COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the matter of:

THE APPLICATION OF EAST KENTUCKY NETWORK, LLC FOR THE ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY TO CONSTRUCT A TOWER IN MORGAN COUNTY, KENTUCKY.	)))))	CASE NO. 2017-00080

East Kentucky Network, LLC d/b/a Appalachian Wireless was granted authorization to provide cellular service in the KY-9 Cellular Market Area (CMA451) by the Federal Communications Commission (FCC). FCC license is included as Exhibit 1. East Kentucky Network, LLC merger documents were filed with the Commission on February 2, 2001 in Case No. 2001-022. East Kentucky Network, LLC is a Kentucky Limited Liability Company that was organized on June 16, 1998. East Kentucky Network, LLC is in good standing with the state of Kentucky.

In an effort to improve service in Morgan County, East Kentucky Network, LLC pursuant to KRS 278.020 Subsection 1 and 807 KAR 5:001 is seeking the Commission's approval to construct a 300 foot self-supporting tower on a tract of land located at 266 Tower Road, West Liberty, Morgan County, Kentucky (37°'55'51.1001"N 83°06'02.1800"W). A map and detailed directions to the site can be found in Exhibit 7.

Exhibit 2 is a list of all property owners according to the Property Valuation Administrator's record who own property within 500 feet of the proposed tower and all property owners that own property contiguous to the property upon which construction is proposed in accordance with the Property Valuation Administrator's record.

Pursuant to 807 KAR 5:063 Section 1(1)(l), Section 1(1)(m) and Section 2, all affected property owners according to the Property Valuation Administrator's record who own property

within 500 feet of the proposed Tower or contiguous to the property upon which construction is proposed were notified by certified mail return receipt requested of East Kentucky Network, LLC's proposed construction and informed of their right to intervene. They were given the docket number under which this application is filed. Enclosed in Exhibit 2 is a copy of that notification.

Morgan County has no formal local planning unit. In absence of this unit, the Morgan County Judge Executive's office was notified by certified mail, return receipt requested, of East Kentucky Network, LLC's proposal and informed of their right to intervene. The Morgan County Judge Executive's office was also given the docket number under which this application is filed. Enclosed in Exhibit 3 is a copy of that notification.

Notice of the location of the proposed construction was published in the The Licking Valley Courier, March 9, 2017, edition. Enclosed is a copy of that notice in Exhibit 3. The Licking Valley Courier is the newspaper with the largest circulation in Morgan County.

A geologist was employed to determine soil and rock types and to ascertain the distance to solid bedrock. The geotechnical report is enclosed as Exhibit 4.

A copy of the tower design information is enclosed as Exhibit 5. The proposed tower has been designed by engineers at World Tower Company, Inc. and will be constructed under their supervision. Their qualifications are evidenced in Exhibit 5 by the seal and signature of the registered professional engineer responsible for this project.

The tower will be erected by S & S Tower Services of St. Albans, West Virginia. S & S Tower Services has vast experience in the erection of communications towers.

FAA and Kentucky Airport Zoning Commission approvals are included as Exhibit 6.

No Federal Communications Commission approval is required prior to construction of this facility. Once service is established from this tower we must immediately notify the Federal Communications Commission of its operation. Prior approval is needed only if the proposed

facility increases the size of the cellular geographic service area. This cell site will not expand the cellular geographic service area.

East Kentucky Network, LLC will finance the subject construction with earned surplus in its General Fund.

Estimated Cost of Construction	$ 350,000.00
Annual Operation Expense of Tower	$ 12,500.00

Two notice signs meeting the requirements prescribed by 807 KAR 5:063, Section 1(2), measuring at least two (2) feet in height and four (4) feet in width and containing all required language in letters of required height, have been posted, one at a visible location on the proposed site and one on the nearest public road. The two signs were posted on February 23, 2017, and will remain posted for at least two weeks after filing of this application as specified.

Enclosed in Exhibit 8 are copies of East Kentucky Network LLC's Deeds for the site location along with a lot description.

The proposed construction site is on a previously developed piece of property. There is an existing 180' tower owned by East Kentucky Network, LLC on the property, which cannot meet the needs of East Kentucky Network, LLC and will be removed upon construction of the proposed tower.

East Kentucky Network, LLC's operation will not affect the use of nearby land nor its value. No more suitable site exists in the area. A copy of the search area map is enclosed in Exhibit 7. No other tower capable of supporting East Kentucky Network, LLC's load exists in the general area; therefore, there is no opportunity for co-location of our facilities with anyone else.

Enclosed and filed as Exhibit 9 is a survey of the proposed tower site signed by a Kentucky registered professional engineer.

Exhibit 10 is a map in one (1) inch equals 200 feet scale identifying every structure and every owner of real estate within 500 feet of the proposed tower and all property owners who own contiguous property to the property upon which construction is proposed.

Exhibit 11 contains a vertical sketch of the tower supplied by James W. Caudill, Kentucky registered professional engineer.

WHEREFORE, Applicant, having met the requirements of KRS 278.020(1), 278.650, 278.665 and all applicable rules and regulations of the PSC, respectfully requests that the PSC accept the foregoing Application for filing and grant a Certificate of Public Convenience and Necessity to construct and operate the proposed tower.

The foregoing document was prepared by Cindy McCarty, Staff Attorney for East Kentucky Network, LLC d/b/a Appalachian Wireless. All related questions or correspondence concerning this filing should be mailed to East Kentucky Network, LLC d/b/a/ Appalachian Wireless, 101 Technology Trail, Ivel, KY 41642.

SUBMITTED BY: Lynn Haney DATE: 3/9/17

Lynn Haney, Regulatory Compliance Director

APPROVED BY: W A Gillum DATE: 3/9/2017

W.A. Gillum, General Manager

ATTORNEY: Cindy McCarty DATE: 3-9-2017

Hon. Cindy McCarty, Attorney

CONTACT INFORMATION:

W.A. Gillum, General Manager
Phone: (606) 477-2355, Ext. 111
Email: wagillum@ekn.com

Lynn Haney, Regulatory Compliance Director
Phone: (606) 477-2355, Ext. 1007
Email: lhaney@ekn.com

Cindy McCarty, Attorney
Phone: (606) 477-2355, Ext. 1006
Email: cmccarty@ekn.com

Mailing Address:

East Kentucky Network, LLC
d/b/a Appalachian Wireless
101 Technology Trail
Ivel, KY 41642

1. FCC License
2. Copies of Cell Site Notices to Land Owners
3. Notification of County Judge Executive and Newspaper Advertisement
4. Universal Soil Bearing Analysis
5. Tower Design
6. FAA and KAZ C Approvals
7. Driving Directions from County Court House and Map to Suitable Scale
8. Deed for Proposed Site with Legal Description
9. Survey of Site Signed/Sealed by Professional Engineer Registered in State of Kentucky
10. Site Survey Map with Property Owners Identified in Accordance with PVA of County
11. Vertical Profile Sketch of Proposed Tower
12.

ULS License

Cellular License - KNKN880 - East Kentucky Network, LLC d/b/a Appalachian Wireless

Call Sign	KNKN880	Radio Service	CL - Cellular
Status	Active	Auth Type	Regular

Market

Market	CMA451 - Kentucky 9 - Elliott	Channel Block	B
Submarket	0	Phase	2

Dates

Grant	08/30/2011	Expiration	10/01/2021
Effective	08/30/2011	Cancellation	

Five Year Buildout Date

10/23/1996

Control Points

1	U.S. 23, HAROLD, KY

Licensee

FRN	0001786607	Type	Limited Liability Company

Licensee

East Kentucky Network, LLC d/b/a Appalachian Wireless
101 Technology Trail
Ivel, KY 41642
ATTN Gerald Robinette, Manager

P:(606)477-2355
F:(606)874-7551

Contact

Lukas, Nace, Gutierrez & Sachs, LLP
Pamela L Gist Esq
8300 Greensboro Drive
McLean, VA 22102

P:(703)584-8665
F:(703)584-8695
E:pgist@fcclaw.com

Ownership and Qualifications

Radio Service Type	Mobile		
Regulatory Status	Common Carrier	Interconnected	Yes

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

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

EXHIBIT II: LIST OF PROPERTY OWNERS:

Statement Pursuant to Section 1 (1) (I) 807 KAR 5:063

Section 1 (1)(I) 1. The following is a list of every property owner who according to property valuation administrator's records, owns property within 500 feet of the proposed tower and each have been: notified by certified mail, return receipt requested, of the proposed construction,

Section 1 (1)(I) 2. Every person listed below who, according to the property valuation administrator's records, owns property within 500 feet of the proposed tower has been: Given the Commission docket number under which the application will be processed: and

Section 1 (1)(I) 3. Every person listed below who, according to property valuation administrator's records owns property within 500 feet of the proposed tower has been: Informed of his right to request intervention.

Section 2. If the construction is proposed for an area outside the incorporated boundaries of a city, the application shall state that public notices required by Section 1(1)(L) have been sent to every person who, according to the property valuation administrator, owns property contiguous to the property upon which the construction is proposed

LIST OF PROPERTY OWNERS

HG Land, LLC
8413 Meade Springer Road
Ashland, KY 41102

Wade Cantrell
3394 Kellacy Road
West Liberty, KY 41472

EAST KENTUCKY NETWORK
101 TECHNOLOGY TRAIL
IVEL, KY 41642
P (606) 874-7550
FAX: (606) 874-7551

EAST KENTUCKY NETWORK

VIA: U.S. CERTIFIED MAIL

PUBLIC NOTICE

March 9, 2016

HG Land, LLC
8413 Meade Springer Road
Ashland, KY 41102

RE: Public Notice-Public Service Commission of Kentucky (Case No. 2017-00080)

East Kentucky Network, LLC d/b/a Appalachian Wireless has applied to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide cellular telecommunications service in Morgan County. The facility will include a 300-foot self-supporting tower with attached antennas extending upwards, and an equipment shelter located on a tract of land near 266 Tower Road, West Liberty, Morgan County, Kentucky. A map showing the location of the proposed new facility is enclosed. This notice is being sent to you because you may own property within a 500' radius of the proposed tower or own property contiguous to the property upon which construction is proposed.

The Commission invites your comments regarding the proposed construction. You also have the right to intervene in this matter. The Commission must receive your initial communication within 20 days of the date of this letter as shown above.

Your comments and request for intervention should be addressed to: Executive Director's Office, Public Service Commission of Kentucky, P.O. Box 615, Frankfort, KY 40602. Please refer to Case No. 2017-00080 in your correspondence.

If you have any questions for East Kentucky Network, LLC, please direct them to my attention at the following address: East Kentucky Network, LLC, 101 Technology Trail, Ivel, KY 41642 or call me at 606-477-2355, Ext. 1007.

Sincerely,

Lynn Haney

Lynn Haney, CPA
Regulatory Compliance Director
Enclosure 1

EAST KENTUCKY NETWORK
101 TECHNOLOGY TRAIL
IVEL, KY 41642
PH (606) 874-7550
FAX (606) 874-7551

EAST KENTUCKY NETWORK

VIA: U.S. CERTIFIED MAIL

PUBLIC NOTICE

March 9, 2016

Wade Cantrell
3394 Kellacy Road
West Liberty, KY 41472

RE: Public Notice-Public Service Commission of Kentucky (Case No. 2017-00080)

East Kentucky Network, LLC d/b/a Appalachian Wireless has applied to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide cellular telecommunications service in Morgan County. The facility will include a 300-foot self-supporting tower with attached antennas extending upwards, and an equipment shelter located on a tract of land near 266 Tower Road, West Liberty, Morgan County, Kentucky. A map showing the location of the proposed new facility is enclosed. This notice is being sent to you because you may own property within a 500' radius of the proposed tower or own property contiguous to the property upon which construction is proposed.

The Commission invites your comments regarding the proposed construction. You also have the right to intervene in this matter. The Commission must receive your initial communication within 20 days of the date of this letter as shown above.

Your comments and request for intervention should be addressed to: Executive Director's Office, Public Service Commission of Kentucky, P.O. Box 615, Frankfort, KY 40602. Please refer to Case No. 2017-00080 in your correspondence.

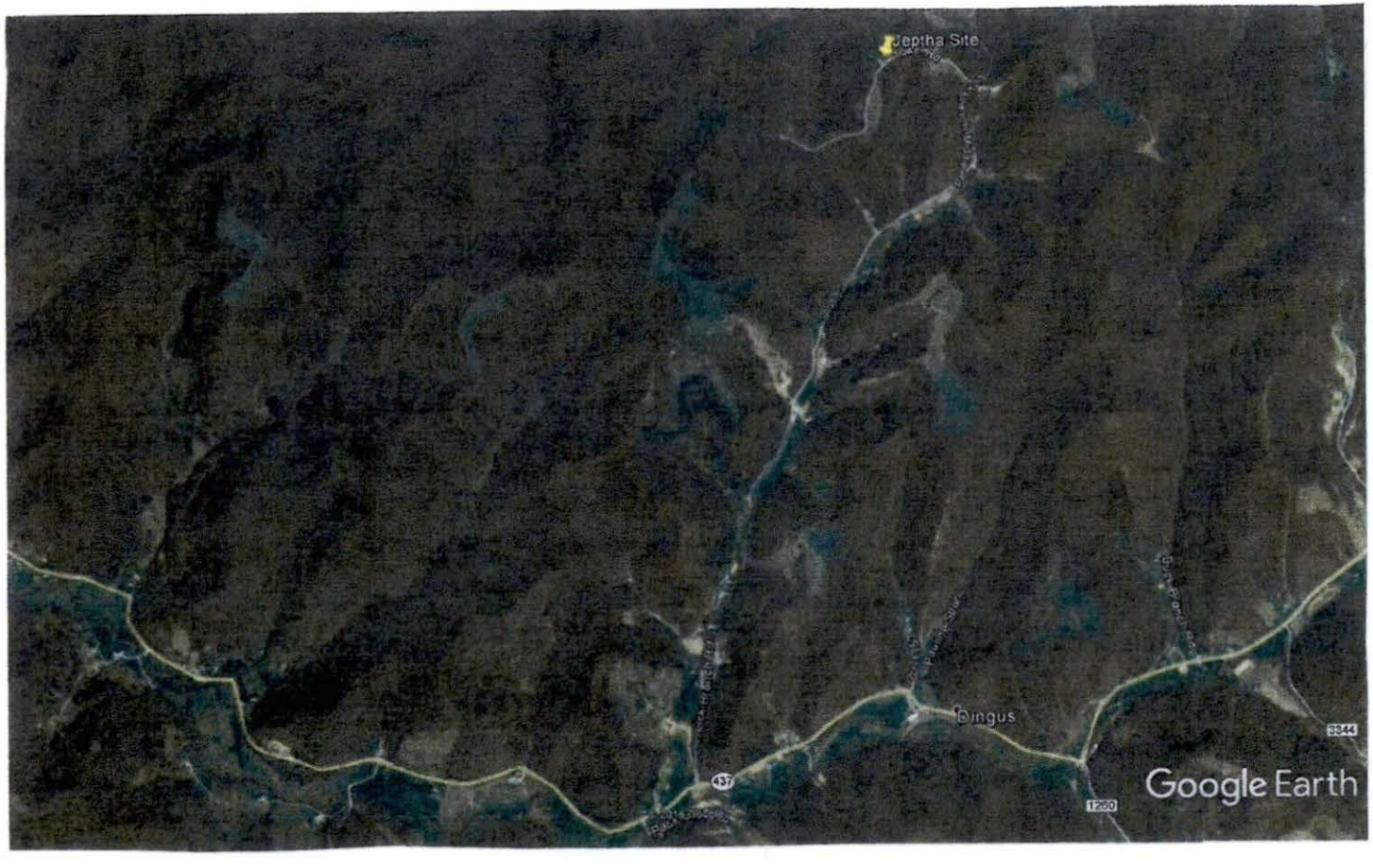
If you have any questions for East Kentucky Network, LLC, please direct them to my attention at the following address: East Kentucky Network, LLC, 101 Technology Trail, Ivel, KY 41642 or call me at 606-477-2355, Ext. 1007.

Sincerely,

Lynn Haney

Lynn Haney, CPA
Regulatory Compliance Director
Enclosure 1

Appalachian Wireless Location Map



Site Name	Location	GPS Location
Jeptha Site	266 Tower Road, West Liberty 41472	N 37 55 51.1001 W 83 06 02.1800

dba Appalachian Wireless
101 Technology Trail
Ivel, KY 41642
Phone: 606-477-2355
Fax: 606-791-2225

EAST KENTUCKY NETWORK

To:	The Licking Valley Courier Attn: Classifieds	**From:**	Raina Helton Regulatory Compliance Assistant
Email:	courier@mrtc.com	**Date:**	March 6, 2017
Re:	PUBLIC NOTICE ADVERTISEMENT	**Pages:**	1

Please place the following Public Notice Advertisement in The Licking Valley Courier to be ran on March 9, 2017.

PUBLIC NOTICE:

RE: Public Service Commission of Kentucky (CASE NO. 2017-00080)

Public Notice is hereby given that East Kentucky Network, LLC, dba Appalachian Wireless has applied to the Kentucky Public Service Commission to construct a cellular telecommunications tower on a tract of land located near 266 Tower Road, West Liberty, Morgan County, Kentucky. The proposed tower will be a 300 foot self-supporting tower with attached antennas. If you would like to respond to this notice, please contact the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to Case No. 2017-00080.

If you have any questions about the placement of the above mentioned notice, please call me at 606-477-2375, ext. 1005.

Thank you,

Raina Helton
Regulatory Compliance Assistant

EAST KENTUCKY NETWORK
101 TECHNOLOGY TRAIL
KY 41642
NE: (606) 874-7550
FAX: (606) 874-7551

EAST KENTUCKY NETWORK

VIA: U.S. CERTIFIED MAIL

March 9, 2017

Stanley Franklin, Judge Executive
450 Prestonsburg Street
West Liberty, KY 41472

RE: Public Notice-Public Service Commission of Kentucky (Case No. 2017-00080)

East Kentucky Network, LLC d/b/a Appalachian Wireless has applied to the Public Service Commission of Kentucky for a Certificate of Public Convenience and Necessity to construct and operate a new facility to provide cellular telecommunications service in Morgan County. The facility will include a 300-foot self-supporting tower with attached antennas extending upwards, and an equipment shelter located on a tract of land near 266 Tower Road, West Liberty, Morgan County, Kentucky. A map showing the location of the proposed new facility is enclosed. This notice is being sent to you because you are the County Judge Executive of Morgan County.

The Commission invites your comments regarding the proposed construction. You also have the right to intervene in this matter. The Commission must receive your initial communication within 20 days of the date of this letter as shown above.

Your comments and request for intervention should be addressed to: Executive Director's Office, Public Service Commission of Kentucky, P.O. Box 615, Frankfort, KY 40602. Please refer to Case No. 2017-00080 in your correspondence.

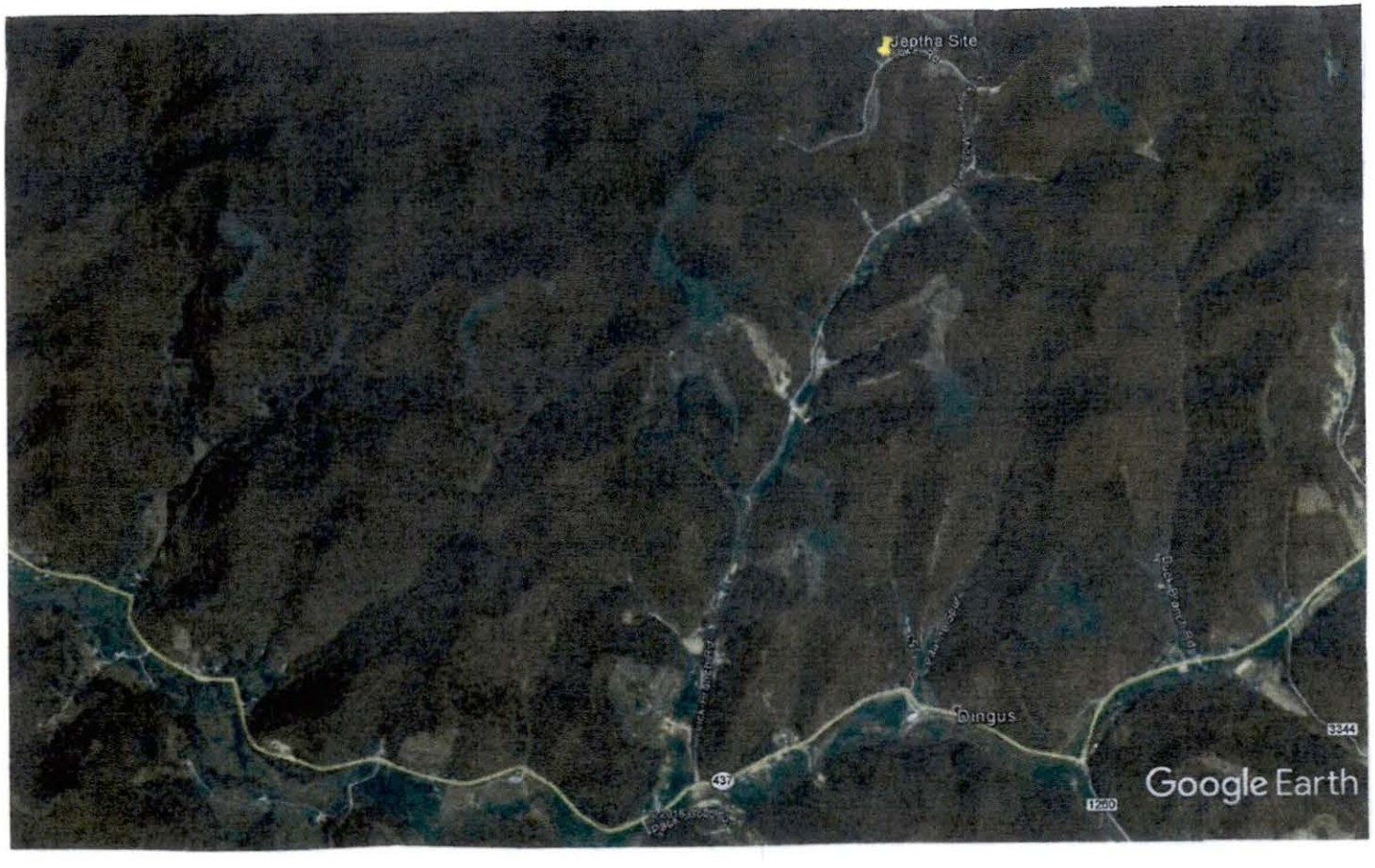
If you have any questions for East Kentucky Network, LLC, please direct them to my attention at the following address: East Kentucky Network, LLC, 101 Technology Trail, Ivel, KY 41642 or call me at 606-477-2355, Ext. 1007.

Sincerely,

Lynn Haney

Lynn Haney
Regulatory Compliance Director
Enclosure

Appalachian Wireless Location Map



Site Name	Location	GPS Location
Jeptha Site	266 Tower Road, West Liberty 41472	N 37 55 51.1001 W 83 06 02.1800

APPALACHIAN WIRELESS
Geotechnical Investigation on the
Jeptha Site
Morgan County, Kentucky
ERMC2 Project No.

prepared for:

Appalachian Wireless
101 Technology Trail
Ivel, Kentucky 41642

Prepared by:
Richard Dirk Smith PE, PLS
General Manager Appalachian Region
ErMC²
230 Swartz Drive
Hazard, Kentucky 41701

_____, 20215, February 17th, 2017

EXECUTIVE SUMMARY

A geotechnical investigation has been performed on the Jeptha tower site, located in Morgan County, Kentucky. This site is readily accessible. A location map is shown in Figure 1 of this report. Four (4) borings were advanced to depths ranging from 19.5 ft. to 25.2 ft. The following geotechnical considerations were identified:

- Borings utilized for this study encountered soft clays to a depth of 10 ft. Underlying shales and sandstone were encountered to a depth of 25.2 ft. The estimated proposed base elevation of tower foundation is 1185.0 ft.
- This site is next to an already existing tower.
- **The allowable bearing capacities of the underlying shales is estimated at 6 tsf.**
- The 2015 International Building Code seismic site classification for this site is "B".
- We are recommending the footing be placed in the bedrock. The overlying clays and silt have high moisture contents and low strength values.
- Close monitoring of the construction operations discussed herein will be critical in achieving the design subgrade support. We therefore recommend that ERMC2 be retained to monitor this portion of the work.

This executive summary is included to provide a general overview of the project and should not be relied upon except for the purpose it was prepared. Please rely on the complete report for the information on the findings, recommendations and all other concerns.

1. INTRODUCTION

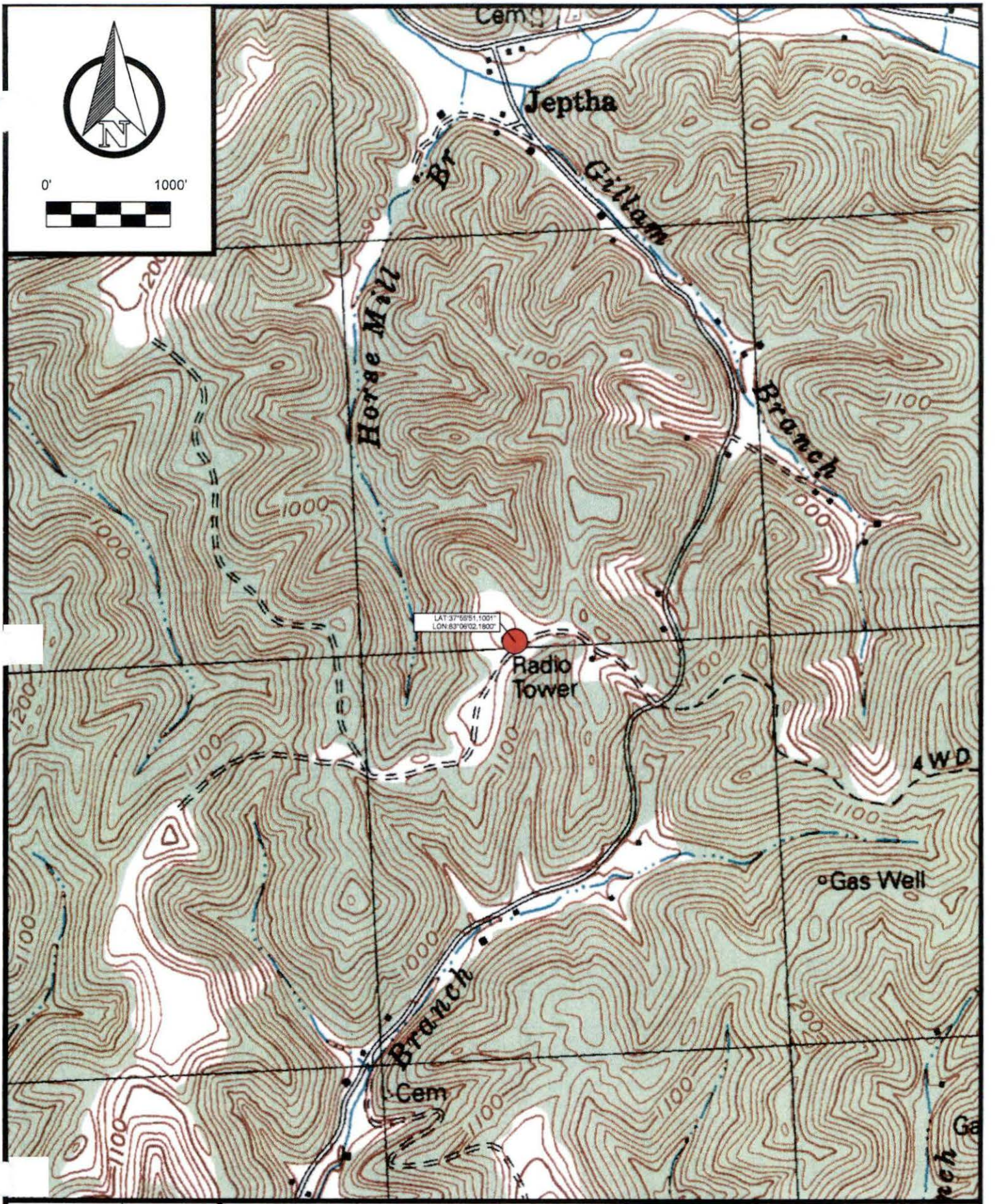
ERMC2 was retained by Mr. Marty Thacker of Appalachian Wireless to prepare a geotechnical engineering report for the proposed tower site located on the Jeptha Property, in Morgan County, Kentucky. A site location map is shown in Figure No. 1. Four (4) borings were advanced to depths ranging from 19.5 ft. to 25.2 ft. Horn and Associates, Inc. provided drilling services to obtain these borings. Logs of the borings along with a boring location plan are included in Appendix A. The purpose of these services is to provide information and geotechnical engineering recommendations relative to subsurface conditions, earthwork, seismic considerations, groundwater conditions and foundation design.

2.0 PROJECT DESCRIPTION

The proposed communication facility will consist of a self-supporting tower of undetermined height and ancillary support areas. The provided footing area will be approximately 40 ft. x 40 ft. with an estimated base of the tower footer elevation at 1185.0 ft. Based upon information provided, we estimate the structural loads will be similar to the following conditions;

CONDITION	LOAD
Total Shear	40 Kips
Axial Load	50 Kips

We anticipate that overturning will govern the structural design. If the loading is significantly different than these expected values, ERMC2 should be notified to re-evaluate the recommendations provided in this report.



Drawn:	Date: 2/17/17
Job:	Scale: 1"=400'
Drawing: USGS QUAD SITE LOCATON MAP	

JEPTHA TOWER SITE

APPALACHIAN WIRELESS

USGS QUAD SITE LOCATION MAP

ErMC²

921 Beasley Street, Suite 145
Lexington, KY 40509
(859)381-1000
engineering@ermc2.us

3.0 SITE DESCRIPTION & HISTORICAL MINING

3.1 GENERAL INFORMATION

The site location is a disturbed relatively flat ridge line in Morgan County. The site has reasonable vegetative cover. ERMC2 reviewed available historical mine maps from the Kentucky Division of Mine Safety, Kentucky Mine Mapping Information System ("KMMIS"). Based on available data, no historical surface and underground mining has occurred.

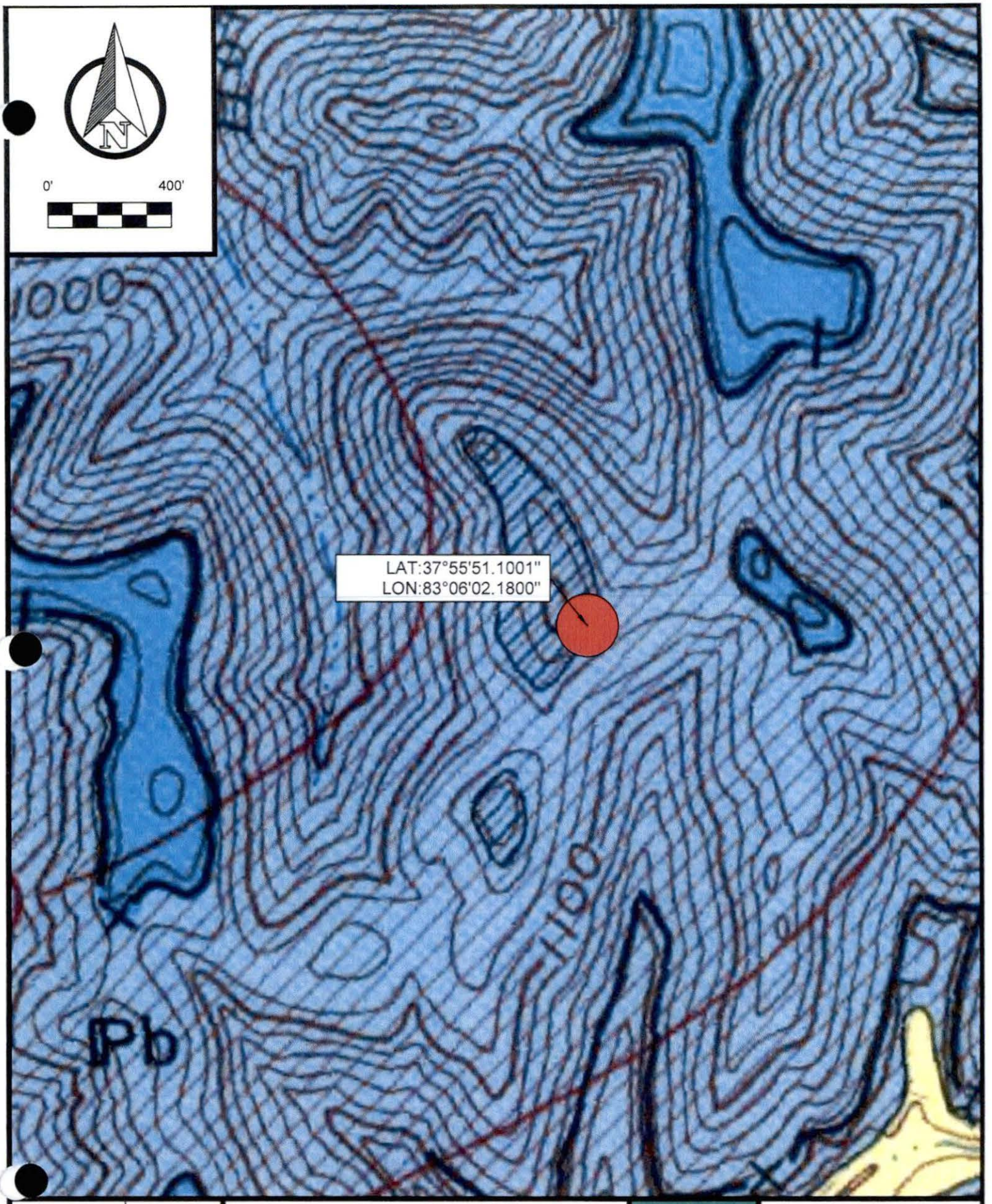
4.0 FIELD EXPLORATION

4.1 SITE INFORMATION

A site drawing was provided by the client on the Jeptha Property. The proposed tower location was established and tied to the existing boundary. An estimated footer location was determined and boring locations were placed at the corners of proposed foundation for the towers support.

4.2 BORING DATA

Four (4) borings were made in the relative positions shown on the Boring Location Map in Appendix A. The boring logs and resulting data are also included in Appendix A. The borings were made with a track mounted boring rig using hollow-stem augers and employing standard penetration resistance methods (ASTM D-1586, which includes 140-pound hammer, 30-inch drop, and two-inch-O.D. split-spoon sampler) at maximum depth intervals of five feet or at major changes in stratum, whichever occurred first. The disturbed split-spoon samples were visually classified, logged, sealed in moisture-proof jars, and taken to the ERMC2 laboratory for study. The depths where these "A"-type split-spoon samples were collected are noted on the boring logs. The results of the natural moisture contents by boring and interval are shown in Table 1.



Drawn:	Date: 2/17/17
Job:	Scale: 1"=400'
Drawing: GQ SITE LOCATON MAP	

JEPTHA TOWER SITE

APPALACHIAN WIRELESS

GQ QUAD SITE LOCATION MAP

ErMC²

921 Beasley Street, Suite 145
Lexington, KY 40509
(859)381-1000
engineering@ermc2.us

TABLE 1

RESULTS OF NATURAL MOISTURE CONTENT TESTS (ASTM D-4643)

BORING NO.	DEPTH INCREMENT, (FT.)	NATURAL MOISTURE CONTENT, %
B1	2.5-4.0	10.6 %
B1	5.0-6.5	13.2 %
B1	7.5-9.0	12.4%
B1	10.0-11.0	7.4 %
B2	1.5-3.0	9.9 %
B2	4.0-5.5	10.4 %
B2	6.5-8.0	10.9 %
B2	9.0-10.2	12.8 %
B3	2.0-3.5	9.0 %
B3	4.5-6.0	9.0 %
B3	7.0-8.5	6.3%
B3	9.5-10.0	9.7%
B4	2.0-3.5	8.4%
B4	4.5-6.0	13.9%
B4	7.0-8.5	10.9%

The borings encountered soft clay and silty soils to a maximum depth of 11.0 ft. The borings were extended by "NX" size rock core that were taken to confirm the presence of rock at the site and to determine its physical characteristics. The core was made with "NX" size diamond coring equipment. These rock cores range in depth from 9.5 ft. to 25.2 ft. The position at which the core was taken are indicated on the boring logs and shown on the boring location map in Appendix A. The corresponding Rock Quality Data Ratings (RQD) are shown in Table No. 2. This boring demonstrates the full geologic column at the site. Rock-quality designation (RQD) is a rough measure of the degree of jointing or fracture in a rock mass, measured as a percentage of the drill core in lengths of 10 cm or more. High-quality rock has an RQD of more than 75%, low quality of less than 50%. Rock quality designation (RQD) has several definitions.

TABLE NO. 2

ROCK QUALITY

Boring	Run Interval	RQD Values %	Description
B1	11.0-16.0	48%	Grey Shale
B1	16.0-25.0	70%	Shale / Sandstone
B2	10.2-15.2	44%	Grey Shale
B2	15.2- 20.2	46%	Grey Shale/ Sandstone
B2	20.2-25.2	48%	Grey Shale/ Sandstone
B3	10.0-20.0	76%	Grey Shale/ Sandstone
B4	9.5-19.5	87%	Grey Shale/ Sandstone

Photographs of the cores are included in Appendix A of this report.

4.3 GROUNDWATER

Groundwater observations were made during the drilling operations (by noting the depth to water on the drilling tools) and in the open boreholes following withdrawal of the drilling augers. Groundwater was found at the surface at boring B-1 and at a depth of 3.8 ft. at boring B-2.

4.4 SEISMIC SITE CLASSIFICATION

Based on the encountered soil conditions at the project site and our recommendations, the site classification was determined to be "Site Class B" Rock" per the 2015 Kentucky Building Code. In addition, a S_{DS} coefficient of 0.120 g was calculated, and a S_{D1} coefficient of 0.055 g was also calculated for design based on the aforementioned building code.

5.0 DISCUSSION AND RECOMMENDATIONS

5.1 GENERAL

The structure will be a self-supporting free standing tri-pole tower. Due to wind loading, lattice tower foundations can experience both vertical loads and horizontal loads. The vertical loads act in both an upward and downward direction as the tower attempts to overturn and can act in any directions.

5.2 FOUNDATIONS

It is our understanding that the foundations for these structures can be designed to bear on low bearing pressure soils. This report demonstrates the different expected bearing capacities based upon the type of material encountered from the boring logs and sampling taken at the site.

Approximately 10 feet of soil and predominately soft clays (CH) are present at this proposed location. Standard penetrations tests were conducted on 2.5 foot intervals in this material. The blow counts ranged from 1 to 5. The material was very soft and high in moisture. Shales with sandstone lenses were found from 10 ft. to 22 ft. Sandstone was found from 22 ft. to 25 ft.

5.3 SHALLOW FOUNDATIONS

Typically, we do not recommend shallow foundations on sites consisting of soft clay material. Significant settlement can and is likely to occur once the final structure's loading is in place. No settlement calculations have been evaluated for this report. Based upon the laboratory and field testing, visual inspection of the materials and practical experience we have estimated that the bearing capacity of the clays to be less than 500 psf.

If shallow foundations are used, we recommend that site be over excavated to the rock below the footing subgrade and ten feet outside the footing area. Any large rock and unsuitable material will be removed and backfilled with a select backfill or dense grade aggregate. The material is to be placed in 8 inch horizontal lifts, compacted to not less than 95% of the maximum density as determined in accordance with the standard proctor dry unit weight (ASTM D-968) and within +2% and -2% of the optimum

moisture content. This would remediate the site with engineered fill and provide a bearing capacity of 2500 psf.

It is furthermore recommended that the slabs-on-grade be supported on 4 to 6-inch layer of relatively clean granular material such as sand and gravel or crushed stone. This is to help distribute concentrated loads and equalize moisture conditions beneath the slab. Proper drainage must be incorporated into this granular layer to preclude future wet areas in the finished slab-on-grade. However, all topsoil and/or other deleterious materials encountered during site preparation must be removed and replaced with 4000 psi. concrete below the foundation base. Provided that a minimum of 4 inches of granular material is placed below the new slab-on-grade, a modulus of subgrade reaction (k30) of 100 lbs./cu. in. can be used for design of the slabs.

Support structure for this tower can be placed as needed. It is recommended that test pits are examined to insure that any of these structures are on the competent materials. If pockets of soft, loose or otherwise unsuitable material are encountered in the footing excavations and it is inconvenient to lower the footings, the proposed footing elevations may be re-established by backfilling after the undesirable material has been removed. The undercut excavation beneath each footing should extend to suitable bearing soils and the dimensions of the excavation base should be determined by imaginary planes extending outward and down on a 1 (vertical) to 1 (horizontal) slope from the base perimeter of the footing. The entire excavation should then be refilled with a well-compacted engineered fill, or lean concrete (Please note that the width of the lean concrete zone should be equal or wider than the width of the overlying footing element). Special care should be exercised to remove any sloughed, loose or soft materials near the base of the excavation slopes. In addition, special care should be taken to "tie-in" the compacted fill with the excavation slopes, with benches as necessary, to insure that no pockets of loose or soft materials will be left in place along the excavation slopes below the foundation bearing level. All Federal, State, and Local regulations should be strictly adhered to relative to excavation side-slope geometry.

5.2 DEEP FOUNDATIONS

We recommend that the foundations for this structure to be straight shaft drilled piers. Based upon the available data and experience we recommend the following design parameters.

TABLE NO. 3

Approx. Depth (ft.)	Allowable Skin Friction (psf.)	Allowable End Bearing Pressure (psf.)	Effective Unit Weight (pcf.)	Cohesion	Internal Angle of Friction (Degrees)
0-10 Soft Clays	200	N/A	120	----------	20
10 - 20 Shales	1,500	12,000	150	----------	30
10 - 20 Sandstone	2,200	20,000	160	----------	35

The top ten feet of clays are not recommended for foundation placement. Minimal skin friction values are provided for this material due to high moisture contents. The presented cohesion has no safety factor. The skin friction and passive resistance have a factor of safety of 2. The allowable end bearing pressure has an approximate safety factor of 3. If the drilled piers are designed using the above design parameters, settlements are not anticipated to exceed ¼ inch.

5.5 BURIED UTILITIES

Excavations for buried utility pipelines should follow the guidelines set forth in this report. Depending on the pipeline material, a minimum thickness of at least 0.5 feet of select fine-grained granular bedding material should be used beneath all below-grade pipes, with a minimum cover thickness of at least 3 feet to afford an "arching" effect and reduce stresses on the pipe. The cover thickness may be reduced if the external loading condition on the pipe is relatively light or if the pipe is designed to withstand the external loading condition. It is not recommended that "pea-gravel" or

other "open-work" aggregates be used for trench backfill since these materials are nearly impossible to compact and have a tendency to pond water within their interstices.

6.0 WARRANTY

Our professional services have been performed, our findings obtained and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. No other warranty, express or implied, is made. While the services of ERMC2 are a valuable and integral part of the design and construction teams, we do not warrant, guarantee, or insure the quality or completeness of services provided by other members of those teams, the quality, completeness, or satisfactory performance of construction plans and specifications which we have not prepared, nor the ultimate performance of building site materials.

6.1 SUBSURFACE EXPLORATION

Subsurface exploration is normally accomplished by test borings, although test pits are sometimes employed. The method of determining the boring location and the surface elevation at the boring is noted in the report, and is presented on the Boring Location Plan or on the boring log. The location and elevation of the boring should be considered accurate only to the degree inherent with the method used.

The boring log includes sampling information, description of the materials recovered, approximate depth of boundaries between soil and rock strata and groundwater data. The boring log represents conditions specifically at the location and time the boring was made. The boundaries between different soil strata are indicated at specific depths; however, these depths are in fact approximate and are somewhat dependent upon the frequency of sampling (The transition between soil strata is often gradual). Free groundwater level readings are made at the times and under conditions stated on the boring logs (Groundwater levels change with time and season). The borehole does not always remain open sufficiently long enough for the measured water level to coincide with the groundwater table.

6.2 LABORATORY AND FIELD TESTS

Laboratory and field tests are performed in accordance with specific ASTM standards unless otherwise indicated. All determinations included in a given ASTM standard are not always required and performed. Each test report indicates the measurements and determinations actually made.

6.3 ANALYSIS AND RECOMMENDATIONS

The geotechnical report is prepared primarily to aid in the engineering design of site work and structural foundations. Although the information in the report is expected to be sufficient for these purposes, it is not intended to determine the cost of construction or to stand alone as a construction specification.

Our engineering report recommendations are based primarily on data from test borings made at the locations shown on a boring location drawing included. Soil variations may exist between borings and these variations may not become evident until construction. If significant variations are then noted, the geotechnical engineer should be contacted so that field conditions can be examined and recommendations revised if necessary.

The geotechnical engineering report states our understanding as to the location, dimensions and structural features proposed for the site. Any significant changes in the nature, design, or location of the site improvements MUST be communicated to the geotechnical engineer such that the geotechnical analysis, conclusions, and recommendations can be appropriately adjusted. The geotechnical engineer should be given the opportunity to review all drawings that have been prepared based on their recommendations.

6.4 CONSTRUCTION MONITORING

Construction monitoring is a vital element of complete geotechnical services. The field engineer/inspector is the owner's "representative" observing the work of the contractor, performing tests as required in the specifications, and reporting data developed from such tests and observations. The field engineer or inspector does not direct the contractor's construction means, methods, operations or personnel. The field inspector/engineer does not interfere with the relationship between the owner and the contractor and, except as an observer, does not become a substitute owner on

site. The field inspector/engineer is responsible for his own safety but has no responsibility for the safety of other personnel at the site. The field inspector/engineer is an important member of a team whose responsibility is to watch and test the work being done and report to the owner whether that work is being carried out in general conformance with the plans and specifications.

6.5 GENERAL

The scope of our services did not include an environmental assessment for the presence or absence of hazardous or toxic materials in the soil, surface water, groundwater or air, on, within or beyond the site studied. Any statements in the report or on the boring logs regarding odors, staining of soils or other unusual items or conditions observed are strictly for the information of our client.

To evaluate the site for possible environmental liabilities, we recommend an environmental assessment, consisting of a detailed site reconnaissance, a record review, and report of findings. Additional subsurface drilling and samplings, including groundwater sampling, may be required.

This report has been prepared for the exclusive use of Appalachian Wireless, for specific application to the proposed cellular tower located on the Jeptha Property located in Morgan County, Kentucky. Specific design and construction recommendations have been provided in the various sections of the report. The report shall, therefore, be used in its entirety. This report is not a bidding document and shall not be used for that purpose. Anyone reviewing this report must interpret and draw their own conclusions regarding specific construction techniques and methods chosen. ERMC2 is not responsible for the independent conclusions, opinions or recommendations made by others based on the field exploratory and laboratory test data presented in this report.

SPECIFICATIONS

I – GENERAL

1.0 STANDARDS AND DEFINITIONS

1.1 STANDARDS - All standards refer to latest edition unless otherwise noted.

1.1.1 ASTM D-698-70 (Method C) "Standard Test Methods for Moisture. Density Relations of Soils and Soil Aggregate Mixtures Using 5.5-lb (2.5 kg.) Rammer and 12-inch (305-mm) Drop".

1.1.2 ASTM D-2922 "Standard Test Method for Density of Soil and Soil Aggregate in Place by Nuclear methods (Shallow Depth)".

1.1.3 ASTM D-1556 "Standard Test Method for Density of Soil in place by the Sand-Cone Method".

1.2 DEFINITIONS

1.2.1 Owner - In these specifications the word "Owner" shall mean Appalachian Wireless.

1.2.2 Engineer - In these specifications the word "Engineer" shall mean the Owner designated engineer.

1.2.3 Design Engineer - In these specifications the words "Design Engineer" shall mean the Owner designated design engineer.

1.2.4 Contractor - In these specifications the word "Contractor" shall mean the firm or corporation undertaking the execution of any work under the terms of these specifications.

1.2.5 Approved - In these specifications the word "approved" shall refer to the approval of the Engineer or his designated representative.

1.2.6 As Directed - In these specifications the words "as directed" shall refer to the directions to the Contractor from the Owner or his designated representative.

2.0 GENERAL CONDITIONS

2.1 The Contractor shall furnish all labor, material and equipment and perform all work and services except those set out and furnished by the Owner, necessary to complete in a satisfactory manner the site preparation, excavation, filling, compaction, grading as shown on the plans and as described therein.

This work shall consist of all mobilization clearing and grading, grubbing, stripping, removal of existing material unless otherwise stated, preparation of the land to be filled, filling of the land, spreading and compaction of the fill, and all subsidiary work necessary to complete the grading of the cut and fill areas to conform with the lines, grades, slopes, and specifications.

This work is to be accomplished under the observation of the Owner or his designated representative.

2.2 Prior to bidding the work, the Contractor shall examine, investigate and inspect the construction site as to the nature and location of the work, and the general and local conditions at the construction site, including, without limitation, the character of surface or subsurface conditions and obstacles to be encountered on and around the construction site; and shall make such additional investigation as he may deem necessary for the planning and proper execution of the work.

If conditions other than those indicated are discovered by the Contractor, the Owner should be notified immediately. The material which the Contractor believes to be a changed condition should not be disturbed so that the owner can investigate the condition.

2.3 The construction shall be performed under the direction of an experienced engineer who is familiar with the design plan.

II - ENGINEERED FILL BENEATH STRUCTURES
CLEARING AND GRADING SPECIFICATIONS

1.0 GENERAL CONDITIONS

The Contractor shall furnish all labor, materials, and equipment, and perform all work and services necessary to complete in a satisfactory manner the site preparation, excavation, filling, compaction and grading as shown on the plans and as described therein.

This work shall consist of all clearing and grading, removal of existing structures unless otherwise stated, preparation of the land to be filled, filling of the land, spreading and compaction of the fill, and all subsidiary work necessary to complete the grading of the cut and fill areas to conform with the lines, grades, slopes, and specifications.

This work is to be accomplished under the constant and continuous supervision of the Owner or his designated representative.

In these specifications the terms "approved" and "as directed" shall refer to directions to the Contractor from the Owner or his designated representative.

2.0 SUBSURFACE CONDITIONS

Prior to bidding the work, the Contractor shall examine, investigate and inspect the construction site as to the nature and location of the work, and the general and local conditions at the construction site, including without limitation, the character of surface or subsurface conditions and obstacles to be encountered on and around the construction site; and shall make such additional investigation as he may deem necessary for the planning and proper execution of the work. Borings and/or soil investigations shall have been made. Results of these borings and studies will be made available by the Owner to the Contractor upon his request, but the Owner is not responsible for any interpretations or conclusions with ErMC2t thereto made by the Contractor on the basis of such information, and the Owner further has no responsibility for the accuracy of the borings and the soil investigations.

If conditions other than those indicated are discovered by the Contractor, the Owner should be notified immediately. The material which the Contractor believes to be a changed condition should not be disturbed so that the Owner can investigate the condition.

3.0 SITE PREPARATION

Within the specified areas, all trees, brush, stumps, logs, tree roots, and structures scheduled for demolition shall be removed and disposed of.

All cut and fill areas shall be properly stripped. Topsoil will be removed to its full depth and stockpiled for use in finish grading. Any rubbish, organic and other objectionable soils, and other deleterious material shall be disposed of off the site, or as directed by the Owner or his designated representative if on site disposal is provided. In no case

shall such objectionable material be allowed in or under the fill unless specifically authorized in writing.

Prior to the addition of fill, the original ground shall be compacted to job specifications as outlined below. Special notice shall be given to the proposed fill area at this time. If wet spots, spongy conditions, or groundwater seepage is found, corrective measures must be taken before the placement of fill.

4.0 FORMATION OF FILL AREAS

Fills shall be formed of satisfactory materials placed in successive horizontal layers of not more than eight (8) inches in loose depth for the full width of the cross-section. The depth of lift may be increased if the Contractor can demonstrate the ability to compact a larger lift. If compaction is accomplished using hand-tamping equipment, lifts will be limited to 4-inch loose lifts. Engineered fill placed below the structure bearing elevation shall be compacted to at least 95% of the maximum dry unit weight with a moisture content within 2% of the optimum moisture content as determined by the modified Proctor test. The top size of the material placed shall not exceed 4 inches.

All material entering the fill shall be free of organic matter such as leaves, grass, roots, and other objectionable material.

The operations on earth work shall be suspended at any time when satisfactory results cannot be obtained because of rain, freezing weather, or other unsatisfactory conditions. The Contractor shall keep the work areas graded to provide the drainage at all times.

The fill material shall be of the proper moisture content before compaction efforts are started. Wetting or drying of the material and manipulation to secure a uniform moisture content throughout the layer shall be required. Should the material be too wet to permit proper compaction or rolling, all work thus affected shall be delayed until the material has dried to the required moisture content. The moisture content of the fill material should be no more than two (2) percentage points higher or lower than optimum unless otherwise authorized. Sprinkling shall be done with equipment that will satisfactorily distribute the water over the disced area. Any areas inaccessible to a roller shall be consolidated and compacted by mechanical tampers. The equipment shall be operated in such a manner that hardpan, cemented gravel, clay or other chunky soil material will be broken up into small particles and become incorporated with the other material in the layer.

In the construction of filled areas, starting layers shall be placed in the deepest portion of the fill, and as placement progresses, additional layers shall be constructed in horizontal planes. Original slopes shall be continuously, vertically benched to provide horizontal fill planes. The size of the benches shall be formed so that the base of the bench is horizontal and the back of the bench is vertical. As many benches as are necessary to bring the site to final grade shall be constructed. Filling operations shall

begin on the lowest bench, with the fill being placed in horizontal eight (8) inch thick loose lifts unless otherwise authorized. The filling shall progress in this manner until the entire first bench has been filled, before any fill is placed on the succeeding benches. Proper drainage shall be maintained at all times during benching and filling of the benches, to insure that all water is drained away from the fill area.

Frozen material shall not be placed in the fill nor shall the fill be placed upon frozen material.

The Contractor shall be responsible for the stability of all fills made under the contract, and shall replace any portion, which in the opinion of the Owner or his designated representative, has become displaced due to carelessness or negligence on the part of the Contractor. Fill damaged by inclement weather shall be repaired at the Contractor's expense.

5.0 SLOPE RATIO AND STORM WATER RUN-OFF

Slopes shall not be greater than 2 (horizontal) to 1 (vertical) in both cut and fill, or as illustrated on the construction drawings. Excavations shall be constructed in accordance with all Federal, State and local codes relative to slope geometry.

6.0 GRADING

The Contractor shall furnish, operate, and maintain such equipment as is necessary to construct uniform layers, and control smoothness of grade for maximum compaction and drainage.

7.0 COMPACTING

The compaction equipment shall be approved equipment of such design, weight, and quantity to obtain the required density in accordance with these specifications.

8.0 TESTING AND INSPECTION SERVICES

Testing and inspection services will be provided by the Owner.

III- DRILLED PIER INSTALLATION

1.0 DRILLING PROCEDURE

1.1 Drilled piers will be installed with large caisson drill rigs capable of torque and crowd forces sufficient to install drilled piers at the project site given the in-situ soil conditions.

1.2 The drill rig kelly bar and auger will be carefully and accurately placed over the centerline of the drilled pier. The Contractor is responsible for providing necessary surveying to verify drilled pier location before, during, and after the drilled pier installation.

1.3 The augers are advanced downwards as they are rotated such that drilling of the soil mass is efficiently accomplished. Depending on the subsurface conditions, and the requirements for the given project, a temporary steel casing should be installed at this time to preclude caving of the soil and/or broken rock mass being penetrated.

2.0 CASING INSTALLATION

2.1 The casing will be checked for centerline accuracy and plumbness by the Contractor's survey crew. During casing installation, the Contractors survey crew will verify alignment with instruments. If plumbness and alignment are not within tolerance as determined by the Contractors survey crew, the casing will be extracted and re-aligned as necessary.

2.2 The drill rig will remove soil and bedrock material from within the casing to the drilled pier design tip elevation. A steel casing, or "Sonotube" shall be inserted into the borehole to preclude cave-ins and/or instability in the borehole.

2.3 The bearing surface within the drilled pier will be inspected by a registered Professional Engineer prior to being approved for structural concreting.

3.0 INSTALLATION OF THE REBAR CAGE

3.1 An epoxy coated spiral reinforcing steel cage will be installed while in the drilled pier borehole.

3.2 To assist in assuring that the reinforcing steel cage does not settle during concrete pumping, a mat of reinforcing steel bars will be installed across the bottom of the reinforcing steel cage perpendicular to the vertical axis of the cage. The exact number of bars will be determined and installed

by the Structural Engineer. The number of rebar boots used on the bottom of the cage will also be determined by the Structural Engineer.

3.3 The reinforcing steel cage will be lowered into the drilled pier borehole, while drilled pier spacers are placed at intervals as required by the Structural Engineer. The reinforcing steel cage will be checked for alignment by the Contractors survey crew.

3.4 The crane will remain attached to the reinforcing steel cage while the concrete pump outlet pipe is lowered to just above the bottom of the drilled pier. The concrete pump pipe sections will be welded together to assure that do not separate during pumping.

4.0 CONCRETING OF THE DRILLED PIER

4.1 Concrete pumping may commence once the bearing surface has been approved in accordance with Clause 2.3

4.2 A three inch trash pump will be used to pump slurry and/or water from within the casing and from above the newly pumped concrete.

4.3 The concrete pump outlet pipe will maintain at least ten (10) feet of embedment into the fresh concrete. The concrete level in the casing will be monitored.

4.4 The casing will be completely extracted with the crane and/or vibratory hammer. Caisson clamps on the vibratory hammer (if applicable) will be adjusted to the proper dimension to withdrawal the casing.

4.5 The concrete will be terminated at the top of drilled pier elevation and screeded flat.

4.6 The upper reinforcing steel dowel cage will be lowered into the concrete to the embedment elevation. If necessary, the concrete will be vibrated to assist in placement. Alignment will be verified by the Contractors survey crew and the cage will be sufficiently braced.

IV - GUIDELINES FOR EXCAVATIONS AND TRENCHES

The following represents some general guidelines relative to the design and construction of excavations and trenches. It must be emphasized that these guidelines are not intended to represent a "safety plan," but rather are presented herein to provide general guidance with regard to the design characteristics and safety measures for excavations and trenches.

1. Check with the following utilities prior to breaking ground:
   - Sewer
   - Telephone
   - Fuel
   - Electric
   - Water
   - Gas
   - Cable

   When utility companies or owners do not respond to your request within 48 hours, the contractor may only then proceed provided the contractor does so with caution by using detection equipment or other acceptable means to locate utility installations.

   Once the excavation is open, the contractor should protect and support the exposed underground utilities or remove installations to safeguard workers and prevent damage to exposed utilities.

2. Access and egress ramps must be designed by a "competent person" and structural ramps used for equipment must be designed by a "competent person" with qualified knowledge in structural design. In addition:
   - Ramps must be secured to prevent displacement;
   - Ramps used in lieu of steps must have cleats to prevent slipping; and
   - Trenching excavations four feet or greater in depth must have a stairway, ladder, ramps or other safe means to egress with lateral travel no more than 25 feet.

5.0 3. Workers must be provided with reflector garments, such as warning orange or red vests, when exposed to vehicular traffic.

4. Contractors must not allow workers to work under or near equipment when there is danger of falling debris, spillage or equipment-related injuries.

5. Mobile equipment, operating adjacent to an open excavation or approaching the edge of an excavation, must have one of the following when the operator's view is obstructed:
   - Warning System
   - Mechanical Signals
   - Barricades
   - Stop Logs

- Hand Signals

6. The contractor must check the atmosphere for hazardous gases and oxygen deficiencies when excavating four feet or greater around landfills, or when hazardous substances are stored nearby, and when the contractor expects there could be any exposure to the workers.

7. When hazardous atmospheric conditions exist, or when conditions could change, the contractor must make emergency rescue equipment readily available including breathing apparatus, safety harnesses with life lines and a basket stretcher.

8. When workers enter bell-bottom pier holes or other deep and confined excavations, the worker must wear (at all times while performing work in the confined space) a separate life line attached to a harness. The line must be attended by someone above while work is being performed. The worker must check for hazardous atmospheric conditions prior to entry.

9. The contractor must ensure that water does not accumulate in open excavations and must inspect the excavation prior to allowing workers to re-enter after heavy rains.

10. Adjacent structures (buildings, walls, etc.) must be supported or secured to prevent worker exposure to unsafe conditions and damage to existing structures.

11. A registered professional engineer must approve operations when a contractor underpins existing structures to ensure worker safety and prevent damage to existing structures.

12. Workers must not be exposed to loose soil and rock or materials in and around excavations. Materials, such as removed soil and rock, must not be stored closer than two feet from the edge of the excavation.

13. Daily inspections of the excavation, the adjacent areas and protective systems must be made by a "competent person" for evidence of possible cave-ins, indications of failure of protective systems, hazardous atmospheres or other hazardous conditions. The "competent person" must stop work immediately and remove workers from the excavation when conditions change and pose a threat to their safety.

14. Workers must not be exposed to fall hazards associated with excavations. Protective walkways or bridges with standard guard rails must be provided.

15. All wells, pits, shafts etc. must be barricaded or covered. After completion of work, all wells, pits, shafts etc. must be backfilled.

V - GENERAL CONCRETE SPECIFICATIONS

1.0 GENERAL

It is the intent of this specification to secure, for every part of the work, concrete of homogenous structure which, when hardened, will have the required strength and resistance to weathering. To this end, the limiting values of concrete and the requirements hereinafter specified must be met. Standard tests of the cement, aggregates, concrete and reinforcement will be made by the Owner as it sees fit. The Contractor shall furnish the material for all required samples plus such labor as required to obtain samples. The Contractor shall provide to authorized representatives of the Owner, convenient access to all parts of the work of all concreting operations for the purpose of sampling and inspection.

2.0 SCOPE

Contractor shall furnish all materials, labor, services, transportation, tools, equipment, and related items required to complete work indicated on the drawings and/or specified.

Unless otherwise noted or as modified by more stringent requirements specified herein, all plain and reinforced concrete work shall be performed in full compliance with applicable requirements of the Building Code Requirements for Reinforced Concrete ACI 318.

Contractor shall obtain Owner's approval of all subgrades, footing bottoms, forms, and reinforcement just prior to placing concrete.

Contractor shall coordinate the work specified in this section with that specified in other sections so that all anchors, pipes and other embedded items are properly installed before concrete is placed.

Contractor shall clean all exposed concrete surfaces and obtain approval of Owner for method of cleaning.

3.0 MATERIALS

All materials shall be of the ErMC2tive quality specified herein, delivered, stored, and handled as to prevent inclusion of foreign matter and damage by dampness or breakage. Packaged material shall be stored in original container until ready for use. Materials showing evidence of dampness or other damage may be rejected.

A. Fine and Coarse Aggregates: Coarse and fine aggregates shall conform to ASTM Specification C33. The maximum size of aggregate shall not be larger than one-fifth (1/5) of the narrowest dimensions between forms, or larger than three fourths (3/4) of the minimum clear spacing between reinforcement.

1. Fine Aggregate: Sand shall be composed essentially of clean, hard, strong, durable grains free of structurally weak grains,

organic matter, loam, clay, silt, salt, mica or other fine materials that may affect bonding of the cement paste.

2. Coarse Aggregate: Cement concrete shall consist of crushed rock or screened gravel and shall be composed essentially of clean, hard, strong and impermeable particles, resistant to wear and frost and free from deleterious amounts of organic matter, loam, clay, salts, mica, and soft, thin, elongated, laminated or disintegrated stone, and shall be inert to water and cement.

B. Portland Cement: Portland cement shall conform to ASTM Specification C150. Type I or Type II Portland Cement shall be used provided that they are not intermixed during any one batch. Type II Portland Cement shall not be used unless indicated on the plans.

C. Water: Water for mixing and curing shall be clean, fresh, and free from deleterious materials.

D. Metal Reinforcement: Rebar shall be Grade 60 and with deformations conforming to ASTH Specification A305. Welded wire mesh shall conform to W4 x W4 size and be of Grade 60 steel.

E. Admixtures: Except as herein noted, admixtures shall not be used.

6.0 1. Under adverse weather conditions only retarding or accelerating agents containing no chloride may be used.

2. Air-Entraining Agent shall be used for all concrete will give an entrained air range of not less than 4 percent but no greater than 8 percent in the finished product. Under no circumstances shall the air-entraining be interground with cement.

3. Approval in writing shall be required from Owner prior to the use of any admixture.

4.0 FORM

Forms shall be constructed with proper shoring and cross-bracing, safeguarding the total structure and specifically lateral stability and sufficiently strong to stand vibrations of concrete and to carry, without appreciable deflection or displacement, all dead and live loads to which they may be subjected.

5.0 INSERTS, ETC.

Anchors, bolts, dowels, conduit, waterstops, vent pipes and other similar built-in or concreted-in items shall be properly located, accurately positioned and secured. The Contractor shall cooperate in placing of such items with other contractors who require a fastening device for their work and he shall maintain them in proper location during the progress of his work.

6.0 REINFORCEMENT

Reinforcement at the time concrete is placed shall be free from rust, scale or other coatings that will destroy or reduce the bond.

Reinforcement shall be accurately placed and securely tied at intersections and shall be securely held in position during the placing of concrete by pacers, chairs, or other approved supports.

The reinforcement of foundations, footings and other principal structural members in which the concrete is deposited against the ground shall not have less than three (3) inches of concrete between it and the ground contact surface. If concrete surfaces after removal of the forms are to be exposed to the weather or to be in contact with the ground or rock, reinforcement shall be protected with not less than two (2) inches of concrete.

7.0 CONCRETE

Concrete for the various parts of the work shall be of 4000 pounds per square inch compressive strength with a minimum 28-day cure. Contractor is responsible to provide a mix of not less than 6 bags of cement per yard of concrete and not more than 7 gallons of water per bag of cement, producing a minimum slump of 2-1/2 inches and a maximum slump of 4-1/2 inches. Concrete that exceeds the above range of maximum or minimum slump requirements may be rejected by the Owner. All concrete shall be air-entrained. Contractors are required to furnish the name or names of the company(s) that will be providing the mix. The Owner reserves the right to disapprove any concrete supplier that has been known to supply an undesirable material to the Owner on previous occasions.

8.0 DEPOSITING CONCRETE

4.1. Preparation for Placing Concrete: Before depositing concrete, the Contractor shall:

1. Remove from space to be occupied by concrete all debris, including snow, ice, and water unless otherwise permitted by Owner.
2. Provide diversion, satisfactory to Owner, of any flow of water to an excavation so as to avoid washing the freshly deposited concrete.
3. Coal the forms prior to placing of reinforcing steel as required in form work.
4. Secure firmly in correct position, all reinforcement and other items to be encased and remove therefrom all coating including ice and frost.

B. Transportation of Concrete from Batch Plant: The concrete shall be delivered to the site of the work and discharge shall be completed

within 90 minutes after addition of the cement and water to the aggregates. Each batch of concrete delivered at the job site shall be accompanied by a time slip issued at the batching plant, bearing the time of charging of the mixer drum with the cement and aggregates.

C. Transporting of Concrete from Mixer to Place of Final Deposit: Transportation shall be done as rapidly as practical by means which shall prevent the separation or loss of the ingredients. If chutes are used, they shall be at a slope not flatter than one vertical to two horizontal. Buggies or carts shall be equipped with pneumatic rubber tires or surfaces of runways shall be sufficiently smooth or both so as not to cause separation or segregation of concrete ingredients. Concrete shall not be allowed to drop freely more than 4 feet. Where greater drops are required, canvas "elephant trunks" or galvanized iron chutes equipped with suitable hopper heads shall be employed and a sufficient number placed to insure that the concrete may be effectively compacted into horizontal layers not exceeding 12 inches in thickness with minimum lateral movements.

D. Depositing of Concrete: Depositing of concrete shall:

1. Proceed continuously after once starting until reaching the end of a section of construction joint location shown on the drawings, or as approved by the Owner. The operations shall be conducted so that no concrete is deposited on concrete sufficiently hardened to cause formation of seams, and planes of weakness.
2. Be as near as practical to its final position in the forms.
3. Proceed so as to maintain constantly a top surface which is approximately level.
4. Be placed before initial set has occurred, and in no event after it has contained its water content for more than 90 minutes.
5. Be thoroughly worked and compacted by means of suitable tools to provide impermeability, durability and strength and shall be thoroughly worked around reinforcements and embedded items and into corners of forms and so as to be free from voids, pockets or honeycombing. Particular care shall be taken to provide impermeability.

E. Vibration Equipment: Vibration equipment shall be of the appropriate type and shall, at all times, be adequate in number of units and power of each unit to properly consolidate all concrete.

F. Monolithic Pours: Proper delivery of concrete shall be the Contractor's responsibility in order to make a mono-lithic pour without delays and changes of cold joints.

9.0 CURING

All concrete work shall be protected from injurious action by the sun, rain, flowing water, frost and other injury and shall be covered with plastic after application of curing compound for three (3) days on pours located above ground.

Contractor shall not remove any formwork for a minimum period of 24 hours after a concrete pour without written approval of the Owner.

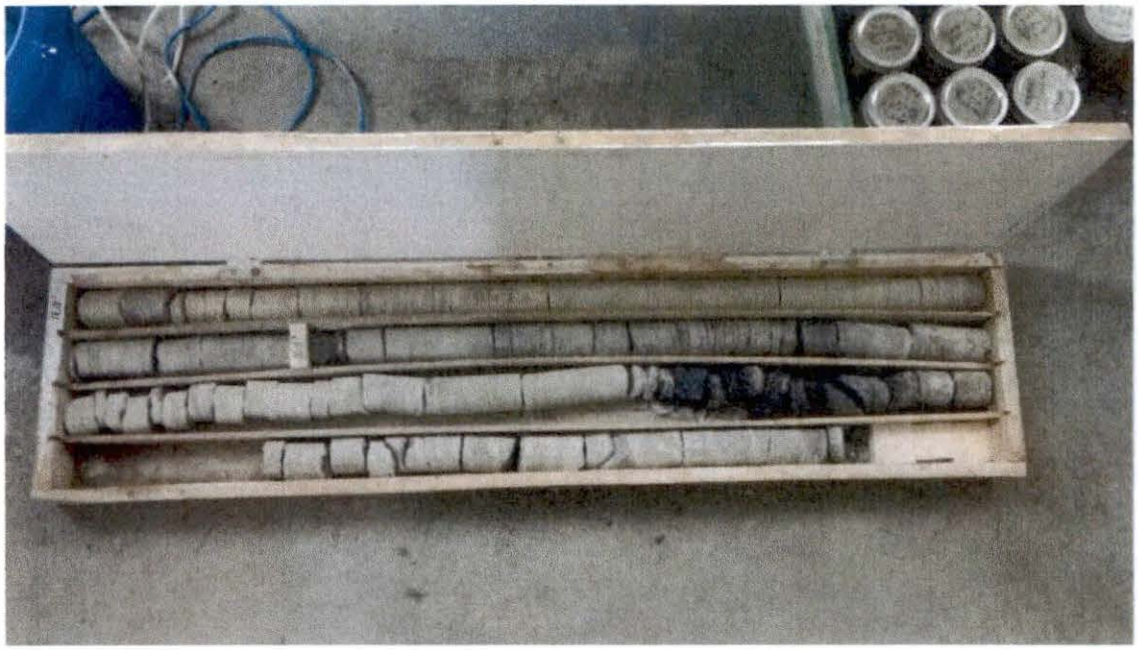
10.0 CONCRETE FINISHES

Finishes of all exposed concrete shall be free of defects which impair its durability or adversely affect is appearance. All such surfaces when stripped, shall be uniform in appearance and any surfaces displaying any deviations from adjacent uniform surfaces shall be rejected and subject to removal.

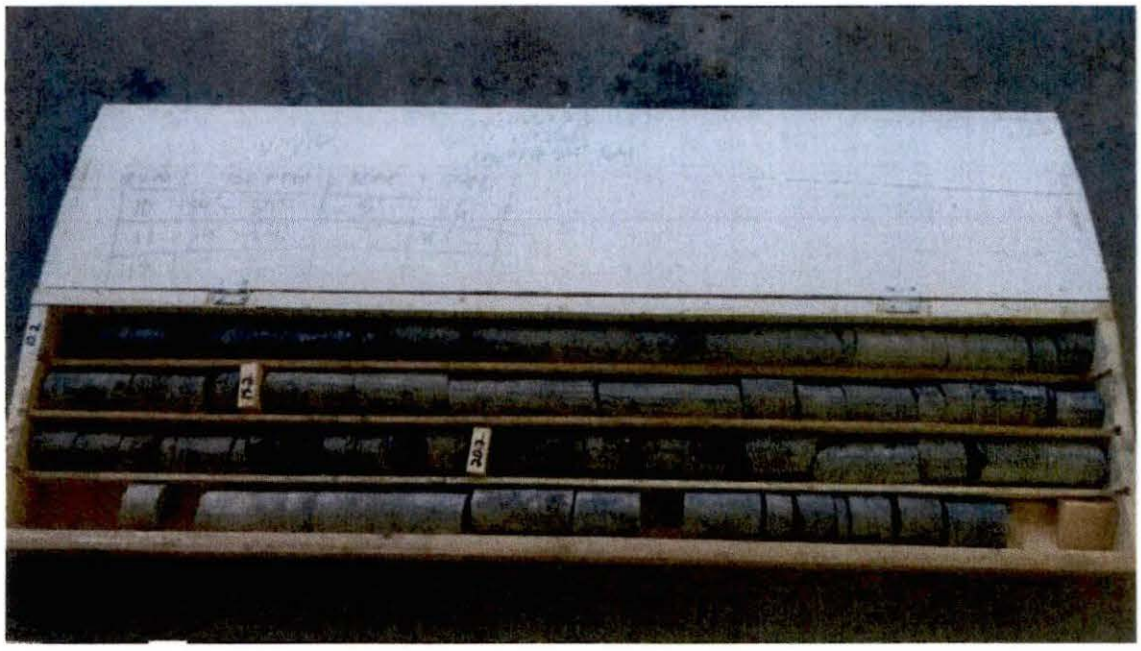
Finished work shall be level and plumb, true to lines, and dimensions. Finished plane surfaces shall be smooth, and as nearly perfect as practical; however, deviations from a true plane shall not exceed 1/8 inch when measured from a 6-foot straight edge placed against the surface to any point on the surface and under the straight edge.

All exposed surfaces shall have deflects corrects, protrusions removed, and holes filled.

APPENDIX A BORING DATA

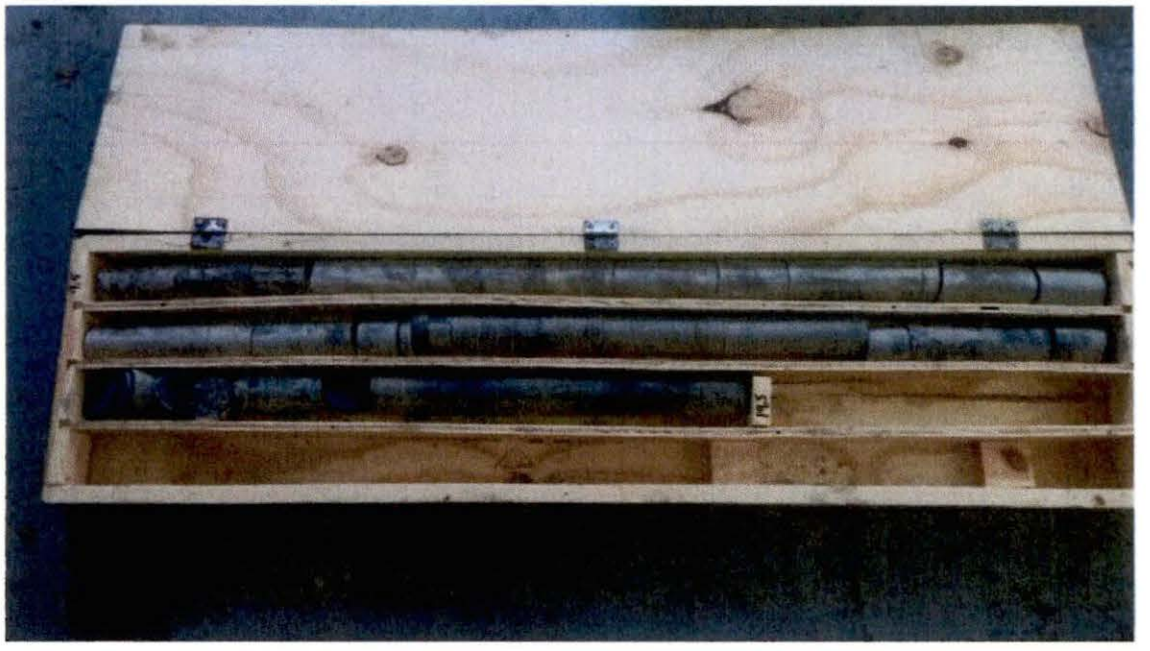


BORING NO. 1



BORING NO. 2

BORING NO. 3



BORING NO. 4

HORN AND ASSOCIATES, INC
N. Main Street - Winchester, KY 40391
800-729-2802 Fax: 859-744-5892

FIELD BORING LOG

Page ___ of ___

Project Name: Morgan Co Cell Tower
Federal Project No.:
State Project No.:
Drilling/Sampling Method: 4¼ HSA/NX
Boring Diameter:

Hole Number: JEP-1 Total Depth: 25.0
Location: As Staked
Surface Elevation: Not Given
Date Started: 1/31/17 Date Completed: 1/31/17
Driller: TWJ Weather: Clear

From To	Soil and Rock Description	Sample/Run Interval	Blow Counts/RQD	Sample/Run No.	Sample Type	% Recovery
0-10.0	Cl; Br, Si, w/small pebbles Wet	2.5-4.0	1-1-1	S-1	SPT	0.9
10.0-21.5	Sh; Gr, Si, Sa, Soft	5.0-6.5	1-2-2	2	↓	1.0
21.5-22.4	Sh; Si, Gr, Soft coal layers	7.5-9.0	0-1-2	3	↓	1.5
22.4-25.0	Sh; Sa, Lt Br/Gr	10-11.0	12-50/5	4	↓	0.8
		Bedrock @ 11.0'.				
		11.0-16.0	4.8	R-1	NX	
		16.0-25.0	7.0	2	NX	
		Terminated @ 25.0'.				
	Backfilled w/ cuttings					

Level @ Drilling: Surface
24 Hr. Water Level:
7 Day Water Level:
Moving/Delay Time:
Hammer Weight: 140 lbs.
Hammer Drop: 30 in.

"ORN AND ASSOCIATES, INC
. Main Street - Winchester, KY 40391
n: 800-729-2802 Fax: 859-744-6892

FIELD BORING LOG

Page ___ of ___

Project Name: Morgan Co Cell Tower
Federal Project No.:
State Project No.:
Drilling/Sampling Method: 4¼HSA/NX
Boring Diameter:

Hole Number: JEP-2 Total Depth: 25.2
Location: As Marked
Surface Elevation: Not Given
Date Started: 1/31/17 Date Completed: 1/31/17
Driller: Kim Jenkins Weather: Clear

From To	Soil and Rock Description	Sample/Run Interval	Blow Counts/RQD	Sample/Run No.	Sample Type	% Recovery
0-9.5	Cl; Si Br, Fill, Wet	1.5-3.0	2-3-2	S-1	SPT	1.2
9.5-19.8	Sh; Gr, Si, Sa, Soft	4.0-5.5	1-2-3	2	↓	1.0
19.8-20.4	Coal; Shale seams Soft	6.5-8.0	1-1-2	3	↓	1.0
20.4-25.2	Sh; Gr, Si, Soft	9-10.2	1-12-50/2	4	↓	0.9
		Bedrock @ 10.2				
		10.2-15.2	4.4	R-1	NX	4.3
		15.2-20.2	4.6	2	↓	4.0
		20.2-25.2	4.8	3	↓	4.3
		Terminated @ 25.2'				
	Backfilled with cuttings					

Water Level @ Drilling: 3.8' 24 Hr. Water Level: ___ 7 Day Water Level: ___
Moving/Delay Time: ___ Hammer Weight: 140 lbs. Hammer Drop: 30 in.

"ORN AND ASSOCIATES, INC
d. Main Street - Winchester, KY 40391
.: 800-729-2602 Fax: 859-744-5592

FIELD BORING LOG

Page ___ of ___

Project Name Morgan Co Cell Tower
Federal Project No.
State Project No.
Drilling/Sampling Method 4¼ HSA/NX
Boring Diameter

Hole Number JEP-3 Total Depth 20.0'
Location As Staked
Surface Elevation Not Given
Date Started 1/31/17 Date Completed 1/31/17
Driller Jim Griffiss Weather Clear

From To	Soil and Rock Description	Sample/Run Interval	Blow Counts/RQD	Sample/Run No.	Sample Type	% Recovery
0-10.0	Cl; Br, Silty, Fill, Wet	2.0-3.5	1-2-1	S-1	SPT	1.1
10.0-20.0	Sh; Gr, Si, Sa, Soft	4.5-6.0	4-6-5	2	"	1.3
		7.0-8.5	3-3-3	3	"	1.2
		9.5-10.0	50/.5	4	"	0.5
		Bedrock @ 10.0'				
		10.0-20.0	6.7'	R-1	NX	10.0
		Terminated	@ 20.0'			
	Backfilled with cuttings					

Level @ Drilling 4.6 24 Hr. Water Level 7 Day Water Level
Moving/Delay Time Hammer Weight 140 lbs. Hammer Drop 30 in.

ORN AND ASSOCIATES, INC
I. Main Street - Winchester, KY 40391
n: 800-729-2802 Fax: 859-744-5892

FIELD BORING LOG

Page ___ of ___

Project Name: Morgan Co Cell Tower
Federal Project No.:
State Project No.:
Drilling/Sampling Method: 4¼ HSA / NX
Boring Diameter:

Hole Number: JEP-4 Total Depth: 19.5
Location: As Staked
Surface Elevation: Not Given
Date Started: 1/31/17 Date Completed: 1/31/17
Driller: Jim Lutkins Weather: Clear

From / To	Soil and Rock Description	Sample/Run Interval	Blow Counts/RQD	Sample/Run No.	Sample Type	% Recovery
0-8.7	Cl; Br, Si; Fill, Wet	2.0-3.5	1-2-3	S-1	SPT	1.0
8.7-10.3	Sh; Gr, Si, Soft, Weath	4.5-6.0	1-0-1	2	"	1.0
10.3-19.5	Sh; Gr, Si; Soft	7.0-8.5	1-0-3	3	"	0.9
		Bedrock @	9.5			
		9.5-19.5	8.7	R-1	NX	9.9
		Terminated @ 19.5				
	Backfilled w/ cuttings					

Level @ Drilling: 2.2 24 Hr. Water Level: 7 Day Water Level:
Moving/Delay Time: Hammer Weight: 140 lbs. Hammer Drop: 30 in.

APPENDIX B PHOTOGRAPHS

APPENDIX B SEISMIC

USGS Design Maps Summary Report

User-Specified Input

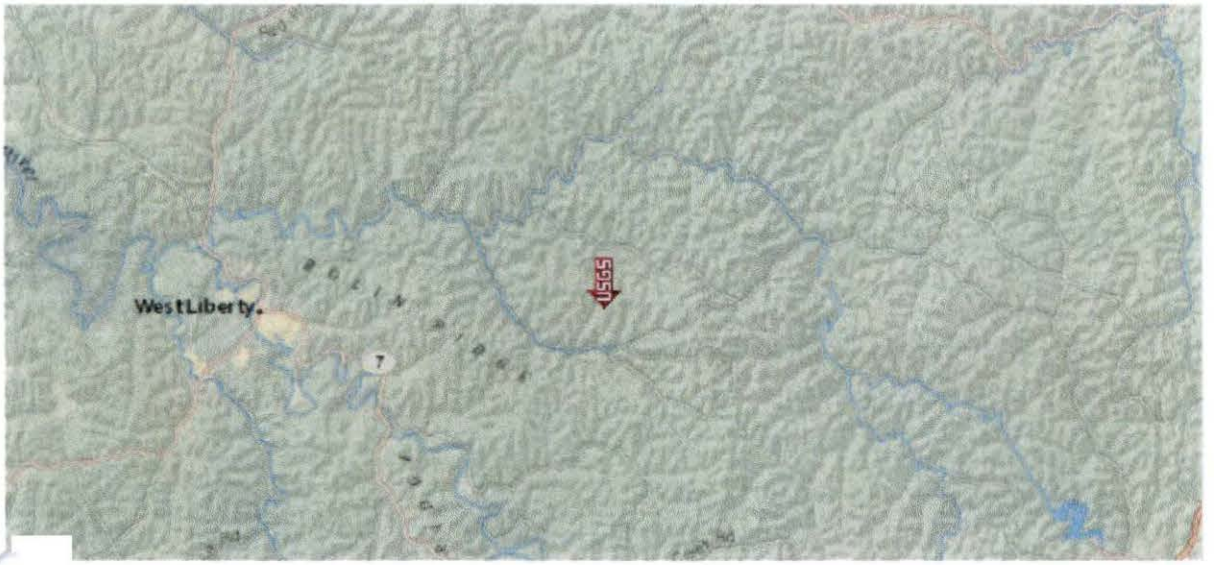
Report Title Jeptha Tower Site
Fri February 17, 2017 13:49:44 UTC

Building Code Reference Document 2012/2015 International Building Code
(which utilizes USGS hazard data available in 2008)

Site Coordinates 37.93086°N, 83.10061°W

Site Soil Classification Site Class B – "Rock"

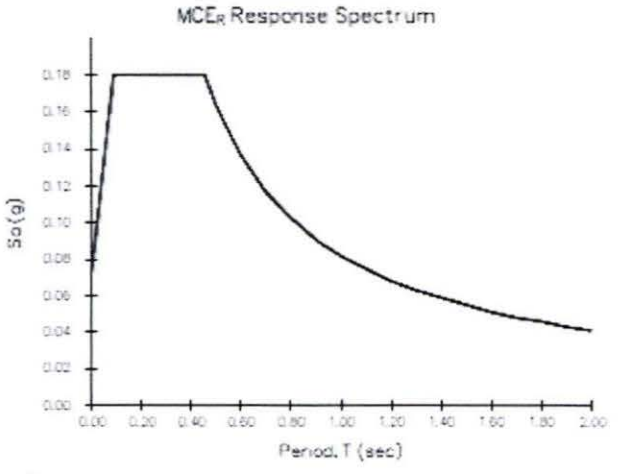
Risk Category IV (e.g. essential facilities)

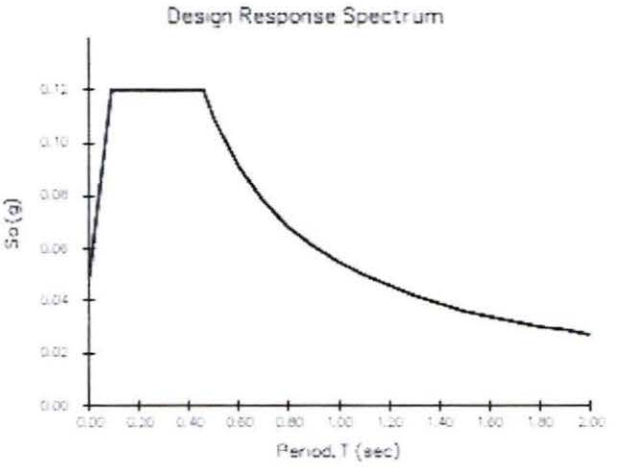


S-Provided Output

S_S =	0.180 g	S_{MS} =	0.180 g	S_{DS} =	0.120 g
S_1 =	0.082 g	S_{M1} =	0.082 g	S_{D1} =	0.055 g

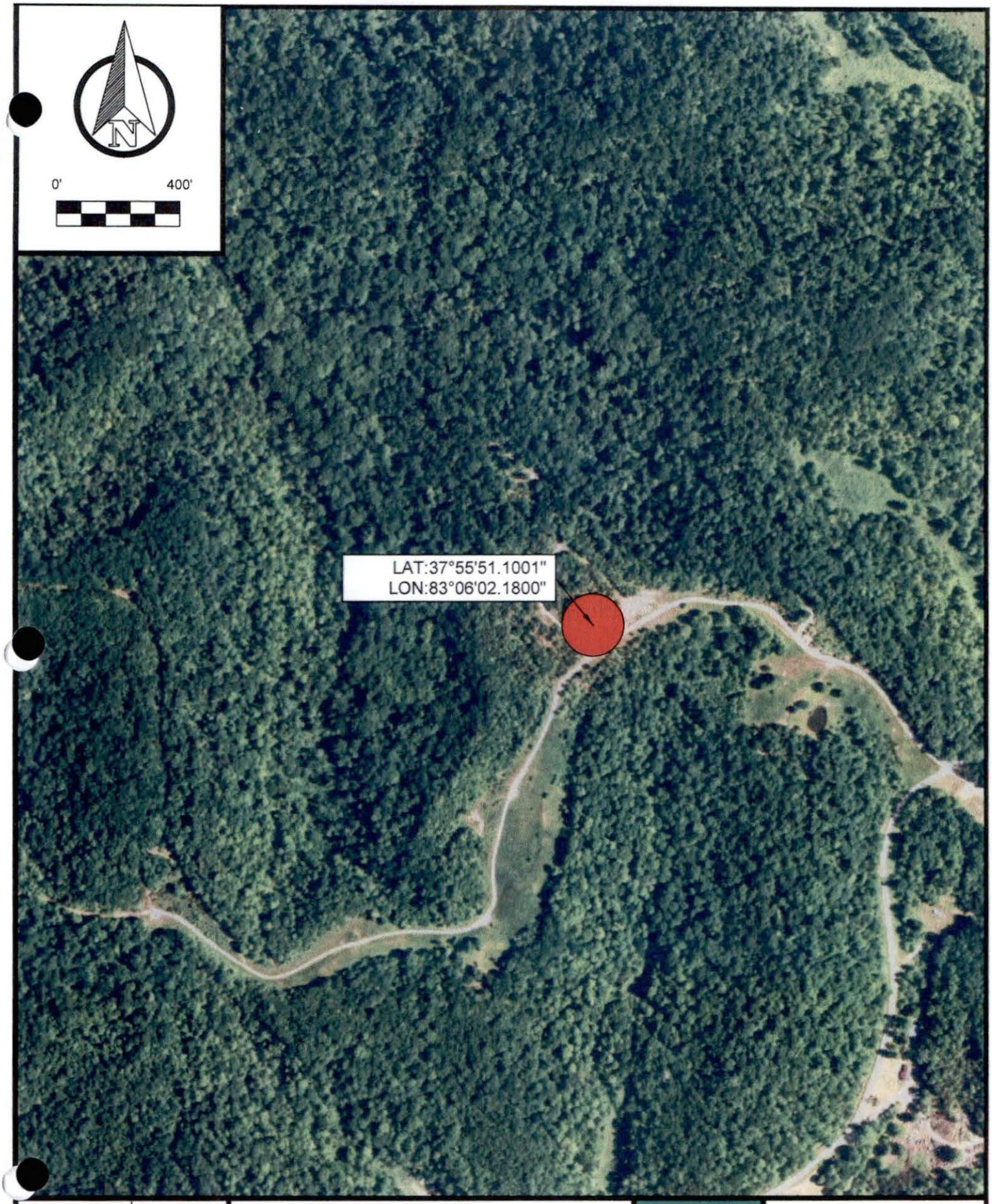
For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.





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

APPENDIX C MAPS



Drawn:	Date: 2/17/17
Job:	Scale: 1"=400'
Drawing: 2016 AERIAL IMAGE SITE LOCATON MAP	

JEPTHA TOWER SITE

APPALACHIAN WIRELESS

2016 AERIAL IMAGE SITE LOCATION MAP

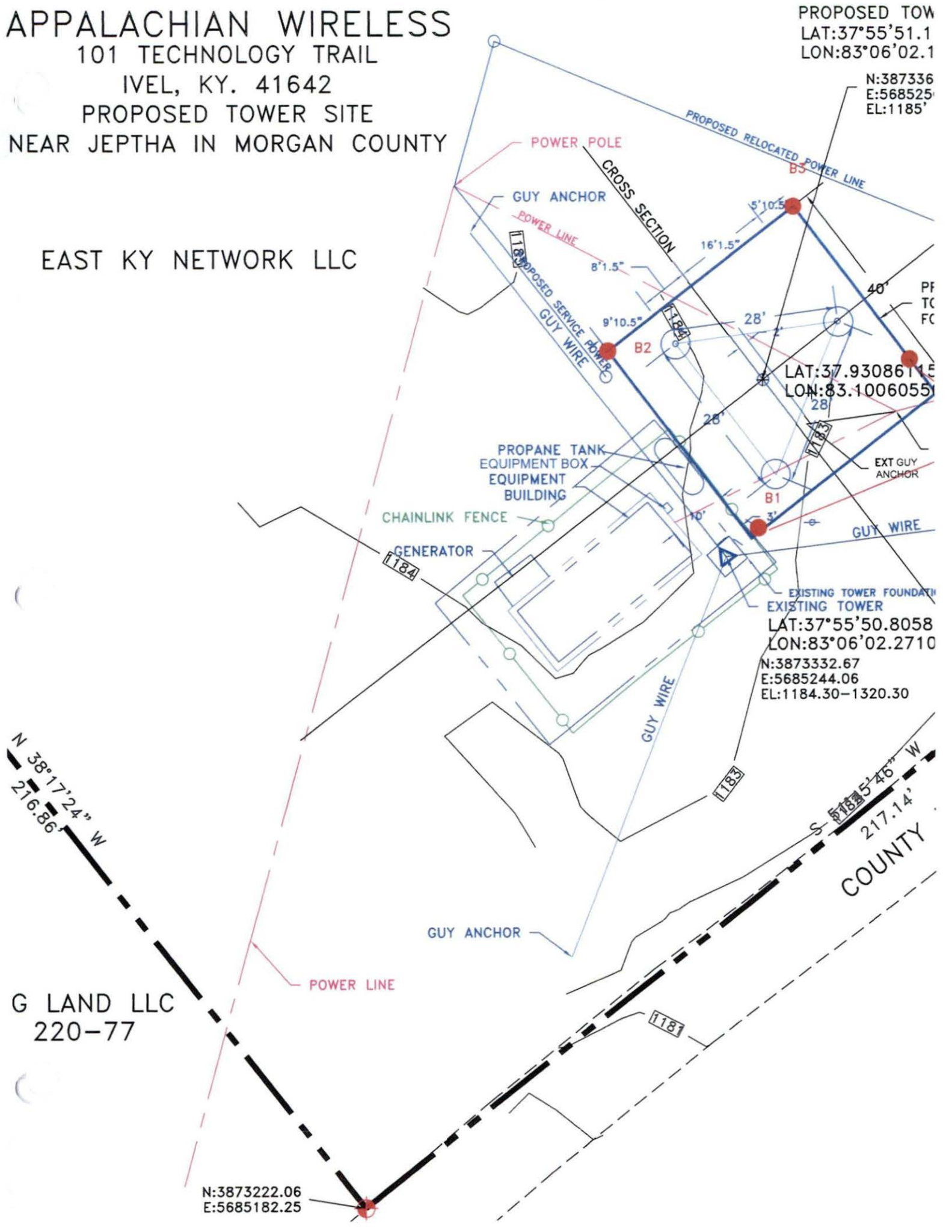
ErMC²

921 Beasley Street, Suite 145
Lexington, KY 40509
(859)381-1000
engineering@ermc2.us

APPALACHIAN WIRELESS

101 TECHNOLOGY TRAIL
IVEL, KY. 41642
PROPOSED TOWER SITE
NEAR JEPTHA IN MORGAN COUNTY

EAST KY NETWORK LLC



World Tower
COMPANY, INC.

1213 Compressor Drive
P.O. Box 508
Mayfield, KY 42066
270-247-3642
FAX: 270-247-0909
E-mail: worldtower@worldtower.com
Web: www.worldtower.com

300' MODEL WSST TOWER
FOR: APPALACHIAN WIRELESS
SITE: JEPTHA
MORGAN COUNTY, KY
DESIGN PACKAGE

3-8-2017

Fabrication, Installation, and Maintenance of TV, AM, FM, & Wireless Communications Towers

GENERAL NOTES

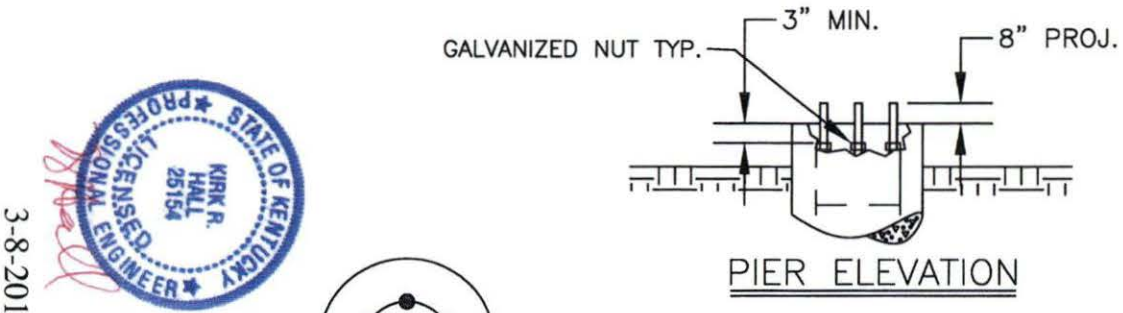
1. WELDED CONNECTIONS SHALL CONFORM TO THE LATEST REVISION OF THE AMERICAN WELDING SOCIETY AWS. D 1.1.
2. TOWER AND ALL FABRICATED ACCESSORIES ARE HOT-DIP GALVANIZED.
3. ALL BOLTS SHALL BE GALVANIZED ACCORDING TO THE STANDARD SPECIFICATION FOR ZINC COATING OF IRON AND STEEL HARDWARE ASTM A153.
4. LEG STEEL IS 50 KSI MIN YIELD SOLID ROUND OR PIPE AND BRACING STEEL IS 36 KSI MIN YIELD SOLID ROUND OR STRUCTURAL ANGLE.
5. ALL STRUCTURAL BOLTS ARE ASTM A325X, THREADS EXCLUDED FROM SHEAR PLANE.
6. TOWER SHOULD BE INSPECTED IN ACCORDANCE WITH TIA-222-G EVERY 5 YEARS.
7. TOWER INSPECTION SHOULD ONLY BE PERFORMED BY EXPERIENCED QUALIFIED PERSONNEL. FOR ASSISTANCE IN PROPER MAINTENANCE OF YOUR TOWER, CALL WORLD TOWER AT 270-247-3642.

3-8-2017

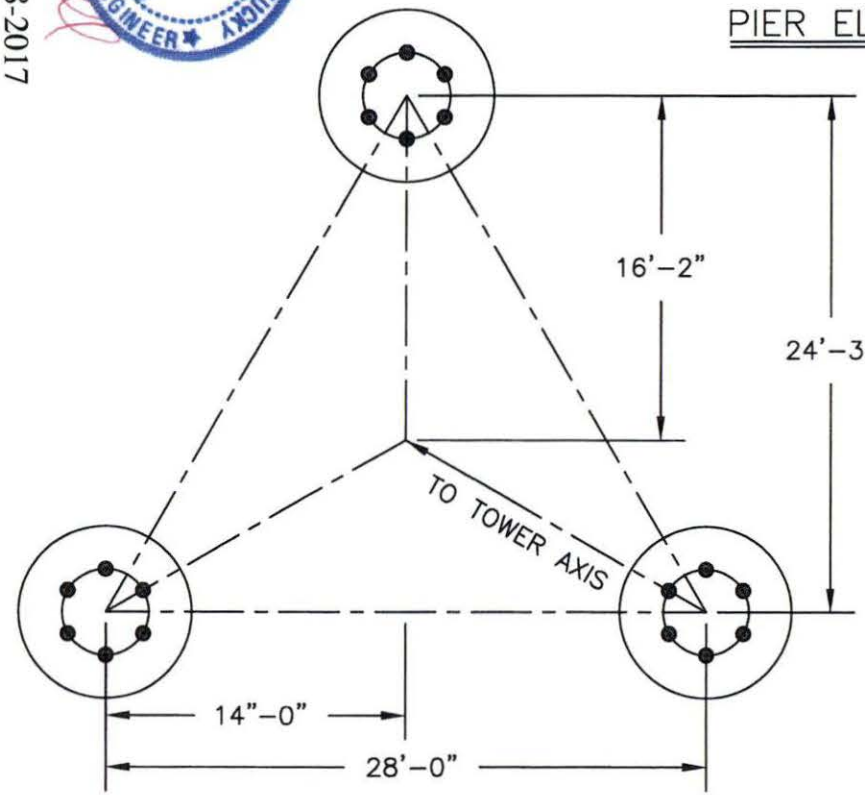
WORLD TOWER

TITLE:
300' MODEL WSST TOWER
FOR: APPALACHIAN WIRELESS
SITE: JEPTHA
MORGAN COUNTY, KY

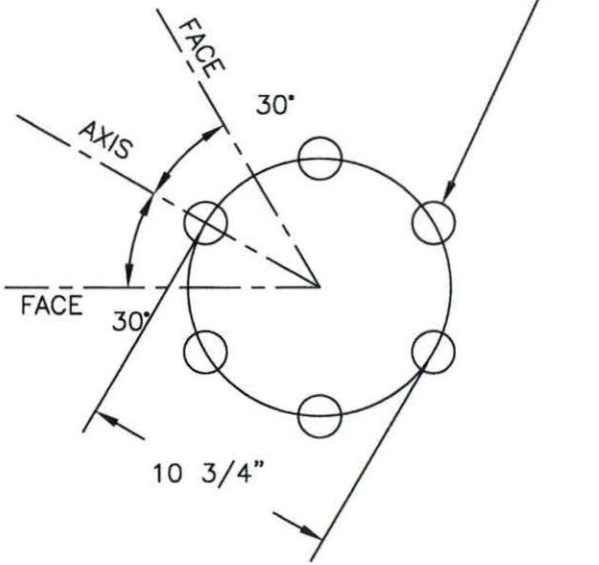
SCALE	DWN. LKG	CKD.	DATE 3-6-17
FILE		DWG. NO.	Q16782N



PIER ELEVATION



ANCHOR BOLTS
(6) 1 1/2"ø X 104"
(ASTM A354 GR. BC)
EQUALLY SPACED WITH
TOP TEMPLATE AND
EMBEDDED PLATE

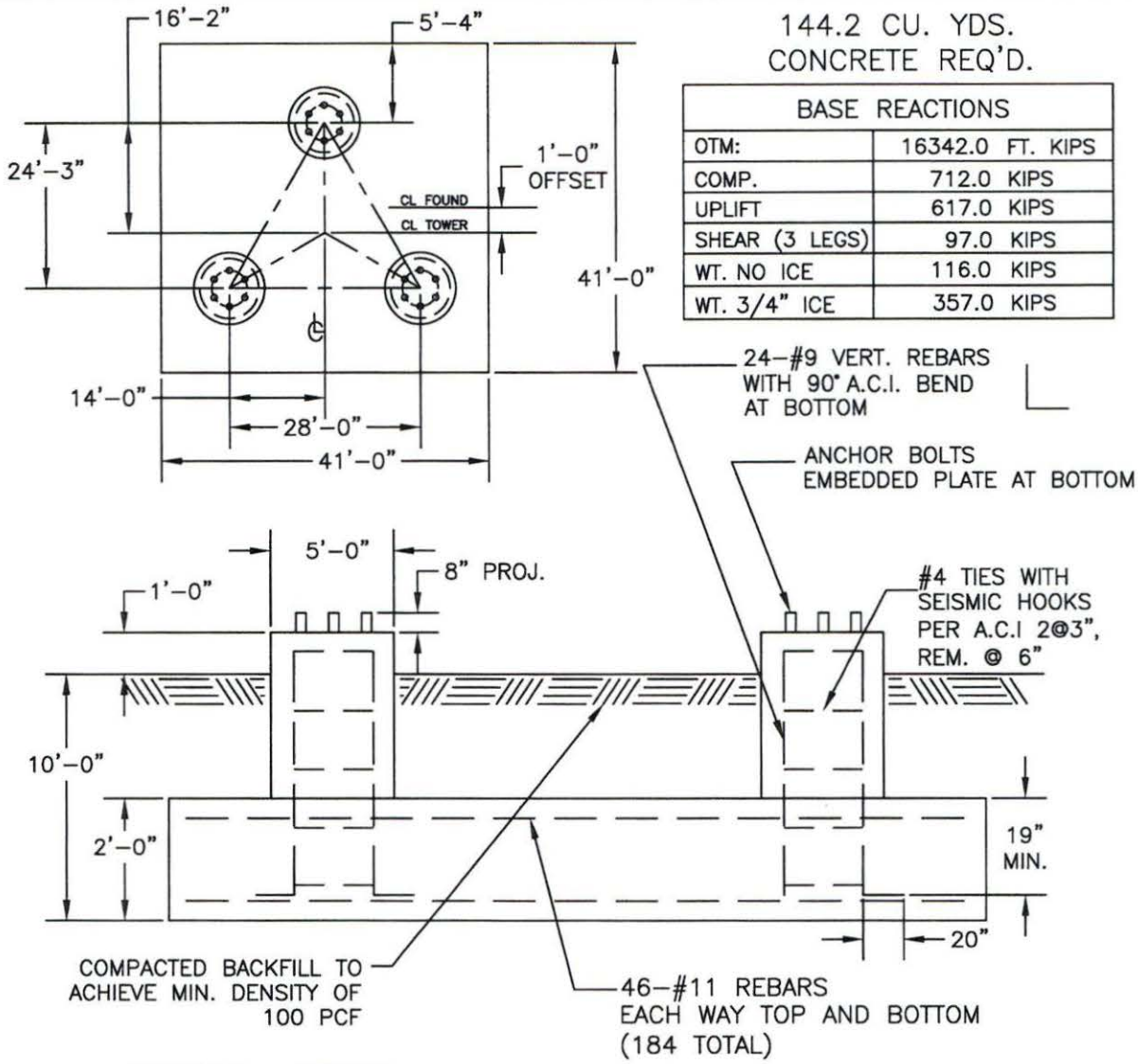


3-8-2017

TITLE:
300' MODEL WSST TOWER
FOR: APPALACHIAN WIRELESS
SITE: JEPTHA
MORGAN COUNTY, KY

WORLD TOWER

SCALE NONE	DWN. LKG	CKD.	DATE 3-6-17
FILE	DWG. NO. Q16782AB		



144.2 CU. YDS.
CONCRETE REQ'D.

BASE REACTIONS	
OTM:	16342.0 FT. KIPS
COMP.	712.0 KIPS
UPLIFT	617.0 KIPS
SHEAR (3 LEGS)	97.0 KIPS
WT. NO ICE	116.0 KIPS
WT. 3/4" ICE	357.0 KIPS

GENERAL NOTES

1. CONCRETE TO HAVE 4000 PSI MIN. COMPRESSIVE STRENGTH AFTER 28 DAYS.
2. ALL REINFORCMENT STEEL IS DEFORMED AND MEETS THE STRENGTH REQUIREMENTS OF ASTM A615 GRADE 60.
3. EMBEDDED STEEL TO HAVE 3" MIN. CONCRETE COVER.
4. FOUNDATION DESIGN IS BASED ON CUSTOMER SUPPLIED SOIL DATA FROM ERMC2 SITE NAME JEPTHA DATED FEBRUARY 17, 2017.
5. BASE OF PAD SHALL BEAR ENTIRELY ON SOLID ROCK.

3-8-2017

TITLE: FOUNDATION DETAIL
300' WSST TOWER
FOR: APPALACHIAN WIRELESS
SITE: JEPTHA
MORGAN COUNTY, KY

WORLD TOWER

SCALE NONE	DWN. LKG	CKD.	DATE 3-6-17
FILE		DWG. NO. Q16782F	

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

Aeronautical Study No.
2017-ASO-551-OE

Issued Date: 02/16/2017

Ali Kuzehkanani
East Kentucky Network, LLC
8300 Greensboro Drive, Suite 1200
Tysons, VA 22102

**** 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 - Top Mount Jeptha (Dingus) Tower
Location:	Dingus, KY
Latitude:	37-55-51.10N NAD 83
Longitude:	83-06-02.18W
Heights:	1185 feet site elevation (SE)
	310 feet above ground level (AGL)
	1495 feet above mean sea level (AMSL)

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

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 L Change 1, Obstruction Marking and Lighting, 24-hr med-strobes - Chapters 4,6(MIWOL),&12.

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

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

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

This determination expires on 08/16/2018 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 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 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.

opy 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. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2017-ASO-551-OE.

Signature Control No: 314708447-322416727 (DNE)
Angelique Eersteling
Technician

Attachment(s)
Frequency Data

cc: FCC

Frequency Data for ASN 2017-ASO-551-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
698	806	MHz	1000	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
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
1850	1910	MHz	1640	W
1930	1990	MHz	1640	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W

KENTUCKY AIRPORT ZONING COMMISSION

MATTHEW BEVIN
Governor

200 Mero Street 4th Floor
Frankfort, KY 40622
www.transportation.ky.gov
502-782-4044

February 21, 2017

APPROVAL OF APPLICATION

APPLICANT:
East Kentucky Network, LLC.
East Kentucky Network, LLC.
8300 Greensboro Drive|Suite 1200
McLean, VA 22102

SUBJECT: AS-088-913-2017-003

STRUCTURE:	Antenna
LOCATION:	Dingus, KY
COORDINATES:	37° 55' 51.10" N / 83° 6' 2.18" W
HEIGHT:	310' AGL/1495'AMSL

The Kentucky Airport Zoning Commission has approved your application for a permit to construct 310'AGL/ 1495'AMSL Antenna near Dingus, KY 37° 55' 51.10" N / 83° 6' 2.18" W.

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

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

Medium Intensity White Obstruction Lighting (MIWOL) is required in accordance with 602 KAR 50:100.

John Houlihan
Administrator

MATTHEW BEVIN
Governor

KENTUCKY AIRPORT ZONING COMMISSION
200 Mero Street 4th Floor
Frankfort, KY 40622
www.transportation.ky.gov
502-782-4044

CONSTRUCTION/ALTERATION STATUS REPORT

February 21, 2017

AERONAUTICIAL STUDY NUMBER: AS-088-913-2017-003

East Kentucky Network, LLC.
East Kentucky Network, LLC.
8300 Greensboro Drive Suite 1200
McLean, VA 22102

This concerns the permit which was issued to you by the Kentucky Airport Zoning Commission on February 21, 2017. This permit is valid for a period of 18 Month(s) from its date of issuance. If construction is not completed within the said 18-Month period, this permit shall lapse and be void, and no work shall be performed without the issuance of a new permit. When appropriate, please indicate the status of the project in the place below and return this letter to John Houlihan, Administrator, Kentucky Airport Zoning Commission, 200 Mero Street 4th Floor Office of Audits, Frankfort, KY, 40622. 502-782-4044.

STRUCTURE:	Antenna
LOCATION:	Dingus, KY
COORDINATES:	37° 55' 51.10" N / 83° 6' 2.18" W
HEIGHT:	310' AGL /1495'AMSL

CONSTRUCTION/ALTERATION STATUS

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

2. Construction status is as follows:
   Structure reached its greatest height of _____ ft. AGL
   _____ ft. AMSL on _____ (date).

   Date construction was completed. _____

   Type of obstruction marking/painting. _____

   Type of obstruction lighting. _____

   As built coordinates. _____

   Miscellaneous Information. _____

   DATE _____

   SIGNATURE/TITLE _____

KENTUCKY TRANSPORTATION CABINET

KENTUCKY AIRPORT ZONING COMMISSION

TC 56-50
Rev. 07/2010

APPLICATION FOR PERMIT TO CONSTRUCT OR ALTER A STRUCTURE

APPLICANT (*name*) East Kentucky Network, LLC c/o LNGS	**PHONE** 703-584-8667	**FAX** 703-584-8692	**KY AERONAUTICAL STUDY #** 207-003	
ADDRESS (*street*) 8300 Greensboro Dr, #1200	**CITY** McLean		**STATE** VA	**ZIP** 22102
APPLICANT'S REPRESENTATIVE (*name*) Ali Kuzehkanani	**PHONE** 703-584-8667	**FAX** 703-584-8692		
ADDRESS (*street*) 8300 Greensboro Dr, #1200	**CITY** Tysons		**STATE** VA	**ZIP** 22102
APPLICATION FOR ☒ New Construction ☐ Alteration ☐ Existing **DURATION** ☐ Permanent ☐ Temporary (*months* *days*)			**WORK SCHEDULE** Start 02/25/17 End 03/01/17	
TYPE ☐ Crane ☐ Building ☒ Antenna Tower ☐ Power Line ☐ Water Tank ☐ Landfill ☐ Other	**MARKING/PAINTING/LIGHTING PREFERRED** ☐ Red Lights & Paint ☒ White- medium intensity ☐ White- high intensity ☐ Dual- red & medium intensity white ☐ Dual- red & high intensity white ☐ Other			
LATITUDE 37°55'51.10"	**LONGITUDE** 83°06'02.18"		**DATUM** ☒ NAD83 ☐ NAD27 ☐ Other	
NEAREST KENTUCKY City Dingus County Morgan	**NEAREST KENTUCKY PUBLIC USE OR MILITARY AIRPORT** West Liberty Airport			
SITE ELEVATION (AMSL, *feet*) 1185	**TOTAL STRUCTURE HEIGHT** (AGL, *feet*) 310		**CURRENT** (*FAA aeronautical study #*)	
OVERALL HEIGHT (*site elevation plus total structure height, feet*) 1495			**PREVIOUS** (*FAA aeronautical study #*)	
DISTANCE (*from nearest Kentucky public use or Military airport to structure*) 8.3 mi			**PREVIOUS** (*KY aeronautical study #*)	
DIRECTION (*from nearest Kentucky public use or Military airport to structure*) East				

DESCRIPTION OF LOCATION (*Attach USGS 7.5 minute quadrangle map or an airport layout drawing with the precise site marked and any certified survey.*)
Jeptha, approx. 1.5 miles N of Dingus (Morgan), KY

DESCRIPTION OF PROPOSAL
A new 300' tower with top-mounted antennas (overall height of 310' AGL)

FAA Form 7460-1 (*Has the "Notice of Construction or Alteration" been filed with the Federal Aviation Administration?*)
☐ No ☒ Yes, when? 01/11/17

CERTIFICATION (*I hereby certify that all the above entries, made by me, are true, complete, and correct to the best of my knowledge and belief.*)
PENALITIES (*Persons failing to comply with KRS 183.861 to 183.990 and 602 KAR 050 are liable for fines and/or imprisonment as set forth in KRS 183.990(3). Noncompliance with FAA regulations may result in further penalties.*)

NAME	**TITLE**	**SIGNATURE**	**DATE**
Ali Kuzehkanani	Dir of Engineering	Ali Kuzehkanani	01/11/17

COMMISSION ACTION

☐ Chairperson, KAZC
☒ Administrator, KAZC

☒ Approved
☐ Disapproved

SIGNATURE

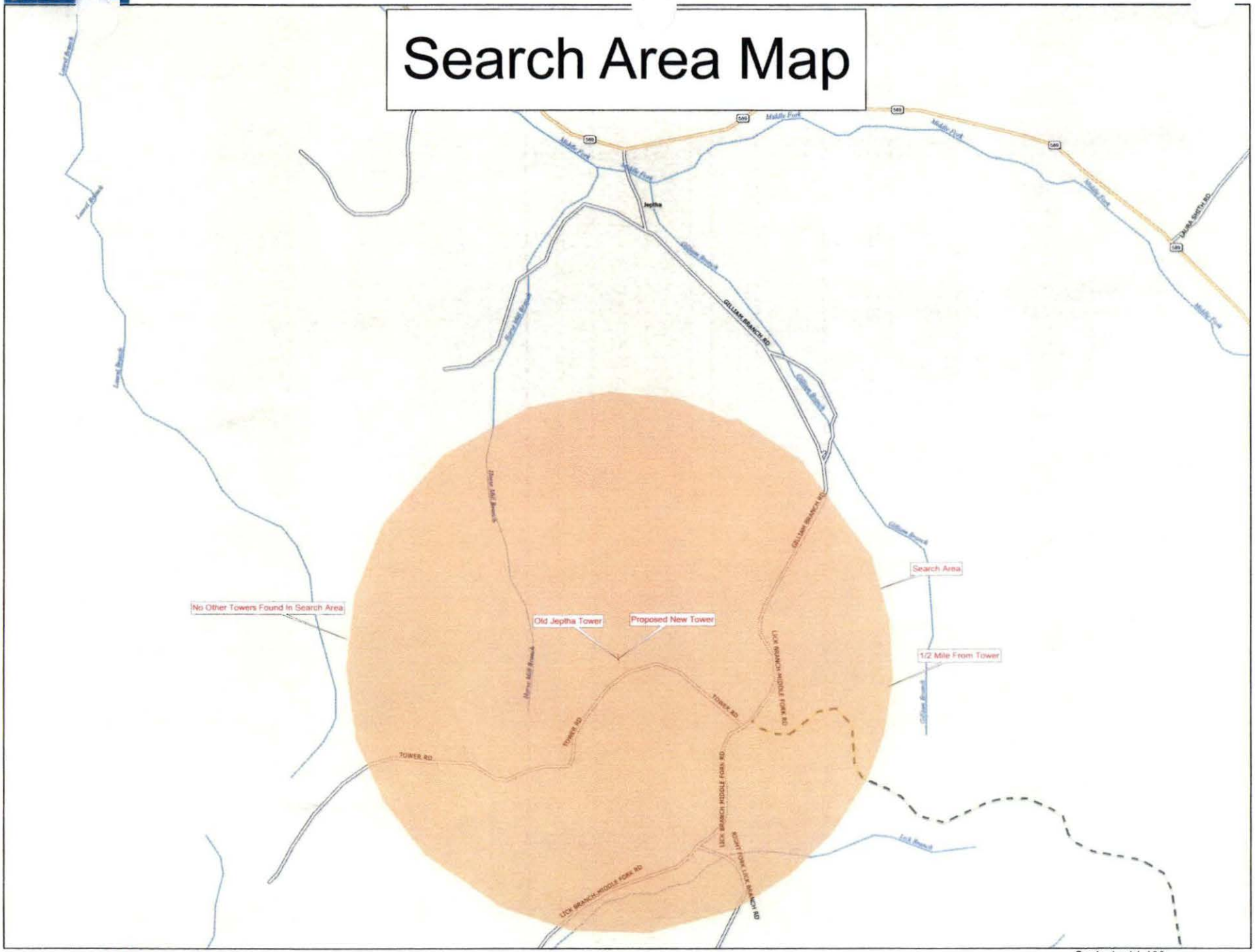
DATE 2-21-17

Driving Directions for Jeptha

Starting in front of the Morgan County Courthouse, on the corner of Court Street and Main Street, go .1 mile, turn right on Prestonsburg Street (Rt. 460 East), then go .9 miles and turn left on HWY 172 East. Then go 9.2 miles and turn right on Highway 589, go 2.4 miles, turn right on Gilliam Branch, go 1.1 miles. Tower sight access road will be on your right (signs will be posted here). Go .2 mile, and the tower site will be on your right. Signs will be posted here.

Prepared By:
Daryl Bartley
Cell Site Compliance Agent
East Kentucky Network, LLC
dba Appalachian Wireless
606-791-0310
dbartley@ekn.com

Search Area Map



TN
MN (6.7°W)

Scale 1 : 14,400
0 400 800 1200 1600 2000 ft
0 120 240 360 480 600 m
1" = 1,200.0 ft Data Zoom 14-6

17 w
20 a
37 w pd

LODGED FOR RECORD
MORGAN COUNTY CLERK

OCT 13 2016

TIME: 1:40 PM
RANDY WILLIAMS CLERK

DEED

EKN – East Ky

THIS DEED is entered into and effective as of the 30 day of September, 2016, by and between **MOUNTAIN RURAL TELEPHONE COOPERATIVE CORPORATION, INC.**, a Kentucky corporation ("**Grantor**"), with a mailing address of P.O. Box 399, West Liberty, Kentucky 41472, and **EAST KENTUCKY NETWORK, LLC D/B/A APPALACHIAN WIRELESS**, a Kentucky limited liability company ("**Grantee**"), with a mailing address of 101 Technology Trail, Ivel, Kentucky 41642, which is the "in care of" address to which the property tax bill for 2016 may be sent.

W I T N E S S E T H

For and in consideration of the sum of Twenty Thousand Dollars ($20,000.00), cash in hand paid, the receipt and sufficiency of which are hereby acknowledged, Grantor does hereby grant, sell, and convey to the Grantee, its successors and assigns, that certain real property situated in or near Jeptha, Morgan County, Kentucky, and more particularly described as follows, to wit:

> BEGINNING at an iron pin in the property of Anthony Beculhimer, said point being south 60.5° west, 101.75 feet from the property corner between Smith Heirs and Anthony Beculhimer; thence north 40° west, 60 feet to an iron pin; thence south 50° west, 60 feet to an iron pin; thence south 40° east, 60 feet to an iron pin; thence north 50° east, 60 feet to the point of beginning. See Exhibit A attached to the Deed of record in Deed Book 126, Page 729, for a more definite description of said property.
>
> This conveyance also includes each and every other easement, right-of-way, right, privilege, and other matter conveyed to Grantor in the Deed of record in Deed Book 126, Page 729, including but not limited to an easement for the placement of guy lines or wires outside of the boundary of the property herein conveyed; the right to enter onto the adjacent property that formerly belonged to the prior grantor to locate, set, and anchor said guy lines and wires and to repair, maintain, and/or replace the same; the right to ingress and egress to and from the property; and the full right and privilege to

construct in, on and over or under any of the premises formerly owned by the prior grantor adjacent to the tract of proper herein conveyed, any structures, lines, or pertinences necessary for the proper maintenance and operation of the facility and to include any underground line or lines for the proper and suitable operation of the tower.

Being all of the same property, rights, and interests conveyed to Grantor from Anthony Beculhimer and Sarah Beculhimer by Deed dated April 30, 1979, and recorded on May 12, 1979, in the Morgan County Clerk's Office in Deed Book 126, Page 729.

TO HAVE AND TO HOLD the same with all appurtenances thereunto belonging unto the Grantee, its successors and assigns forever, with covenant of General Warranty.

We the undersigned, do hereby certify, pursuant to KRS Chapter 382, that the above-stated consideration in the amount of $20,000.00, is the true, correct and full consideration paid for the property herein conveyed. We further certify our understanding that falsification of the stated consideration or sale price of the property as a Class D felony, subject to one to five years imprisonment, and fines up to $10,000.00.

IN TESTIMONY WHEREOF, the parties have hereunto subscribed their names as of the date set forth herein.

GRANTOR:

MOUNTAIN RURAL TELEPHONE COOPERATIVE CORPORATION, INC.

Jimmie Jones

By: Jimmie Jones

Its: President

COMMONWEALTH OF KENTUCKY
COUNTY OF Floyd:

I, Lynn Haney, a Notary Public in and for the County and State aforesaid, do hereby certify that the foregoing Deed and Consideration Certificate was this day produced, acknowledged, subscribed, and sworn to before me in the County and State aforesaid and signed by Jimmie Jones, in his/her capacity as the President of Mountain Rural Telephone Cooperative Corporation, Inc. Grantor, this 30 day of September, 2016.

Lynn Haney
Notary Public

LYNN HANEY Notary ID # 540329 NOTARY PUBLIC EXP. 08/19/2019 STATE AT LARGE, KENTUCKY

My Commission Expires: August 19, 2019

GRANTEE:

EAST KENTUCKY NETWORK, LLC D/B/A APPALACHIAN WIRELESS

W.A. Gillum
By: W A Gillum
Its: CEO/General Manager

COMMONWEALTH OF KENTUCKY
COUNTY OF Floyd:

I, Lynn Haney, a Notary Public in and for the County and State aforesaid, do hereby certify that the foregoing Consideration Certificate was this day produced, acknowledged, subscribed, and sworn to before me in the County and State aforesaid and signed by W. A. Gillum, in his capacity as the CEO/General Manager of East Kentucky Network, LLC d/b/a Appalachian Wireless, Grantee, this 30 day of September, 2016.

Lynn Haney
Notary Public

LYNN HANEY Notary ID # 540329 NOTARY PUBLIC EXP. 08/19/2019 STATE AT LARGE, KENTUCKY

My Commission Expires: August 19, 2019

This is to certify that this instrument was prepared by:

Cindy D. McCarty
Cindy D. McCarty, Attorney
101 Technology Trail
Ivel, Kentucky 41642
606-339-1006

STATE OF KENTUCKY
COUNTY OF MORGAN

I, Randy Williams, Clerk Morgan County for the county and state aforesaid do hereby certify that the foregoing DEED was on the 13th day of Oct, 2016 lodged for record, whereupon the foregoing and this certificate have been duly recorded in my office. Given under my hand this the 13th day of OCT 2016

Randy Williams, Clerk

3 BY: D.C.

Deed Book 234 page 397

LODGED FOR RECORD
MORGAN COUNTY CLERK

JAN 05 2017

TIME: 2:45PM
RANDY WILLIAMS CLERK

$20-
10-
$30-
PD

DEED

THIS DEED OF CONVEYANCE is made and entered into this 21st day of December, 2016, by and between **HG LAND, LLC**, a Kentucky limited liability company, whose address is 8413 Meade Springer Road, Ashland, Kentucky 41102 (hereinafter referred to as "**Grantor**"), and **EAST KENTUCKY NETWORK, LLC D/B/A APPALACHIAN WIRELESS**, a Kentucky limited liability company (hereinafter referred to as "**Grantee**"), whose address is 101 Technology Trail, Ivel, Kentucky 41642, which is also the "in care of" address to which the property tax bill for 2017 should be sent.

W I T N E S S E T H

That for and in consideration of the sum of Ten Thousand and 00/100 Dollars ($10,000.00), cash in hand paid, the receipt and sufficiency of which are hereby acknowledged, Grantor does hereby GRANT, SELL, and CONVEY to the Grantee, its successors and assigns, that certain real property on the waters of Middle Fork of Elk Fork in Morgan County, Kentucky, which is more particularly described in the Lot Description **attached** hereto and made a part herein as **Exhibit A** and depicted on the plat **attached** hereto and made a part herein as **Exhibit B**, prepared by J.W. Caudill, Licensed Professional Land Surveyor (hereinafter referred to as the "Property").

Being a portion of the same property conveyed to Grantor by Rifle Coal Company, LLC, by Deed dated February 11, 2011, and recorded in the Morgan County Clerk's Office in Deed Book 220, Page 77.

TO HAVE AND TO HOLD the same with all appurtenances and privileges thereunto belonging unto the Grantee, its successors and assigns forever, with covenant of GENERAL WARRANTY.

CONSIDERATION CERTIFICATE

The parties to this deed certify that the consideration reflected in this deed is the full consideration paid for the property and understand that falsification of the stated consideration is a class D felony, subject to one to five years imprisonment and fines up to $10,000.00.

IN TESTIMONY WHEREOF, the parties have hereunto subscribed their names as of the date set forth herein.

GRANTOR:
HG LAND, LLC

Marla Glancy
By: Marla Glancy
Its: Authorized Member

STATE OF Ohio.
COUNTY OF Washington.

I, Anita Tabler, a Notary Public in and for the County and State aforesaid, do hereby certify that the foregoing Deed and Consideration Certificate was this day produced, acknowledged, subscribed, and sworn to before me in the County and State aforesaid and signed by Marla Glancy, in his/her capacity as the authorized Member of HG Land, LLC, Grantor, this 21 day of December, 2016.

Anita Tabler
Notary Public

My Commission Expires: 1-27-2021

NOTARIAL SEAL
STATE OF OHIO

ANITA TABLER
Notary Public, State of Ohio
My Commission Expires
01-27-2021

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

GRANTEE:
EAST KENTUCKY NETWORK, LLC D/B/A APPALACHIAN WIRELESS

W A Gillum

By: W.A. Gillum
Its: CEO/General Manager

COMMONWEALTH OF KENTUCKY
COUNTY OF Floyd:

I, Raina Helton, a Notary Public in and for the County and State aforesaid, do hereby certify that the foregoing Consideration Certificate was this day produced, acknowledged, subscribed, and sworn to before me in the County and State aforesaid and signed by W.A. Gillum, in his capacity as the CEO/General Manager of East Kentucky Network, LLC d/b/a Appalachian Wireless, Grantee, this 13th day of December 2016.

Raina L. Helton
Notary Public

RAINA L. HELTON
NOTARY PUBLIC
ID NO. 549406
MY COMMISSION EXPIRES
2/6/2020
STATE AT LARGE, KY.

My Commission Expires: Feb 6, 2020

This is to certify that this instrument was prepared by:

Cindy D. McCarty

Cindy D. McCarty, Attorney
101 Technology Trail
Ivel, Kentucky 41642
606-339-1009

EXHIBIT tabbies A

LOT DESCRIPTION
Property of
HG Land, LLC
198 S. Carol Malone Boulevard
Grayson, KY 41143
Gilliam Branch Road in Morgan County
October 24, 2016

A certain tract of land being located in the Commonwealth of Kentucky, County of Morgan, and on the waters of Middle Fork of Elk Fork. Being a portion of the same property conveyed to HG Land, LLC from Rifle Coal Company, LLC, by deed dated February 11, 2011 and of record in Deed Book 220, page 77, in the Office of the Morgan County Clerk.

Lot 1A

Beginning at a set iron pin with cap marked LS2259 at the edge of the county road and having NAD83 State Plane KY Single Zone coordinates N:3873222.06 E:5685182.25; thence leaving the road and severing the property of HG Land, LLC North 38 deg 17 min 24 sec West, a distance of 216.86 feet to a set iron pin with cap marked LS2259 in a pine thicket; thence North 51 deg 40 min 03 sec East, a distance of 217.32 feet to a set iron pin with cap marked LS2259 in a group of small trees; thence running back towards the county road South 38 deg 14 min 28 sec East, a distance of 217.22 feet to a set iron pin with cap marked LS2259 at the edge of the county road; thence running with the county road South 51 deg 45 min 46 sec West, a distance of 217.14 feet to the point of the beginning. Containing a calculated area of 47146.7 square feet or 1.083 acres.

Unless stated otherwise, any monument referred to herein as "set iron pin with cap" is a set ½" diameter rebar, at least eighteen (18") in length, with a plastic cap stamped "LS-2259". All bearings stated herein are referred to NAD83, KY single zone of the Kentucky state plane system.

This survey was performed on October 24, 2016 by James W. Caudill, a Kentucky Licensed Professional Land Surveyor No. 2259.

James W. Caudill
James W. Caudill, PLS #2259
10-24-16

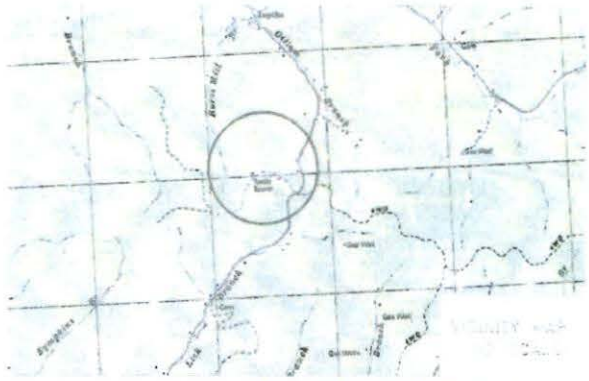
STATE OF KENTUCKY
COUNTY OF MORGAN

I, Randy Williams, Clerk Morgan County for the county and state aforesaid do hereby certify that the foregoing deed was on the 5 day of Jan. 2017 lodged for record, whereupon the foregoing and this certificate have been duly recorded in my office. Given under my hand this the 7 day of Jan 2017.

Randy Williams, Clerk
BY: Jennifer Whitaker D.C.

DB 234 page 927

Beginning at a set iron pin with cap marked LS2259 at the edge of the county road and having NAD83 State Plane Ky Single Zone Coordinates N:3873222.06 E:5685182.25;
thence N 38°17'24" W, 216.86' to a set iron pin with cap in a pine thicket;
thence N 51°40'03" E, 217.32' to a set iron pin with cap in a group of small trees;
thence S 38°14'28" E, 217.22' to a set iron pin with cap at the edge of the county road;
thence S 51°45'46" W, 217.14' to a set iron pin with cap at the edge of the county road, which is the point of the beginning.
Having an area of 47146.7 square feet, or 1.083 acres.



APPALACHIAN WIRELESS
101 TECHNOLOGY TRAIL
IVEL, KY 41642
EXISTING TOWER SITE
JEPTHA TOWER
NEAR GILLAM BRANCH IN MORGAN COUNTY

SET IRON PIN WITH CAP
MARKED LS2259 IN SMALL TREES

HG LAND, LLC
198 S. CAROL MALONE BLVD.
GRAYSON, KY 41143
DEED BOOK: 220 PAGE: 77

WADE CANTRELL
3394 KELLACY ROAD
WEST LIBERTY, KY 41472
DEED BOOK: 223 PAGE: 717

LOT 1A AREA
47146.7 Sq. Feet
(1.083 Acres)

SET IRON PIN WITH
CAP MARKED LS2259
IN PINE THICKET

SET IRON PIN WITH CAP MARKED
LS 2259 AT EDGE OF COUNTY ROAD

EXISTING TOWER
LAT:37°55'50.8058"
LON:83°06'02.2710"

APPROX LOCATION OF
EXISTING TOWER LOT
EAST KENTUCKY NETWORK LLC
DEED BOOK:234 PAGE:387
3600.0 Sq. Feet
(.083 Acres)

BEGIN - SET IRON PIN WITH CAP MARKED
LS 2259 AT EDGE OF COUNTY ROAD

N:3873222.06
E:5685182.25

HG LAND, LLC
198 S. CAROL MALONE BLVD.
GRAYSON, KY 41143
DEED BOOK: 220 PAGE: 77

NAD83 KY SINGLE ZONE

0' 50' 100' 150'

PLAT OF SURVEY

DRAWN	DATE	SUBDIVISION OF THE PROPERTY OF HG LAND, LLC. 198 S. CAROL MALONE BLVD. GRAYSON, KY 41143 DEED BOOK: 220 PAGE: 77
JWC	10/24/2016	
APPROVED	DATE 10/24/2016	
SCALE 1" = 50'	SHEET 1 OF 1	

SURVEYED BY JAMES W. CAUDILL LS2259
2999 PERKINS/MADDEN ROAD
AMBURGEY, KY 41773
PHONE: 606-642-3217

James W. Caudill 2259 10-24-16

APPALACHIAN WIRELESS

101 TECHNOLOGY TRAIL
IVEL, KY. 41642
PROPOSED TOWER SITE
NEAR JEPTHA IN MORGAN COUNTY

EAST KY NETWORK LLC

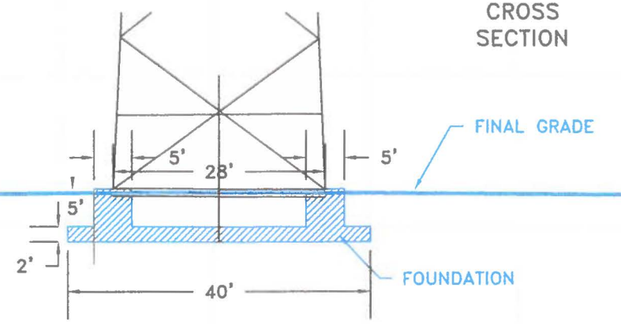
LINE TABLE		
LINE	BEARING	DISTANCE
LINE1	N 16°01'39" E	151.29
LINE2	N 23°23'03" E	185.04
LINE3	N 25°53'40" E	156.25
LINE4	N 30°12'09" E	131.60
LINE5	N 35°18'44" E	169.32
LINE6	S 78°48'15" W	106.37
LINE7	N 86°32'43" W	102.50
LINE8	N 85°06'37" W	129.25
LINE9	N 69°56'44" W	103.38

PROPOSED TOWER
LAT:37°55'51.1001"
LON:83°06'02.1800"
N:3873362.63
E:5685250.49
EL:1185'

PROPOSED RELOCATED POWER LINE
POWER POLE
GUY ANCHOR
POWER LINE
PROPOSED SERVICE POWER
GUY WIRE
CROSS SECTION
PROFILE
PROPOSED TOWER FOUNDATION
PROPANE TANK
EQUIPMENT BOX
EQUIPMENT BUILDING
CHAINLINK FENCE
GENERATOR
EXT POWER POLE
EXT GUY ANCHOR
GUY ANCHOR
GUY WIRE
EXISTING TOWER FOUNDATION
EXISTING TOWER
LAT:37°55'50.8058"
LON:83°06'02.2710"
N:3873332.67
E:5685244.06
EL:1184.30–1320.30
N:3873356.45
E:5685352.81
N 38°17'24" W
216.86'
POWER LINE
GUY ANCHOR
GUY WIRE
COUNTY ROAD
HG LAND LLC
220–77
HG LAND LLC
220–77
N:3873222.06
E:5685182.25

1200
1180
1160
0+40
0+60
0+80
1+00
1+20
1+40
1+60

CROSS SECTION



PRELIMINARY DESIGN
NOTE: FOUNDATION AND TOWER DIMENSIONS ARE ESTIMATED FOR PLANNING PURPOSES. DRAWING WILL BE REVISED WHEN DESIGNS ARE FINALIZED.

SURVEY STA SET FOUND
IRON PIN WITH CAP (18" X .5" REBAR PLASTIC CAP MARKED LS2259)
BOUNDARY LINE
ACCESS ROAD
CHAINLINK FENCE

NAD83 KY SINGLE ZONE

N

0' 20' 40' 60'

-THE PROPOSED TOWER HAS BEEN LOCATED USING DUAL FREQUENCY GPS UNIT PROCESSED BY "OPUS"
-STATE PLANE COORDINATES NAD 83 KY SINGLE ZONE N:3873362.63 E:5685250.49 EL:1185' EXISTING GR PLAN– FOUNDATION EL1185.0'–TOP TOWER EL 1485.0'
-PRECISION: HORIZONTAL=0.30' VERTICAL=0.50'
-THIS SURVEY MEETS OBSTACLE ACCURACY CODE 2C.
-PROPERTY LINE INFORMATION TAKEN FROM DEEDS AND VERIFIED IN THE FIELD.

STATE OF KENTUCKY
JAMES W. CAUDILL
12305
LICENSED PROFESSIONAL ENGINEER

I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECTION.

James W. Caudill 12305 12-27-16
JAMES W. CAUDILL PE# DATE

PROPOSED SITE PLAN AND STRUCTURE LOCATION
SITE PLAN DETAIL

DRAWN *JWC*	DATE *12/27/16*	*JEPTHA TOWER SITE OFF GILLAM BRANCH ROAD EAST KY NETWORK PROPERTY NEAR JEPTHA IN MORGAN CO. KY*
APPROVED	DATE	
SCALE *1" = 20'*	SHEET *1 OF1*	PROJECT NO. *JEPTHA/JEPTHA2C20*

APPALACHIAN WIRELESS

101 TECHNOLOGY TRAIL

IVEL, KY. 41642

EXISTING TOWER SITE

NEAR JEPTHA IN MORGAN COUNTY

PROPOSED NEW TOWER SITE
LAT:37°55'51.1001"
LON:83°06'02.1800"
N:3873362.63
E:5685250.49
EL:1185.0'

AFFECTED AREA BOUNDARY

WADE CANTRELL
3394 KELLACY ROAD
WEST LIBERTY, KY 41472
MAP:171 PARCEL:10
DEED BOOK:223 PAGE:717

HG LAND LLC
8413 MEADE SPRINGER ROAD
ASHLAND, KY 41102
MAP:171 PARCEL:4
DEED BOOK:220 PAGE:77

APPALACHIAN WIRELESS
EAST KENTUCKY NETWORK LLC
101 TECHNOLOGY TRAIL
IVEL, KY. 41642
MAP:171 PARCEL:14
DEED BOOK:126 PAGE:729

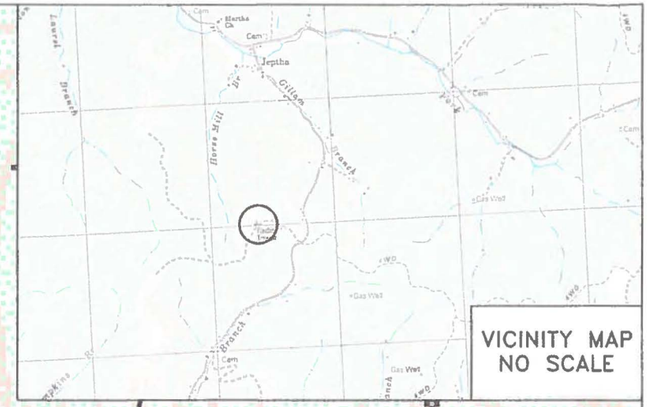
EQUIPMENT BUILDING

POWER LINE

EXISTING TOWER

Radio Tower

RUBY M. CANTRELL
1553 HIGHWAY 589
WEST LIBERTY, KY 41472
MAP:171 PARCEL:12
DEED BOOK:224 PAGE:875



HG LAND LLC
8413 MEADE SPRINGER ROAD
ASHLAND, KY 41102
MAP:171 PARCEL:4
DEED BOOK:220 PAGE:77

HG LAND LLC
8413 MEADE SPRINGER ROAD
ASHLAND, KY 41102
MAP:171 PARCEL:4
DEED BOOK:220 PAGE:77

JOHN ED HOWARD
1444 LICK BRANCH ROAD
WEST LIBERTY, KY 41472
MAP:171 PARCEL:11
DEED BOOK:133 PAGE:93

RUSSELL DEAN BOLIN
AND TERESA BERGMAN
12605 FINGERBOARD ROAD
MONROVIA, MA 21770
MAP:172 PARCEL:1

0' 200' 400' 600'

STATE OF KENTUCKY
J. W. CAUDILL
12305
LICENSED PROFESSIONAL ENGINEER

J W CAUDILL ENGINEERING

9283 HWY 15 STE. C, ISOM, KY 41824

ENGINEER'S CERTIFICATE: I HEREBY CERTIFY THAT THE INFORMATION SHOWN REFLECTS THE INFORMATION OBTAINED AND PROVIDED BY THE MORGAN COUNTY PROPERTY VALUATION ADMINISTRATION OFFICE IN WEST LIBERTY, KY.

James W. Caudill PE# 12305 12-27-16

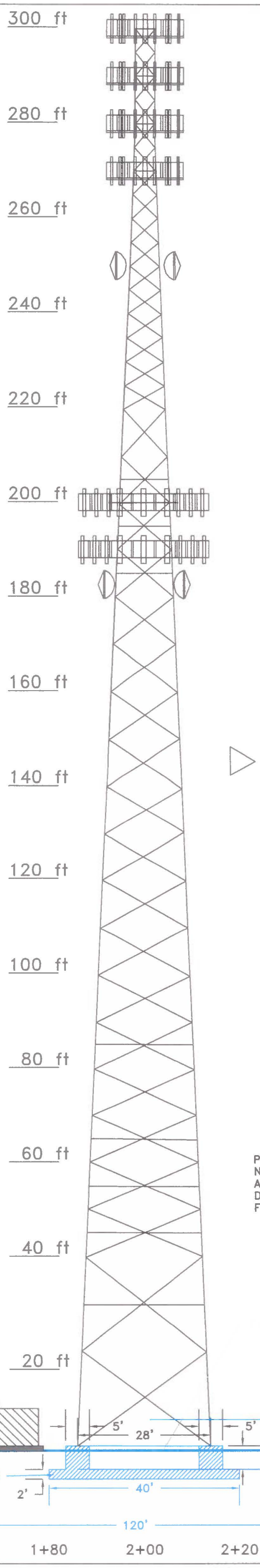
JAMES W. CAUDILL

LEGEND

- POWER LINE
- PROPERTY LINE
- ACCESS ROAD
- CREEK
- CEMETERY
- TOWER

DATE

PROPOSED SITE PLAN AND STRUCTURE LOCATION STRUCTURES AND LAND OWNERS WITHIN 500'		
DRAWN JWC	DATE 12/27/16	JEPTHA TOWER SITE OFF GILLAM BRANCH ROAD EAST KY NETWORK PROPERTY NEAR JEPTHA IN MORGAN COUNTY, KY
APPROVED JWC	DATE 12/27/16	
SCALE 1" = 200'	SHEET 1 OF 3	PROJECT NO. JEPTHA/JEP200PVA



APPALACHIAN WIRELESS

101 TECHNOLOGY TRAIL
IVEL, KY. 41642
PROPOSED TOWER SITE
JEPTHA IN MORGAN COUNTY

PROFILE WITH TOWER

THIS IS A VERTICAL PROFILE SKETCH OF THE TOWER INDICATING THE PROPOSED ANTENNA AND DISH ELEVATIONS. NO DESIGN CRITERIA WAS CONSIDERED IN THE PREPARATION OF THIS DRAWING.

James W. Caudill 12305 12-27-16
JAMES W. CAUDILL PE #. DATE

NOTE: SEE FOUNDATION DRAWINGS FOR DETAILS

PRELIMINARY DESIGN
NOTE: FOUNDATION AND TOWER DIMENSIONS ARE ESTIMATED FOR PLANNING PURPOSES. DRAWING WILL BE REVISED WHEN DESIGNS ARE FINALIZED.

12/27/2016

SCALE 1" = 20'

0' 20' 40' 60'

PROPOSED SITE PLAN AND STRUCTURE LOCATION DETAIL SITE PLAN PROFILE		
DRAWN JWC	DATE 12/27/2016	JEPTHA TOWER SITE EAST KY NETWORK PROPERTY NEAR JEPTHA IN MORGAN COUNTY
APPROVED	DATE	
SCALE 1" = 20'	SHEET 3 OF 3	PROJECT NO. JEPTHA/JEPPRO2C20