily wooded lot approximately 230 north-northeast of an existing telecommunications tower. Figure 1 shows the project site location, as indicated on the U.S. Geological Survey's (USGS) 1976 Palmer, Kentucky 7.5-minute topographic quadrangle map.

### **GEOTECHNICAL INVESTIGATION**

The geotechnical investigation was performed on October 16, 2019 and consisted of one test boring positioned as close as feasible to the proposed center of tower location (staked by others prior to our boring). *Due to the steep topography with rock outcropping immediately surrounding the proposed center of tower location, the boring was positioned approximately 25 to 30 feet southeast of the proposed center of tower location, at an estimated 9 to 10 feet lower in elevation. Refer to the attached site photo log for detail.*

The test boring (B-1) was advanced using a CME 550 drill rig to auger refusal, which was encountered at 6.1 feet below ground surface (BGS). Upon auger refusal, rock coring was performed from 6.1 feet to a depth of 21.1 feet BGS. Groundwater conditions were observed in

EGSci Consulting Inc.

the borehole during drilling. Subsurface material samples were collected and transported to EGSci's facility for further examination and are discarded thirty days after completion of fieldwork. The approximate boring location is represented on Figure 1, and the detailed boring log is attached to this report.

### ***Field and Laboratory Procedures***

#### **Standard Penetration Test (SPT) Boring**

The SPT boring was performed in accordance with the American Society for Testing and Materials (ASTM) Standard D1586: Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils. This sampling technique involves driving a split spoon (split-barrel) sampler into the soil using a 140-pound hammer, free falling 30 inches. The number of hammer blows required to drive the sampler one foot (after an initial seating of six inches) is termed the N-value or penetration resistance. The penetration resistance provides a general indication of soil density and/or consistency. The boring was advanced using solid stem. An automatic hammer was utilized for the Standard Penetration Tests at the project site.

#### **Soil Classification**

The samples retrieved from the split spoon sampler were visually examined and classified in general accordance with the guidelines of ASTM D2487: Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).

#### **Laboratory Soil Resistivity**

Laboratory soil resistivity testing was performed on one shallow soil sample in accordance with ASTM G57: Standard Test Method for Field Measurement of Soil Resistivity Using the Wenner Four-Electrode Method. A Miller Soilbox and Nilson 400 Soil Resistance Meter were utilized for this test. The sample tested was collected from the project site at a depth of 0 to 3 feet BGS and yielded soil resistivity of 8,400 ohm-cm.

### ***Subsurface Conditions***

The subsurface conditions encountered in the boring drilled at the project site are shown in detail on the boring log attached to this report. Soil boundaries indicated have been inferred from the results of non-continuous sampling and observations of drilling resistance, which can typically represent transitions from one soil type to another, rather than exact planes of stratigraphic change. The conditions summarized in a boring log are location-specific and conditions may differ beyond the boring location. *Note: Based on the survey information (by others) provided for the project site, the change in ground surface elevation across the proposed lease area is approximately 35 ± feet; therefore, subsurface conditions at the project site should be expected to vary (due to the change in ground surface elevation) within the proposed lease area relative to the boring location.*

Groundwater was encountered during drilling; however, seasonal precipitation may affect the groundwater levels at the project site. A groundwater monitoring program would be required to establish long-term groundwater conditions at the project site, which is beyond the scope of this investigation.

#### **Regional Geology**

According to the USGS digital geologic map of the State of Kentucky, the geology of the project site area is characterized by the Devonian to Mississippian Wildie, Nada, Halls Gap, Holtsclaw

Siltstone, Cowbell, Nancy, Kenwood Siltstone, New Providence Shale, Sunbury Shale, Berea Sandstone, and Bedford Shale, undivided; Borden Formation locally includes Renfro Member in eastern Kentucky. This geology is primarily comprised of shale, with minor siltstone and sandstone.

#### Relatively Sound Rock

Rock coring procedures were utilized in the boring to determine the nature and continuity of the materials causing refusal to soil drilling procedures. Small zones or seams a few inches to a few feet thick of weathered rock often exist within the relatively sound rock. The rock observed in the cores was characterized as greenish gray and red-brown, fine to very fine grained, intensely to slightly fractured, moderately to slightly weathered, medium strong, sandy Siltstone. Rock core runs had Recovery of 92% and 100% with Rock Quality Designations (RQD) of 43%, 89%, and 87%.

### **GEOTECHNICAL ANALYSIS AND RECOMMENDATIONS**

The geotechnical design parameters presented below are to assist in design and analysis of the proposed tower and ancillary structure foundation systems. These design values are based on in-situ conditions observed in the test boring and evaluation of subsurface samples. The following sections present our general design and construction recommendations.

#### ***Ancillary Structures***

Ancillary structures (such as equipment shelters) may be constructed on shallow foundations bearing at or below the frost depth. The maximum net ultimate bearing resistance for foundations bearing on suitable natural materials or new structural fill at an approximate Elevation of 1208.5 feet above mean sea level (AMSL) (per the provided Construction Drawings, by others) shall be 6.0 kips per square foot (ksf). We recommend undercutting to remove any soft soil and/or topsoil layers and replacing with structural fill, as described in the subsequent sections. *The shelter foundation should be designed in accordance with the various applicable codes.*

#### ***Tower Foundation***

Based on the geotechnical investigation performed by EGSci, a generalized subsurface profile was developed for the conditions encountered at the project site. A shallow foundation system or a deep foundation system are feasible foundation options for supporting the proposed tower. *The selected foundation system should be designed and constructed in accordance with the various applicable codes.* The recommended geotechnical design parameters for the proposed foundation are presented in Table 1.

*Note that the geotechnical design parameters presented in Table 1 are based on the subsurface conditions at Boring B-1 and are solely intended to assist in the design and analysis of the proposed tower foundation; parameters for other analyses, including earth retention structures, rock cuts, surficial stability, and/or slope stability, are beyond the scope of this report and should be addressed by others.*

*Due to the steep topography and rock outcropping at the project site and ensuing offset of Boring B-1 from the staked center of tower position, subsurface conditions at the proposed tower center*

*and proposed tower leg positions may differ from the subsurface conditions encountered in our boring. Additionally, at the time of our investigation, the project site had not been graded to finished elevation. Thus, the boring position, boring surface elevation, and finished grade elevation should be considered in the tower foundation design.*

**Table 1: Recommended Geotechnical Parameters for the Tower Foundation System (B-1)**

Depth		Material Type For Analysis Purposes	Angle of Internal Friction (Degrees)	Total Unit Weight (pcf)	Buoyant Unit Weight (pcf)	Undrained Shear Strength (psf)	Coefficient of Passive Pressure	Ultimate Skin Friction for Drilled Shafts (psf)	Net Ultimate Bearing Resistance (psf)
From	To								
(feet)	(feet)								
0	3	Cohesive	0	100	-	500	1.0	-	-
3	4	Cohesive	0	105	-	1,000	1.0	500	-
4	6.1	Cohesionless	30	115	-	-	3.0	500	-
6.1	11.1	Siltstone	35	135	-	-	3.7	3,500	-
11.1	16.1	Siltstone	38	140	-	-	4.2	6,000	<i>18,000</i>
16.1	21.1	Siltstone	38	140	-	-	4.2	6,000	60,000

- <sup>1</sup> Skin friction for depths above 3 feet BGS should be neglected.
- <sup>2</sup> Nominal skin friction and bearing resistance values are provided above; the appropriate reduction factors should be applied per applicable design code.
- <sup>3</sup> Bearing resistance values provided in *italics* correspond to shallow foundations.
- <sup>4</sup> *The above parameters are for design purposes only; the local contractor should be prepared with proper construction equipment and means and methods for foundation installation in rock. Weathered rock and rock were encountered at shallow depths at the boring location and were observed at shallow depths throughout the project site; thus, all drilling, excavation, and trenching performed at this site may require specialized rock and/or weathered rock drilling, excavation, localized blasting and trenching techniques.*
- <sup>5</sup> *Drilled shafts are technically feasible for this project but will require hard rock drilling/coring techniques to advance through the weathered rock and rock layers encountered in the boring.*
- <sup>6</sup> *Due to the steep topography with rock outcropping immediately surrounding the proposed center of tower location, the boring was positioned approximately 25 to 30 feet southeast of the proposed center of tower location, at an estimated 9 to 10 feet lower in elevation. Based on the Site Grading Plan of the Preliminary Construction Drawings, prepared by Power of Design and issued for review on October 10, 2019, it is estimated that Boring B-1 was performed at an approximate elevation of 1220 to 1221 feet AMSL. Thus, appropriate depth adjustments (from the depths listed in Table 1) should be considered for the foundation design.*

**Frost Depth**

The regional design frost depth at the project site is 30 inches, which is based on values from the Naval Facilities Engineering Command Soil Mechanics Design Manual (NAVFAC DM 7.01), as reported by the Telecommunications Industry Association Structural Standard for Antenna Supporting Structures and Antennas (ANSI/TIA-222-G).

**Seismic Site Class**

Based on the subsurface data encountered in our boring, the International Building Code (IBC) Seismic Site Class is Site Class C. The Seismic Site Class is based on average properties of subsurface materials to a depth of 100 feet BGS. Because soil test borings to 100 feet were not performed at this site, it is necessary to estimate the Seismic Site Class based on the boring performed and the regional geology.

### ***Construction Inspection and Considerations***

In general, foundation recommendations contained in this report are contingent upon inspection by a geotechnical engineer or experienced designated inspector at the time of construction on a full-time basis. Inspections should include observations for compliance with recommendations and/or testing (e.g. in-place density tests), as required. Based on the field observations of the geotechnical engineer or inspector, additional recommendations may be required.

***The foundation excavations should be inspected and approved by a qualified geotechnical engineer or geotechnical inspector immediately prior to placing reinforcement steel or concrete.*** Foundation areas should be level and free of loose soil, standing water, and debris. Loose or soft soils should be removed and replaced with suitable fill material. If the foundation excavations are kept open for a long time, the bearing soils may be softened by water intrusion or exposure. If bearing soils are softened, they must be removed and replaced before placement of concrete.

If the bottom of the foundation excavation is not level, a structural concrete leveling pad (similar to the structural concrete required for the foundation) may be used; open-graded stone, such as gravel, are not recommended for use as a leveling pad below the foundation due to the potential for water to be retained (i.e., not drain) and cause degradation to the bearing materials and foundation. *Prior to installing a concrete leveling pad, if required, the foundation bearing surface should be inspected and approved by a geotechnical inspector.*

*A specialized drill rig capable of drilling into the rock and weathered rock encountered at the project site will be required to install the drilled shafts for the tower foundation. The contractor should be prepared for the potential hard drilling at shallow depths to reach the desired drilled shaft design depth.* Additionally, rock excavation (including rock trench excavation) requiring specialized pneumatic jackhammers, rock breakers, and/or localized blasting to reach proposed design elevation may be required for the following:

- installation of the new foundations for the proposed tower
- installation of grounding rings
- installation of underground utilities
- installation of any new foundation for ancillary structures.

Additional construction considerations are as follows:

- *For drilled shaft foundation construction, the contractor's selected means and methods shall maintain a stable drill hole throughout the foundation construction process; this may require the use of slurry, casing system, and/or other techniques based on the anticipated subsurface geotechnical conditions and site conditions (e.g. nearby structures). Prior to construction, the contractor should submit a site-specific Drilled Shaft Installation Plan detailing their proposed means and methods for installing drilled shaft foundations at the project site to ensure the foundation design requirements are met.*
- As only minor cuts and fill will be made at the equipment building site, compaction of the upper soils in the building area, as well as any fill placed, is recommended to provide uniformity and limit settlement.

- *Based on the survey information (by others) provided for the project site, the elevation change across the proposed lease area is approximately  $35 \pm$  feet. Therefore, subsurface conditions at the project site should be expected to vary (due to the change in ground surface elevation) within the proposed lease area relative to the boring location.*
- *Geotechnical recommendations and subsurface conditions relating to earth retention structures, rock cuts, surficial stability, and/or slope stability are beyond the scope of this report and should be addressed by others.*
- General site fill necessary for site grading or backfill material or structural fill should be placed in 8-inch thick layers, moisture conditioned, and compacted to a minimum of 98% of the Standard Proctor Maximum Density (the standard proctor test for the imported fill is to be completed by the contractor's geotechnical/material testing engineer). All imported fill should be clean soil (free of roots and debris and should contain less than 10% by dry weight passing #200).
- A representative sample of the imported fill should be collected by the geotechnical engineering inspector *at the time of construction* for laboratory testing to evaluate the grain size distribution and Atterberg limit characteristics to determine if the imported fill is suitable for use as structural fill. A standard proctor test must be performed on the representative sample of material (imported fill *or* on-site material deemed suitable for structural fill) to be used in the engineered (or structural) fill operations.
- Foundations for the Ancillary Structures placed at or below frost depth on suitable natural materials or new structural fill compacted to at least 98% of the Standard Proctor Maximum Dry Density should be designed for a maximum net ultimate bearing resistance of 6.0 ksf. This recommended bearing resistance is based on a foundation bearing elevation of approximately 1208.5 feet AMSL (per the provided Construction Drawings, by others). We recommend undercutting to remove any soft soil and/or topsoil layers and replacing with structural fill, as described herein. This bearing resistance is based on an allowable settlement of up to 1 inch.
- We recommend that the groundwater or perched water (if encountered) be kept at least 3 feet below the excavation until the structure has been installed.

Shallow foundations designed and constructed based on these recommendations should experience total settlements less than 1 inch. Differential settlements are expected to be one-third to one-half of the total settlements. Most of the total settlement should occur shortly after the dead loads are applied with little settlement after construction.

### **QUALIFICATION OF RECOMMENDATIONS**

This report is for the exclusive use of Vertical Bridge and the designers of the project described herein and is applicable to this project. The conclusions and recommendations have been prepared by the generally accepted standards of Geotechnical Engineering practice in the State of Kentucky practicing under similar conditions subject to the time limits, and financial and physical constraints applicable to the services. No other warranty is expressed or implied. EGSci is not responsible

EGSci Consulting Inc.



for the conclusions, opinions and recommendations of others. Any re-use of this document, particularly by third parties, without our express written permission is solely at their own risk.

Environmental services and/or concerns were not included in our scope of work and have not been addressed in this report.

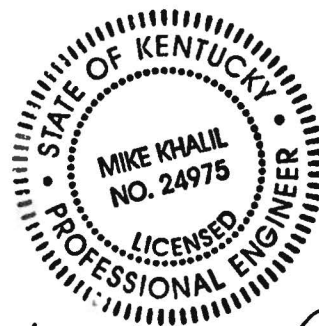
The analysis and recommendations presented in this report are based on the data obtained from the soil borings, exploration and testing program performed at the location shown in Figure 1 and past experience. Soil conditions may differ beyond those at the boring location and are not reflected in this report. If variations in soil conditions become apparent during excavation, the recommendations and conclusions presented herein may need to be re-evaluated based on on-site observations. We recommend that the contractor notify EGSci as soon as possible regarding variations in soil conditions from those presented herein.

If the design or location of the structure presented herein changes, the recommendations and conclusions presented in this report will not be valid. EGSci must review the changes and modify or approve the recommendations and conclusions.

EGSci Consulting Inc. appreciates the opportunity to work with Vertical Bridge on this project. If you have any questions or require additional information regarding this report, please do not hesitate to contact us.

Very truly yours,

EGSci Consulting Inc.



10/22/2019

Handwritten signature of Shelly Keary in black ink.

Shelly Keary, M.Sc.  
Project Geotechnical Engineer

Handwritten signature of Mike Khalil in black ink.

Mike Khalil, M.Sc., P.E. (KY #24975)  
Principal Engineer

Attachments

Site Figures

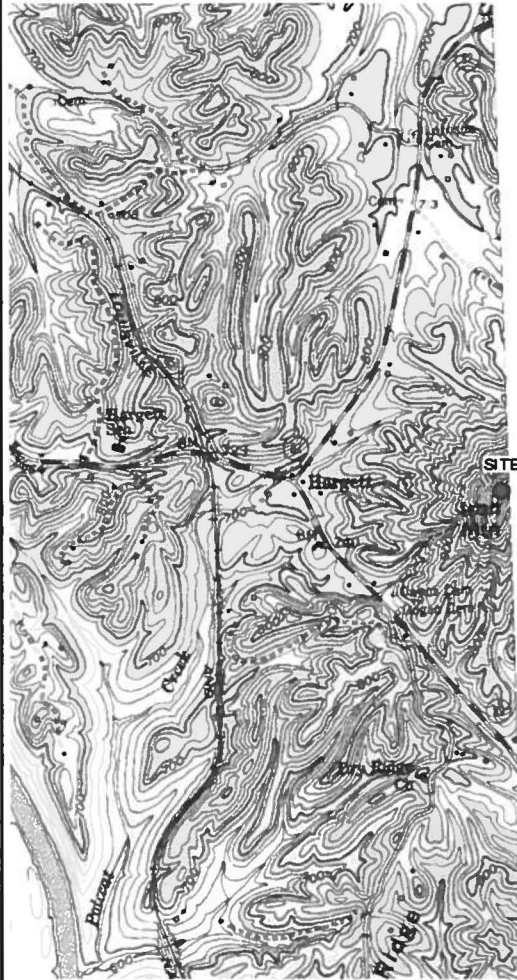
Key to Soil Classification

Log of Boring

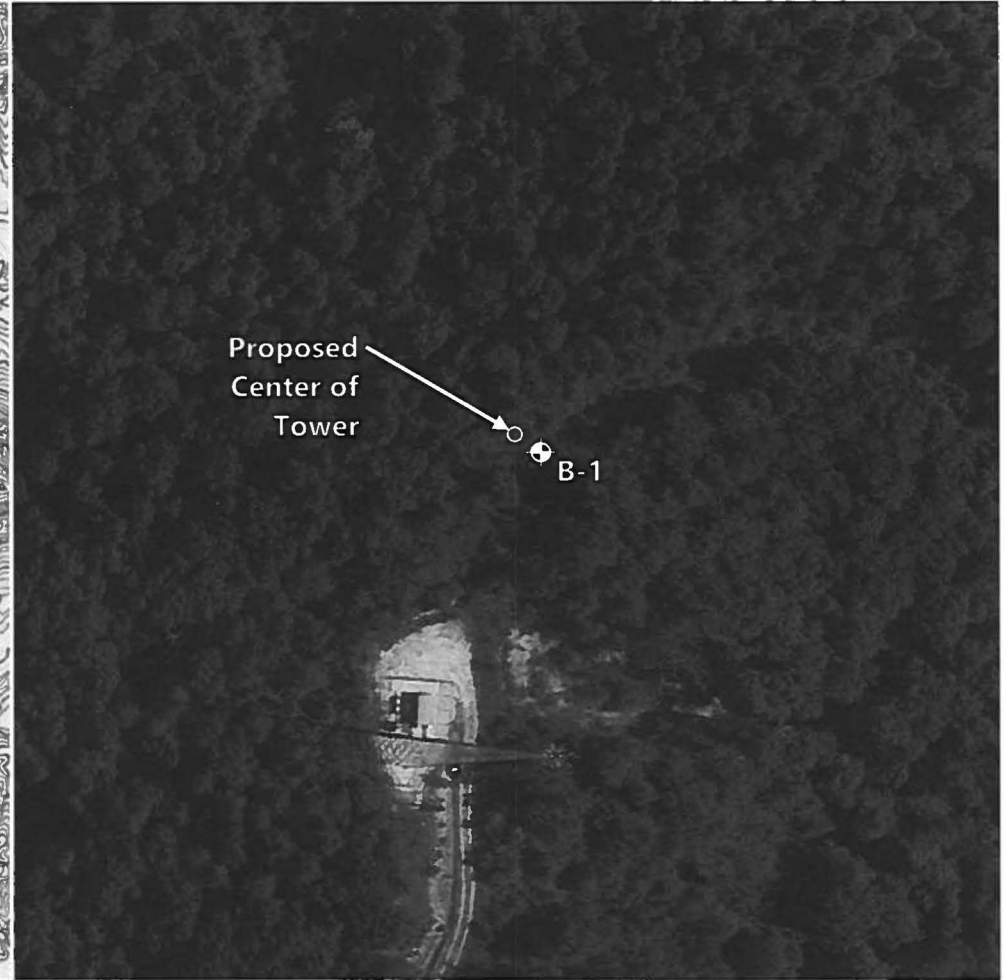
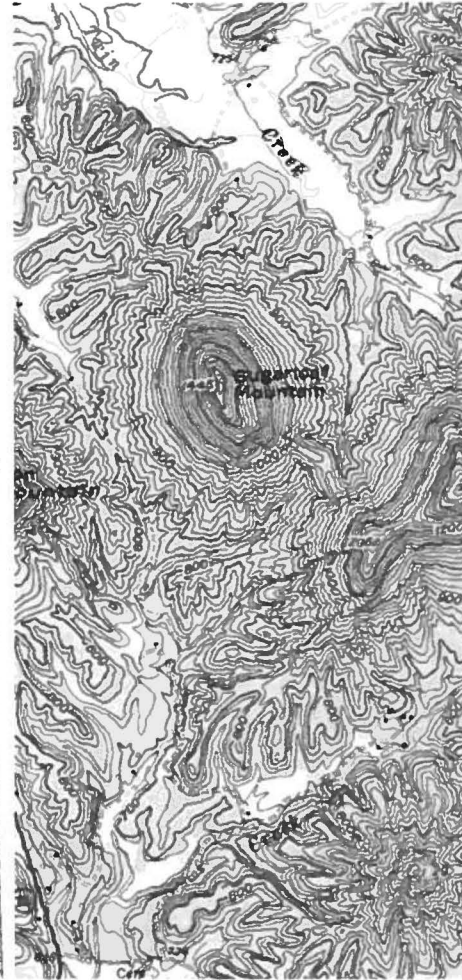
Site Photo Log

EGSci Consulting Inc.

**Note:** Site features below are for reference only, should be considered approximate, and have not been surveyed by EGSci. The Center of Tower position was staked, by others, prior to EGSci's field investigation.



Source: USGS Topographic Map  
Palmer, Kentucky; Year: 1976  
Scale: Not to Scale



Source: Google Earth Imagery  
Scale: Not to Scale  
⊕ Approximate Boring Location



CONSULTANT

**EGSci**  
consulting inc  
1455 Lincoln Parkway – Suite 500  
Atlanta, GA 30346

CLIENT

**verticalbridge**  
750 Park of Commerce Drive; Suite 200  
Boca Raton, Florida 33487

Geotechnical  
Investigation

FIGURE 1

SITE: US-KY-5051 Winchester

Site Location Map and  
Boring Location Plan

## KEY TO SOIL CLASSIFICATION

### TERMS AND DESCRIPTIONS

<u>Soil Description</u>	<u>Range of Proportion</u>
Trace	0 – 5 %
Little	5 – 12 %
Some	12 - 30 %
And	30 – 50 %

### SAMPLE TYPES

AS	Auger Sample
DO	Drive Open
DS	Denison sample
PS	Pitcher sample
RC	Rock core
TO	Thin-walled, open
TP	Thin-walled, piston
WS	Wash sample

<u>Relative Density of Cohesionless Soils</u>	<u>SPT N-value</u>
Very Loose	0 to 4
Loose	4 to 10
Compact	10 to 30
Dense	30 to 50
Very Dense	Over 50

### SOIL TESTS

Moisture Content	M
Atterberg Limits	A
Grain Size	G
Unconfined Compression	U
Triaxial Shear (UU,CU,CD)	T
Direct Shear	D
Organic	O
pH	PH
Permeability	P
Consolidation	C
Specific Gravity	SG
Compaction	Com
Pinhole Dispersion	PD

<u>Consistency of Cohesive Soils</u>	<u>Undrained Shear Strength (psf)</u>
Very soft	Less than 250
Soft	250 to 500
Firm	500 to 1,000
Stiff	1,000 to 2,000
Very stiff	2,000 to 4,000
Hard	Over 4,000

### PENETRATION RESISTANCE

Standard Penetration Resistance (ASTM D1586) "N" = the number of blows required to drive a 2 inch OD split spoon sampler one foot using a 140 lb. hammer falling 30 inches.

Unified Soil Classification System

Criteria for Assigning Group Symbols and Names			Soil Classification Generalized Group Descriptions	
COARSE-GRAINED SOILS More than 50% retained on the No. 200 sieve	GRAVELS More than 50% of coarse fraction retained on No. 4 Sieve	CLEAN GRAVELS Less than 5% fines	GW	Well-graded Gravels
		GRAVELS WITH FINES More than 12% fines	GP	Poorly-graded Gravels
	SANDS 50% or more of coarse fraction passes No. 4 Sieve	CLEAN SANDS Less than 5% fines	GM	Gravel and Silt Mixtures
			GC	Gravel and Clay Mixtures
		SANDS WITH FINES More than 12% fines	SW	Well-graded Sands
			SP	Poorly-graded Sands
FINE-GRAINED SOILS 50% or more passes the No. 200 sieve	SILTS AND CLAYS Liquid limit less than 50	INORGANIC	SM	Sand and Silt Mixtures
			SC	Sand and Clay Mixtures
		ORGANIC	CL	Low-plasticity Clays
			ML	Non-plastic and Low-Plasticity Silts
	SILTS AND CLAYS Liquid limit greater than 50	INORGANIC	OL	Non-plastic and Low-Plasticity Organic Clays Non-plastic and Low-Plasticity Organic Silts
			CH	High-plasticity Clays
		ORGANIC	MH	High-plasticity Silts
			OH	High-plasticity Organic Silts and Clays
HIGHLY ORGANIC SOILS	Primarily organic matter, dark in color, and organic odor	PT	Peat	




PROJECT: US-KY-5051 Winchester  
 PROJECT LOCATION: Winchester Road; Irvine, KY 40336  
 CLIENT: Vertical Bridge

LOG OF BORING B-1  
 SHEET 1 of 1

DRILLING DATE: 10/16/2019

DRILL RIG: CME 550 with Automatic Hammer

DRILLING METHOD: 4" Solid Flight Auger (0 - 6.1 ft); Rock Coring (6.1 - 21.1 ft)

DEPTH (feet)	MATERIAL DESCRIPTION	USCS	GRAPHIC LOG	NUMBER	TYPE	SPT BLOWS per 6 inches or ROCK CORE REC. and RQD	N-VALUE (bpf) (uncorrected)	NOTES
0	Very moist to wet, firm to stiff, brown, red-brown, and gray, fine to coarse Silty CLAY, with little fine to coarse Gravel, and trace Organics. S2: moist, very stiff, with some fine to coarse Sandstone Gravel.	CL		1	DO	4-3-3	6	Groundwater was not encountered during drilling.
1.5				2	DO	5-50/4"	50/4"	
4				3	DO	6-7-13	20	
5	Moist, compact, greenish gray-brown, fine to coarse GRAVEL-sized pieces of Silty Sandstone, with some fine to coarse Sand, and little pockets of Silty medium plasticity Clay.	GW						Auger Refusal encountered at 6.1 ft BGS.
6.1	Greenish gray and red-brown, fine to very fine grained, thin- to medium-bedded, intensely to moderately fractured, medium strong, moderately weathered, Silty SILTSTONE, with a layer (approximately 2 inches) of highly to completely weathered Shale, very weak, thickly laminated.			RC1	RC	REC=92% RQD=43%		
10				RC2	RC	REC=100% RQD=89%		
11.1				RC3	RC	REC=100% RQD=87%		
15								
16.1	Boring Terminated at 21.1 ft BGS.							

## Exhibit F

# KY Public Service Commission

## Master Utility Search

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

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

	Utility ID	Utility Name	Utility Type	Class	City	State
<input type="button" value="View"/>	4111300	2600Hz, Inc. dba ZSWITCH	Cellular	D	San Francisco	CA
<input type="button" value="View"/>	4108300	Air Voice Wireless, LLC	Cellular	B	Bloomfield Hill	MI
<input type="button" value="View"/>	4110650	Alliant Technologies of KY, L.L.C.	Cellular	D	Morristown	NJ
<input type="button" value="View"/>	44451184	Alltel Corporation d/b/a Verizon Wireless	Cellular	A	Lisle	IL
<input type="button" value="View"/>	4110850	AltaWorx, LLC	Cellular	D	Fairhope	AL
<input type="button" value="View"/>	4107800	American Broadband and Telecommunications Company	Cellular	D	Toledo	OH
<input type="button" value="View"/>	4108650	AmeriMex Communications Corp.	Cellular	D	Dunedin	FL
<input type="button" value="View"/>	4105100	AmeriVision Communications, Inc. d/b/a Affinity 4	Cellular	D	Virginia Beach	VA
<input type="button" value="View"/>	4110700	Andrew David Balholm dba Norcell	Cellular	D	Clayton	WA
<input type="button" value="View"/>	4108600	BCN Telecom, Inc.	Cellular	D	Morristown	NJ
<input type="button" value="View"/>	4110550	Blue Casa Mobile, LLC	Cellular	D	Santa Barbara	CA
<input type="button" value="View"/>	4111050	BlueBird Communications, LLC	Cellular	D	New York	NY
<input type="button" value="View"/>	4202300	Bluegrass Wireless, LLC	Cellular	A	Elizabethtown	KY
<input type="button" value="View"/>	4107600	Boomerang Wireless, LLC	Cellular	B	Hiawatha	IA
<input type="button" value="View"/>	4105500	BullsEye Telecom, Inc.	Cellular	D	Southfield	MI
<input type="button" value="View"/>	4100700	Cellco Partnership dba Verizon Wireless	Cellular	A	Basking Ridge	NJ

<a href="#">View</a>	4106600	Cintex Wireless, LLC	Cellular	D	Rockville	MD
<a href="#">View</a>	4111150	Comcast OTR1, LLC	Cellular	D	Philadelphia	PA
<a href="#">View</a>	4101900	Consumer Cellular, Incorporated	Cellular	A	Portland	OR
<a href="#">View</a>	4106400	Credo Mobile, Inc.	Cellular	A	San Francisco	CA
<a href="#">View</a>	4108850	Cricket Wireless, LLC	Cellular	A	San Antonio	TX
<a href="#">View</a>	4111500	CSC Wireless, LLC d/b/a Altice Wireless	Cellular	C	Long Island City	NY
<a href="#">View</a>	10640	Cumberland Cellular Partnership	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	4111650	DataBytes, Inc.	Cellular	C	Rogers	AR
<a href="#">View</a>	4111200	Dynalink Communications, Inc.	Cellular	C	Brooklyn	NY
<a href="#">View</a>	4101000	East Kentucky Network, LLC dba Appalachian Wireless	Cellular	A	Ivel	KY
<a href="#">View</a>	4002300	Easy Telephone Service Company dba Easy Wireless	Cellular	D	Ocala	FL
<a href="#">View</a>	4109500	Enhanced Communications Group, LLC	Cellular	D	Bartlesville	OK
<a href="#">View</a>	4110450	Excellus Communications, LLC	Cellular	D	Chattanooga	TN
<a href="#">View</a>	4105900	Flash Wireless, LLC	Cellular	C	Concord	NC
<a href="#">View</a>	4104800	France Telecom Corporate Solutions L.L.C.	Cellular	D	Oak Hill	VA
<a href="#">View</a>	4109350	Global Connection Inc. of America	Cellular	D	Norcross	GA
<a href="#">View</a>	4102200	Globalstar USA, LLC	Cellular	B	Covington	LA
<a href="#">View</a>	4109600	Google North America Inc.	Cellular	A	Mountain View	CA
<a href="#">View</a>	33350363	Granite Telecommunications, LLC	Cellular	D	Quincy	MA
<a href="#">View</a>	4106000	GreatCall, Inc. d/b/a Jitterbug	Cellular	A	San Diego	CA
<a href="#">View</a>	10630	GTE Wireless of the Midwest dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4111350	HELLO MOBILE TELECOM LLC	Cellular	D	Dania Beach	FL
<a href="#">View</a>	4103100	i-Wireless, LLC	Cellular	B	Newport	KY
<a href="#">View</a>	4109800	IM Telecom, LLC d/b/a Infiniti Mobile	Cellular	D	Tulsa	OK
<a href="#">View</a>	22215360	KDDI America, Inc.	Cellular	D	New York	NY
<a href="#">View</a>	10872	Kentucky RSA #1 Partnership	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	10680	Kentucky RSA #3 Cellular General	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	10681	Kentucky RSA #4 Cellular General	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	4111250	Liberty Mobile Wireless, LLC	Cellular	D	Sunny Isles Beach	FL
<a href="#">View</a>	4111550	Lingo Telecom of the South, LLC	Cellular	C	Atlanta	GA
<a href="#">View</a>	4111400	Locus Telecommunications, LLC	Cellular	A	Fort Lee	NJ
<a href="#">View</a>	4110900	Lunar Labs, Inc.	Cellular	D	Detroit	MI
<a href="#">View</a>	4107300	Lycamobile USA, Inc.	Cellular	D	Newark	NJ

<a href="#">View</a>	4108800	MetroPCS Michigan, LLC	Cellular	A	Bellevue	WA
<a href="#">View</a>	4111700	Mint Mobile, LLC	Cellular	C	Costa Mesa	CA
<a href="#">View</a>	4109650	Mitel Cloud Services, Inc.	Cellular	D	Mesa	AZ
<a href="#">View</a>	4202400	New Cingular Wireless PCS, LLC dba AT&T Mobility, PCS	Cellular	A	San Antonio	TX
<a href="#">View</a>	10900	New Par dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4000800	Nextel West Corporation	Cellular	D	Overland Park	KS
<a href="#">View</a>	4001300	NPCR, Inc. dba Nextel Partners	Cellular	D	Overland Park	KS
<a href="#">View</a>	4001800	OnStar, LLC	Cellular	A	Detroit	MI
<a href="#">View</a>	4110750	Onvoy Spectrum, LLC	Cellular	D	Chicago	IL
<a href="#">View</a>	4109050	Patriot Mobile LLC	Cellular	D	Irving	TX
<a href="#">View</a>	4110250	Plintron Technologies USA LLC	Cellular	D	Bellevue	WA
<a href="#">View</a>	33351182	PNG Telecommunications, Inc. dba PowerNet Global Communications	Cellular	D	Cincinnati	OH
<a href="#">View</a>	4202100	Powertel/Memphis, Inc. dba T- Mobile	Cellular	A	Bellevue	WA
<a href="#">View</a>	4107700	Puretalk Holdings, LLC	Cellular	A	Covington	GA
<a href="#">View</a>	4106700	Q Link Wireless, LLC	Cellular	B	Dania	FL
<a href="#">View</a>	4108700	Ready Wireless, LLC	Cellular	B	Hiawatha	IA
<a href="#">View</a>	4110500	Republic Wireless, Inc.	Cellular	B	Raleigh	NC
<a href="#">View</a>	4111100	ROK Mobile, Inc.	Cellular	D	Culver City	CA
<a href="#">View</a>	4106200	Rural Cellular Corporation	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4108550	Sage Telecom Communications, LLC dba TruConnect	Cellular	D	Los Angeles	CA
<a href="#">View</a>	4109150	SelecTel, Inc. d/b/a SelecTel Wireless	Cellular	D	Freemont	NE
<a href="#">View</a>	4110150	Spectrotel, Inc. d/b/a Touch Base Communications	Cellular	D	Neptune	NJ
<a href="#">View</a>	4111450	Spectrum Mobile, LLC	Cellular	C	St. Louis	MO
<a href="#">View</a>	4200100	Sprint Spectrum, L.P.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4200500	SprintCom, Inc.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4109550	Stream Communications, LLC	Cellular	D	Dallas	TX
<a href="#">View</a>	4111600	STX Group LLC dba Twigby	Cellular	C	Murfreesboro	TN
<a href="#">View</a>	4110200	T C Telephone LLC d/b/a Horizon Cellular	Cellular	D	Red Bluff	CA
<a href="#">View</a>	4202200	T-Mobile Central, LLC dba T- Mobile	Cellular	A	Bellevue	WA
<a href="#">View</a>	4002500	TAG Mobile, LLC	Cellular	D	Carrollton	TX
<a href="#">View</a>	4109700	Telecom Management, Inc. dba Pioneer Telephone	Cellular	D	Portland	ME
<a href="#">View</a>	4107200	Telefonica USA, Inc.	Cellular	D	Miami	FL
<a href="#">View</a>	4108900	Telrite Corporation	Cellular	D	Covington	GA
<a href="#">View</a>	4108450	Tempo Telecom, LLC	Cellular	B	Atlanta	GA



<a href="#">View</a>	4109000	Ting, Inc.	Cellular	A	Toronto	ON
<a href="#">View</a>	4110400	Torch Wireless Corp.	Cellular	D	Jacksonville	FL
<a href="#">View</a>	4103300	Touchtone Communications, Inc.	Cellular	D	Whippany	NJ
<a href="#">View</a>	4104200	TracFone Wireless, Inc.	Cellular	D	Miami	FL
<a href="#">View</a>	4002000	Truphone, Inc.	Cellular	D	Durham	NC
<a href="#">View</a>	4110300	UVNV, Inc. d/b/a Mint Mobile	Cellular	D	Costa Mesa	CA
<a href="#">View</a>	4105700	Virgin Mobile USA, L.P.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4110800	Visible Service LLC	Cellular	D	Basking Ridge	NJ
<a href="#">View</a>	4106500	WiMacTel, Inc.	Cellular	D	Palo Alto	CA
<a href="#">View</a>	4110950	Wing Tel Inc.	Cellular	D	New York	NY

## Exhibit G



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

Aeronautical Study No.  
 2019-ASO-24109-OE  
 Prior Study No.  
 2019-ASO-17488-OE

Issued Date: 08/20/2019

Richard Hickey  
 Vertical Bridge Development, LLC  
 750 Park of Commerce Drive  
 Suite 200  
 Boca Raton, FL 33487

**\*\* 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 US-KY-5051 Winchester  
 Location: Irvine, KY  
 Latitude: 37-46-56.75N NAD 83  
 Longitude: 84-00-01.12W  
 Heights: 1230 feet site elevation (SE)  
 290 feet above ground level (AGL)  
 1520 feet above mean sea level (AMSL)

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

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

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

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

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

This determination expires on 02/20/2021 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 based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

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

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

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

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

If we can be of further assistance, please contact our office at (718) 553-2611, or [angelique.eersteling@faa.gov](mailto:angelique.eersteling@faa.gov). On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2019-ASO-24109-OE.

**Signature Control No: 413141254-414844155**  
Angelique Eersteling  
Technician

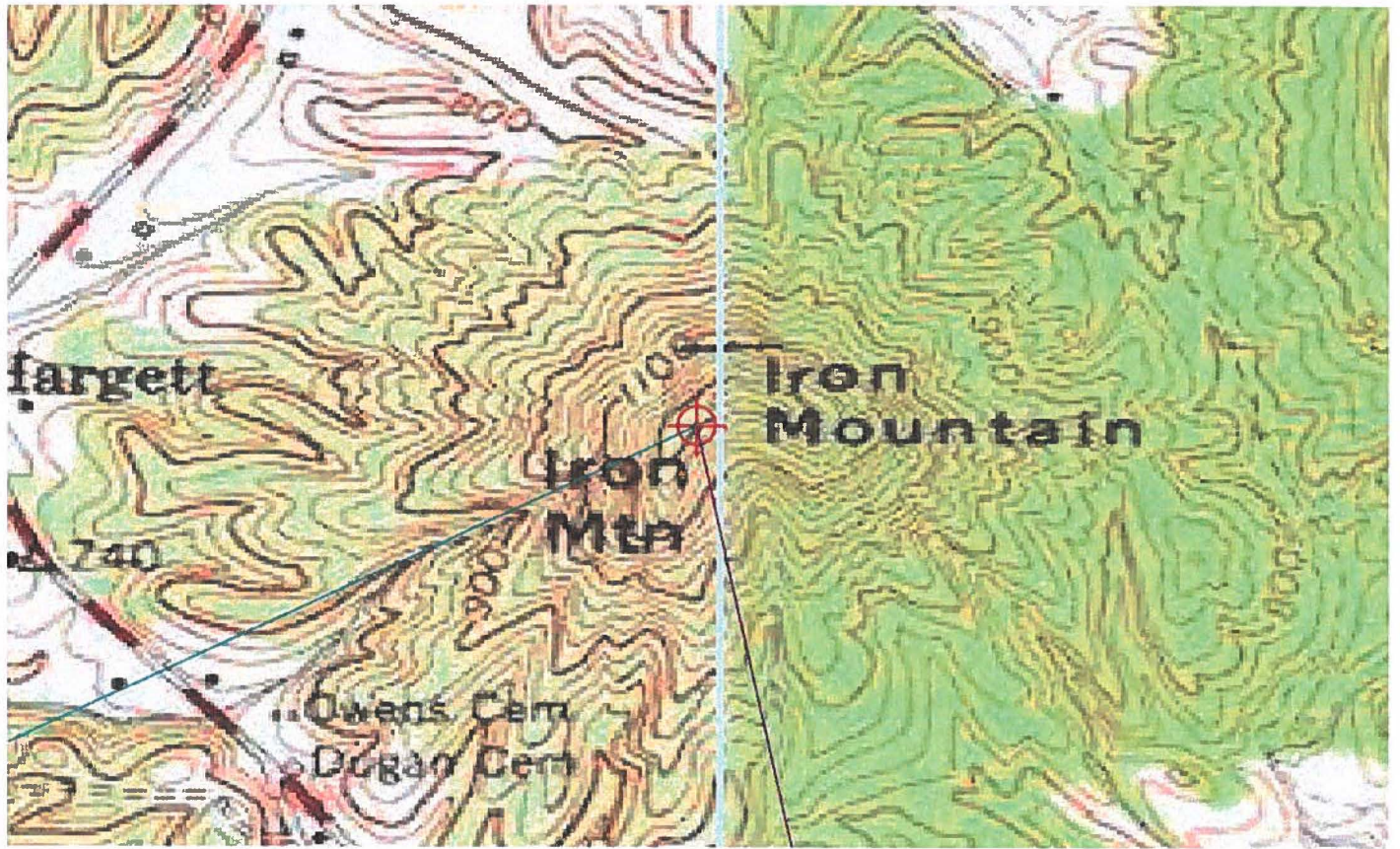
( DNE )

Attachment(s)  
Frequency Data  
Map(s)

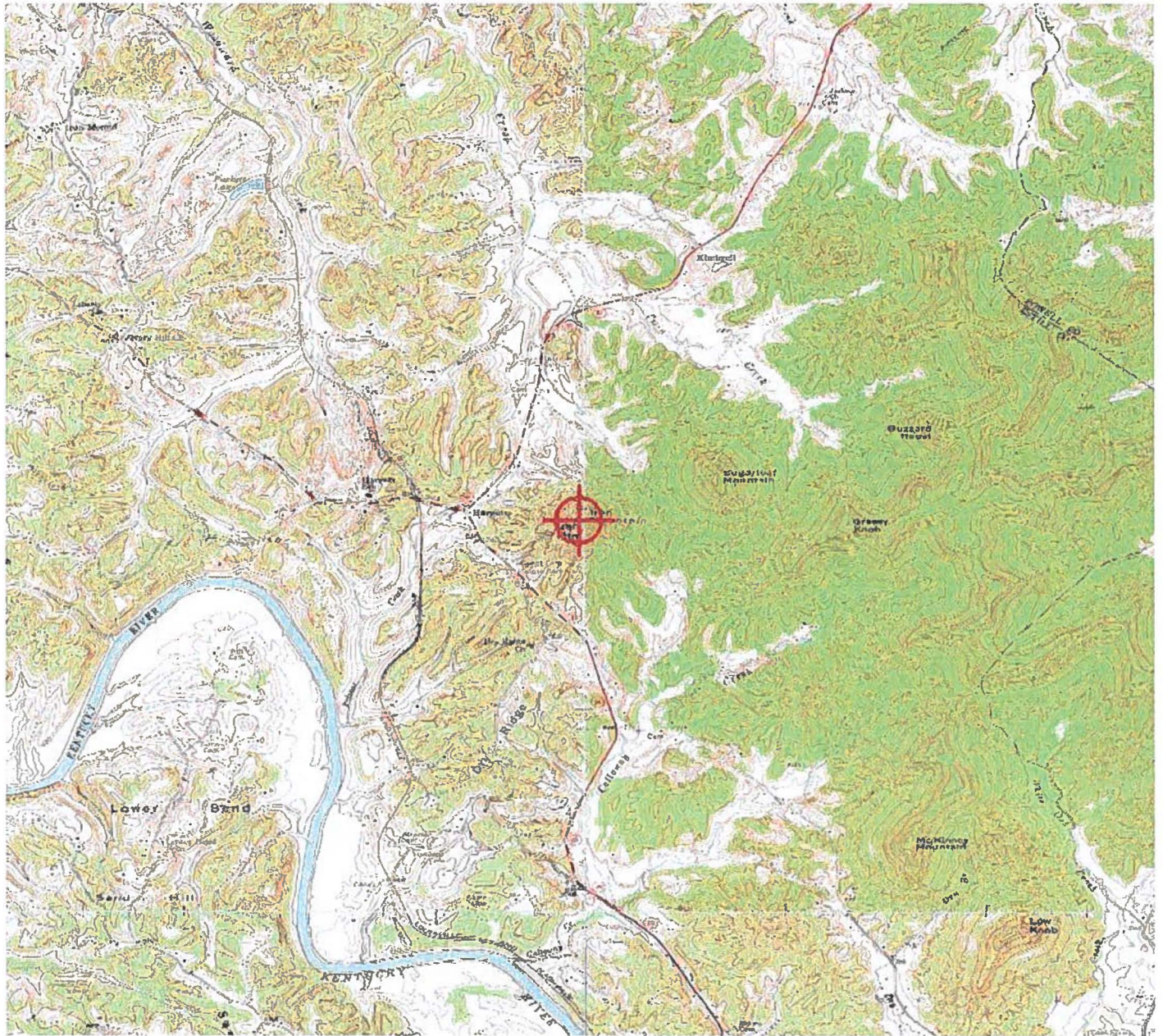
cc: FCC

**Frequency Data for ASN 2019-ASO-24109-OE**

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



TOPO Map for ASN 2019-ASO-24109-OE





## KENTUCKY AIRPORT ZONING COMMISSION

MATTHEW BEVIN  
Governor

421 Buttermilk Pike  
Covington, KY 41017  
[www.transportation.ky.gov](http://www.transportation.ky.gov)  
859-341-2700

October 24, 2019

### APPROVAL OF APPLICATION

#### APPLICANT:

Vertical Bridge Development LLC  
Vertical Bridge Development LLC  
750 Park of Commerce Dr  
Boca Raton, FL 33487

SUBJECT: AS-033-150-2019-105

STRUCTURE: Antenna Tower  
LOCATION: Irvine, KY  
COORDINATES: 37° 46' 56.75" N / 84° 00' 1.12" W  
HEIGHT: 290' AGL/1520' AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 290' AGL/ 1520' AMSL Antenna Tower near Irvine, KY 37° 46' 56.75" N / 84° 00' 1.12" W.

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

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

A handwritten signature in cursive script that reads "John Houlihan".

John Houlihan  
Administrator



An Equal Opportunity Employer M/F/D

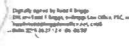




KENTUCKY TRANSPORTATION CABINET  
KENTUCKY AIRPORT ZONING COMMISSION

TC 55-2  
Rev. 05/2017  
Page 2 of 2

**APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE**

<b>APPLICANT (name)</b> Vertical Bridge Development, LLC		<b>PHONE</b> 615-636-9495	<b>FAX</b>	<b>KY AERONAUTICAL STUDY #</b> 2019-ASO-24109-OE	
<b>ADDRESS (street)</b> 750 Park of Commerce Dr.		<b>CITY</b> Boca Raton		<b>STATE</b> FL	<b>ZIP</b> 33487
<b>APPLICANT'S REPRESENTATIVE (name)</b> Todd Briggs		<b>PHONE</b> 844-331-3402	<b>FAX</b>		
<b>ADDRESS (street)</b> 10200 Forest Green Blvd, Suite 112		<b>CITY</b> Louisville		<b>STATE</b> KY	<b>ZIP</b> 40223
<b>APPLICATION FOR</b> <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Alteration <input type="checkbox"/> Existing <b>DURATION</b> <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary (months days )				<b>WORK SCHEDULE</b> Start 11/2019 End 3/2020	
<b>TYPE</b> <input type="checkbox"/> Crane <input type="checkbox"/> Building <input checked="" type="checkbox"/> Antenna Tower <input type="checkbox"/> Power Line <input type="checkbox"/> Water Tank <input type="checkbox"/> Landfill <input type="checkbox"/> Other		<b>MARKING/PAINTING/LIGHTING PREFERRED</b> <input type="checkbox"/> Red Lights & Paint <input type="checkbox"/> White- medium intensity <input type="checkbox"/> White- high intensity <input checked="" type="checkbox"/> Dual- red & medium intensity white <input type="checkbox"/> Dual- red & high intensity white <input type="checkbox"/> Other			
<b>LATITUDE</b> 37 ° 46 ' 56 . 75 "		<b>LONGITUDE</b> 84 ° 00 ' 01 . 12 "		<b>DATUM</b> <input checked="" type="checkbox"/> NAD83 <input type="checkbox"/> NAD27 <input type="checkbox"/> Other	
<b>NEAREST KENTUCKY</b> City Irvine County Estill		<b>NEAREST KENTUCKY PUBLIC USE OR MILITARY AIRPORT</b> Lexington Bluegrass Airport			
<b>SITE ELEVATION (AMSL, feet)</b> 1230'		<b>TOTAL STRUCTURE HEIGHT (AGL, feet)</b> 290'		<b>CURRENT (FAA aeronautical study #)</b> 2019-ASO-24109-OE	
<b>OVERALL HEIGHT (site elevation plus total structure height, feet)</b> 1520'				<b>PREVIOUS (FAA aeronautical study #)</b> 2019-ASO-17488-OE	
<b>DISTANCE (from nearest Kentucky public use or Military airport to structure)</b> 32.12 NM				<b>PREVIOUS (KY aeronautical study #)</b>	
<b>DIRECTION (from nearest Kentucky public use or Military airport to structure)</b> Southeast					
<b>DESCRIPTION OF LOCATION (Attach USGS 7.5 minute quadrangle map or an airport layout drawing with the precise site marked and any certified survey.)</b> Winchester Road (KY-89), Irvine, KY 40336					
<b>DESCRIPTION OF PROPOSAL</b> 280' Self-Support Tower with a 10 lightning Rod (total 290') Carrier is T-Mobile					
<b>FAA Form 7460-1 (Has the "Notice of Construction or Alteration" been filed with the Federal Aviation Administration?)</b> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, when?					
<b>CERTIFICATION (I hereby certify that all the above entries, made by me, are true, complete, and correct to the best of my knowledge and belief.)</b>					
<b>PENALTIES (Persons failing to comply with KRS 183.861 to 183.990 and 602 KAR 050 are liable for fines and/or imprisonment as set forth in KRS 183.990(3). Noncompliance with FAA regulations may result in further penalties.)</b>					
<b>NAME</b> Todd Briggs	<b>TITLE</b> VB Representative	<b>SIGNATURE</b> Todd R Briggs 		<b>DATE</b> 8-27-2019	
<b>COMMISSION ACTION</b>		<input type="checkbox"/> Chairperson, KAZC <input type="checkbox"/> Administrator, KAZC			
<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved	<b>SIGNATURE</b>		<b>DATE</b>		

## Exhibit H



**Federal Communications Commission**  
**Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: T-MOBILE LICENSE LLC

T-MOBILE LICENSE LLC  
 12920 SE 38TH STREET  
 BELLEVUE, WA 98006

<b>Call Sign</b> WQZK769	<b>File Number</b>
<b>Radio Service</b> WT - 600 MHz Band	

FCC Registration Number (FRN): 0001565449

<b>Grant Date</b> 06-14-2017	<b>Effective Date</b> 06-15-2017	<b>Expiration Date</b> 06-14-2029	<b>Print Date</b>
<b>Market Number</b> PEA095	<b>Channel Block</b> B	<b>Sub-Market Designator</b> 0	
<b>Market Name</b> Bluefield, WV			
<b>1st Build-out Date</b> 06-14-2023	<b>2nd Build-out Date</b> 06-14-2029	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**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.



**Federal Communications Commission**  
**Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: T-MOBILE LICENSE LLC

T-MOBILE LICENSE LLC  
 12920 SE 38TH STREET  
 BELLEVUE, WA 98006

<b>Call Sign</b> WQZK770	<b>File Number</b>
<b>Radio Service</b> WT - 600 MHz Band	

FCC Registration Number (FRN): 0001565449

<b>Grant Date</b> 06-14-2017	<b>Effective Date</b> 06-15-2017	<b>Expiration Date</b> 06-14-2029	<b>Print Date</b>
<b>Market Number</b> PEA095	<b>Channel Block</b> C	<b>Sub-Market Designator</b> 0	
<b>Market Name</b> Bluefield, WV			
<b>1st Build-out Date</b> 06-14-2023	<b>2nd Build-out Date</b> 06-14-2029	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**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.



# Federal Communications Commission

Wireless Telecommunications Bureau

## RADIO STATION AUTHORIZATION

LICENSEE: T-MOBILE LICENSE LLC

T-MOBILE LICENSE LLC  
12920 SE 38TH STREET  
BELLEVUE, WA 98006

<b>Call Sign</b> WQZK771	<b>File Number</b>
<b>Radio Service</b> WT - 600 MHz Band	

FCC Registration Number (FRN): 0001565449

<b>Grant Date</b> 06-14-2017	<b>Effective Date</b> 06-15-2017	<b>Expiration Date</b> 06-14-2029	<b>Print Date</b>
<b>Market Number</b> PEA095	<b>Channel Block</b> D	<b>Sub-Market Designator</b> 0	
<b>Market Name</b> Bluefield, WV			
<b>1st Build-out Date</b> 06-14-2023	<b>2nd Build-out Date</b> 06-14-2029	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**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.



**Federal Communications Commission  
Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: T-MOBILE LICENSE LLC

ATTN: FCC REGULATORY COMPLIANCE  
T-MOBILE LICENSE LLC  
12920 SE 38TH STREET  
BELLEVUE, WA 98006

<b>Call Sign</b> WQIZ403	<b>File Number</b> 0008665839
<b>Radio Service</b> WY - 700 MHz Lower Band (Blocks A, B & E)	

FCC Registration Number (FRN): 0001565449

<b>Grant Date</b> 07-23-2019	<b>Effective Date</b> 07-23-2019	<b>Expiration Date</b> 06-13-2029	<b>Print Date</b> 07-25-2019
<b>Market Number</b> BEA047	<b>Channel Block</b> A	<b>Sub-Market Designator</b> 0	
<b>Market Name</b> Lexington, KY-TN-VA-WV			
<b>1st Build-out Date</b>	<b>2nd Build-out Date</b> 06-13-2019	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

If the facilities authorized herein are used to provide broadcast operations, whether exclusively or in combination with other services, the licensee must seek renewal of the license either within eight years from the commencement of the broadcast service or within the term of the license had the broadcast service not been provided, whichever period is shorter in length. See 47 CFR §27.13(b).

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

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

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



**Federal Communications Commission**  
Wireless Telecommunications Bureau

**RADIO STATION AUTHORIZATION**

LICENSEE: T-MOBILE LICENSE LLC

ATTN: DAN MENSER  
T-MOBILE LICENSE LLC  
12920 SE 38TH ST.  
BELLEVUE, WA 98006

<b>Call Sign</b> WQGB377	<b>File Number</b> 0006341062
<b>Radio Service</b> AW - AWS, 1710-1755/2110-2155 MHz bands	

FCC Registration Number (FRN): 0001565449

<b>Grant Date</b> 11-29-2006	<b>Effective Date</b> 09-26-2014	<b>Expiration Date</b> 11-29-2021	<b>Print Date</b> 12-02-2014
---------------------------------	-------------------------------------	--------------------------------------	---------------------------------

<b>Market Number</b> RLA001	<b>Channel Block</b> D	<b>Sub-Market Designator</b> 9
--------------------------------	---------------------------	-----------------------------------

<b>Market Name</b> Mississippi Valley
------------------------------------------

<b>1st Build-Out Date</b>	<b>2nd Build-Out Date</b>	<b>3rd Build-Out Date</b>	<b>4th Build-Out Date</b>
---------------------------	---------------------------	---------------------------	---------------------------

**Waivers/Conditions:**

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

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 law or regulation including, but not limited to, 47 U.S.C. Section

**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.



**Federal Communications Commission**  
Wireless Telecommunications Bureau

**RADIO STATION AUTHORIZATION**

LICENSEE: T-MOBILE LICENSE LLC

ATTN: DAN MENSER  
T-MOBILE LICENSE LLC  
12920 SE 38TH STREET  
BELLEVUE, WA 98006

<b>Call Sign</b> WQSL582	<b>File Number</b> 0006223274
<b>Radio Service</b> AW - AWS, 1710-1755/2110-2155 MHz bands	

FCC Registration Number (FRN): 0001565449

<b>Grant Date</b> 09-27-2013	<b>Effective Date</b> 09-27-2013	<b>Expiration Date</b> 04-30-2022	<b>Print Date</b> 04-02-2014
---------------------------------	-------------------------------------	--------------------------------------	---------------------------------

<b>Market Number</b> REA004	<b>Channel Block</b> E	<b>Sub-Market Designator</b> 2
--------------------------------	---------------------------	-----------------------------------

<b>Market Name</b> Mississippi Valley
------------------------------------------

<b>1st Build-Out Date</b>	<b>2nd Build-Out Date</b>	<b>3rd Build-Out Date</b>	<b>4th Build-Out Date</b>
---------------------------	---------------------------	---------------------------	---------------------------

**Waivers/Conditions:**

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

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.





# Federal Communications Commission

Wireless Telecommunications Bureau

## RADIO STATION AUTHORIZATION

LICENSEE: T-MOBILE LICENSE LLC

ATTN: FCC REGULATORY COMPLIANCE  
 T-MOBILE LICENSE LLC  
 12920 SE 38TH STREET  
 BELLEVUE, WA 98006

<b>Call Sign</b> WQVP317	<b>File Number</b>
<b>Radio Service</b> AT - AWS-3 (1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz)	

FCC Registration Number (FRN): 0001565449

<b>Grant Date</b> 04-08-2015	<b>Effective Date</b> 04-08-2015	<b>Expiration Date</b> 04-08-2027	<b>Print Date</b>
<b>Market Number</b> BEA047	<b>Channel Block</b> H	<b>Sub-Market Designator</b> 0	
<b>Market Name</b> Lexington, KY-TN-VA-WV			
<b>1st Build-out Date</b> 04-08-2021	<b>2nd Build-out Date</b> 04-08-2027	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**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.



**Federal Communications Commission**  
Wireless Telecommunications Bureau

**RADIO STATION AUTHORIZATION**

LICENSEE: T-MOBILE LICENSE LLC

ATTN: FCC REGULATORY COMPLIANCE  
T-MOBILE LICENSE LLC  
12920 SE 38TH STREET  
BELLEVUE, WA 98006

<b>Call Sign</b> KNLH256	<b>File Number</b> 0007643729
<b>Radio Service</b> CW - PCS Broadband	

FCC Registration Number (FRN): 0001565449

<b>Grant Date</b> 04-17-2017	<b>Effective Date</b> 04-17-2017	<b>Expiration Date</b> 04-28-2027	<b>Print Date</b> 04-18-2017
<b>Market Number</b> BTA252	<b>Channel Block</b> F	<b>Sub-Market Designator</b> 0	
<b>Market Name</b> Lexington, KY			
<b>1st Build-out Date</b> 04-28-2002	<b>2nd Build-out Date</b>	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

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

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

**Conditions:**

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

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.



**Federal Communications Commission**  
Wireless Telecommunications Bureau

**RADIO STATION AUTHORIZATION**

LICENSEE: T-MOBILE LICENSE LLC

ATTN: FCC REG COMP CONTACT  
T-MOBILE LICENSE LLC  
12920 SE 38TH ST.  
BELLEVUE, WA 98006

<b>Call Sign</b> WQCX683	<b>File Number</b> 0006751849
<b>Radio Service</b> CW - PCS Broadband	

FCC Registration Number (FRN): 0001565449

<b>Grant Date</b> 06-29-2015	<b>Effective Date</b> 06-29-2015	<b>Expiration Date</b> 06-20-2025	<b>Print Date</b> 06-30-2015
<b>Market Number</b> BTA252	<b>Channel Block</b> C	<b>Sub-Market Designator</b> 3	
<b>Market Name</b> Lexington, KY			
<b>1st Build-out Date</b> 06-20-2010	<b>2nd Build-out Date</b>	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

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

**Conditions:**

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

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.



**Federal Communications Commission**  
**Wireless Telecommunications Bureau**

**RADIO STATION AUTHORIZATION**

LICENSEE: POWERTEL MEMPHIS LICENSES, INC.

ATTN: FCC REGULATORY COMPLIANCE  
 POWERTEL MEMPHIS LICENSES, INC.  
 12920 SE 38TH ST.  
 BELLEVUE, WA 98006

<b>Call Sign</b> KNLH399	<b>File Number</b> 0007644208
<b>Radio Service</b> CW - PCS Broadband	

FCC Registration Number (FRN): 0001832807

<b>Grant Date</b> 04-24-2017	<b>Effective Date</b> 04-24-2017	<b>Expiration Date</b> 04-28-2027	<b>Print Date</b> 04-25-2017
<b>Market Number</b> BTA252	<b>Channel Block</b> E	<b>Sub-Market Designator</b> 3	
<b>Market Name</b> Lexington, KY			
<b>1st Build-out Date</b> 04-28-2002	<b>2nd Build-out Date</b>	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

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

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

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

# Exhibit I

**Landlord:**  
Jimmie Wise  
P.O. Box 479  
Irvine, KY 40336

**Tenant:**  
Vertical Bridge Development, LLC  
750 Park of Commerce Drive, Suite 200  
Boca Raton, FL 33487  
Site #: US-KY-5051  
Site Name: Winchester

### OPTION AND LEASE AGREEMENT

THIS OPTION AND LEASE AGREEMENT (this "Agreement") is made this 12<sup>th</sup> day of November, 2018 (the "Effective Date"), by and between **Jimmie Wise and Shelia H. Wise**, husband and wife ("Landlord"), whose address is P.O. Box 479, Irvine, KY 40336, and **Vertical Bridge Development, LLC**, a Delaware limited liability company ("Tenant"), whose address is 750 Park of Commerce Drive, Suite 200, Boca Raton, FL 33487.

**WHEREAS**, Landlord owns certain real property located in the County of Estill, in the state or commonwealth of Kentucky, that is more particularly described and/or depicted in **Exhibit 1** attached hereto (the "Property"); and,

**WHEREAS**, Tenant desires to lease from Landlord a certain portion of the Property measuring approximately 100' x 100' (approximately 10,000 square feet) and to obtain easements for guy wires, guy anchors, utilities and access, as applicable (the "Premises"), which Premises is more particularly described and/or depicted in **Exhibit 2** attached hereto, for the placement of Tenant's Communications Facilities (defined below).

**NOW THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto agree:

#### 1. OPTION TO LEASE.

(a) As of the Effective Date, Landlord grants to Tenant the exclusive option to lease the Premises (the "Option") during the Option Period (defined below). At any time during the Option Period and Term (defined below), 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, 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 including, 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 under this Agreement, all at Tenant's expense. Tenant shall be authorized to apply for Government Approvals on behalf of Landlord and Landlord agrees to reasonably cooperate with such applications. 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 Period, reasonable wear and tear and casualty not caused by Tenant excepted. In addition, Tenant shall indemnify, defend and hold Landlord harmless from and against any and all injury, loss, damage or claims arising directly out of Tenant's Tests.

(b) In consideration of Landlord granting Tenant the Option, Tenant agrees to pay Landlord the sum of [REDACTED] within thirty (30) days of the full execution of this Agreement. The Option Period will be for an initial term of one (1) year from the Effective Date (the "Initial Option Period") and may be renewed by Tenant for one (1) additional year (the "Renewal Option") upon written notification to Landlord and the payment of an additional [REDACTED] prior to the expiration date of the Initial Option Period. Unless utilized independently, the Initial Option Period and any Renewal Option Period shall be referred to as the "Option Period."

(c) During the Option Period, Tenant may commence the Initial Term (defined below) of this Agreement by notifying Landlord in writing. If Tenant commences the Initial Term, then Landlord leases the Premises to Tenant subject to the terms and conditions of this Agreement. If Tenant does not commence the Initial Term during the Option Period, this Agreement will terminate and the parties will have no further liability to each other.

(d) During the Option Period or the Term, Landlord shall not take any action to change the zoning status or land use of the Property which would diminish, impair, or adversely affect the use of the Premises by Tenant for its permitted uses hereunder

(e) Within twelve (12) months after the Commencement Date, at Tenant's sole cost and expense, Tenant shall order a boundary survey ("Survey") of the Property and provide a copy of the Survey to Landlord suitable for recording.

## 2. TERM.

(a) The Initial Term (defined below) shall commence on the first day of the month in which Tenant begins construction if such construction commences on or before the 15<sup>th</sup> day of the month, or the first day of the month after Tenant commences construction if such construction commences after the 15<sup>th</sup> day of the month (the "Commencement Date"). Unless extended or sooner terminated as herein provided, the initial term shall be for a period of fifteen (15) years following the Commencement Date ("Initial Term").

(b) Tenant shall have the option to extend the term of this Agreement for nine (9) successive terms of five (5) years each (each a "Renewal Term"). Each Renewal Term shall commence automatically, unless Tenant delivers notice to Landlord, not less than thirty (30) days prior to the end of the then-current Term, of Tenant's intent not to renew. For purposes of this Agreement, "Term" shall mean the Initial Term and any applicable Renewal Term(s).

## 3. RENT.

(a) Beginning on the Commencement Date, Tenant shall pay to Landlord an initial annual rent payment of [REDACTED] thereafter, subject to Section 3(b) below, Tenant shall pay to Landlord an annual rent payment of [REDACTED] ("Rent"), at the address set forth above within five (5) business days of each anniversary of the Commencement Date. The Zero Dollar Rent for the first two years is in exchange for Tenant agreeing to pay the entire cost for the Survey referenced above in Section 1(e).

(b) Beginning on the fifth (5<sup>th</sup>) anniversary of the Commencement Date and each five-year anniversary thereafter throughout the remainder of the Term and Renewal Term(s), if any, the Rent shall be increased by an amount equal to [REDACTED] of the amount of the Rent for the previous five-year period, which sum shall be payable in annual installments in advance as herein set forth.

4. **TAXES.** Tenant shall pay any personal property taxes assessed on, or any portion of such taxes attributable to, the Communication Facilities located on the Premises. Landlord shall pay when due all real property taxes and all other fees and assessments attributable to the Property and Premises. Tenant shall pay as additional rent any increase in real property taxes levied against the Premises, which are directly attributable to Tenant's use of the Premises (but not, however, taxes attributable to periods prior to the Commencement Date such as roll-back or greenbelt assessments) if Landlord furnishes proof of such increase to Tenant (such increase, the "**Landlord Tax Reimbursement**"). In the event that Landlord fails to pay when due any taxes affecting the Premises or any easement relating to the Premises, Tenant shall have the right but not the obligation to pay such taxes and deduct the full amount of the taxes paid by Tenant on Landlord's behalf from future installments of Rent. Notwithstanding the foregoing, Tenant shall not have the obligation to pay any tax, assessment, or charge that Tenant is disputing in good faith in appropriate proceedings prior to a final determination that such tax is properly assessed, provided that no lien attaches to the Property. In addition, Tenant shall not have the obligation to pay or reimburse Landlord for the Landlord Tax Reimbursement if Landlord has not provided proof of such amount and demand therefor within one (1) year of the date such amount is due and payable by Landlord.

5. **USE.** The Premises are being leased for the purpose of erecting, installing, operating and maintaining radio or communications towers, transmitting and receiving equipment, antennas, dishes, mounting structures, equipment shelters and other supporting structures, and related equipment (collectively, the "**Communication Facilities**"). Tenant may, subject to the foregoing, make any improvement, alteration or modification to the Premises as are deemed appropriate by Tenant for the permitted use herein. Tenant shall have the right to clear the Premises of any trees, vegetation, or undergrowth which interferes with Tenant's use of the Premises for the intended purposes. Tenant shall have the exclusive right to install and operate upon the Premises communications towers, buildings, equipment, antennas, dishes, fencing, and other accessories related thereto, and to alter, supplement, and/or modify same as may be necessary.

6. **ACCESS AND UTILITIES.** During the Term, Tenant, and its guests, agents, customers, lessees, sublessees and assigns shall have the unrestricted, exclusive right to use, and shall have free and unfettered access to, the Premises seven (7) days a week, twenty-four (24) hours a day. Landlord for itself, its successors and assigns, hereby grants and conveys unto Tenant, its customers, employees, agents, invitees, sublessees, sublicensees, successors and assigns a nonexclusive easement (a) for ingress and egress, and (b) for the construction, installation, operation and maintenance of overhead and underground electric and other utility facilities (including fiber, backhaul, wires, poles, guys, cables, conduits and appurtenant equipment), with the right to reconstruct, improve, add to, enlarge, change and remove such facilities, over, across and through any easement for the benefit of and access to the Premises, subject to the terms and conditions herein set forth. Landlord agrees to cooperate with Tenant's efforts to obtain such utilities and services. If there are utilities already existing on the Premises which serve the Premises, Tenant may utilize such utilities and services. Upon Tenant's request, Landlord shall execute and deliver to Tenant requisite recordable documents evidencing the easements contemplated hereunder within fifteen (15) days of Tenant's request, and Landlord shall obtain the consent and joinder of Landlord's mortgagee to any such grant, if applicable.

7. **EQUIPMENT, FIXTURES AND REMOVAL.** The Communications Facilities shall at all times be the personal property of Tenant and/or its subtenants and licensees, as applicable. Tenant or its customers shall have the right to erect, install, maintain, and operate on the Premises such equipment, structures, fixtures, signs, and personal property as Tenant may deem necessary or appropriate, and such property, including the equipment, structures, fixtures, signs, and personal property currently on the Premises, shall not be deemed to be part of the Premises, but shall remain the property of Tenant or its customers. Within ninety (90) days after the expiration or earlier termination of this Agreement (the



“Removal Period”), Tenant shall remove its improvements and restore the Premises to grade and perform all obligations under this Agreement during the Removal Period, including without limitation, the payment of Rent at the rate in effect upon the expiration or termination of this Agreement. Any property not so removed shall be deemed abandoned and may be removed and disposed of by Landlord in such manner as Landlord shall determine, without any obligation on the part of Landlord to account to Tenant for any proceeds therefrom.

**8. ASSIGNMENT AND SUBLEASE.** Tenant may assign this Agreement to any person or entity, including Lender (defined below), at any time without the prior written consent of Landlord. Upon such assignment, Tenant will be relieved of all liability hereunder. Tenant shall have the exclusive right to sublease or grant licenses without Landlord’s consent to use the Communication Facilities, but no such sublease or license shall relieve or release Tenant from its obligations under this Agreement. Landlord may assign this Agreement only in its entirety and only to any person or entity who or which acquires fee title to the Property, subject to Section 15. Landlord may not subdivide the Property without Tenant’s prior written consent, not to be unreasonably withheld, conditioned or delayed. Subject to the terms of this Agreement, Landlord at any time shall be allowed to transfer, convey or otherwise assign the Property or portion thereof to any immediate family member(s) without the consent of Tenant.

**9. COVENANTS, WARRANTIES AND REPRESENTATIONS.**

(a) Landlord warrants and represents that it is the owner in fee simple of the Property, free and clear of all liens and encumbrances except as to those which may have been disclosed to Tenant in writing prior to the execution hereof, and that it alone has full right to lease the Premises for the Term.

(b) Landlord shall pay promptly, when due, any other amounts or sums due and owing with respect to its ownership and operation of the Property, including, without limitation, judgments, taxes, liens, mortgage payments and other similar encumbrances. If Landlord fails to make any payments required under this Agreement, or breaches any other obligation or covenant under this Agreement, Tenant may (without obligation), after providing ten (10) days written notice to Landlord, make such payment or perform such obligation on behalf of Landlord and offset such payment (including any reasonable attorneys’ fees incurred in connection with Tenant performing such obligation) against payments of Rent.

(c) Landlord shall not do or knowingly permit anything that will interfere with or negate any special use permit or approval pertaining to the Premises or cause Tenant’s use of the Premises to be in nonconformance with applicable local, state, or federal laws. Landlord shall cooperate with Tenant in any effort by Tenant to obtain certificates, permits, licenses and other approvals that may be required by any governmental authorities. Landlord agrees to execute any necessary applications, consents or other documents as may be reasonably necessary for Tenant to apply for and obtain the proper zoning approvals required to use and maintain the Premises and the Communication Facilities.

(d) To the best of Landlord’s knowledge, Landlord has complied and shall comply with all laws with respect to the Property. No asbestos-containing thermal insulation or products containing PCB, formaldehyde, chlordane, or heptachlor or other hazardous materials have been placed on or in the Property by Landlord or, to the knowledge of Landlord, by any prior owner or user of the Property. To the knowledge of Landlord, there has been no release of or contamination by hazardous materials on the Property.

(e) Tenant shall have access to all utilities required for the operation of Tenant’s improvements on the Premises that are existing on the Property.

(f) Other than a certain August 14, 2007 Lease Agreement between Landlord and East Kentucky Network, LLC, d/b/a Appalachian Wireless (the “**Appalachian Lease**”), there currently exist no licenses, sublicenses, or other agreements, written or oral, granting to any party or parties, or possibly

granting to any party or parties, the right of use or occupancy of any portion of the Property; there are no outstanding options or rights of first refusal to purchase the Property or any portion thereof or interest therein, or any equity or interest in Landlord if Landlord is an entity; and there are no parties (other than Landlord) in possession of the Property except as to those that may have been disclosed to Tenant in writing prior to the execution hereof.

**10. HOLD OVER TENANCY.** Should Tenant or any assignee, sublessee or licensee of Tenant hold over the Premises or any part thereof after the expiration of this Agreement, such holdover shall constitute and be construed as a tenancy from month-to-month only, but otherwise upon the same terms and conditions.

**11. INDEMNITIES.** The parties agree to indemnify, defend and hold harmless the other party, its parent company or other affiliates, successors, assigns, officers, directors, shareholders, agents and employees (collectively, "**Indemnified Persons**") from and against all claims and liabilities (including reasonable attorneys' fees and court costs) ("**Losses**") caused by or arising out of (a) such party's breach of any of its obligations, covenants, representations or warranties contained herein, or (b) such party's acts or omissions with regard to this Agreement; provided, however, in no event shall a party indemnify the other party for any such Losses to the extent arising from the gross negligence or willful misconduct of the party seeking indemnification. However, in the event of an Indemnified Person's contributory negligence or other fault, the Indemnified Person shall not be indemnified hereunder to the extent that the Indemnified Person's negligence or other fault caused such claim or liability. Tenant will indemnify Landlord from and against any mechanic's liens or liens of contractors and sub-contractors engaged by or through Tenant.

**12. WAIVERS.**

(a) Landlord hereby waives any and all lien rights it may have, statutory or otherwise, in and to the Communication Facilities or any portion thereof, regardless of whether or not such is deemed real or personal property under applicable laws. Landlord will not assert any claim whatsoever against Tenant for loss of anticipatory profits or any other indirect, special, incidental or consequential damages incurred by Landlord as a result of the construction, maintenance, operation or use of the Premises by Tenant.

(b) EACH PARTY HERETO WAIVES ANY AND ALL CLAIMS AGAINST THE OTHER FOR ANY LOSS, COST, DAMAGE, EXPENSE, INJURY OR OTHER LIABILITY WHICH IS IN THE NATURE OF INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES WHICH ARE SUFFERED OR INCURRED AS THE RESULT OF, ARISE OUT OF, OR ARE IN ANY WAY CONNECTED TO THE PERFORMANCE OF THE OBLIGATIONS UNDER THIS AGREEMENT.

**13. INSURANCE.** Tenant shall insure against property damage and bodily injury arising by reason of occurrences on or about the Premises in the amount of not less than \$1,000,000. The insurance coverage provided for herein may be maintained pursuant to master policies of insurance covering other communication facilities of Tenant and its corporate affiliates. All insurance policies required to be maintained by Tenant hereunder shall name Landlord as an additional insured, be with responsible insurance companies, authorized to do business in the State or Commonwealth where the Premises are located if required by law, and shall provide for cancellation only upon ten (10) days' prior written notice to Landlord. Tenant shall evidence such insurance coverage by delivering to Landlord, if requested, a copy of a certificate of insurance of such policies issued by the insurance companies underwriting such risks.

**14. INTERFERENCE.** During the Term, Landlord, its successors and assigns, will not grant any ground lease, license, or easement with respect to the Premises. In addition, during the Option Period and the Term, Landlord, its successors and assigns, will not grant any ground lease, license, or easement with respect to the Property (outside of the Premises) and any property adjacent or contiguous to the Property that is fee owned by Landlord: (a) for any of the uses contemplated in Section 5 herein; or (b) if such lease,

license, or easement would detrimentally impact the Communication Facilities or Tenant's economic opportunities at the Premises, or the use thereof. Landlord shall not cause or permit the construction of radio or communications towers on the Property or on any other property of Landlord adjacent or contiguous to or in the immediate vicinity of the Property, except for towers constructed by Tenant. Landlord and Tenant intend by this Agreement for Tenant (and persons deriving rights by, through, or under Tenant) to be the sole parties to market, use, or sublease any portion of the Property for communications or broadcast facilities during the Option Period and the Term. Landlord agrees that this restriction on the use of the Property is commercially reasonable, not an undue burden on Landlord, not injurious to the public interest, and shall be specifically enforceable by Tenant (and persons deriving rights by, through or under Tenant) in a court of competent jurisdiction. The foregoing restriction shall run with the land and be binding on the successors and assigns of Landlord. Tenant agrees that the Communications Facilities will not cause any interference to any current transmissions of lessee under the Appalachian Lease and, if Tenant does cause such interference, Tenant will remedy the interference following Tenant's written receipt of notice from Landlord describing the interference.

**15. RIGHT OF FIRST REFUSAL.** In the event Landlord determines to sell, transfer, license or otherwise convey any interest, whether fee simple interest, easement interest, leasehold, or otherwise, and whether direct or indirect by way of transfer of ownership interests in Landlord if Landlord is an entity, which interest underlies or affects any or all of the Premises (the "**ROFR Property**") to any third party that is a Third Party Competitor (as defined below), Landlord shall offer Tenant a right of first refusal to purchase the Premises (or such larger portion of Landlord's property that encompasses the Premises, if applicable). For purposes herein, a "**Third Party Competitor**" is any person or entity directly or indirectly engaged in the business of owning, acquiring, operating, managing, investing in or leasing communications infrastructure or any person or entity directly or indirectly engaged in the business of owning, acquiring, or investing in real property leases or easements underlying communications infrastructure. In such event, Landlord shall provide a copy of any offer to purchase, or any executed purchase agreement or letter of intent ("**Offer**"), to Tenant which copy shall include, at a minimum, the purchase price, proposed closing date, and financing terms ("**Minimum Terms**"). Within thirty (30) days of receipt of such Offer, Tenant shall provide written notice to Landlord of Tenant's election to purchase the ROFR Property on the same Minimum Terms; provided, the closing date shall be no sooner than sixty (60) days after Tenant's purchase election notice. In such event, Landlord agrees to sell the ROFR Property to Tenant subject to Tenant's payment of the purchase price and compliance with a purchase and sale agreement to be negotiated in good faith between Landlord and Tenant. If Tenant provides written notice that it does not elect to exercise its rights of first refusal to purchase the ROFR Property, or if Tenant does not provide notice of its election within the thirty (30) day period, Tenant shall be deemed to have waived such right of first refusal only with respect to the specific Offer presented (and any subsequent Offers shall again be subject to Tenant's continuing right of first refusal hereunder), and Landlord shall be permitted to consummate the sale of the ROFR Property in accordance with the strict terms of the Offer ("**Permitted Sale**"). If Landlord does not consummate the Permitted Sale within ninety (90) days of the date of Tenant's waiver of its rights of first refusal, such Offer shall be deemed to have lapsed. The foregoing Right of First Refusal shall in no event apply to a sale of the Property by Landlord to a purchaser that is not a Third-Party Competitor.

**16. SECURITY.** The parties recognize and agree that Tenant shall have the right to safeguard and protect its improvements located upon or within the Premises. Consequently, Tenant may elect, at its expense, to construct such enclosures and/or fences as Tenant reasonably determines to be necessary to secure its improvements, including the tower(s), building(s), guy anchors, and related improvements situated upon the Premises. Tenant may also undertake any other appropriate means to restrict access to its communications towers, buildings, **guy anchors, guy wires**, and related improvements, including, without limitation, posting signs for security purposes.

**17. FORCE MAJEURE.** The time for performance by Landlord or Tenant of any term, provision, or covenant of this Agreement shall be deemed extended by time lost due to delays resulting from acts of God,

strikes, civil riots, floods, material or labor restrictions by governmental authority, and any other cause not within the control of Landlord or Tenant, as the case may be.

**18. CONDEMNATION.** Notwithstanding any provision of this Agreement to the contrary, in the event of condemnation of the Premises, Landlord and Tenant shall be entitled to separate awards with respect to the Premises, in the amount determined by the court conducting such condemnation proceedings based upon Landlord's and Tenant's respective interests in the Premises. If a separate condemnation award is not determined by such court, Landlord shall permit Tenant to participate in the allocation and distribution of the award. In no event shall the condemnation award to Landlord exceed the unimproved value of the Premises, without taking into account the improvements located thereon, and in no event shall this Agreement be terminated or modified (other than an abatement of rent) due to a casualty or condemnation without the prior written consent of Lender.

**19. DEFAULT.** The failure of Tenant or Landlord to perform any of the covenants of this Agreement shall constitute a default. The non-defaulting party shall give the other written notice of such default, and the defaulting party shall cure such default within thirty (30) days after receipt of such notice. In the event any such default cannot reasonably be cured within such thirty (30) day period, if the defaulting party shall proceed promptly after the receipt of such notice to cure such default, and shall pursue curing such default with due diligence, the time for curing shall be extended for such period of time as may be necessary to complete such curing, however, in no event shall this extension of time be in excess of sixty (60) days, unless agreed upon by the non-defaulting party.

**20. REMEDIES.** Should the defaulting party fail to cure a default under this Agreement, the other party shall have all remedies available either at law or in equity, including the right to terminate this Agreement. In the event Landlord elects to terminate this Agreement due to a default by Tenant, Landlord shall continue to honor all sublease and sublicense commitments made by Tenant through the expiration of the term of any such commitment, it being intended hereby that each such commitment shall survive the early termination of this Agreement.

**21. ATTORNEYS' FEES.** If there is any legal proceeding between Landlord or Tenant arising from or based on this Agreement, the unsuccessful party to such action or proceeding shall pay to the prevailing party all costs and expenses, including reasonable attorneys' fees and disbursements, incurred by such prevailing party in such action or proceeding and in any appeal in connection therewith. If such prevailing party recovers a judgment in any such action, proceeding or appeal, such costs, expenses and attorneys' fees and disbursements shall be included in and as a part of such judgment.

**22. ADDITIONAL TERMINATION RIGHT.** If at any time during the Term, Tenant determines, in Tenant's sole and absolute discretion, with or without cause, that the Premises is no longer suitable or desirable for Tenant's intended use and/or purposes, Tenant shall have the right to terminate this Agreement upon sixty (60) days prior written notice to Landlord.

**23. PRIOR AGREEMENTS.** The parties hereby covenant, recognize and agree that the terms and provisions of this Agreement shall constitute the sole embodiment of the arrangement between the parties with regard to the Premises, and that all other written or unwritten agreements, contracts, or leases by and between the parties with regard to the Premises are hereby terminated, superseded and replaced by the terms hereof.

**24. SUBORDINATION, NON-DISTURBANCE AND ATTORNMENT.** In the event the Property is encumbered by a mortgage or deed of trust or other security instrument of any kind (a "**Landlord Mortgage**"), Landlord, within fifteen (15) days following Tenant's request or immediately prior to the creation of any encumbrance created after the date this Agreement is fully executed, will obtain from the holder of each such Landlord Mortgage a fully-executed subordination, non-disturbance and attornment agreement (an "**SNDA**") in recordable form, which shall be prepared or approved by Tenant. The holder of every such Landlord Mortgage shall, in the SNDA, agree that in the event of a foreclosure, or conveyance

in lieu of foreclosure of Landlord's interest in the Premises, such Landlord Mortgage holder shall recognize and confirm the validity and existence of this Agreement and Tenant shall have the right to continue its use and occupancy of the Premises in accordance with the provisions of this Agreement, provided Tenant is not in default of this Agreement beyond applicable notice and cure periods.

## **25. LENDER'S RIGHTS.**

(a) Landlord agrees to recognize the leases/licenses of all subtenants and sublicensees and will permit each of them to remain in occupancy of its premises notwithstanding any default hereunder by Tenant so long as each such respective subtenant or sublicensee is not in default under the lease/license covering its premises. Landlord agrees to execute such documents as any such subtenant and/or sublicensee might reasonably require, including customary subordination, non-disturbance and attornment agreements and/or Landlord recognition agreements, to further memorialize the foregoing, and further agrees to use Landlord's best efforts to also cause its lenders to similarly acknowledge, in writing, subtenant/sublicensee's right to continue to occupy its premises as provided above.

(b) Landlord consents to the granting by Tenant of a lien and security interest in Tenant's interest in this Agreement and all of Tenant's personal property and fixtures attached to the real property described herein, and furthermore consents to the exercise by Lender of its rights of foreclosure with respect to its lien and security interest. Landlord agrees to recognize Lender as Tenant hereunder upon any such exercise by Lender of its rights of foreclosure.

(c) Landlord hereby agrees to give Lender written notice of any breach or default of the terms of this Agreement within fifteen (15) days after the occurrence thereof at the address set forth in Section 29. Landlord further agrees that no default under this Agreement shall be deemed to have occurred unless such notice to Lender is also given and that, in the event of any such breach or default under the terms of this Agreement, Lender shall have the right, to the same extent, for the same period and with the same effect, as Tenant, plus an additional ninety (90) days after any applicable grace period to cure or correct any such default.

(d) Landlord acknowledges that nothing contained herein shall be deemed or construed to obligate Lender to take any action hereunder, or to perform or discharge any obligation, duty or liability of Tenant under this Agreement. No Lender shall become liable under the provisions of this Agreement or any lease executed pursuant to Section 26 hereof unless and until such time as it becomes, and then only for as long as it remains, the owner of the leasehold estate created hereby or thereby.

(e) Tenant shall have the right from time to time to mortgage or otherwise encumber Tenant's interest in this Agreement; provided, however, in no event shall there be more than one such mortgage or encumbrance outstanding at any one time. If Tenant shall so mortgage (each a "**Tenant Mortgage**") Tenant's interest in this Agreement to one or more lenders (any such lender, and any successor, assign, designee or nominee of such lender, hereinafter a "**Lender**"), Tenant or such Lender shall give Landlord prompt notice of such Tenant Mortgage and furnish Landlord with a complete and correct copy of such Tenant Mortgage, certified as such by Tenant or such Lender, together with the name and address of such Lender.

(f) This Agreement shall not be amended or modified without the consent of any Lender. In the event that a Lender shall become the owner of such leasehold estate, such Lender shall not be bound by any modification or amendment of this Agreement made subsequent to the date of a Tenant Mortgage unless Lender shall have consented to such modification or amendment at the time it was made.

## **26. RIGHT TO NEW LEASE.**

(a) In the case of termination of this Agreement for any reason, or in the event this Agreement is rejected or disaffirmed pursuant to any bankruptcy, insolvency or other law affecting creditor's rights, Landlord shall give prompt notice thereof to Lender at the address set forth in Section 29 or as may be provided to Landlord by Tenant following the Commencement Date. Thereafter, Landlord, upon written request of Lender, and within thirty (30) days after the receipt of such request, shall promptly execute and deliver a new lease of the Premises and assignment of all subleases and sublicenses to Lender or its designee or nominee, for the remainder of the Term upon all the covenants, conditions, limitations and agreements contained herein (including, without limitation, options to extend the Term) except for such provisions which must be modified to reflect such termination, rejection or disaffirmance and the passage of time, provided that such Lender (i) shall pay to Landlord, simultaneously with the delivery of such new lease, all unpaid rent due under this Agreement up to and including the date of the commencement of the term of such new lease and all reasonable expenses, including, without limitation, reasonable attorneys' fees and disbursements and court costs, incurred by Landlord in connection with the default by Tenant, the termination of this Agreement and the preparation of the new lease, and (ii) shall cure all defaults existing under this Agreement which are susceptible to being cured by such Lender promptly and with due diligence after the delivery of such new lease. Notwithstanding anything to the contrary contained herein, provided such Lender shall have otherwise complied with the provisions of this Section, such Lender shall have no obligation to cure any defaults which are not susceptible to being cured by such Lender (for example, the bankruptcy of Tenant).

(b) For so long as Lender shall have the right to enter into a new lease with Landlord pursuant to this Section, Landlord shall not enter into a new lease of the Premises with any person or entity other than Lender, without the prior written consent of Lender.

## **27. ADDITIONAL PROVISIONS.**

(a) The parties hereto agree that (i) Tenant is in possession of the Premises notwithstanding the fact that Tenant has subleased, or may in the future sublease, certain of the improvements thereon to third parties and (ii) the requirements of Section 365(h) of Title II of the United States Code (the Bankruptcy Code) with respect to Tenant's possession of the leasehold under this Agreement are satisfied. Accordingly, the right of Tenant to remain in possession of the leasehold under this Agreement shall continue notwithstanding any rejection of this Agreement in any bankruptcy proceeding involving Landlord, or any other actions by any party in such a proceeding. This provision, while included in this Agreement, has been separately negotiated and shall constitute a separate contract between the parties as well as a part of this Agreement. The provisions of this Section are for the benefit of Tenant and its assigns, including, without limitation, Lender. The parties hereto also agree that Lender is a party in interest and shall have the right to appear as a party in any proceeding brought under any bankruptcy law or under any other law which may affect this Agreement.

(b) The provisions of Sections 25 and 26 hereof shall survive the termination, rejection or disaffirmance of this Agreement and shall continue in full force and effect thereafter to the same extent as if such Sections were a separate and independent contract made by Landlord, Tenant and Lender and, from the effective date of such termination, rejection or disaffirmance of this Agreement to the date of execution and delivery of such new lease, Lender may use and enjoy the leasehold estate created by this Agreement without hindrance by Landlord. The aforesaid agreement of Landlord to enter into a new lease with Lender shall be deemed a separate agreement between Landlord and such Lender, separate and apart from this Agreement as well as a part of this Agreement, and shall be unaffected by the rejection of this Agreement in any bankruptcy proceeding by any party.

(c) Landlord shall have no right and expressly waives any right arising under applicable law, in and to the rentals payable to Tenant, if any, under any lease of the Premises, which rentals may be assigned by Tenant to Lender.

(d) If a Tenant Mortgage is in effect, (i) this Agreement shall not be modified or amended by the parties hereto, or terminated or surrendered by Tenant, nor shall Landlord accept any such termination or surrender of this Agreement by Tenant, without the prior written consent of Lender and (ii) Landlord shall not have the right to terminate this Agreement in the event of a casualty or condemnation without the prior written consent of Lender.

(e) The provisions of Sections 25 and 26 hereof are for the benefit of Lender and may be relied upon and shall be enforceable by Lender as if Lender were a party to this Agreement.

(f) Landlord shall, within ten (10) days of the request of Tenant or any Lender or prospective Lender, provide an estoppel certificate as to any matters reasonably requested by Tenant or Lender.

(g) The right to extend or renew this Agreement and any right of first refusal to purchase the Premises may be exercisable by the holder of a Tenant Mortgage and, before the expiration of any periods to exercise such a right, Landlord must provide to Lender at least thirty (30) days prior written notice before the expiration of the right to so extend or renew in order to extinguish Lender's right to so extend, renew or purchase.

(h) Under no circumstances shall the fee estate of Landlord and the leasehold estate created hereby merge, even though owned by the same party, without the written consent of the holder of a Tenant Mortgage.

**28. QUIET ENJOYMENT.** So long as Tenant is not in default under this Agreement beyond the applicable notice and cure period, Landlord covenants and agrees that Tenant shall peaceably and quietly hold and enjoy the Premises throughout the Term, without any hindrance, molestation or ejection by Landlord, its successors or assigns or by those claiming by, through or under them.

**29. NOTICES.** All notices, requests, claims, demands, and other communications hereunder shall be in writing and may be hand delivered (provided the deliverer provides proof of delivery) or sent by nationally-established overnight courier that provides proof of delivery, or certified or registered mail (postage prepaid, return receipt requested). Notice shall be deemed received on the date of delivery as demonstrated by the receipt of delivery. Notices shall be delivered to a party at the party's respective address below, or to such other address that a party below may provide from time to time:

**If to Landlord:**  
Jimmie Wise and  
Shelia H. Wise  
P.O. Box 479  
Irvine, KY 40336

**If to Tenant:**  
Vertical Bridge Development, LLC  
750 Park of Commerce Drive  
Suite 200  
Boca Raton, FL 33487  
Attn: General Counsel

**If to Lender:**  
Toronto Dominion (Texas) LLC  
31 West 52nd Street  
New York, NY 10019  
Attn: Admin Agent  
Fax No. 416-982-5535

**30. MISCELLANEOUS.**

(a) Each party hereto warrants and represents that it has the necessary power and authority to enter into and perform its respective obligations under this Agreement.

(b) If any term of this Agreement is found to be void or invalid, such invalidity shall not affect the remaining terms of this Agreement, which shall continue in full force and effect.

(c) All attached exhibits are hereby incorporated by this reference as if fully set forth herein.

(d) Failure of party to insist on strict performance of any of the conditions or provisions of this Agreement, or failure to exercise any of a party's rights hereunder, shall not waive such rights.

(e) This Agreement shall be governed by and construed in accordance with the laws of the State or Commonwealth in which the Premises are located.

(f) This Agreement constitutes the entire agreement and understanding of the parties and supersedes all offers, negotiations, other leases and/or agreements with regard to the Premises. There are no representations or understandings of any kind not set forth herein. Any amendment to this Agreement must be in writing and executed by both parties.

(g) This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, legal representatives, successors and assigns.

(h) A short-form Memorandum of Option to Lease (and a short-form Memorandum of Lease in the event Tenant exercises its option to lease the Premises) may be recorded at Landlord or Tenant's option in the form as depicted in **Exhibit 3** and **Exhibit 4**, respectively, attached hereto.

(i) Landlord shall keep the terms of this Agreement confidential, and shall not disclose any terms contained within this Agreement to any third party other than such terms as are set forth in the Memorandum of Option and Lease or Memorandum of Lease.

**[SIGNATURES BEGIN ON NEXT PAGE]**



IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the Effective Date (date last signed by a party hereto).

**WITNESSES:**

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

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

**LANDLORD:**

*Jimmie Wise*  
Jimmie Wise

Date: 11-1-18

*Shelia H. Wise*  
Shelia H. Wise

Date: 11/1/18

STATE OF Kentucky  
COUNTY OF Estill

The foregoing instrument was acknowledged before me this November 1, 2018 by Jimmie Wise and Shelia H. Wise.

*Janet M. Rose* ID# 594414  
Notary Public

Printed Name: Janet M. Rose

My Commission Expires:  
2/27/22

[Tenant signature page to Option and Lease Agreement]

**WITNESSES:**

**TENANT:**

Christopher Carrick  
Name: Christopher Carrick  
Rachel Williamson  
Name: Rachel Williamson

**Vertical Bridge Development, LLC**  
a Delaware limited liability company

Alex Gelman  
By: Alex Gelman  
Name: ALEX GELMAN  
Title: CEO  
Date: 11/12/18

STATE OF FLORIDA

COUNTY OF PALM BEACH



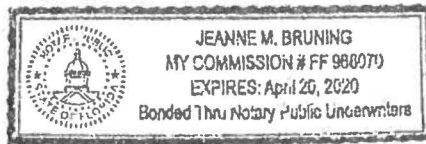
The foregoing instrument was acknowledged before me this November 12<sup>th</sup>, 2018 by Alex Gelman (name of officer), CEO (title of officer) of Vertical Bridge Development, LLC, a Delaware limited liability company, on behalf of the company.

Jeanne M. Bruning  
Notary Public

Printed Name: JEANNE M. Bruning

My Commission Expires:

4/20/20



## EXHIBIT 1

### Legal Description of the Property (Parent Parcel)

(may be updated by Tenant upon receipt of final legal description from title)

#### PARCEL 1:

Beginning at a stone corner on Highway 89, this stone being near a marked black jack oak that is located 73 feet southeast from a forked maple that stands near the highway right of way line on the northeast side of the drain that comes down from Iron Mountain; thence a north, northeast direction up a bluff and out the ridge with a marked line to a twin marked white oak, this white oak being 18 feet southeast from a marked white oak that is standing near the old L. B. McIntosh road that comes around the side of Iron Mountain; thence in a northeastern direction, 34 feet, 6 inches to a marked white oak; thence across the old L. B. McIntosh road to the James Owens property; thence with James Owen's line to Ky. Highway 89; thence with Highway 89 a southwestern direction to the beginning, containing 5 acres, more or less. Being a part of the same land conveyed from P. B. McIntosh, Jr. and Rhoda McIntosh, his wife to Hood Wise by deed dated Nov. 06, 1909, and recorded in Deed Book 31, Page 494, Estill County Clerk's office; being a part of the same land conveyed from L. B. McIntosh and Bettie McIntosh, his wife to Hood Wise and Millie Ann Wise by deed dated January 20, 1937, and recorded in Deed Book 81, Page 187, Estill County Clerk's office; being a part of the same land conveyed from James Owens and Nellie Owens, his wife, to Hood Wise by deed dated February 12, 1924, and recorded in Deed Book 56, Page 184, Estill County Clerk's office; and being a part of the same land conveyed from William Tuttle and Catherine Tuttle, his wife to Hood Wise by deed dated Nov. 06, 1909, and recorded in Deed Book 31, Page 495, Estill County Clerk's office.

#### PARCEL 2:

On Calloway's Creek, beginning on John Sam's line at a small branch in the Winchester & Irvine Road at 1. on the plat of the survey; thence N. 66 E. 144 po. to a pine on top of Iron Mountain corner to John Sams; thence with the divide of the ridge S 64 ½ E 10 po. So. 47 E 8 po. S. 84 E. 16 po. N. 62 E. 12 po. E. 16 po. N. 78 ½ E. 20 po. N. 49 ½ E. 12 po. N. 20 E. 10 po. N. 53 E. 18 po. to a stone in the divide of Calloways & Twin Creek; thence N. 58 E. 113 po. to the top of the Sugar Loan at 4 on the plat; thence with the divide of the ridge S. 33 ¼ E. 10 po. S. 20 W. 18 po. S. 32 ½ E. 18 po. S. 65 ½ E. 26 po. S. 55 E. 7 po. S. 71 E. 20 po. S. 66 E. 9 po. to a stone corner between Blanton & Endes at 5; thence S. 63 ½ E. 20 po. S. 61 ½ E. 6 po. S. 16 ½ E. 23 po. S. 36 E. 24 po. S. 43 ½ E. 26 po. S. 30 E. 17 po. to the top of the Grasse Mountain at 6; thence N. 50 E. 10 po. N. 60 E. 13 po. N. 63 E. 30 po. N. 54 E. 36 po. S. 73 E. 30 po. S. 80 ½ E. 20 po. N. 67 ½ E. 16 po. ; thence down the mountain S. 35 W. 300 po. to John W. Cooper's line; thence with his line N. 55 W. 100 po. to a white oak corner to Bales McIntosh & John W. Cooper at 20; thence N. 5 E. 146 po. to a maple near the forks of a branch, corner to Bugle McIntosh; thence N. 77 W. 23 po. N. 81 W. 8 po. N. 77 ½ W. 10 po. N. 56 W. 11 po. S. 50 W. 11 po. S. 72 W. 6 po. S. 8 ½ W. 11 po. S. 39 W. 4 po. S. 33 E. 3 po. S. 41 W. 4 po. S. 15 ½ W. 7 po. S. 88 E. 3 po. S. 44 E. 3 po. S. 84 ½ E. 9 po. S. 11 W. 9 po. S. 69 W. 6 po. S. 1 E. 3 po. N. 81 W. 4 po. S. 32 W. 4 po. S. 87 W. 7 po. N. 31 E. 3 po. N. 73 W. 8 po. S. 79 W. 8 po. S. 63 W. 5 po. N. 18 E. 2 po. N. 50 W. 8 po.; thence S. 41 W. 30 po.; thence up the branch N. 17 W. 12 po. N. 28 W. 6 po. so as to include the yard fence of old home at 27 S. 58 ½ W. 6 po. S. 65 ½ W. 7 po. S. 50 W. 10 po. S. 55 W. 11 po. S. 23 W. 7 po. S. 21 W. 15 po. opposite Frank McIntosh hickory corner so as to include passway at 28; thence N. 65 W. 122 po. to a chestnut sapling; thence with the edge of the fence 20 W. N. 81 W. 7 po. N. 68 W. 11 po. N. 20 po. N. 78 W. 8 po. S. 14 ½ W. 15 po. to the Road, a cedar; and thence with the Road to the beginning, containing 426 acres, more or less

Being the same property conveyed from Tracy Wallace and C. C. Wallace, executors of James A. Wallace to Hood Wise and Millie Ann Wise by deed dated May 23, 1935, and recorded in Deed Book 69, Page 321, Estill County Clerk's office.

PARCEL 3:

A road fifteen feet wide along the line of L. B. McIntosh and Bettie McIntosh and through their farm as follows, to-wit: Beginning at Irvine and Winchester Road; thence with Hood Wise line east to where the road leaves his line; thence as the road now runs to Hood Wise line; thence with the said Hood Wise line to the L. B. McIntosh and Pettie McIntosh corner, containing one half acre, more or less.

Being the same land conveyed from L. B. McIntosh and Bettie McIntosh, his wife, to Hood Wise and Millie Ann Wise by deed dated January 20, 1937, and recorded in Deed Book No. 81, Page 187, Estill County Clerk's office.

PARCEL 4:

Beginning on a black oak in Hood Wise line; thence south with said Wise line to Owens and Wise corner; thence with Hood Wise line north to L. B. McIntosh Road; thence west with said Road to a black oak, the beginning, containing one half acre, more or less.

Being the same land conveyed from James Owens and Nellie Owens to Hood Wise by deed dated February 12, 1924, and recorded in Deed Book No. 56, Page 184, Estill County Clerk's office.

PARCEL 5:

On the Irvine & Winchester Road and being William Tuttle's part of the site of the old Dry Ridge meeting house, containing 1/4 acre, more or less.

Being the same land conveyed from William Tuttle and Catherine Tuttle, his wife, to Hood Wise by deed dated November 06, 1909, and recorded in Deed Book 31, Page 495, Estill County Clerk's office.

LESS AND EXCEPT that portion of property conveyed to Estill County Water District No. 1 from Otha E. Wise and his wife, Ruth Wise by Deed dated February 22, 1984 and recorded May 03, 1984 in Deed Book 167, Page 630.

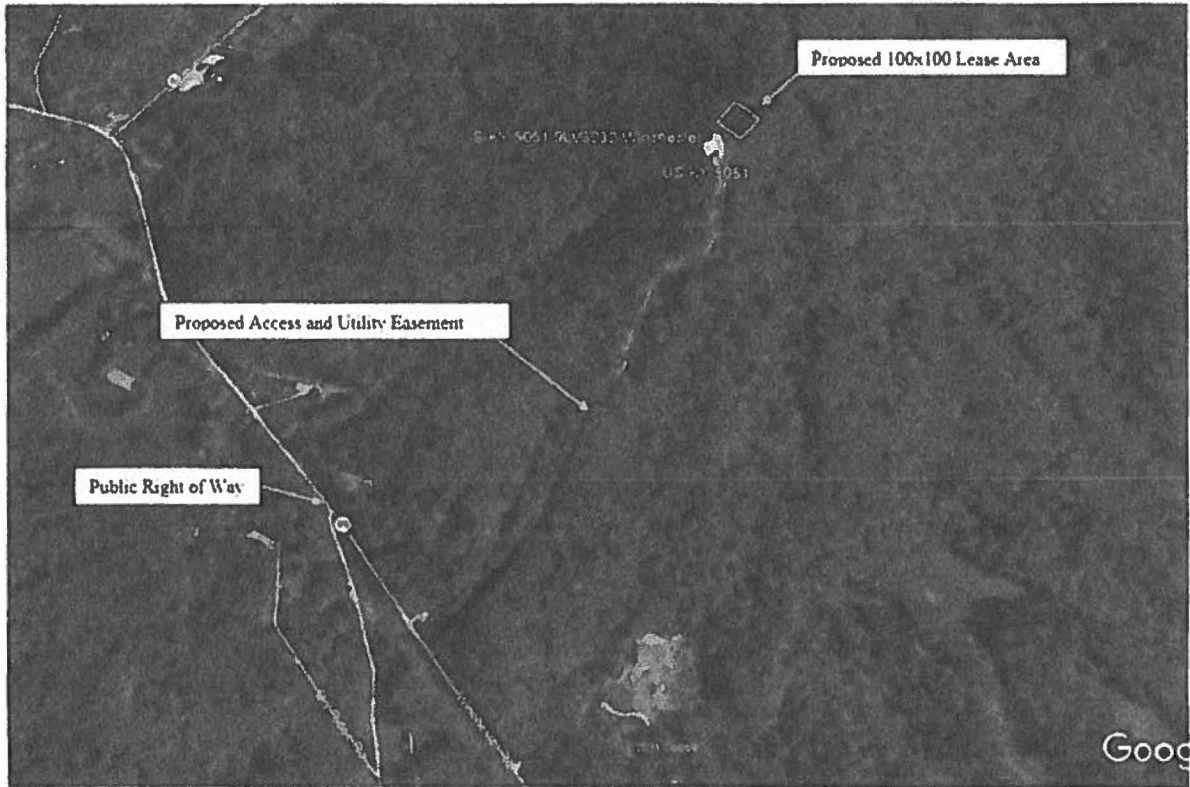
AND BEING a portion of the same property conveyed to Otha E. Wise from Millie Ann Wise by Deed dated May 10, 1969 and recorded July 24, 1969 in Deed Book 124, Page 352; AND FURTHER CONVEYED to Jimmie Wise from the Last Will and Testament of Otha E. (Elmer) Wise recorded on January 16, 2003 in Deed Book WS, Page 370.

Tax Parcel No. 053-00-00-008.00

**EXHIBIT 2**

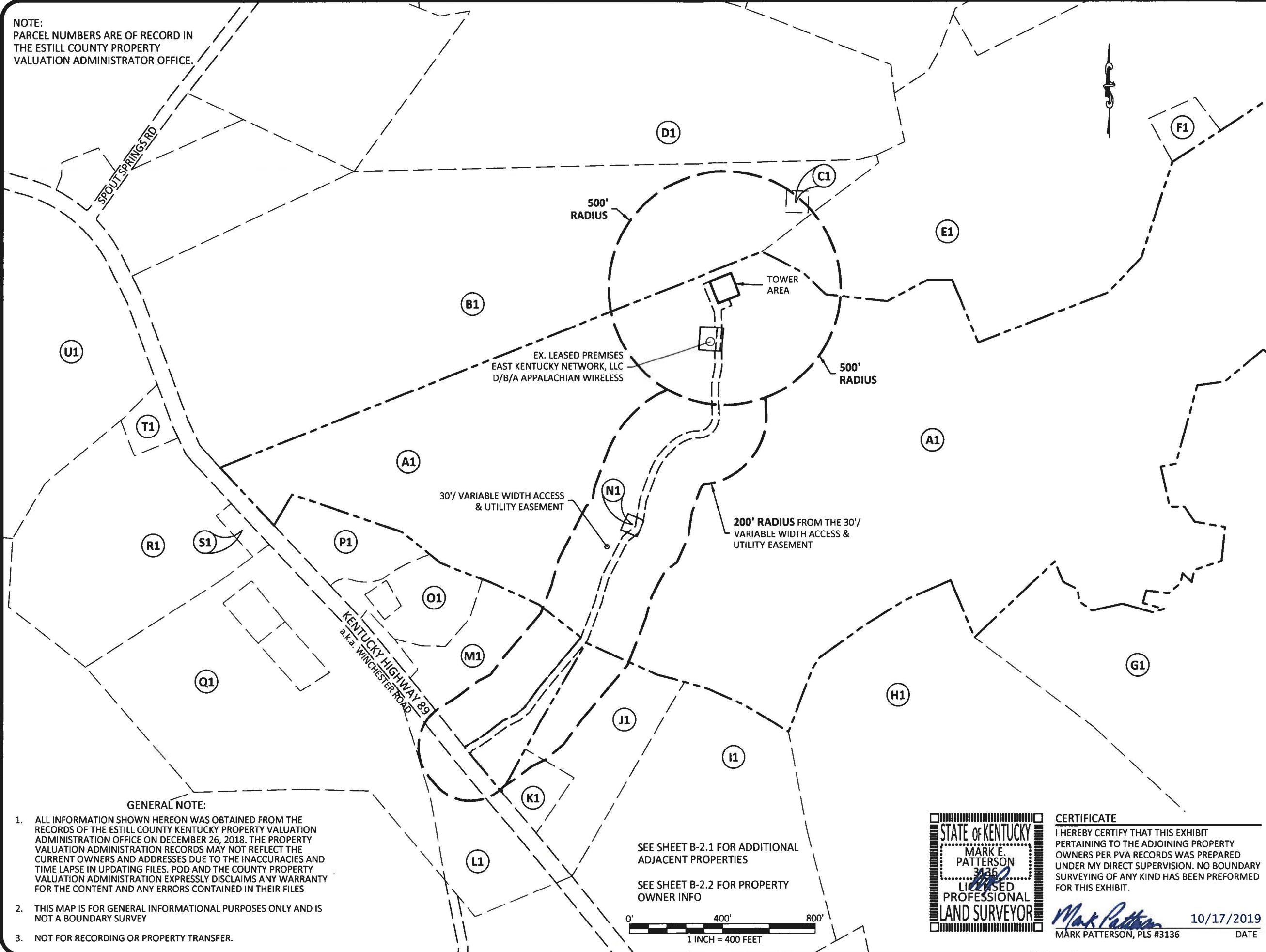
Premises

(If the below is a Site Sketch, then it may be replaced with a final survey and legal description of the Premises)



## Exhibit J

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



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

PREPARED FOR:  
**verticalbridge**  
750 PARK OF COMMERCE DRIVE  
BOCA RATON, FLORIDA 334487  
(561) 948-6367

EXHIBIT

REV.	DATE	DESCRIPTION
A	10.14.19	ISSUED FOR REVIEW
0	10.15.19	ISSUED AS FINAL

SITE INFORMATION:  
**WINCHESTER**  
KENTUCKY HIGHWAY 89  
a.k.a. WINCHESTER ROAD  
IRVINE, KY 40336  
ESTILL COUNTY  
  
TAX PARCEL NUMBER:  
053-00-00-008.00  
  
PROPERTY OWNER:  
JIMMIE R. WISE  
P.O. BOX 479  
IRVINE, KY 40336  
  
SOURCE OF TITLE:  
BOOK W S, PAGE 370  
(DEED BOOK 124, PAGE 352)

SITE NUMBER:  
US-KY-5051

POD NUMBER: 18-26961  
DRAWN BY: DAP  
CHECKED BY: MEP  
SURVEY DATE: 12.26.18  
PLAT DATE: 10.14.19

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

SHEET NUMBER: (3 pages)  
**B-2**

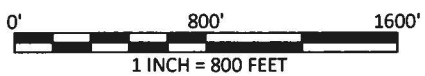
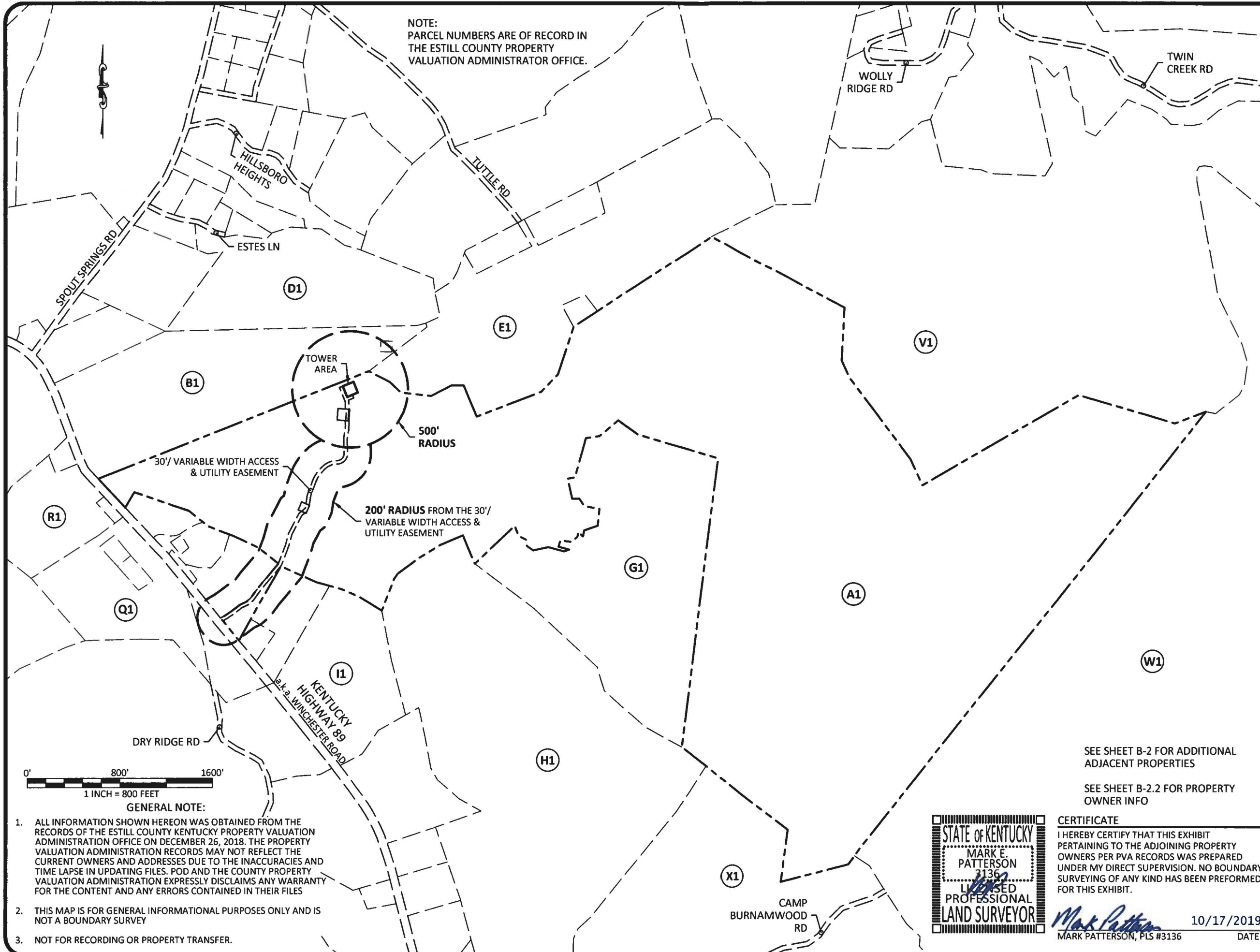
GENERAL NOTE:  
1. ALL INFORMATION SHOWN HEREON WAS OBTAINED FROM THE RECORDS OF THE ESTILL COUNTY KENTUCKY PROPERTY VALUATION ADMINISTRATION OFFICE ON DECEMBER 26, 2018. THE PROPERTY VALUATION ADMINISTRATION RECORDS MAY NOT REFLECT THE CURRENT OWNERS AND ADDRESSES DUE TO THE INACCURACIES AND TIME LAPSE IN UPDATING FILES. POD AND THE COUNTY PROPERTY VALUATION ADMINISTRATION EXPRESSLY DISCLAIMS ANY WARRANTY FOR THE CONTENT AND ANY ERRORS CONTAINED IN THEIR FILES  
2. THIS MAP IS FOR GENERAL INFORMATIONAL PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY  
3. NOT FOR RECORDING OR PROPERTY TRANSFER.

SEE SHEET B-2.1 FOR ADDITIONAL ADJACENT PROPERTIES  
SEE SHEET B-2.2 FOR PROPERTY OWNER INFO  
0' 400' 800'  
1 INCH = 400 FEET



CERTIFICATE  
I HEREBY CERTIFY THAT THIS EXHIBIT PERTAINING TO THE ADJOINING PROPERTY OWNERS PER PVA RECORDS WAS PREPARED UNDER MY DIRECT SUPERVISION. NO BOUNDARY SURVEYING OF ANY KIND HAS BEEN PERFORMED FOR THIS EXHIBIT.  
*Mark Patterson* 10/17/2019  
MARK PATTERSON, PLS #3136 DATE

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



**GENERAL NOTE:**

1. ALL INFORMATION SHOWN HEREON WAS OBTAINED FROM THE RECORDS OF THE ESTILL COUNTY KENTUCKY PROPERTY VALUATION ADMINISTRATION OFFICE ON DECEMBER 26, 2018. THE PROPERTY VALUATION ADMINISTRATION RECORDS MAY NOT REFLECT THE CURRENT OWNERS AND ADDRESSES DUE TO THE INACCURACIES AND TIME LAPSE IN UPDATING FILES. POD AND THE COUNTY PROPERTY VALUATION ADMINISTRATION EXPRESSLY DISCLAIMS ANY WARRANTY FOR THE CONTENT AND ANY ERRORS CONTAINED IN THEIR FILES
2. THIS MAP IS FOR GENERAL INFORMATIONAL PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY
3. NOT FOR RECORDING OR PROPERTY TRANSFER.

SEE SHEET B-2 FOR ADDITIONAL  
ADJACENT PROPERTIES

SEE SHEET B-2.2 FOR PROPERTY  
OWNER INFO



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

*Mark Patterson*  
MARK PATTERSON, PLS #3136  
DATE 10/17/2019

PREPARED BY:

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

PREPARED FOR:

750 PARK OF COMMERCE DRIVE  
BOCA RATON, FLORIDA 334487  
(561) 948-6367

**EXHIBIT**

REV.	DATE	DESCRIPTION
A	10.14.19	ISSUED FOR REVIEW
0	10.15.19	ISSUED AS FINAL

**SITE INFORMATION:**  
**WINCHESTER**  
KENTUCKY HIGHWAY 89  
a.k.a. WINCHESTER ROAD  
IRVINE, KY 40336  
ESTILL COUNTY

**TAX PARCEL NUMBER:**  
053-00-00-008.00

**PROPERTY OWNER:**  
JIMMIE R. WISE  
P.O. BOX 479  
IRVINE, KY 40336

**SOURCE OF TITLE:**  
BOOK W S, PAGE 370  
(DEED BOOK 124, PAGE 352)

**SITE NUMBER:**  
US-KY-5051

POD NUMBER: 18-26961

DRAWN BY: DAP  
CHECKED BY: MEP  
SURVEY DATE: 12.26.18  
PLAT DATE: 10.14.19

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

SHEET NUMBER: (3 pages)  
**B-2.1**



**A1** PARCEL ID: 053-00-00-008.00  
WISE JIMMIE R  
P O BOX 479  
IRVINE, KY 40336

**G1** PARCEL ID: 053-00-00-030.003  
KAVANAUGH WILLIAM MICHAEL  
650 SUGARLOAF LANE  
IRVINE, KY 40336

**M1** PARCEL ID: 053-00-00-005.01  
TURNER GREGORY L & CINDY L  
P O BOX 6533  
NAVARRE, FL 32566

**S1** PARCEL ID: 053-00-00-012.00  
JOHNSON WENDELL EST  
c/o MICHAEL JOHNSON  
1047 RED RIVER RD  
IRVINE, KY 40336

**B1** PARCEL ID: 053-00-00-015.00  
NAPIER ANNE E & CLARK MARY F &  
BRANAM PATRICK & COLLIER L BRANAM  
HERMITTAGE, TN 37076

**H1** PARCEL ID: 053-00-00-031.000  
COX JASON  
3110 HARRIS FERRY RD  
IRVINE, KY 40336

**N1** PARCEL ID: 053-00-00-005.00  
ESTILL CO WATER DIST NO I  
76 CEDAR GROVE RD  
IRVINE, KY 40336

**T1** PARCEL ID: 053-00-00-013.00  
PUCKETT SHERMAN L & BARBARA  
6275 WINCHESTER RD  
IRVINE, KY 40336

**C1** PARCEL ID: 053-00-00-008.01  
WISE JIMMIE R  
P O BOX 479  
IRVINE, KY 40336

**I1** PARCEL ID: 053-00-00-003.02  
ESTES BILLY JOE JR  
5660 WINCHESTER RD  
IRVINE, KY 40336

**O1** PARCEL ID: 053-00-00-009.01  
ELLIOTT KENNETH II  
6120 WINCHESTER RD  
IRVINE, KY 40336

**U1** PARCEL ID: 053-00-00-014.00  
PATRICK W G  
6395 WINCHESTER RD  
IRVINE, KY 40336

**D1** PARCEL ID: 053-00-00-038.00  
TERRY WILLIE  
4350 WINCHESTER RD  
IRVINE, KY 40336

**J1** PARCEL ID: 053-00-00-003.01  
ESTES BILLY JOE JR  
5660 WINCHESTER RD  
IRVINE, KY 40336

**P1** PARCEL ID: 053-00-00-009.00  
ELLIOTT KENNETH II  
6120 WINCHESTER RD  
IRVINE, KY 40336

**V1** PARCEL ID: 067-00-00-010.00  
HADDEN HARRY M IRREVOCABLE TRUST  
700 TWIN CREEK RD  
IRVINE, KY 40336

**E1** PARCEL ID: 053-00-00-039.00  
PEARSON CHARLOTTE  
1067 N MAIN ST  
NICHOLASVILLE, KY 40356

**K1** PARCEL ID: 053-00-00-003.00  
LARRISON BETTY & AMANDA  
5635 WINCHESTER ROAD  
IRVINE, KY 40336

**Q1** PARCEL ID: 053-00-00-010.00  
PATRICK TRACY & IRENE  
6135 WINCHESTER RD  
IRVINE, KY 40336

**W1** PARCEL ID: 067-00-00-011.00  
PRESBYTERY OF TRANSYLVANIA INC  
412 ROSE ST  
LEXINGTON, KY 40507

**F1** PARCEL ID: 053-00-00-039.03  
PEARSON SAHARA  
620 TUTTLE RD  
IRVINE, KY 40336

**L1** PARCEL ID: 053-00-00-004.00  
POWELL DANNY O & TRACEY L  
2090 DRY RIDGE RD  
IRVINE, KY 40336

**R1** PARCEL ID: 053-00-00-011.00  
MUNCIE ONNALEEN & SHIRLEY STAMPER  
3655 SANDHILL RD  
IRVINE, KY 40336

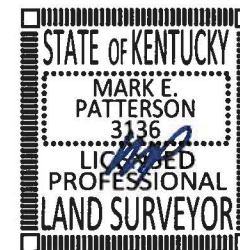
**X1** PARCEL ID: 053-00-00-032.00  
COOPER JAMES A -EST-  
c/o JAMES COOPER JR.  
5434 NORTHCREST LANE APT 19  
CINCINNATI, OH 45247

**GENERAL NOTE:**

- ALL INFORMATION SHOWN HEREON WAS OBTAINED FROM THE RECORDS OF THE ESTILL COUNTY KENTUCKY PROPERTY VALUATION ADMINISTRATION OFFICE ON DECEMBER 26, 2018. THE PROPERTY VALUATION ADMINISTRATION RECORDS MAY NOT REFLECT THE CURRENT OWNERS AND ADDRESSES DUE TO THE INACCURACIES AND TIME LAPSE IN UPDATING FILES. POD AND THE COUNTY PROPERTY VALUATION ADMINISTRATION EXPRESSLY DISCLAIMS ANY WARRANTY FOR THE CONTENT AND ANY ERRORS CONTAINED IN THEIR FILES
- THIS MAP IS FOR GENERAL INFORMATIONAL PURPOSES ONLY AND IS NOT A BOUNDARY SURVEY
- NOT FOR RECORDING OR PROPERTY TRANSFER.

SEE SHEET B-2 & B-2.1 FOR MAP OF ADJACENT PROPERTIES

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



**CERTIFICATE**

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

*Mark Patterson*  
MARK PATTERSON, PLS #3136 10/17/2019  
DATE

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

PREPARED FOR:  
**verticalbridge**  
750 PARK OF COMMERCE DRIVE  
BOCA RATON, FLORIDA 334487  
(561) 948-6367

EXHIBIT		
REV.	DATE	DESCRIPTION
A	10.14.19	ISSUED FOR REVIEW
0	10.15.19	ISSUED AS FINAL

SITE INFORMATION:  
**WINCHESTER**  
KENTUCKY HIGHWAY 89  
a.k.a. WINCHESTER ROAD  
IRVINE, KY 40336  
ESTILL COUNTY  
  
TAX PARCEL NUMBER:  
053-00-00-008.00  
  
PROPERTY OWNER:  
JIMMIE R. WISE  
P.O. BOX 479  
IRVINE, KY 40336  
  
SOURCE OF TITLE:  
BOOK W S, PAGE 370  
(DEED BOOK 124, PAGE 352)

SITE NUMBER:  
US-KY-5051

POD NUMBER: 18-26961  
DRAWN BY: DAP  
CHECKED BY: MEP  
SURVEY DATE: 12.26.18  
PLAT DATE: 10.14.19

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

SHEET NUMBER: (3 pages)  
**B-2.2**

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Willie Terry  
4350 Winchester Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Charlotte Pearson  
1067 N. Main St.  
Nicholasville, KY 40356

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Sahara Pearson  
620 Tuttle Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

William Michael Kavanaugh  
650 Sugarloaf Lane  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: **2019-00359** in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Jason Cox  
3110 Harris Ferry Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Billy Joe Estes, Jr.  
5660 Winchester Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Betty & Amanda Larrison  
5635 Winchester Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure



# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Danny & Tracey Powell  
2090 Dry Ridge Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Gregory & Cindy Turner  
P.O. Box 6533  
Navarre, FL 32566

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
also admitted in Colorado

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Estill County Water District No. 1  
76 Cedar Grove Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Kenneth Elliott II  
6120 Winchester Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Tracy & Irene Patrick  
6135 Winchester Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Shirley Stamper & M. Onnaleen  
3655 Sandhill Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Wendell Johnson Estate  
1047 Red River Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Sherman & Barbara Puckett  
6275 Winchester Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure



# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

W.G. Patrick  
6395 Winchester Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Harry M. Hadden Irrev. Trust  
700 Twin Creek Rd  
Irvine, KY 40336

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Prebytery of Transylvania Inc.  
412 Rose St  
Lexington, KY 40507

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

James A. Cooper Estate  
5434 Northcrest Lane Apt 19  
Cincinnati, OH 45247

Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

Via USPS Certified Mail - Return Receipt Requested

## Notice of Proposed Construction - Wireless Communications Facility

Napier, Clark, Branham Collier, et al  
12156 Old Hickory Blvd  
Hermitage, TN 37076

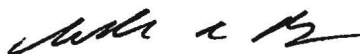
Dear Landowner:

Vertical Bridge Development, LLC and Powertel/Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission ("Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

This notice is being sent to you because the Estill County Property Valuation Administrator's records indicate that you own property that is within a 500' radius of the proposed tower site OR is contiguous to the property on which the tower is to be constructed.

The Commission invites your comments regarding the proposed construction and wants you to be aware of your right to intervene in the Commission's proceedings on this application. Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to Case Number: 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

## Exhibit K

# BRIGGS LAW OFFICE, PSC

10200 Forest Green Boulevard | Suite 112 | Louisville, Kentucky 40223  
[884] 331-3402 main | [502] 468-3751 mobile | todd@briggslawoffice.net

**TODD R. BRIGGS**  
*also admitted in Colorado*

**Via USPS Certified Mail - Return Receipt Requested**

Honorable Donnie Watson  
Estill County Judge Executive  
130 Main Street  
Irvine, KY 40336

**RE: Notice of Proposal to Construct Wireless Communications Facility -  
Kentucky Public Service Commission--Case No. 2019-00359**

Dear Judge Watson:

Vertical Bridge Development, LLC and Powertel Memphis, Inc. ("Applicant") is applying to the Kentucky Public Service Commission (the "Commission") for a Certificate of Public Convenience and Necessity to construct and operate a new wireless communications facility. The proposed facility will consist of a self-support tower plus related ground facilities to be located near KY Hwy 89 (Winchester Road), Irvine, Estill County, Kentucky 40336 (Latitude 37° 46' 56.75" / Longitude 84° 00' 01.12"). A map showing the location is enclosed.

You have a right to submit comments regarding the proposed construction to the Commission or to request intervention in the Commission's proceedings on this application.

Your comments and request for intervention should be addressed to: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to case number 2019-00359 in any correspondence.

Sincerely,



Todd R. Briggs

Enclosure

## Exhibit L



# PUBLIC NOTICE

Vertical Bridge Development, LLC  
& Powertel/Memphis Inc. proposes  
to construct a telecommunications

# TOWER

on this site. If you have  
any questions please contact:

Briggs Law Office, PSC  
10200 Forest Green Blvd. Suite 112  
Louisville, KY 40223  
(844) 331-3402

or  
Executive Director  
Public Service Commission  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, KY 40602

Please refer to Commission's  
**Case #2019-00359**  
in your correspondence.

# PUBLIC NOTICE

Vertical Bridge Development, LLC  
& Powertel/Memphis Inc. proposes  
to construct a telecommunications

# TOWER

near this site. If you have  
any questions please contact:

Briggs Law Office, PSC  
10200 Forest Green Blvd. Suite 112  
Louisville, KY 40223  
(844) 331-3402

or  
Executive Director  
Public Service Commission  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, KY 40602

Please refer to Commission's  
**Case #2019-00359**  
in your correspondence.

## Exhibit M



# Exhibit N



April 18, 2019

Re: Proposed T-Mobile Wireless Communications Facility  
Site Name: 9LV3232F

To Whom It May Concern:

The purpose of this letter is to state the need for a new T-Mobile Wireless Communications Facility to be built on the property of Jimmie Wise located at Irvine, KY 40336. This site will provide coverage to improve the wireless voice and data experience that T-Mobile customers rely on. It will also provide critical safety support through enhanced 911 services.

This site has been designed and will be constructed and operated in accordance with all applicable requirements and regulations set forth by the various agencies that manage them including the FAA and the FCC. This site will transmit within the licensed frequency bands owned by T-Mobile and will adhere to FCC regulated power limitations. RF emission readings in the accessible areas will be below the FCC limits for exposure. Appropriate RF emission signage will be placed at the entrance to the site.

Sincerely,

Tracy Sours  
RF Deployment Engineer  
T-Mobile USA