

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

**RECEIVED**

**AUG 13 2015**

**PUBLIC SERVICE  
COMMISSION**

In the Matter of:

THE APPLICATION OF )  
PI TELECOM INFRASTRUCTURE V, LLC )  
AND CELLCO PARTNERSHIP )  
d/b/a VERIZON WIRELESS )  
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC ) CASE NO.: 2015-00273  
CONVENIENCE AND NECESSITY TO CONSTRUCT )  
A WIRELESS COMMUNICATIONS FACILITY )  
IN THE COMMONWEALTH OF KENTUCKY )  
IN THE COUNTY OF CARTER )

SITE NAME: CARTER HOLLOW

\*\*\*\*\*

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

PI Telecom Infrastructure V, LLC, and Cellco Partnership d/b/a Verizon Wireless (“Applicants”), by counsel, pursuant to (i) KRS §§ 278.020, 278.040, 278.650, 278.665, and other statutory authority, and the rules and regulations applicable thereto, and (ii) the Telecommunications Act of 1996, respectfully submit this Application requesting issuance of a Certificate of Public Convenience and Necessity (“CPCN”) from the Kentucky Public Service Commission (“PSC”) to construct, maintain, and operate a Wireless Communications Facility (“WCF”) to serve the customers of Verizon Wireless with wireless communications services.

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

1. The complete name and address of the Applicants: PI Telecom Infrastructure V, LLC, having a mailing address of 4601 Touchton Road East, Building 300, Suite 3200, Jacksonville, FL 32246; and Cellco Partnership, d/b/a Verizon Wireless having a mailing address of 2441 Holloway Road, Louisville, KY 40299.

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

3. The Certificate of Authority filed with the Kentucky Secretary of State for PI Telecom Infrastructure V, LLC is attached as a part of **Exhibit A**. This entity is in good standing in the state in which it is organized and is authorized to transact business in Kentucky.

4. Verizon Wireless is a general partnership. The Certificate of Authority filed with the Kentucky Secretary of State for this Verizon Wireless entity is attached as a part of **Exhibit A**. Verizon Wireless is in good standing in the state in which it is organized and is authorized to transact business in Kentucky.

5. Verizon Wireless operates on frequencies licensed by the Federal Communications Commission ("FCC") pursuant to applicable FCC requirements. A copy of Verizon Wireless' FCC license to provide wireless services is attached to this Application or described as part of **Exhibit A**, and the facility will be constructed and operated in accordance with applicable FCC regulations. PI Telecom Infrastructure V, LLC will build,

own and manage the tower and tower compound where Verizon Wireless will place its equipment building, antennas, radio electronics equipment and appurtenances.

6. The public convenience and necessity require the construction of the proposed WCF. The construction of the WCF will bring or improve Verizon Wireless' services to an area currently not served or not adequately served by increasing coverage and/or capacity and thereby enhancing the public's access to innovative and competitive wireless communications services. The WCF will provide a necessary link in the Verizon Wireless communications network that is designed to meet the increasing demands for wireless services in Kentucky's wireless communications service area. The WCF is an integral link in Verizon Wireless' network design that must be in place to provide adequate coverage to the service area.

7. To address the above-described service needs, Applicants propose to construct a WCF on Beckwith Branch Road in Grayson, KY (38°20'31.661" North latitude, 82°53'57.736" West longitude), on a parcel of land located entirely within the county referenced in the caption of this application. The property on which the WCF will be located is owned by William R. Hayes II pursuant to a Deed recorded at Deed Book 200, Page 865 in the office of the Carter County Clerk. The proposed WCF will consist of a 250-foot tall tower, with an approximately 5-foot tall lightning arrestor attached at the top, for a total height of 255-feet. The WCF will also include concrete foundations and a shelter or cabinets to accommodate the placement of the Verizon Wireless' radio electronics equipment and appurtenant equipment. The WCF equipment cabinet or shelter will be approved for use in the Commonwealth of Kentucky by the relevant building inspector.

The WCF compound will be fenced and all access gate(s) will be secured. A description of the manner in which the proposed WCF will be constructed is attached as **Exhibit B** and **Exhibit C**.

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

9. The site development plan and a vertical profile sketch of the WCF signed and sealed by a professional engineer registered in Kentucky depicting the tower height, as well as a proposed configuration for the antennas has also been included as part of **Exhibit B**. As shown on this exhibit, the site has been designed to accommodate the co-location of future antennas.

10. Foundation design plans signed and sealed by a professional engineer registered in Kentucky and a description of the standards according to which the tower was designed are included as part of **Exhibit C**.

11. Applicants have considered the likely effects of the installation of the proposed WCF on nearby land uses and values and have concluded that there is no more suitable location reasonably available from which adequate services can be provided, and that there are no reasonably available opportunities to co-locate the necessary antennas on an existing structure. When suitable towers or structures exist, Verizon Wireless attempts to co-locate on existing structures such as communications towers or other structures capable of supporting its facilities; however, no other suitable or available co-location site was found to be located in the vicinity of the site. A report detailing the site selection process for the subject site (including documentation as to why co-location is not

possible for this site) is attached as **Exhibit E**.

12. A copy of the application for a Determination of No Hazard to Air Navigation issued by the Federal Aviation Administration ("FAA") is attached as **Exhibit F**.

13. A copy of the application for Kentucky Airport Zoning Commission ("KAZC") Approval to construct the tower is attached as **Exhibit G**.

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

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

16. Applicants, pursuant to a written agreement, have acquired the right to use the WCF site and associated property rights. A copy of the agreement or an abbreviated agreement recorded with the County Clerk is attached as **Exhibit J**.

17. Personnel directly responsible for the design and construction of the proposed WCF are well qualified and experienced. The tower and foundation drawings for the proposed tower submitted as part of **Exhibit C** bear the signature and stamp of a professional engineer registered in the Commonwealth of Kentucky. All tower designs

meet or exceed the minimum requirements of applicable laws and regulations.

18. The Construction Manager for the proposed facility is Chad Sylvester, and the identity and qualifications of each person directly responsible for design and construction of the proposed tower are contained **Exhibits B & C**.

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

20. **Exhibit B** includes a map drawn to an appropriate scale that shows the location of the proposed tower and identifies every owner of real estate within 500 feet of the proposed tower (according to the records maintained by the County Property Valuation Administrator). Every structure and every easement within 500 feet of the proposed tower or within 200 feet of the access road including intersection with the public street system is illustrated in **Exhibit B**.

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

22. Applicants have notified the applicable County Judge/Executive by certified mail, return receipt requested, of the proposed construction. This notice included the PSC

docket number under which the application will be processed and informed the County Judge/Executive of his/her right to request intervention. A copy of this notice is attached as **Exhibit M**.

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

24. The general area where the proposed facility is to be located is rural with sparse residential uses.

25. The process that was used by the Verizon Wireless radio frequency engineers in selecting the site for the proposed WCF was consistent with the general process used for selecting all other existing and proposed WCF facilities within the proposed network design area. Verizon Wireless' radio frequency engineers have conducted studies and tests in order to develop a highly efficient network that is designed to handle voice and data traffic in the service area. The engineers determined an optimum area for the placement of the proposed facility in terms of elevation and location to provide the best quality service to customers in the service area. A radio frequency design search area prepared in reference to these radio frequency studies was considered when searching for sites for antennas that would provide the coverage deemed necessary by

Verizon Wireless. A map of the area in which the tower is proposed to be located which is drawn to scale and clearly depicts the necessary search area within which the site should be located pursuant to radio frequency requirements is attached as **Exhibit O**.

26. The tower must be located at the proposed location and proposed height to provide necessary service to wireless communications users in the subject area. A report prepared by a radio frequency engineer that describes the need for the proposed facility is attached as **Exhibit P**.

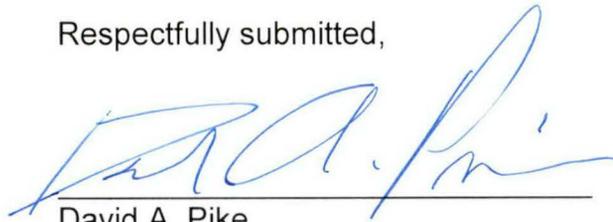
27. All Exhibits to this Application are hereby incorporated by reference as if fully set out as part of the Application.

28. All responses and requests associated with this Application may be directed to:

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

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

Respectfully submitted,



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

## LIST OF EXHIBITS

- A - FCC License Documentation and Corporate Documents
- B - Site Development Plan:
  - 500' Vicinity Map
  - Legal Descriptions
  - Flood Plain Certification
  - Site Plan
  - Vertical Tower Profile
- C - Tower and Foundation Design
- D - Competing Utilities, Corporations, or Persons List
- E - Co-location Report
- F - FAA
- G - Kentucky Airport Zoning Commission
- H - Geotechnical Report
- I - Directions to WCF Site
- J - Copy of Real Estate Agreement
- K - Notification Listing
- L - Copy of Property Owner Notification
- M - Copy of County Judge/Executive Notice
- N - Copy of Posted Notices
- O - Copy of Radio Frequency Design Search Area
- P - Radio Frequency Report

**EXHIBIT A  
FCC LICENSE DOCUMENTATION  
AND CORPORATE DOCUMENTS**

0926695.06

amcray  
ADD

Alison Lundergan Grimes  
Kentucky Secretary of State  
Received and Filed:  
7/8/2015 10:09 AM  
Fee Receipt: \$90.00



COMMONWEALTH OF KENTUCKY  
ALISON LUNDERGAN GRIMES, SECRETARY OF STATE

Division of Business Filings  
Business Filings  
PO Box 718  
Frankfort, KY 40602  
(502) 564-3490  
www.sos.ky.gov

Certificate of Authority  
(Foreign Business Entity)

FBE

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

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

2. The name of the entity is PI TELECOM INFRASTRUCTURE V, LLC  
(The name must be identical to the name on record with the Secretary of State.)

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

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

5. The date of organization is 7/11/2014 and the period of duration is \_\_\_\_\_  
(If left blank, the period of duration is considered perpetual.)

6. The mailing address of the entity's principal office is  
2855 Le Jeune Rd., 4th Floor Coral Gables FL 33134  
 Street Address City State Zip Code

7. The street address of the entity's registered office in Kentucky is  
421 West Main Street Frankfort KY 40601  
 Street Address (No P.O. Box Numbers) City State Zip Code

and the name of the registered agent at that office is Corporation Service Company d/b/a CSC-Lawyers Incorporating Service Company

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

Name	Street or P.O. Box	City	State	Zip Code
Yannis Macheras (P)	Same as Principal Office			
Kolleen Cobb (VP, S)	Same as Principal Office			
Juan Godoy (VP, T, AS)	Same as Principal Office			

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

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

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

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

By: Kolleen Cobb Kolleen Cobb, Vice President  
Signature of Authorized Representative Printed Name & Title Date

I, Caroline M. Kriz consent to serve as the registered agent on behalf of the business entity.  
Type/Print Name of Registered Agent

Caroline M. Kriz Asst Vice President  
Signature of Registered Agent Printed Name Title Date

(01/12)

6/26/15

COMMONWEALTH OF KENTUCKY  
TREY GRAYSON  
SECRETARY OF STATE



0641227.07 Dornish  
Trey Grayson C226  
Secretary of State  
Received and Filed  
06/21/2006 12:06:08 PM  
Fee Receipt: \$20.00

CERTIFICATE OF ASSUMED NAME

This certifies that the assumed name of  
Verizon Wireless

(Please under which the business will be conducted)

has been adopted by See Addendum

(Real name - KRS 364.015(1))

which is the "real name" of [YOU MUST CHECK ONE]

- |  |   |
|--|---|
| <input type="checkbox"/> a Domestic General Partnership                      | <input checked="" type="checkbox"/> a Foreign General Partnership           |
| <input type="checkbox"/> a Domestic Registered Limited Liability Partnership | <input type="checkbox"/> a Foreign Registered Limited Liability Partnership |
| <input type="checkbox"/> a Domestic Limited Partnership                      | <input type="checkbox"/> a Foreign Limited Partnership                      |
| <input type="checkbox"/> a Domestic Business Trust                           | <input type="checkbox"/> a Foreign Business Trust                           |
| <input type="checkbox"/> a Domestic Corporation                              | <input type="checkbox"/> a Foreign Corporation                              |
| <input type="checkbox"/> a Domestic Limited Liability Company                | <input type="checkbox"/> a Foreign Limited Liability Company                |
| <input type="checkbox"/> a Joint Venture                                     |   |

organized and existing in the state or country of Delaware and whose address is

One Verizon Way Basking Ridge NJ 07920  
Street address, if any City State Zip Code

The certificate of assumed name is executed by

NYNEX PCS Inc.

Jane A. Schapker  
Signature  
Jane A. Schapker-Assistant Secretary

Print or type name and title

June 15, 2006

Date

Signature

Print or type for me and file

Date

**Addendum**

The full name of the Partnership is Cellco Partnership; a Delaware general partnership with its headquarters located One Verizon Way, Basking Ridge NJ 07920-1097.

<b>General Partners of Cellco Partnership</b>	<b>Address</b>
Bell Atlantic Cellular Holdings, L.P.	One Verizon Way Basking Ridge, NJ 07920
NYNEX PCS Inc.	One Verizon Way Basking Ridge, NJ 07920
PCSCO Partnership	One Verizon Way Basking Ridge, NJ 07920
GTE Wireless Incorporated	One Verizon Way Basking Ridge, NJ 07920
GTE Wireless of Ohio Incorporated	One Verizon Way Basking Ridge, NJ 07920
PCS Nucleus, L.P.	2999 Oak Road, 7 <sup>th</sup> Floor Walnut Creek, CA 94597
JV PartnerCo, LLC	2999 Oak Road, 7 <sup>th</sup> Floor Walnut Creek, CA 94597

Organization Number 0641227  
Name VERIZON WIRELESS  
Company Type GPA - General Partnership Assumed Name  
Status A - Active  
State DE  
File Date 6/21/2006  
Authority Date 6/21/2006  
Expiration Date 6/21/2011  
Principal Office ONE VERIZON WAY  
BASKING RIDGE, NJ 07920

**Incorporators and Initial Directors**

President BELL ATLANTIC CELLULAR HOLDINGS, L.P.  
President NYNEX PCS INC.  
President PCSCO PARTNERSHIP  
President GTE WIRELESS INCORPORATED  
President GTE WIRELESS OF OHIO INCORPORATED  
President PCS NUCLEUS, L.P.  
President IV PARTNERCO, LLC

**This organization has no assumed names**

**Images Available Online**

Documents filed with the Office of the Secretary of State on September 15, 2004 or thereafter are available as scanned images or PDF documents. Documents filed prior to September 15, 2004 will become available as the images are created.

6/21/2006      2 pages      [tiff](#)      [PDF](#)      [Certificate of Assumed Name](#)

REFERENCE COPY

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



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

**RADIO STATION AUTHORIZATION**

LICENSEE: CELLCO PARTNERSHIP

ATTN: REGULATORY  
 CELLCO PARTNERSHIP  
 1120 SANCTUARY PKWY, #150 GASA5REG  
 ALPHARETTA, GA 30009-7630

<b>Call Sign</b> WQJQ691	<b>File Number</b>
<b>Radio Service</b> WU - 700 MHz Upper Band (Block C)	

FCC Registration Number (FRN): 0003290673

<b>Grant Date</b> 11-26-2008	<b>Effective Date</b> 01-13-2015	<b>Expiration Date</b> 06-13-2019	<b>Print Date</b>
<b>Market Number</b> REA003	<b>Channel Block</b> C	<b>Sub-Market Designator</b> 0	
<b>Market Name</b> Great Lakes			
<b>1st Build-out Date</b> 06-13-2013	<b>2nd Build-out Date</b> 06-13-2019	<b>3rd Build-out Date</b>	<b>4th Build-out Date</b>

**Waivers/Conditions:**

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

This authorization is conditioned upon compliance with section 27.16 of the Commission's rules

**Conditions:**

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

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

## ULS License

**PCS Broadband License - KNLH252 - Cellco Partnership**

Call Sign	KNLH252	Radio Service	CW - PCS Broadband
Status	Active	Auth Type	Regular

**Market**

Market	BTA197 - Huntington, WV-Ashland, KY	Channel Block	F
Submarket	0	Associated Frequencies (MHz)	001890.00000000-001895.00000000-001970.00000000-001975.00000000

**Dates**

Grant	05/30/2007	Expiration	04/28/2017
Effective	12/16/2010	Cancellation	

**Buildout Deadlines**

1st	04/28/2002	2nd	
-----	------------	-----	--

**Notification Dates**

1st	04/29/2002	2nd	
-----	------------	-----	--

**Licensee**

FRN	0003290673	Type	Joint Venture
-----	------------	------	---------------

**Licensee**

Cellco Partnership 1120 Sanctuary Pkwy, #150 GASA5REG Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

**Contact**

Verizon Wireless Licensing - Manager LicensingCompliance@VerizonWireless.com Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

**Ownership and Qualifications**

Radio Service Type	Mobile		
Regulatory Status	Common Carrier	Interconnected	Yes

**Alien Ownership**

Is the applicant a foreign government or the representative of any foreign government?	No
Is the applicant an alien or the representative of an alien?	No
Is the applicant a corporation organized under the laws of any	

foreign government?

No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? No

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? Yes

The Alien Ruling question is not answered.

**Basic Qualifications**

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

**Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

**Demographics**

Race

Ethnicity

Gender

## ULS License

**PCS Broadband License - WPOJ803 - Cellco Partnership**

Call Sign	WPOJ803	Radio Service	CW - PCS Broadband
Status	Active	Auth Type	Regular

**Market**

Market	BTA197 - Huntington, WV-Ashland, KY	Channel Block	C
Submarket	0	Associated Frequencies (MHz)	001895.00000000-001910.00000000-001975.00000000-001990.00000000

**Dates**

Grant	08/03/2009	Expiration	06/30/2019
Effective	12/16/2010	Cancellation	

**Buildout Deadlines**

1st	06/30/2004	2nd	06/30/2009
-----	------------	-----	------------

**Notification Dates**

1st	06/17/2004	2nd	06/02/2009
-----	------------	-----	------------

**Licensee**

FRN	0003290673	Type	General Partnership
-----	------------	------	---------------------

**Licensee**

Cellco Partnership 1120 Sanctuary Pkwy, #150 GASA5REG Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

**Contact**

Verizon Wireless Licensing - Manager LicensingCompliance@VerizonWireless.com Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

**Ownership and Qualifications**

Radio Service Type	Mobile
Regulatory Status	Common Carrier Interconnected Yes

**Alien Ownership**

Is the applicant a foreign government or the representative of any foreign government?	No
Is the applicant an alien or the representative of an alien?	No
Is the applicant a corporation organized under the laws of any	

foreign government?

No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? No

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? Yes

The Alien Ruling question is not answered.

**Basic Qualifications**

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

**Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

**Demographics**

Race

Ethnicity

Gender

## ULS License

**AWS (1710-1755 MHz and 2110-2155 MHz) License - WQGA717 - Cellco Partnership****PA** This license has pending applications: 0006869754

Call Sign	WQGA717	Radio Service	AW - AWS (1710-1755 MHz and 2110-2155 MHz)
Status	Active	Auth Type	Regular
<b>Market</b>			
Market	REA003 - Great Lakes	Channel Block	F
Submarket	17	Associated Frequencies (MHz)	001745.00000000-001755.00000000-002145.00000000-002155.00000000

**Dates**

Grant	11/29/2006	Expiration	11/29/2021
Effective	02/06/2015	Cancellation	

**Buildout Deadlines**

1st	2nd
-----	-----

**Notification Dates**

1st	2nd
-----	-----

**Licensee**

FRN	0003290673	Type	General Partnership
-----	------------	------	---------------------

**Licensee**

Cellco Partnership 1120 Sanctuary Pkwy, #150 GASA5REG Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

**Contact**

Verizon Wireless Licensing - Manager 1120 Sanctuary Pkwy, #150 GASA5REG Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
---	---

**Ownership and Qualifications**

Radio Service Type	Mobile
Regulatory Status	Common Carrier Interconnected Yes

**Alien Ownership**

Is the applicant a foreign government or the representative of	No
--	----

any foreign government?

Is the applicant an alien or the representative of an alien? No

Is the applicant a corporation organized under the laws of any foreign government? No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? No

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? Yes

The Alien Ruling question is not answered.

**Basic Qualifications**

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

**Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

**Demographics**

Race

Ethnicity

Gender

ULS License

# 700 MHz Upper Band (Block C) License - WQJQ691 - Cellco Partnership

**PA** This license has pending applications: 0005826939

Call Sign	WQJQ691	Radio Service	WU - 700 MHz Upper Band (Block C)
Status	Active	Auth Type	Regular
<b>Market</b>			
Market	REA003 - Great Lakes	Channel Block	C
Submarket	0	Associated Frequencies (MHz)	000746.00000000-000757.00000000-000776.00000000-000787.00000000

**Dates**

Grant	11/26/2008	Expiration	06/13/2019
Effective	06/23/2015	Cancellation	

**Buildout Deadlines**

1st	06/13/2013	2nd	06/13/2019
-----	------------	-----	------------

**Notification Dates**

1st		2nd	
-----	--	-----	--

**Licensee**

FRN	0003290673	Type	General Partnership
-----	------------	------	---------------------

**Licensee**

Cellco Partnership 1120 Sanctuary Pkwy, #150 GASA5REG Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

**Contact**

Verizon Wireless Licensing Manager LicensingCompliance@VerizonWireless.com Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.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.

**Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

**Demographics**

Race

Ethnicity

Gender

## ULS License

**AWS (1710-1755 MHz and 2110-2155 MHz) License - WQPW449 - Cellco Partnership****PA** This license has pending applications: 0006869754

Call Sign	WQPW449	Radio Service	AW - AWS (1710-1755 MHz and 2110-2155 MHz)
Status	Active	Auth Type	Regular
<b>Market</b>			
Market	REA003 - Great Lakes	Channel Block	D
Submarket	31	Associated Frequencies (MHz)	001735.00000000-001740.00000000-002135.00000000-002140.00000000

**Dates**

Grant	08/23/2012	Expiration	04/30/2022
Effective	01/04/2014	Cancellation	

**Buildout Deadlines**

1st	2nd
-----	-----

**Notification Dates**

1st	2nd
-----	-----

**Licensee**

FRN	0003290673	Type	General Partnership
-----	------------	------	---------------------

**Licensee**

Cellco Partnership 1120 Sanctuary Pkwy, #150 GASA5REG Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

**Contact**

Verizon Wireless Licensing Manager 1120 Sanctuary Pkwy, #150 GASA5REG Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
---	---

**Ownership and Qualifications**

Radio Service Type	Mobile
Regulatory Status	Common Carrier Interconnected Yes

**Alien Ownership**

Is the applicant a foreign government or the representative of	No
--	----

any foreign government?

Is the applicant an alien or the representative of an alien? No

Is the applicant a corporation organized under the laws of any foreign government? No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? No

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? Yes

The Alien Ruling question is not answered.

**Basic Qualifications**

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

**Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

**Demographics**

Race

Ethnicity

Gender

## ULS License

**AWS (1710-1755 MHz and 2110-2155 MHz) License - WQPZ950 - Cellco Partnership****PA** This license has pending applications: 0006869754

Call Sign	WQPZ950	Radio Service	AW - AWS (1710-1755 MHz and 2110-2155 MHz)
Status	Active	Auth Type	Regular
<b>Market</b>			
Market	REA003 - Great Lakes	Channel Block	E
Submarket	90	Associated Frequencies (MHz)	001740.00000000-001745.00000000-002140.00000000-002145.00000000

**Dates**

Grant	08/23/2012	Expiration	11/29/2021
Effective	01/03/2014	Cancellation	

**Buildout Deadlines**

1st	2nd
-----	-----

**Notification Dates**

1st	2nd
-----	-----

**Licensee**

FRN	0003290673	Type	General Partnership
-----	------------	------	---------------------

**Licensee**

Cellco Partnership 1120 Sanctuary Pkwy, #150 GASA5REG Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

**Contact**

Verizon Wireless Licensing Manager 1120 Sanctuary Pkwy, #150 GASA5REG Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
---	---

**Ownership and Qualifications**

Radio Service Type	Mobile
Regulatory Status	Common Carrier Interconnected Yes

**Alien Ownership**

Is the applicant a foreign government or the representative of	No
--	----

any foreign government?

Is the applicant an alien or the representative of an alien? No

Is the applicant a corporation organized under the laws of any foreign government? No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? No

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? Yes

The Alien Ruling question is not answered.

**Basic Qualifications**

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

**Tribal Land Bidding Credits**

This license did not have tribal land bidding credits.

**Demographics**

Race

Ethnicity

Gender

**EXHIBIT B**

**SITE DEVELOPMENT PLAN:**

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

# Parallel

INFRASTRUCTURE

4601 TOUCHTON ROAD EAST  
BLDG 300, SUITE 3200  
JACKSONVILLE, FL 32246

## CARTER HOLLOW PI3WV00008.A

PROPOSED INSTALLATION  
250' SELF SUPPORT TOWER

# Parallel

INFRASTRUCTURE

4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VERIZON WIRELESS PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

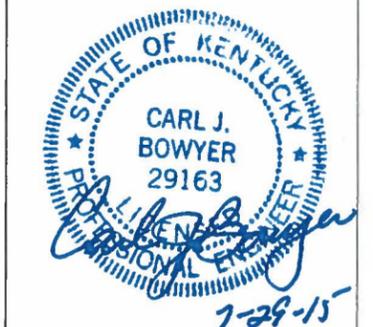
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15



**Mead & Hunt**  
400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

TITLE SHEET SHEET T-1

### SIGNATURE BLOCK

**SITE NAME**  
CARTER HOLLOW

**SITE NUMBER**  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VERIZON WIRELESS PROJECT CODE: 20141108697  
VERIZON WIRELESS LOCATION CODE: 307336

**SITE ADDRESS**  
BECKWITH BRANCH ROAD  
GRAYSON, KY

**PROPERTY OWNER**  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

**SITE DATA**  
NAD 83 LATITUDE - N38° 20' 31.661"  
NAD 83 LONGITUDE - W82° 53' 57.736"  
ELEVATION - 757.21±'  
AS PER 1A DATED: APRIL 8, 2015

**LEASE AREA**  
10,000 SQUARE FEET

**PROJECT DESCRIPTION**  
INSTALLATION OF 250' SELF SUPPORT TOWER  
WITHIN A 75' x 75' FENCED COMPOUND.  
NEW UTILITY RUNS TO SITE.

**JURISDICTION**  
CARTER COUNTY

**CONTACTS**  
PARALLEL INFRASTRUCTURE  
ALEJANDRA STINSON  
(513) 259-3673 - Phone

MEAD & HUNT  
CURTIS PAXTON  
(681) 313-4612 - OFFICE  
(304) 553-8103 - CELL

SHEET	TITLE SHEET
T-1	TITLE SHEET
L-1	LEASE MAP
R-1	RADIUS MAP
C-1	SITE PLAN
C-2	GRADING PLAN (TOWER SITE)
C-2A	ACCESS ROAD GRADING PLAN & PROFILE
C-3	UTILITY SERVICE PLAN
C-4	UTILITY SERVICE PLAN (VZW)
C-5	TOWER ELEVATION
C-5A	RF DATA
D-1	MISCELLANEOUS DETAILS
D-2	MISCELLANEOUS DETAILS
D-3	MISCELLANEOUS DETAILS
D-4	MISCELLANEOUS DETAILS
ES-1	E&S CONTROL PLAN
ES-2	E&S CONTROL NOTES
ES-3	E&S CONTROL DETAILS
A-1	SHELTER LAYOUT (VZW)
A-2	SHELTER FOUNDATION (VZW)
A-3	SHELTER DETAILS (VZW)
A-4	SHELTER DETAILS (VZW)
A-5	SHELTER DETAILS (VZW)
A-6	ICEBRIDGE / GPS DETAILS (VZW)
G-1	GROUNDING PLAN
G-2	GROUNDING RING DETAILS
G-3	GROUNDING DETAILS
G-4	GROUNDING DETAILS

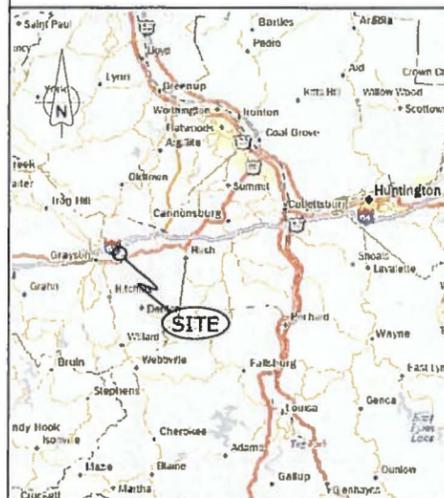
### SHEET INDEX

**POLICE/FIRE/RESCUE**  
911

**ELECTRIC POWER**  
KENTUCKY POWER  
CONTACT: CUSTOMER SERVICE  
PHONE#: 502-696-7000

**TELEPHONE**  
WINDSTREAM  
CONTACT: CUSTOMER SERVICE  
PHONE#: 866-445-5880

EMERGENCY AND UTILITY CONTACTS



AREA MAP

### DESIGN ENGINEER

**Mead & Hunt**

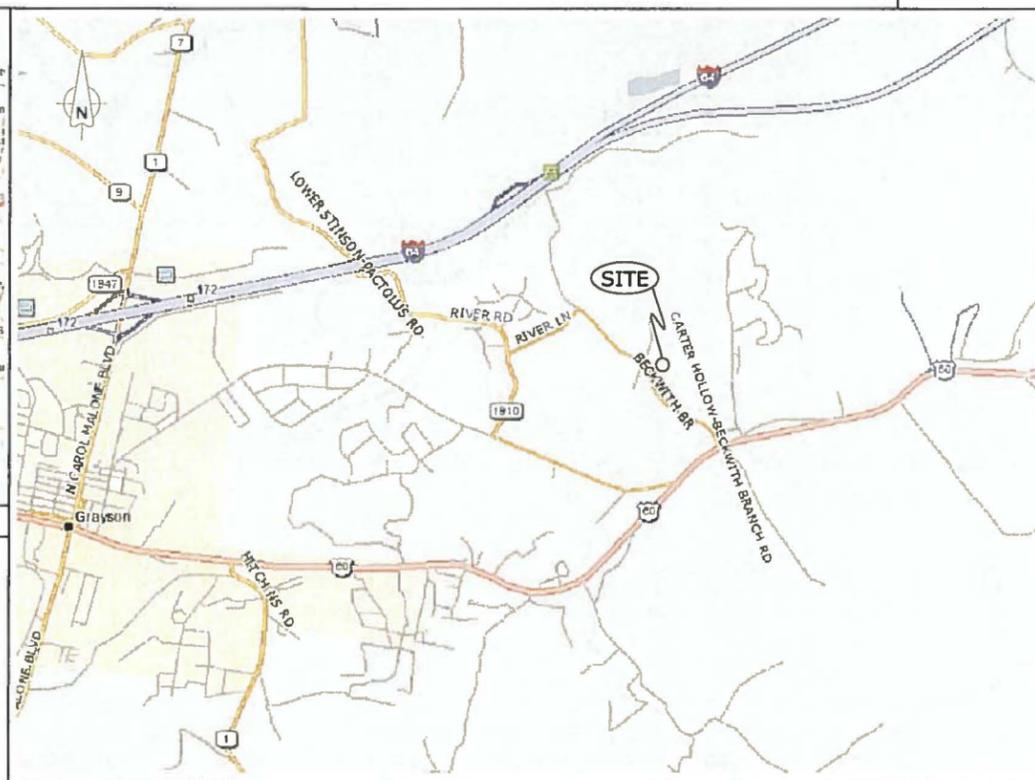
400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

### SURVEYING



1370 WASHINGTON PIKE  
SUITE 308  
BRIDGEVILLE, PA 15017  
(412) 564-5215 PHONE

CONSULTANT TEAM



VICINITY MAP

### SITE DIRECTIONS

FROM CARTER COUNTY JUDGE EXECUTIVE'S OFFICE AT 300 WEST MAIN STREET (US ROUTE 60), GRAYSON, KY: GO EAST ON US ROUTE 60 FOR ABOUT 3.35 MILES TO BECKWITH BRANCH ROAD. TURN LEFT ONTO BECKWITH BRANCH ROAD AND GO 0.35 MILES. ENTRANCE TO ACCESS ROAD IS THE CEMETERY ENTRANCE ON THE RIGHT SIDE OF THE ROAD. ENTRANCE IS LOCATED AT N38° 20' 23.5", W82° 53' 59.7".

DIRECTIONS TO SITE

PROJECT INFORMATION

NORTH MERIDIAN REFERENCED TO KY STATE PLANE COORDINATE SYSTEM SINGLE ZONE (NAD83)

**CENTER OF PROPOSED TOWER**  
 NAD 83 LATITUDE - N38° 20' 31.661"  
 NAD 83 LONGITUDE - W82° 53' 57.736"  
 ELEVATION - 757.21±'

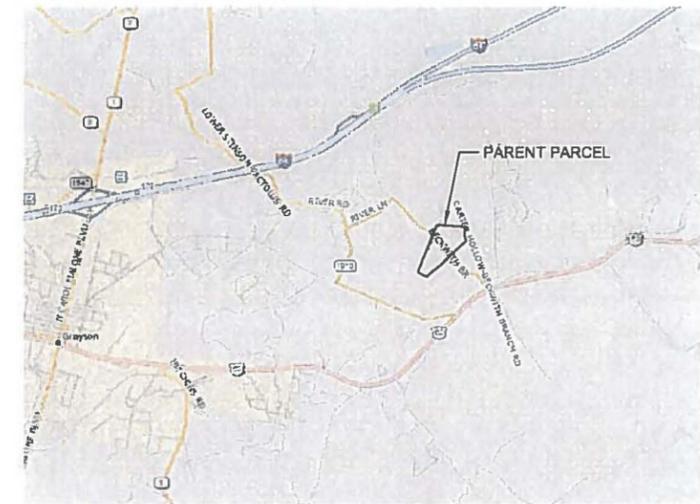
**LEGEND**

---	PROPERTY LINE
- - - -	TRACT LINE
---	LEASE LINE
---	ROW LINE
---	EXISTING FENCE LINE
---	GAS LINE
---	OVERHEAD POWER
---	OVERHEAD TELEPHONE
---	UNDERGROUND POWER
---	UNDERGROUND TELCO
---	OVERHEAD POWER/TELEPHONE
○	5/8" REBAR W/CAP SET
●	FOUND MONUMENTATION
○	CALCULATED POINT
○	EXISTING UTILITY POLE
○	POINT OF BEGINNING
○	POINT OF COMMENCING

**Parallel INFRASTRUCTURE**  
 4601 TOUCHTON ROAD EAST  
 BUILDING 300, SUITE 3200  
 JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW  
 SITE NUMBER: PARALLEL INFRASTRUCTURE: PI3WV00008.A  
 VZW PROJECT CODE: 20141108697  
 VZW LOCATION CODE: 307336  
 SITE ADDRESS: BECKWITH BRANCH ROAD  
 GRAYSON, KY  
 AREA: LEASE AREA = 10,000 SQ. FT.  
 PROPERTY OWNER: WILLIAM R. HAYES II  
 7 CARTER LANE  
 GRAYSON, KY 41143  
 COUNTY: CARTER  
 MUNICIPALITY: GRAYSON  
 TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED PER CHECKLIST	06/04/15
4	FINAL	06/05/15
5	REVISED PER PI TELECOM RL	07/24/15



**VICINITY MAP**  
 SCALE: NO SCALE

STATE OF KENTUCKY  
 WILLIAM J. WHITMAN II  
 3566  
 LICENSED PROFESSIONAL LAND SURVEYOR

**encompass**

1370 WASHINGTON PIKE  
 SUITE 308  
 BRIDGEVILLE, PA 15017  
 (412) 564-5215 PHONE

PROJECT # R4381500-150949.01

LEASE MAP SHEET L-1

**DONALD & OPAL WITHROW**  
 DEED BOOK 209 PAGE 427  
 TAX ID# 120W-00-00-042.00

**WILLIAM & ROSEMARY KARTUNE**  
 DEED BOOK 029 PAGE 712  
 TAX ID# 120W-00-00-040.00

**WILLIAM R. HAYES II**  
 DEED BOOK 200 PAGE 865  
 TAX ID# 120W-00-00-033.00

**HUGH JUNIOR WITHROW**  
 DEED BOOK 199 PAGE 986  
 TAX ID# 120W-00-00-036.00

**JOHNSON & GOEBEL, INC.**  
 DEED BOOK 179 PAGE 038  
 TAX ID# 120-10-00-081.00

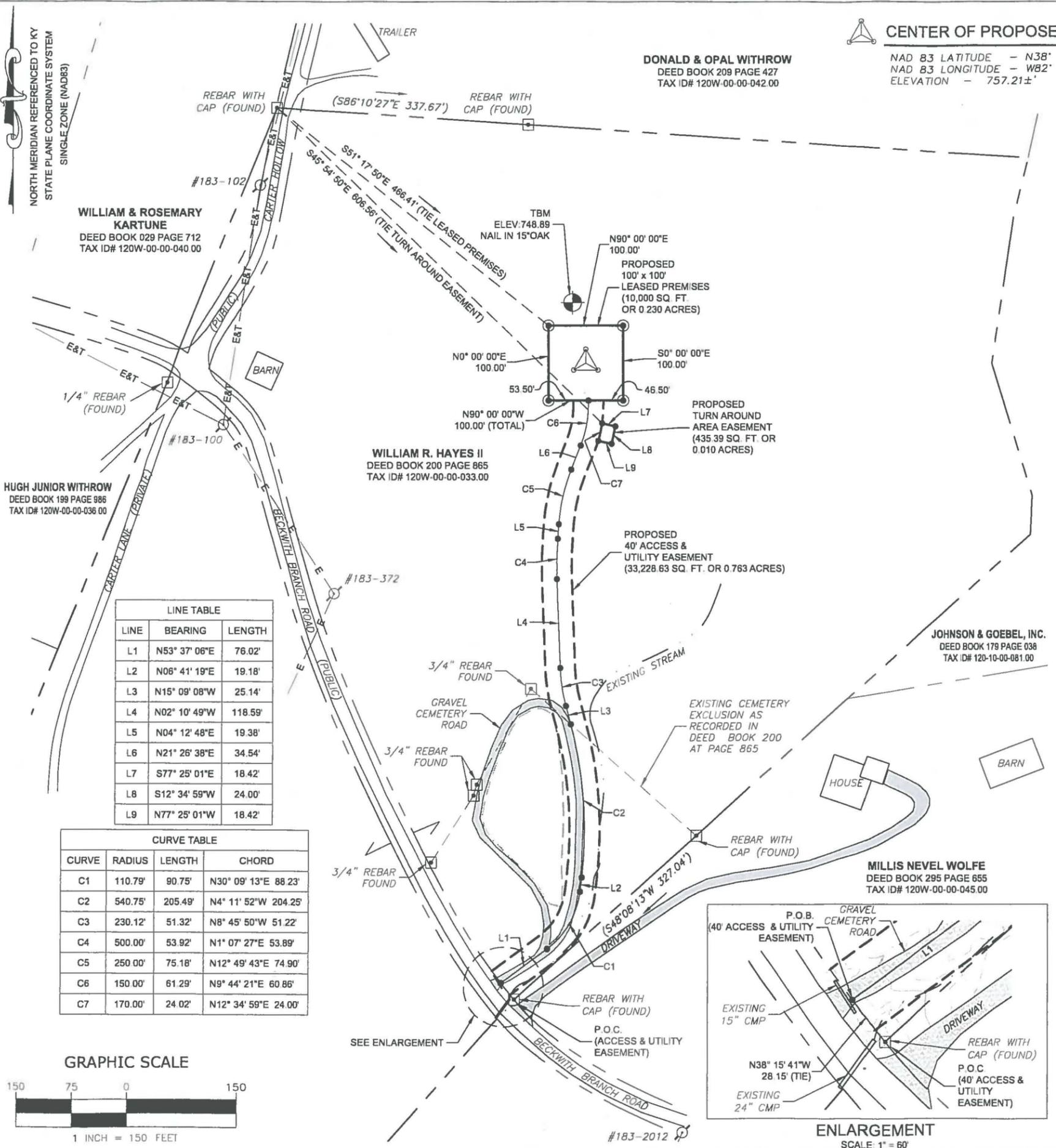
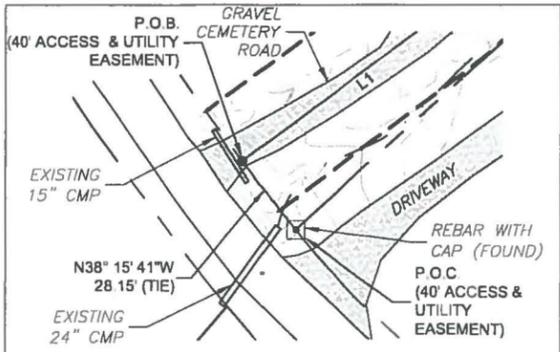
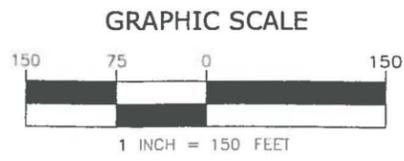
**MILLIS NEVEL WOLFE**  
 DEED BOOK 295 PAGE 655  
 TAX ID# 120W-00-00-045.00

**LINE TABLE**

LINE	BEARING	LENGTH
L1	N53° 37' 06"E	76.02'
L2	N06° 41' 19"E	19.18'
L3	N15° 09' 08"W	25.14'
L4	N02° 10' 49"W	118.59'
L5	N04° 12' 48"E	19.38'
L6	N21° 26' 38"E	34.54'
L7	S77° 25' 01"E	18.42'
L8	S12° 34' 59"W	24.00'
L9	N77° 25' 01"W	18.42'

**CURVE TABLE**

CURVE	RADIUS	LENGTH	CHORD
C1	110.79'	90.75'	N30° 09' 13"E 88.23'
C2	540.75'	205.49'	N4° 11' 52"W 204.25'
C3	230.12'	51.32'	N8° 45' 50"W 51.22'
C4	500.00'	53.92'	N1° 07' 27"E 53.89'
C5	250.00'	75.18'	N12° 49' 43"E 74.90'
C6	150.00'	61.29'	N9° 44' 21"E 60.86'
C7	170.00'	24.02'	N12° 34' 59"E 24.00'



**LEGAL DESCRIPTIONS**

**PARENT PARCEL**  
 A TRACT OF LAND LYING AND BEING ON THE WATERS OF STINSON CREEK IN CARTER COUNTY, KENTUCKY; BEGINNING AT A BEECH STANDING ON THE SIDE OF THE ROAD BETWEEN WHERE STEPHEN STEPHENS AND H.K. ASH FORMERLY RESIDED; THENCE N 49° E 8 POLES TO A SMALL BLACK OAK AND WHITE OAK STANDING IN THE HEAD OF THE HOLLOW, THENCE N 6° E 3 POLES TO AN ASH AND HICKORY SPROUT NEAR A WHITE OAK MARKED EX IN THE NOTH (SIC) BACK LINE OF THE 98 1/4 ACRE SURVEY; LINE NEAR A BRANCH; THENCE S 23° W 109 POLES TO A GUM ON A RIDGE; THENCE S 64 3/4° E 21 POLES TO A STAKE; THENCE N 52° E 53 POLES TO THE BEGINNING, CONTAINING 41 ACRES AND 16 POLES.

**EXCLUSION:** THERE IS EXCLUDED FROM THE DESCRIPTION HEREIN THE CARTER FAMILY CEMETERY. SAID CEMETERY INCLUDES ONE ACRE, MORE OR LESS AND IS ENCLOSED BY MARKED STAKES.

**RESERVATION:** THE GRANTORS RESERVED THE RIGHT OF THE USE OF THE ROAD ON THE PROPERTY CONVEYED HEREIN FOR THE PURPOSE OF INGRESS AND EGRESS TO THE CARTER FAMILY CEMETERY.

BEING THE SAME REAL ESTATE CONVEYED TO WILLIAM R. HAYES, II BY THAT CERTAIN DEED DATED APRIL 24, 1989, FROM MAHALA KIMBLER, ET AL., APPEARING OF RECORD IN DEED BOOK 200, PAGE 867, AND ALSO IN THAT CERTAIN DEED DATED MAY 9, 1989, FROM JOANN BLEVINS, ET AL., APPEARING OF RECORD IN DEED BOOK 200, PAGE 865, IN THE OFFICE OF THE CARTER COUNTY COURT CLERK OF KENTUCKY

**40 FOOT ACCESS & UTILITY EASEMENT**

BEING A 40 FOOT WIDE STRIP OF LAND, 20' EITHER SIDE OF CENTERLINE, SITUATE ON THE WATERS OF STINSON CREEK, CARTER COUNTY, KENTUCKY ON PROPERTY NOW OR FORMERLY OWNED BY WILLIAM R. HAYES II AS RECORDED IN DEED BOOK 200 AT PAGE 865, SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
 COMMENCING AT A REBAR WITH CAP FOUND, SAID REBAR BEING IN THE NORTHERLY RIGHT OF WAY LINE OF BECKWORTH DRIVE, SAID REBAR BEING A COMMON CORNER TO PROPERTY NOW OR FORMERLY OWNED BY MILLIS NEVEL WOLFE AS RECORDED IN DEED BOOK 295 AT PAGE 655; THENCE WITH THE RIGHT OF WAY LINE N 38° 15' 41" W 28.15 FEET TO A POINT IN THE GRAVEL CEMETERY ACCESS ROAD TO THE CARTER FAMILY CEMETERY AS DESCRIBED IN DEED BOOK 200 AT PAGE 865, SAID POINT BEING THE TRUE POINT OF BEGINNING; THENCE WITH THE EXISTING CARTER FAMILY CEMETERY ROAD N 53° 37' 06" E 76.02 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 110.79 FEET, AN ARC LENGTH OF 90.75 FEET, AND A CHORD BEARING N 30° 09' 13" E 88.23 FEET TO A POINT; THENCE N 06° 41' 19" E 19.18 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 540.75 FEET, AN ARC LENGTH OF 205.49 FEET, AND A CHORD BEARING N 04° 11' 52" W 204.25 FEET TO A POINT; THENCE LEAVING THE EXISTING CARTER FAMILY CEMETERY ROAD N 15° 09' 08" W 25.14 FEET TO A POINT; THENCE WITH A CURVE TO THE RIGHT HAVING A RADIUS OF 230.12 FEET, AN ARC LENGTH OF 51.32 FEET, AND A CHORD BEARING N 08° 45' 50" W 51.22 FEET TO A POINT; THENCE N 02° 10' 49" W 118.59 FEET TO A POINT; THENCE WITH A CURVE TO THE RIGHT HAVING A RADIUS OF 500.00 FEET, AN ARC LENGTH OF 53.92 FEET, AND A CHORD BEARING N 01° 07' 27" E 53.89 FEET TO A POINT; THENCE N 04° 12' 48" E 19.38 FEET TO A POINT; THENCE WITH A CURVE TO THE RIGHT HAVING A RADIUS OF 250.00 FEET, AN ARC LENGTH OF 75.18 FEET, AND A CHORD BEARING N 12° 49' 43" E 74.90 FEET TO A POINT; THENCE N 21° 26' 38" E 34.54 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 150.00 FEET, AN ARC LENGTH OF 61.29 FEET, AND A CHORD BEARING N 09° 44' 21" E 60.86 FEET TO A POINT IN THE SOUTHERLY LINE OF A 10,000 SQ. FT. LEASED PREMISES, SAID POINT BEING THE TERMINUS OF THE DESCRIBED ACCESS & UTILITY EASEMENT CONTAINING 33,228.63 SQ. FT. (0.763 ACRES), MORE OR LESS. TOTAL LENGTH OF EASEMENT = 830.79 FEET.

**LEASED PREMISES**

BEING A 100 FOOT BY 100 FOOT TRACT OF LAND, SITUATE ON THE WATERS OF STINSON CREEK, CARTER COUNTY, KENTUCKY ON PROPERTY NOW OR FORMERLY OWNED BY WILLIAM R. HAYES II AS RECORDED IN DEED BOOK 200 AT PAGE 865, SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
 COMMENCING AT A REBAR WITH CAP FOUND, SAID REBAR BEING THE NORTHWESTERLY CORNER OF SAID HAYES PROPERTY AND BEING A COMMON CORNER TO PROPERTY NOW OR FORMERLY OWNED BY DONALD & OPAL WITHROW AS RECORDED IN DEED BOOK 209 AT PAGE 427; THENCE S 51° 17' 50" E 466.41 FEET TO A 5/8" REBAR WITH CAP SET, SAID REBAR BEING THE TRUE POINT OF BEGINNING; THENCE N 90° 00' 00" E 100.00 FEET TO A 5/8" REBAR WITH CAP SET; THENCE S 00° 00' 00" E 100.00 FEET TO A 5/8" REBAR WITH CAP SET; THENCE N 90° 00' 00" W 100.00 FEET TO A 5/8" REBAR WITH CAP SET; THENCE N 00° 00' 00" E 100.00 FEET TO THE TRUE POINT OF BEGINNING, CONTAINING 10,000 SQ. FT. (0.230 ACRES), MORE OR LESS.

**TURN AROUND AREA EASEMENT**

BEING A 435.39 SQ. FT. TRACT OF LAND, SITUATE ON THE WATERS OF STINSON CREEK, CARTER COUNTY, KENTUCKY ON PROPERTY NOW OR FORMERLY OWNED BY WILLIAM R. HAYES II AS RECORDED IN DEED BOOK 200 AT PAGE 865, SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
 COMMENCING AT A REBAR WITH CAP FOUND, SAID REBAR BEING THE NORTHWESTERLY CORNER OF SAID HAYES PROPERTY AND BEING A COMMON CORNER TO PROPERTY NOW OR FORMERLY OWNED BY DONALD & OPAL WITHROW AS RECORDED IN DEED BOOK 209 AT PAGE 427; THENCE S 45° 54' 50" E 606.56 FEET TO A POINT IN THE EASTERLY LINE OF A 40 FOOT WIDE ACCESS & UTILITY EASEMENT; THENCE S 77° 25' 01" E 18.42 FEET TO A POINT; THENCE S 12° 34' 59" W 24.00 FEET TO A POINT; THENCE N 77° 25' 01" W 18.42 FEET TO A POINT IN THE SAID EASTERLY LINE OF A 40 FOOT WIDE ACCESS & UTILITY EASEMENT; THENCE WITH THE SAME WITH A CURVE TO THE LEFT HAVING A RADIUS OF 170.00 FEET, AN ARC LENGTH OF 24.02 FEET, AND A CHORD BEARING N 12° 34' 59" E 24.00 FEET TO THE TRUE POINT OF BEGINNING, CONTAINING 435.39 SQ. FT. (0.010 ACRES), MORE OR LESS.

**GENERAL NOTES**

1. THIS IS NOT A BOUNDARY SURVEY.
2. THE INTENT OF THIS SURVEY IS TO LOCATE A PROPOSED 10,000 SQ. FT. LEASE, 40' ACCESS AND UTILITY EASEMENT, AND TURN AROUND EASEMENT UPON A PARCEL SITUATE ON THE WATERS OF STINSON CREEK, CARTER COUNTY, KENTUCKY, NOW OR FORMERLY OWNED BY WILLIAM R. HAYES II AS RECORDED IN DEED BOOK 200 AT PAGE 865.
3. THE LOCATION OF EXTERIOR BOUNDARY LINES OF THE PARENT TRACT AND ADJOINING PARCELS AS SHOW ON THESE PLANS HEREIN ARE BASED UPON DEED DESCRIPTIONS, EXISTING SURVEY INFORMATION, AND HAVE BEEN RELATED TO MONUMENTS RECOVERED IN THE FIELD. THESE DRAWINGS DO NOT REPRESENT A BOUNDARY SURVEY OF THE PARENT OR ADJOINING TRACT(S) OF LAND.
4. THE HORIZONTAL AND VERTICAL DATUM ARE BASED UPON POST-PROCESSED OBSERVATIONS UTILIZING A TRIMBLE 5800 UNIT BASED ON NAD(83) AND NAVD(88).
5. FIELD WORK COMPLETED ON MARCH 31, 2015.
6. ALL BEARINGS ARE BASED UPON THE KENTUCKY STATE PLANE COORDINATE SYSTEM NAD 83 SINGLE ZONE. ALL DISTANCES SHOWN ARE HORIZONTAL UNIT GRID DISTANCES
7. ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS, THE PROPOSED TELECOMMUNICATIONS SITE IS LOCATED IN ZONE "X", MAP NUMBER 21043C0209D, DATED JUNE 2, 2011.
8. NO WETLANDS AREAS HAVE BEEN INVESTIGATED BY THIS SURVEY.
9. THE LEASED PREMISES IS CONTIGUOUS ALONG ITS COMMON BOUNDARIES TO THE 40' ACCESS & UTILITY EASEMENT, WHICH IN TURN IS CONTIGUOUS ALONG ITS COMMON BOUNDARIES TO THE BECKWORTH DRIVE RIGHT OF WAY, AND THERE ARE NO GAPS, GORES, SPACES, OR OVERLAPS BETWEEN OR AMONG ANY OF SAID PARCELS OF LAND.
10. THE 40' ACCESS & UTILITY EASEMENT, TURN AROUND EASEMENT, AND LEASED PREMISES ARE CONTIGUOUS ALONG THEIR COMMON BOUNDARIES, AND THERE ARE NO GAPS, GORES, SPACES, OR OVERLAPS BETWEEN OR AMONG ANY OF SAID PARCELS OF LAND.
11. NO BUFFER ZONES OR LANDSCAPE AREAS ARE REQUIRED FOR THIS SITE.

**TITLE NOTES**

MEAD & HUNT HAS RECEIVED AND REVIEWED THE TITLE COMMITMENT PREPARED BY CHICAGO TITLE INSURANCE COMPANY, DATED EFFECTIVE MARCH 31, 2015, BEING COMMITMENT NO. 513-119 FOR THE SUBJECT PROPERTY, TO DETERMINE THE IMPACTS OF EXISTING TITLE EXCEPTIONS.

- EXCEPTION 8:** PRIOR UNRELEASED MORTGAGE DATED NOVEMBER 10, 2010 TO FIRST NATIONAL BANK OF GRAYSON IN THE AMOUNT OF \$150,000, APPEARING OF RECORD IN OFFICIAL RECORD BOOK 262, PAGE 371.
- RESPONSE 8:** THE PRIOR UNRELEASED MORTGAGE DATED NOVEMBER 10, 2010 TO FIRST NATIONAL BANK OF GRAYSON IS A BLANKET TO THE ENTIRE PARENT PARCEL WITH A MATURITY DATE OF DECEMBER 1, 2025 AND SHOULD NOT IMPACT THE PROPOSED LEASED PREMISES OR EASEMENTS.
- EXCEPTION 9:** RIGHT OF WAY EASEMENT DATED JUNE 10, 2002 TO KENTUCKY POWER COMPANY, APPEARING OF RECORD IN OFFICIAL RECORD BOOK 80, PAGE 294.
- RESPONSE 9:** THE RIGHT OF WAY EASEMENT DATED JUNE 10, 2002 TO KENTUCKY POWER COMPANY IS AN UNSPECIFIED WIDTH RIGHT OF WAY AGREEMENT FOR THE INSTALLATION AND MAINTENANCE OF OVERHEAD POWER LINES. THE DESCRIPTION OF THE EXACT LOCATION OF THE RIGHT OF WAY IS AMBIGUOUS, BUT THE EXISTING POWER LINES ON THE PARENT PARCEL ARE LOCATED IN THE WESTERN PORTION OF THE PARENT PARCEL. THIS RIGHT OF WAY AGREEMENT SHOULD NOT IMPACT THE PROPOSED LEASED PREMISES OR EASEMENTS.
- EXCEPTION 10:** OUT CONVEYANCE DATED MARCH 3, 2005 TO WILLIAM HAYES, II AND SONNIE M. HAYES, FOR 5 ACRES, APPEARING OF RECORD IN OFFICIAL RECORD BOOK 147, PAGE 46.
- RESPONSE 10:** THE OUT CONVEYANCE DATED MARCH 3, 2005 TO WILLIAM HAYES, II AND SONNIE M. HAYES, FOR 5 ACRES, REFERS TO A TRACT OF LAND ON THE SOUTH SIDE OF BECKWITH BRANCH ROAD, AND THIS OUT CONVEYANCE SHOULD NOT IMPACT THE LEASED PREMISES OR EASEMENTS.

**SURVEYOR'S CERTIFICATION**

TO: PI TELECOM INFRASTRUCTURE V, LLC, A FLORIDA LIMITED LIABILITY COMPANY AND CHICAGO TITLE INSURANCE COMPANY.

I, WILLIAM J. WHITMAN, II, A KENTUCKY PROFESSIONAL LAND SURVEYOR, CERTIFY THAT THE INFORMATION SHOWN HEREON WAS COMPILED USING DATA FROM AN ACTUAL FIELD SURVEY MADE UNDER MY DIRECT SUPERVISION AND THAT THE FIELD SURVEY AND THE COMPILATION OF INFORMATION SHOWN HEREIN WERE CONDUCTED IN ACCORDANCE WITH THE KENTUCKY STANDARDS OF PRACTICE; AND THAT THE RELATIVE POSITIONAL ACCURACY OF THIS SURVEY MEETS OR EXCEEDS THE REQUIREMENTS FOR A RURAL PARTIAL BOUNDARY SURVEY AS DEFINED UNDER SECTION 4(b) AND SECTION 12 OF 201 KAR 18.150 AS PUBLISHED BY THE KENTUCKY STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

WILLIAM J. WHITMAN, II, PLS#3566

DATED: JULY 24, 2015



4601 TOUCHTON ROAD EAST  
 BUILDING 300, SUITE 3200  
 JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
 PARALLEL INFRASTRUCTURE: P13WV00008.A  
 VZW PROJECT CODE: 20141108697  
 VZW LOCATION CODE: 307336

SITE ADDRESS:  
 BECKWITH BRANCH ROAD  
 GRAYSON, KY

AREA:  
 LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
 WILLIAM R. HAYES II  
 7 CARTER LANE  
 GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED PER CHECKLIST	06/04/15
4	FINAL	06/05/15
5	REVISED PER PI TELECOM RL	07/24/15

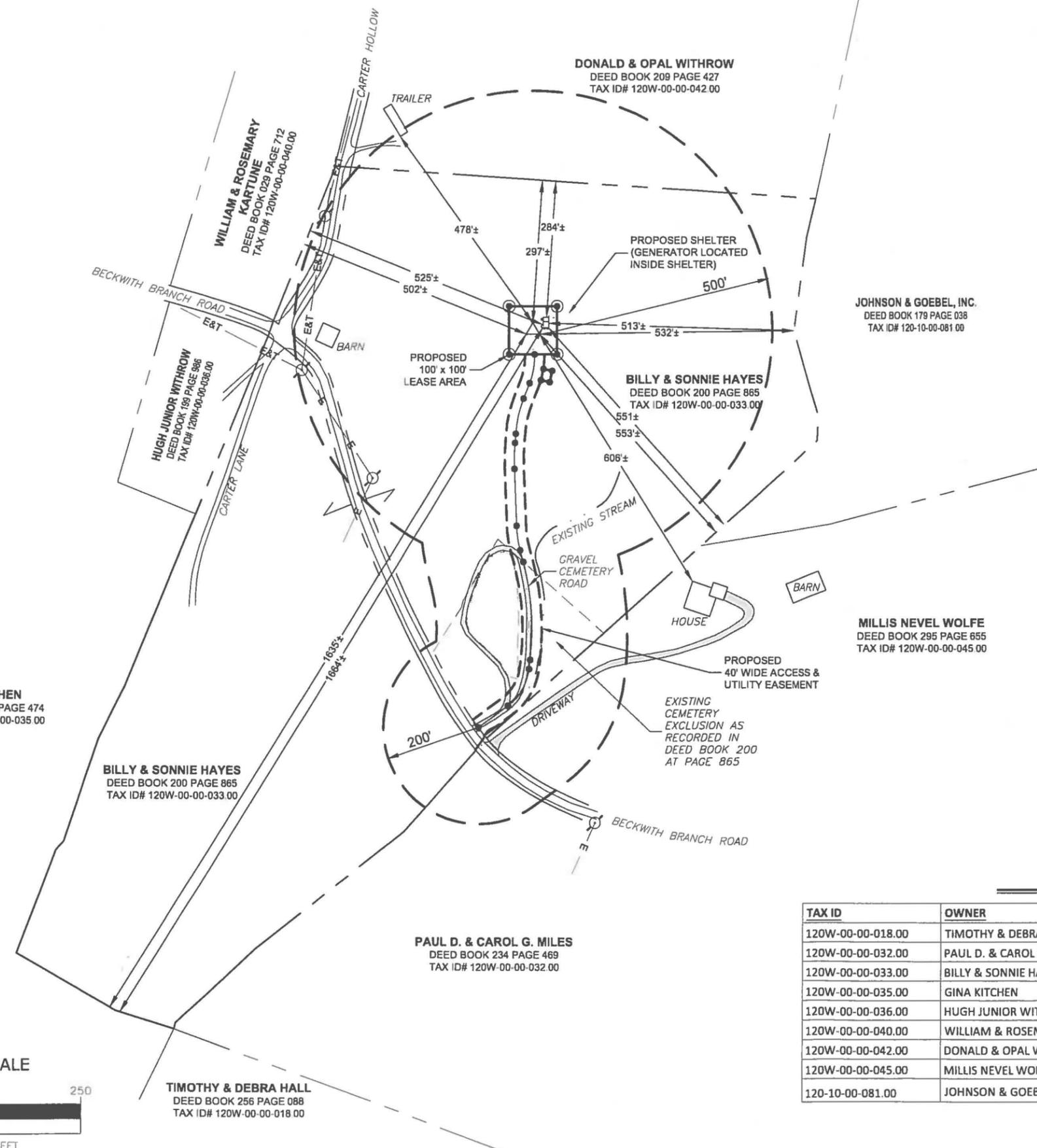


1370 WASHINGTON PIKE  
 SUITE 308  
 BRIDGEVILLE, PA 15017  
 (412) 564-5215 PHONE

PROJECT # R4381500-150949.01

LEASE MAP SHEET  
 L-2

NORTH MERIDIAN REFERENCED TO KY  
STATE PLANE COORDINATE SYSTEM  
SINGLE ZONE (NAD83)



**LEGEND**

---	PROPERTY LINE
---	TRACT LINE
---	LEASE LINE
---	ROW LINE
---	EXISTING FENCE LINE
---	GAS LINE
---	OVERHEAD POWER
---	OVERHEAD TELEPHONE
---	UNDERGROUND POWER
---	UNDERGROUND TELCO.
---	OVERHEAD POWER/TELEPHONE
---	5/8" REBAR W/CAP SET
---	FOUND MONUMENTATION
---	CALCULATED POINT
---	EXISTING UTILITY POLE
---	POINT OF BEGINNING
---	POINT OF COMMENCING

E&T    E&T  
 P.O.B.  
 P.O.C.

# Parallel INFRASTRUCTURE

4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED PER CHECKLIST	06/04/15
4	FINAL	06/05/15
5	REVISED PER PI TELECOM RL	07/24/15

STATE OF KENTUCKY  
WILLIAM J. WHITMAN II  
3566  
LICENSED PROFESSIONAL LAND SURVEYOR

## encompass

1370 WASHINGTON PIKE  
SUITE 308  
BRIDGEVILLE, PA 15017  
(412) 564-5215 PHONE

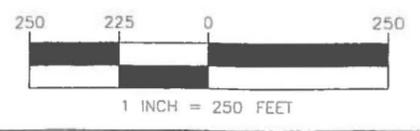
PROJECT # R4381500-150949.01

RADIUS MAP R-1

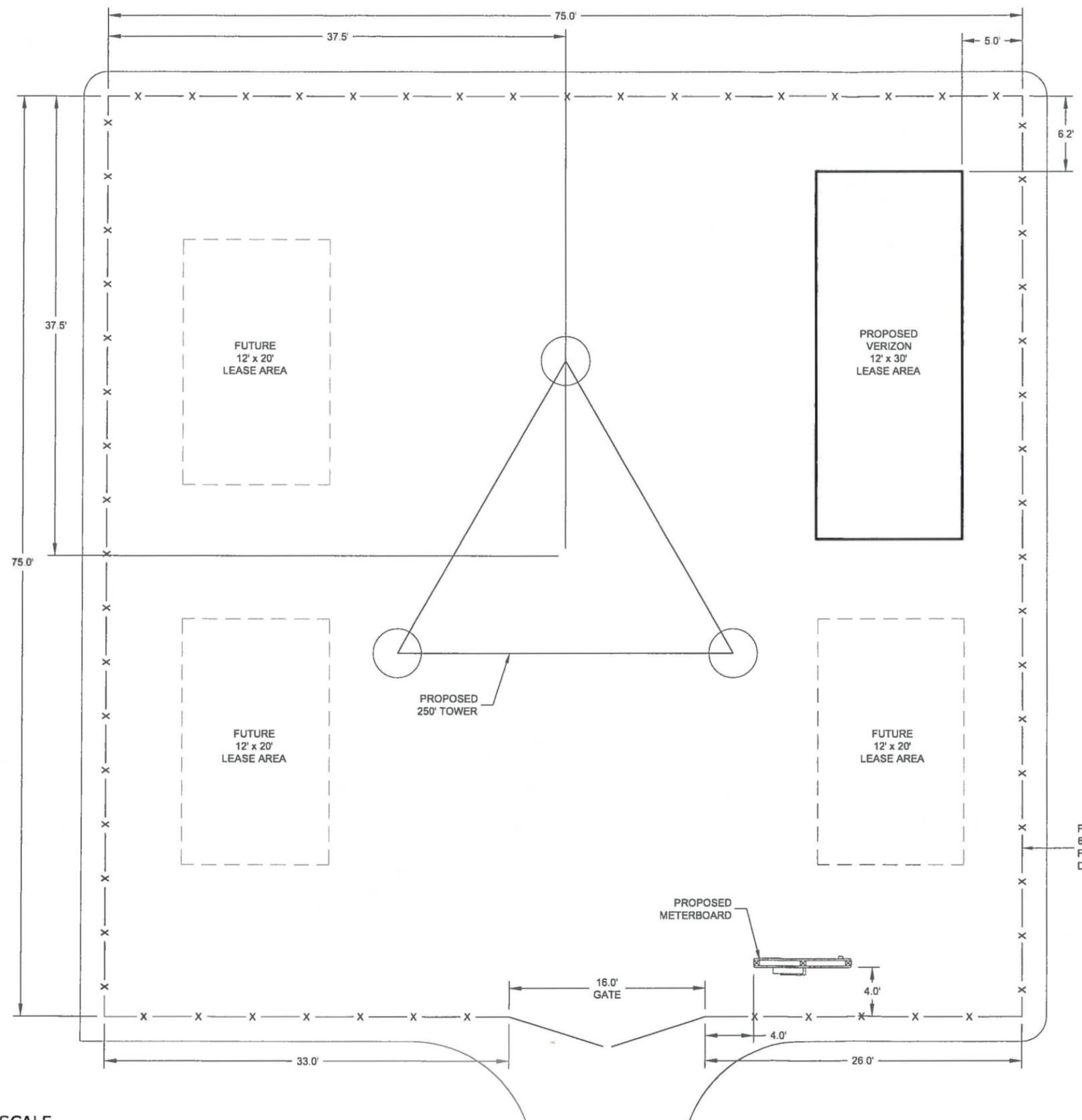
### OWNER INDEX

TAX ID	OWNER	ADDRESS
120W-00-00-018.00	TIMOTHY & DEBRA HALL	1865 E. MIDLAND TRL., GRAYSON, KY 41143
120W-00-00-032.00	PAUL D. & CAROL G. MILES	321 BECKWITH BR., GRAYSON, KY 41143
120W-00-00-033.00	BILLY & SONNIE HAYES	7 CARTER LN., GRAYSON, KY 41143
120W-00-00-035.00	GINA KITCHEN	295 PINE RIDGE DR., GRAYSON, KY 41143
120W-00-00-036.00	HUGH JUNIOR WITHROW	48 CARTER LN., GRAYSON, KY 41143
120W-00-00-040.00	WILLIAM & ROSEMARY KARTUNE	604 BECKWITH BR., GRAYSON, KY 41143
120W-00-00-042.00	DONALD & OPAL WITHROW	84 CARTER HOLLOW, GRAYSON, KY 41143
120W-00-00-045.00	MILLIS NEVEL WOLFE	PO BOX 1002, GRAYSON, KY 41143
120-10-00-081.00	JOHNSON & GOEBEL, INC.	310 S CAROL MALONE BLVD., GRAYSON, KY 41143

### GRAPHIC SCALE



NORTH MERIDIAN REFERENCED TO KY  
STATE PLANE COORDINATE SYSTEM  
SINGLE ZONE (NAD83)



**LEGEND**

	PROPERTY LINE
	LEASE LINE
	ROW LINE
	EXISTING FENCE LINE
	PROPOSED FENCE LINE
	PROPOSED SILT FENCE
	GAS LINE
	OVERHEAD POWER
	OVERHEAD TELEPHONE
	UNDERGROUND POWER
	UNDERGROUND TELCO.
	OVERHEAD POWER/TELEPHONE
	5/8" REBAR W/CAP SET
	FOUND MONUMENTATION
	CALCULATED POINT
	EXISTING UTILITY POLE
	PROPOSED UTILITY POLE

**Parallel  
INFRASTRUCTURE**  
4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: P13WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

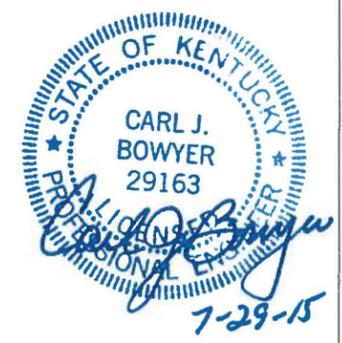
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15

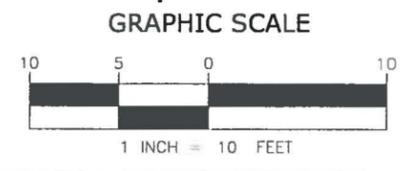


**Mead  
& Hunt**

400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

SITE PLAN SHEET C-1



NORTH MERIDIAN REFERENCED TO KY  
STATE PLANE COORDINATE SYSTEM  
SINGLE ZONE (NAD83)

TBM  
ELEV. 748.89  
NAIL IN 15" OAK

PROPOSED  
GRASS LINED  
DRAINAGE DITCH  
(SEE DETAIL ON SHEET D-2)

LEGEND

- — — — — PROPERTY LINE
- — — — — LEASE LINE
- — — — — ROW LINE
- x-x- EXISTING FENCE LINE
- SF-SF- PROPOSED FENCE LINE
- G-G- PROPOSED SILT FENCE
- E-E- GAS LINE
- T-T- OVERHEAD POWER
- UE-UE- OVERHEAD TELEPHONE
- UT-UT- UNDERGROUND POWER
- UT-UT- UNDERGROUND TELCO.
- E&T-E&T- OVERHEAD POWER/TELEPHONE
- FOUND MONUMENTATION
- CALCULATED POINT
- ⊙ EXISTING UTILITY POLE
- ⊙ PROPOSED UTILITY POLE

**Parallel**  
INFRASTRUCTURE

4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: P13WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

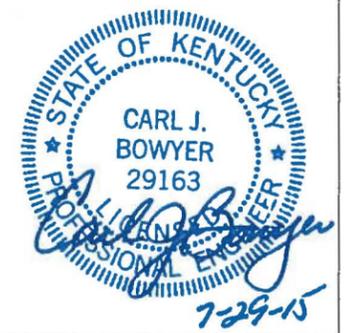
COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15

**NOTE:**  
NO TREES ARE TO BE  
CUT BETWEEN JUNE 1  
AND JULY 31



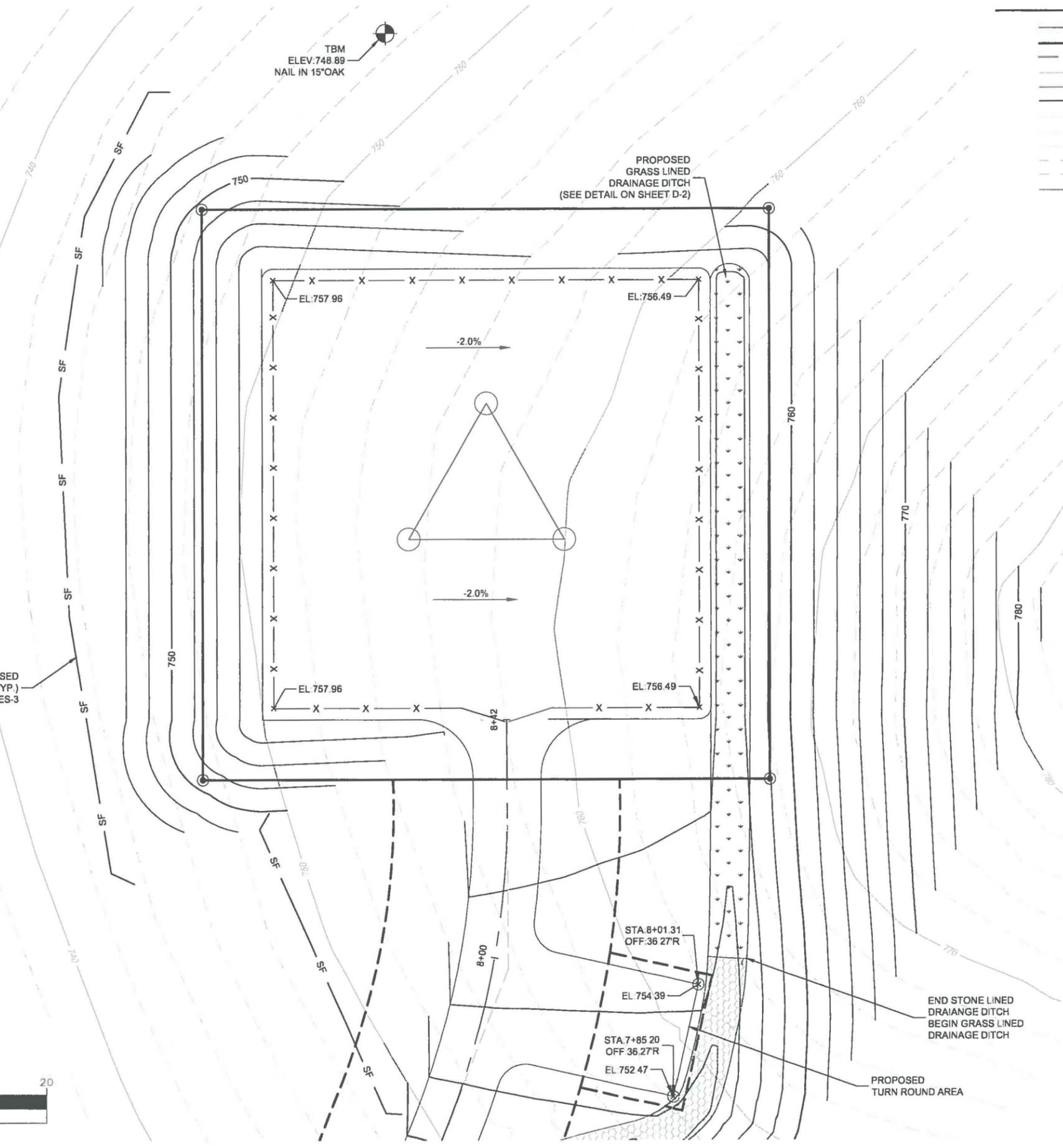
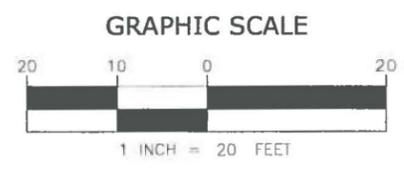
**Mead & Hunt**

400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX



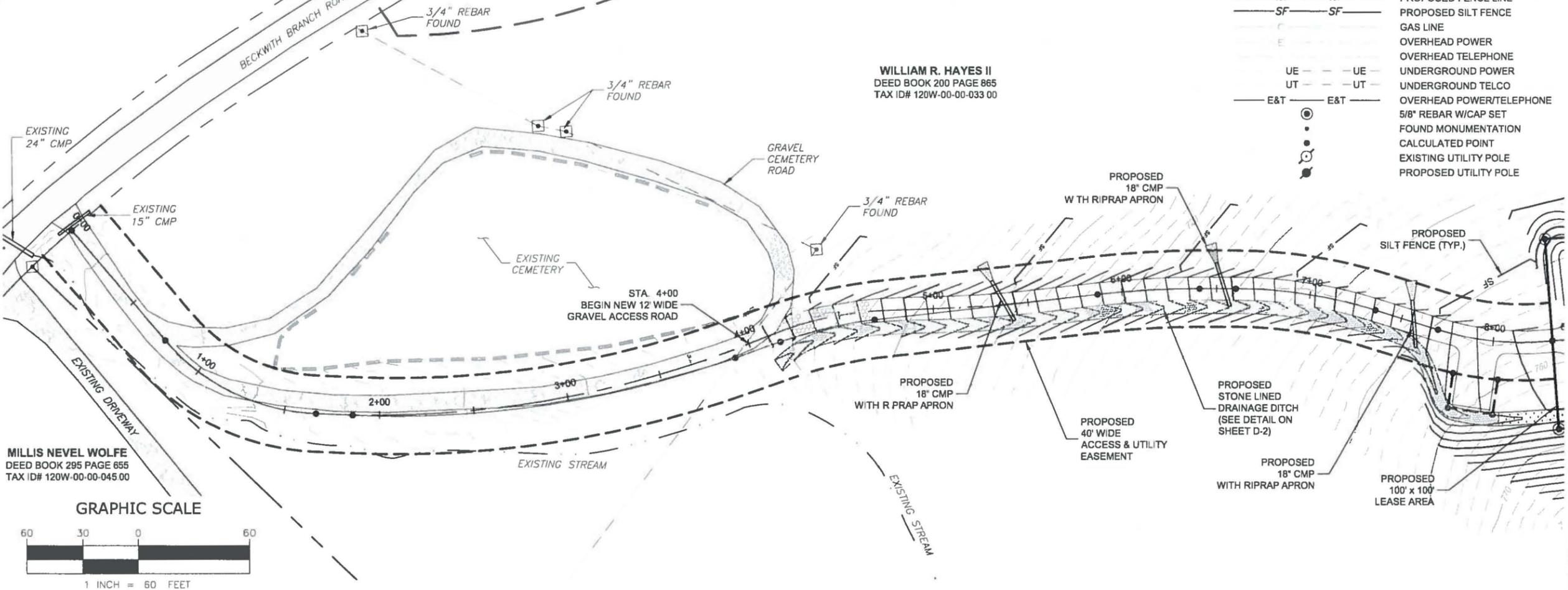
PROJECT # R4381500-150949.01

GRADING PLAN (TOWER SITE) SHEET C-2



NORTH MERIDIAN REFERENCED TO KY  
STATE PLANE COORDINATE SYSTEM  
SINGLE ZONE (NAD83)

WILLIAM R. HAYES II  
DEED BOOK 200 PAGE 865  
TAX ID# 120W-00-00-033 00



MILLIS NEVEL WOLFE  
DEED BOOK 295 PAGE 655  
TAX ID# 120W-00-00-045 00

LEGEND

- PROPERTY LINE
- LEASE LINE
- ROW LINE
- - - EXISTING FENCE LINE
- - - PROPOSED FENCE LINE
- - - SF - SF - PROPOSED SILT FENCE
- - - GAS LINE
- - - OVERHEAD POWER
- - - OVERHEAD TELEPHONE
- - - UNDERGROUND POWER
- - - UNDERGROUND TELCO
- - - OVERHEAD POWER/TELEPHONE
- 5/8" REBAR W/CAP SET
- FOUND MONUMENTATION
- CALCULATED POINT
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE

**Parallel**  
INFRASTRUCTURE

4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

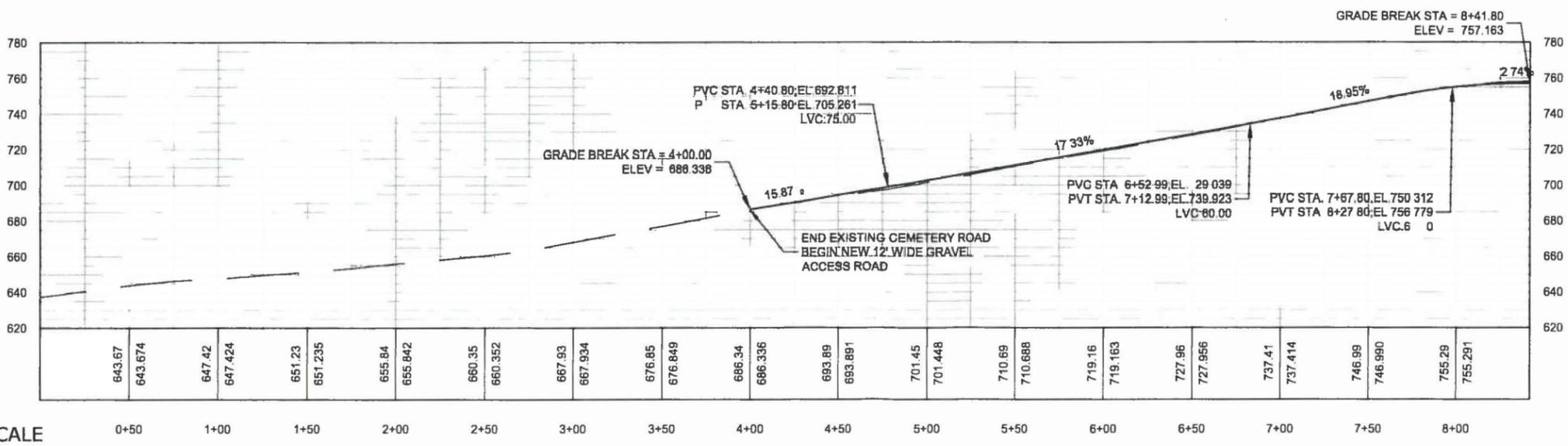
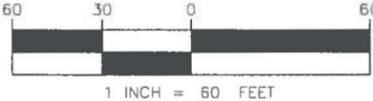
COUNTY: CARTER

MUNICIPALITY: GRAYSON

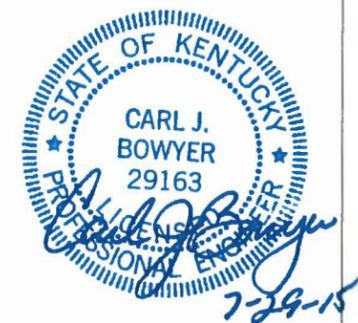
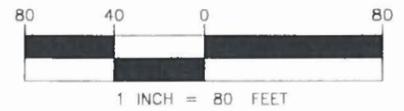
TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15

GRAPHIC SCALE



GRAPHIC SCALE



**Mead & Hunt**

400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345 6712 PHONE  
(304) 345 6714 FAX

PROJECT # R4381500-150949.01

ACCESS ROAD  
GRADING PLAN &  
PROFILE

SHEET  
C-2A

NORTH MERIDIAN REFERENCED TO KY  
STATE PLANE COORDINATE SYSTEM  
SINGLE ZONE (NAD83)

**WILLIAM & ROSEMARY KARTUNE**  
DEED BOOK 029 PAGE 712  
TAX ID# 120W-00-00-040.00

**DONALD & OPAL WITHROW**  
DEED BOOK 209 PAGE 427  
TAX ID# 120W-00-00-042.00

**WILLIAM R. HAYES II**  
DEED BOOK 200 PAGE 865  
TAX ID# 120W-00-00-033.00

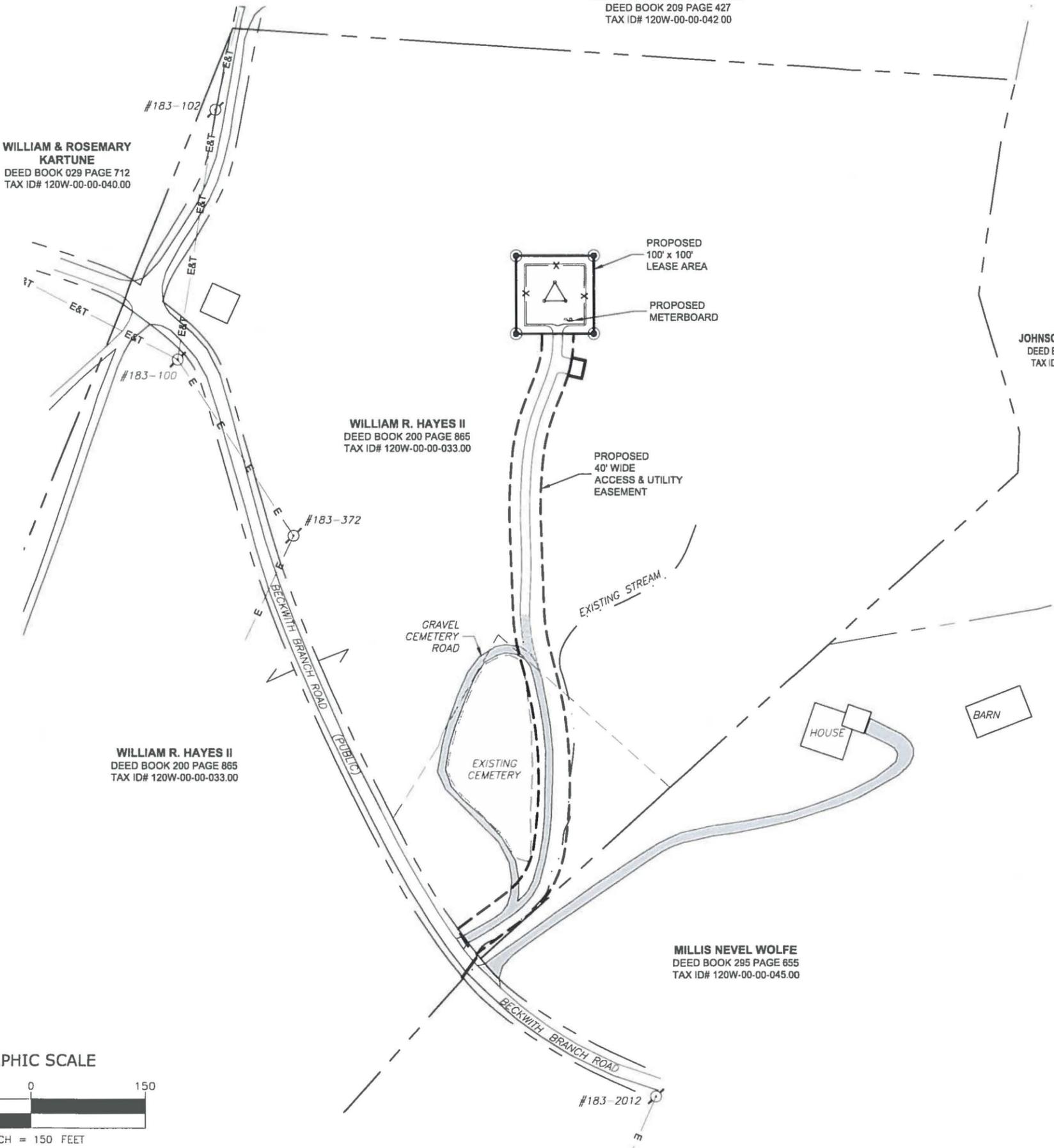
**WILLIAM R. HAYES II**  
DEED BOOK 200 PAGE 865  
TAX ID# 120W-00-00-033.00

**MILLIS NEVEL WOLFE**  
DEED BOOK 295 PAGE 655  
TAX ID# 120W-00-00-045.00

**JOHNSON & GOEBEL, INC.**  
DEED BOOK 179 PAGE 038  
TAX ID# 120-10-00-081.00

**LEGEND**

- PROPERTY LINE
- TRACT LINE
- LEASE LINE
- ROW LINE
- - - - - EXISTING FENCE LINE
- - - - - PROPOSED FENCE LINE
- - - - - PROPOSED SILT FENCE
- - - - - GAS LINE
- - - - - OVERHEAD POWER
- - - - - OVERHEAD TELEPHONE
- - - - - UNDERGROUND POWER
- - - - - UNDERGROUND TELCO
- - - - - OVERHEAD POWER/TELEPHONE
- - - - - CALCULATED POINT
- - - - - FOUND MONUMENTATION
- - - - - EXISTING UTILITY POLE
- - - - - PROPOSED UTILITY POLE



**Parallel INFRASTRUCTURE**

4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: P13WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

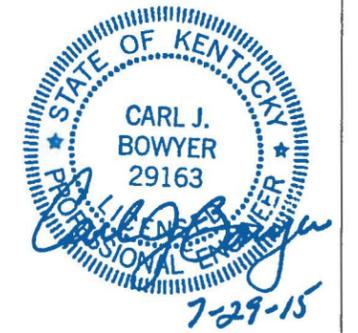
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15



**Mead & Hunt**

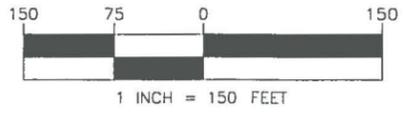
400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

UTILITY SERVICE PLAN SHEET C-3

**NOTE:**  
ORIGIN OF UTILITY RUNS TO SITE SHALL BE DETERMINED BY THE RESPECTIVE UTILITY PROVIDERS.  
A TOTAL OF 4 FIBER RUNS WILL BE INSTALLED FROM UTILITY ORIGIN TO THE SITE.

**GRAPHIC SCALE**



NORTH MERIDIAN REFERENCED TO KY  
STATE PLANE COORDINATE SYSTEM  
SINGLE ZONE (NAD83)

**NOTE:**  
ORIGIN OF UTILITY RUNS TO SITE  
SHALL BE DETERMINED BY THE  
RESPECTIVE UTILITY PROVIDERS.

**LEGEND**

---	PROPERTY LINE
- - - -	TRACT LINE
- - - -	LEASE LINE
- - - -	ROW LINE
- - - -	EXISTING FENCE LINE
- - - -	PROPOSED FENCE LINE
- - - -	PROPOSED SILT FENCE
- - - -	GAS LINE
- - - -	OVERHEAD POWER
- - - -	OVERHEAD TELEPHONE
- - - -	UNDERGROUND POWER
- - - -	UNDERGROUND TELCO
- - - -	OVERHEAD POWER/ TELEPHONE
○	5/8" REBAR W/CAP SET
○	FOUND MONUMENTATION
○	CALCULATED POINT
○	EXISTING UTILITY POLE
○	PROPOSED UTILITY POLE

**Parallel**  
INFRASTRUCTURE

4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

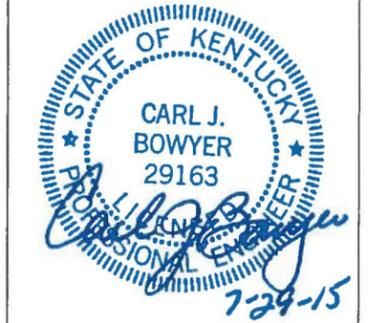
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15

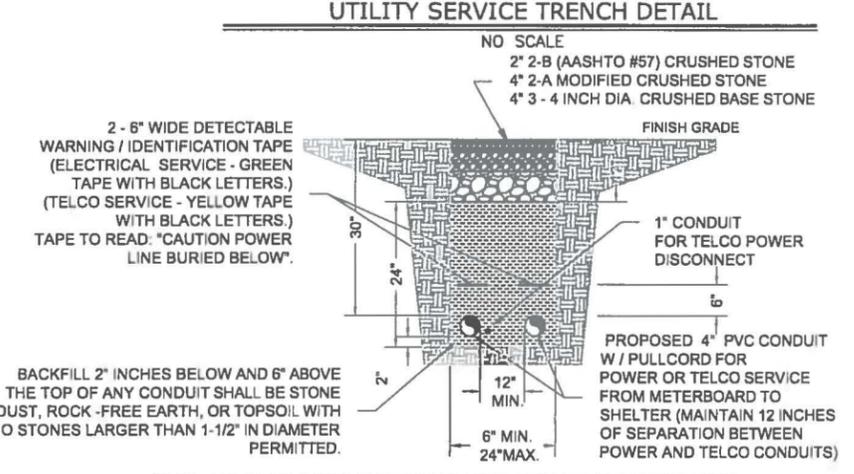
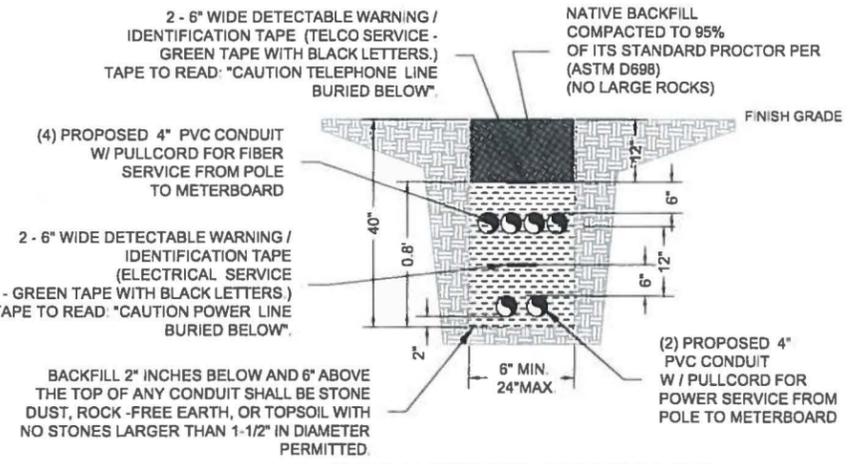
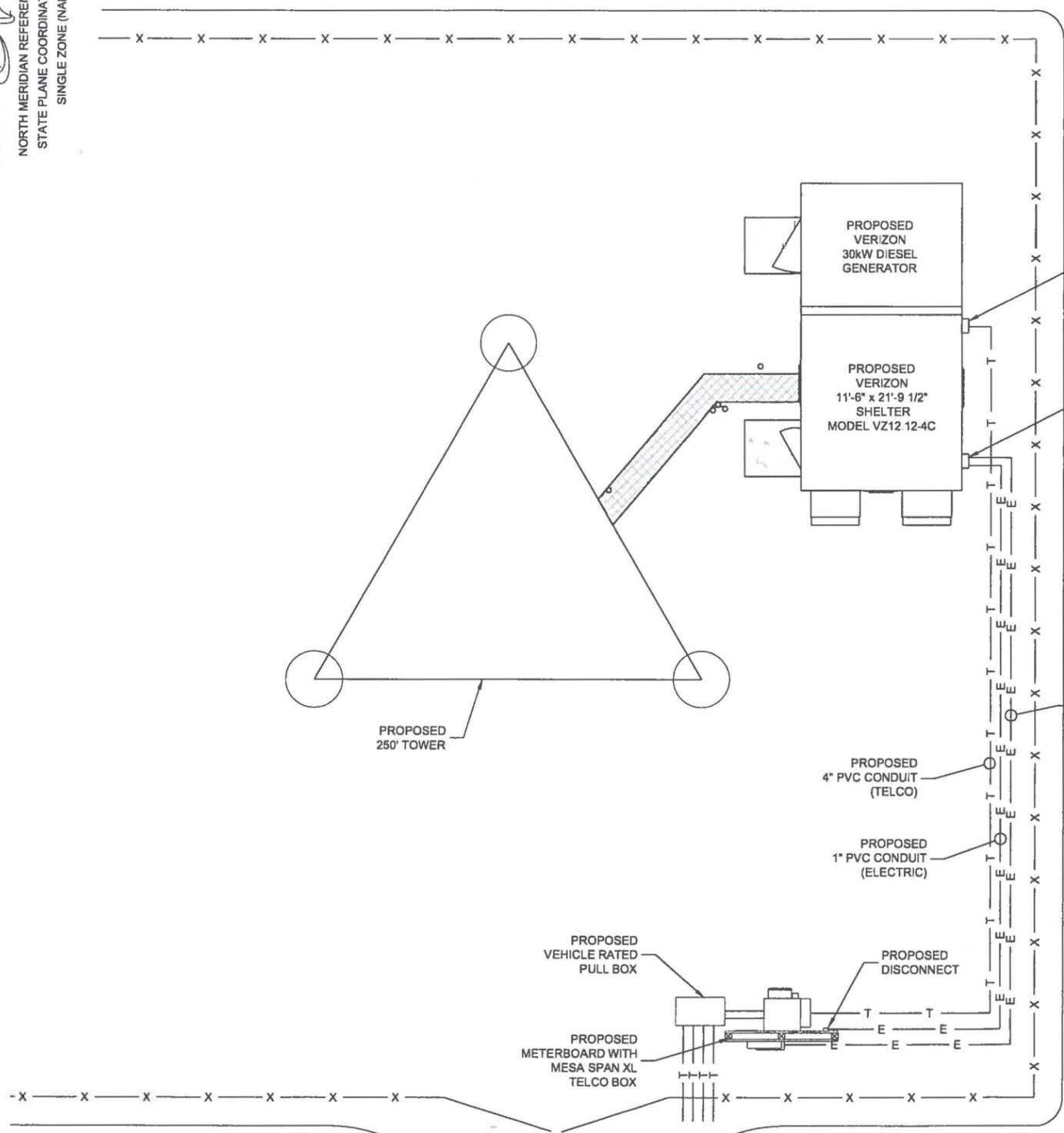


**Mead & Hunt**

400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

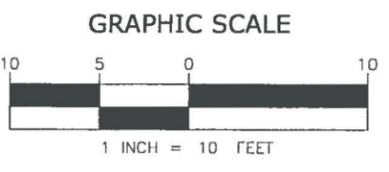
PROJECT # R4381500-150949.01

UTILITY SERVICE PLAN (VERIZON WIRELESS) SHEET C-4



TYP. TRENCHING DETAILS FOR CONDUIT ROUTING WITHIN COMPOUND

- NOTE:**
- CONDUITS ARE TO BE STUBBED UP TO NEAREST UTILITY POLE WITHIN 2' OF THE POLE
  - PROVIDE ALL TRENCHING AND BACKFILLING THAT IS REQUIRED FOR THE INSTALLATION OF THE UNDERGROUND DISTRIBUTION FACILITIES
  - EXCAVATE TRENCH IN THE LOCATION INDICATED BY THE APPROVED ELECTRICAL LAYOUT DRAWING(S) OR FILED STAKE OUT.
  - UTILITY TRENCHES TO BE EXCAVATED TO THE DIMENSIONS AS SHOWN ABOVE PRIMARY, SECONDARY AND SERVICES LATERAL CONDUITS ARE MAY INSTALLED IN THE SAME TRENCH PROVIDED THE PRIMARY TRENCH DIMENSIONS ARE USED
  - THE BOTTOM OF THE TRENCH MUST BE BE FREE FROM ROCK, CINDERS, OR SHARP OBJECTS A 2 INCH BED BELOW AND A 6 INCH APPROVED BACKFILL OVER THE TOP OF ALL CONDUITS ARE REQUIRED TO PREVENT DAMAGE TO THE CONDUITS. APPROVED BACKFILL MUST MEET ALL SPECIFICATIONS ALL BACKFILL SHALL BE COMPACTED TO AVOID AND MINIMIZE SETTLING
  - SEPARATION BETWEEN ELECTRICAL CABLES , GAS, WATER, OR SEWER LINES SHALL 12 INCHES MINIMUM. GREATER SEPARATION SHALL MAINTAINED WHERE PRACTICAL OR HAS MAY BE DETERMINED BY LOCAL PUBLIC SERVICES COMPANIES
  - ALL DISTURBED AREAS NOT COVERED BY STONE ARE TO BE SEEDED AND MULCHED.
  - CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL OF UNSUITABLE MATERIAL WHICH WILL NOT COMPACT PROPERLY
  - A 1/4" HIGH STRENGTH PULL ROPE (NYLON, OR POLYPROPYLENE) SHALL BE INSTALLED BY THE CONTRACTOR FOR THE TELEPHONE COMPANIES USE
  - TAPE SHALL BE LAID DIRECTLY ABOVE THE CABLE OR CONDUIT UNDER UNDER RIGID TYPE AND OIL MAT PAVEMENTS, AND DIRECTLY ON TOP OF THE COMPACTED EARTH SUBGRADE IMMEDIATELY BEFORE RESTORING THE PAVEMENT IN OPEN AREA, THE TAPE SHALL BE LAID DURING THE BACKFILL OPERATION ON SMOOTH, COMPACTED BACKFILL THE TAPE ENDS SHALL BE LAPPED APPROXIMATELY SIX(6") INCHES



SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15

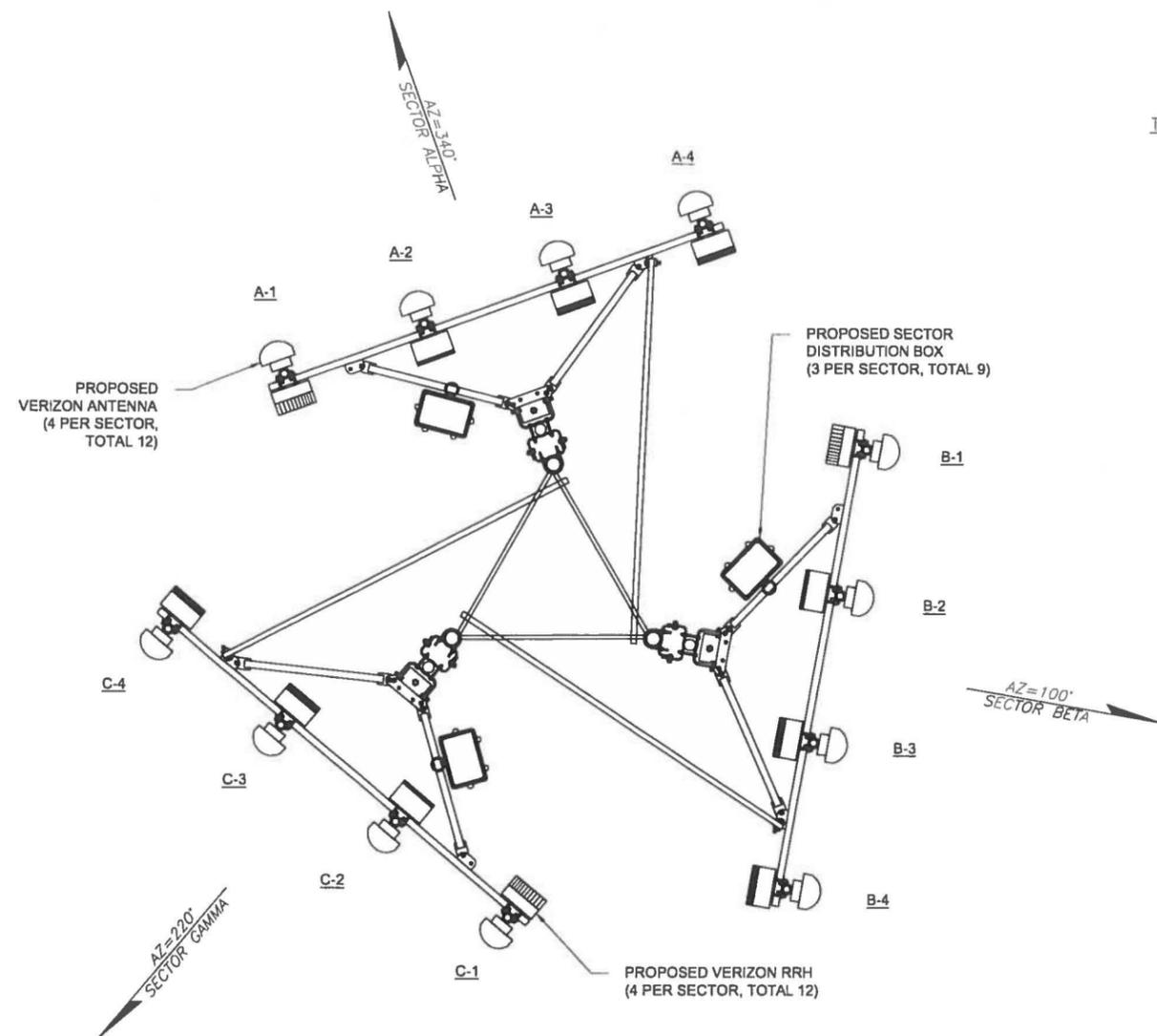
FOR  
ILLUSTRATIVE  
PURPOSES  
ONLY  
SEE  
APPROVED  
TOWER  
DRAWINGS

## Mead & Hunt

400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

TOWER ELEVATION SHEET  
C-5



### PROPOSED ANTENNA ORIENTATION PLAN VIEW

NOT TO SCALE

### PLAN VIEW TOWER MOUNTING DETAIL TWO ANTENNA PER SECTOR WITH STANDOFF HORIZONTAL SEPARATION CONFIGURATION

NOT TO SCALE

#### NOTES:

1. THE TOWER AND TOWER FOUNDATION HAS BEEN DESIGNED BY OTHERS.
2. THE CONTRACTOR TO VERIFY THE COAX AND CABLE LADDER PLACEMENT WITH A REPRESENTATIVE OF THE OWNER AND/OR CURRENT STRUCTURAL ANALYSIS.
3. ALL COAX LINES TO BE STACKED PER STRUCTURAL ANALYSIS.
4. CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE TOWER DESIGN AND/OR CURRENT STRUCTURAL ANALYSIS PERFORMED BY OTHERS.
5. THE CONTRACTOR TO VERIFY ANTENNA INFORMATION 48 HOURS PRIOR TO INSTALLING.
6. THIS DRAWING IS FOR GENERAL INFORMATION ONLY.

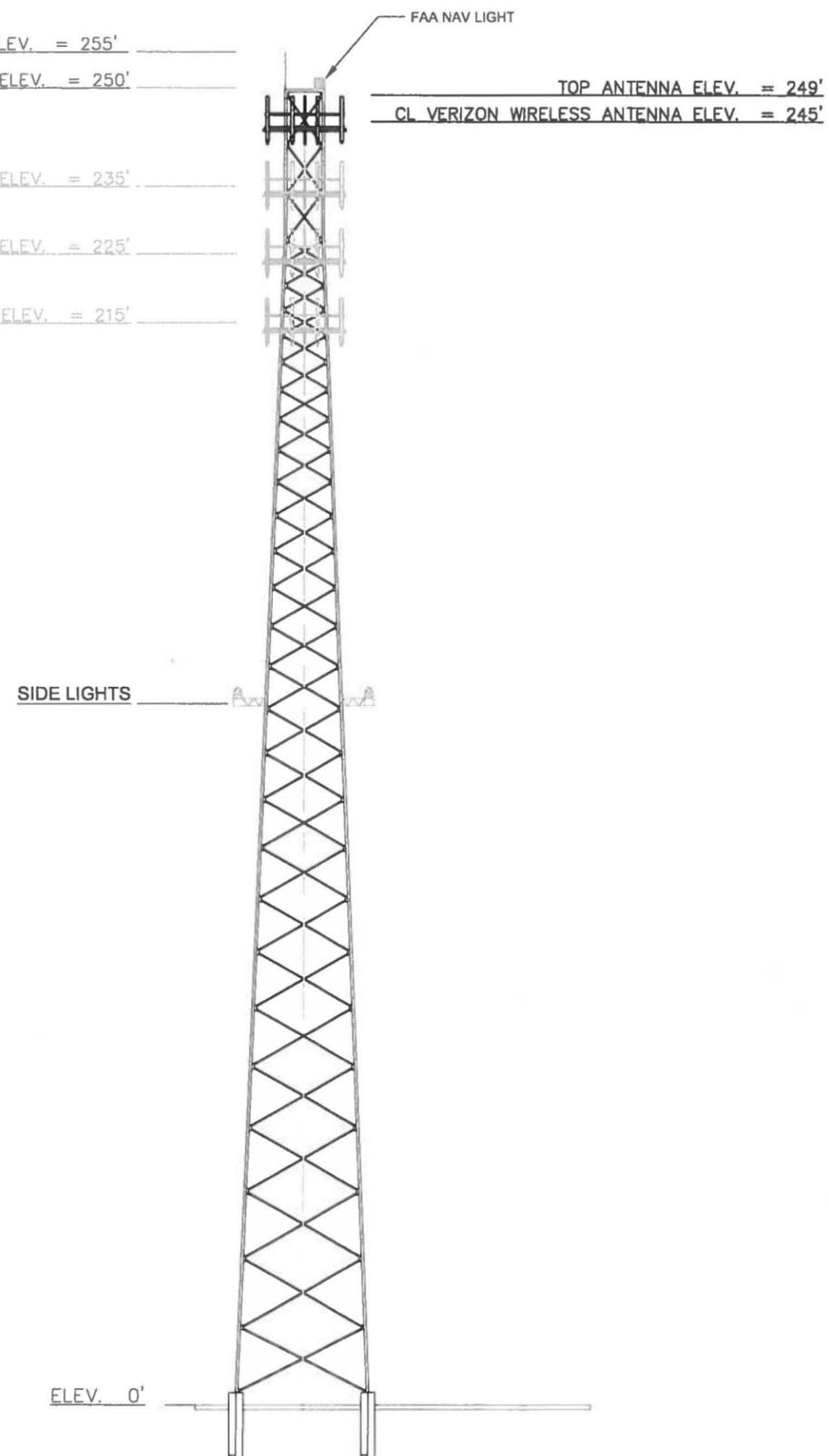
TOP OF LIGHTNING ROD ELEV. = 255'

TOP OF TOWER ELEV. = 250'

FUTURE ANTENNA ELEV. = 235'

FUTURE ANTENNA ELEV. = 225'

FUTURE ANTENNA ELEV. = 215'



# Parallel INFRASTRUCTURE

4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15

FOR  
ILLUSTRATIVE  
PURPOSES  
ONLY  
SEE  
APPROVED  
TOWER  
DRAWINGS

## Mead & Hunt

400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

RF DATA

SHEET  
C-5A

SITE INFORMATION							
Parallel Infrastructure Site ID:	PI3KY00011.B	Lessee Site ID:	Carter Hollow				
Parallel Infrastructure Site Name:	Carter Hollow RD, Grayson KY	Lessee Site Name:	Carter Hollow				
Street Address:	#TBD, Beckworth Drive						
City:	Grayson	County:	Carter	State:	KY	Zip:	41143
Latitude (NAD 83):	38-20-31.661	Longitude (NAD 83):	82-53-57.736				
Desired Installation Date:	April 2016						

APPLICANT INFORMATION (as it should appear on the lease agreement)					
Company Name:	Cellco Partnership, dba Verizon Wireless				
Street Address:	One Verizon Way, Mail Stop 4AW100				
City:	Basking Ridge	State:	NJ	Zip:	07920
Phone:	NA	Fax:	NA		
Entity Type (Partnership, Corporation, etc.):	Partnership				

CARRIER CONTACT INFORMATION (main point of contact for lease)					
Company Name:	Wireless Resources Inc.				
Point of Contact:	Tim Stark				
Street Address:	258 Village Drive				
City:	Canonsburg	State:	PA	Zip:	15317
Phone:	850-232-8777	Fax:	412-436-3711		
E-mail:	Tim.stark@wirelessresources.com				

CUSTOMER REPRESENTATIVE/SITE ACQUISITION CONTACT INFORMATION (main point of contact for application information)					
Company Name:	Wireless Resources Inc.				
Point of Contact:	Tim Stark				
Street Address:	258 Village Drive				
City:	Canonsburg	State:	PA	Zip:	15317
Phone Number:	850-232-8777	Fax:	412-436-3711		
E-mail:	Tim.stark@wirelessresources.com				

ADDITIONAL CARRIER INFORMATION (supplemental points of contact for application information)			
Leasing Contact:	Tim Stark	850-232-8777	Tim.stark@wirelessresources.com
RF Contact:	Doug Crump	304-422-3317	Doug.crump@verizonwireless.com
Legal Review Contact:	Tim Stark	850-232-8777	Tim.stark@wirelessresources.com
Zoning Contact:	Tim Stark	850-232-8777	Tim.stark@wirelessresources.com
Construction Contact:	Josh Supak	412-389-8551	Josh.supak@verizonwireless.com
Emergency Contact:	Verizon NOC Center	800-852-2671	NA

ANTENNAS & TRANSMISSION LINES			
Lessee Owned Antennas	Sector 1	Sector 2	Sector 3
Antenna Height ACL	245'	245'	245'
Antenna Quantity	4	4	4
Antenna Manufacturer	Commscope	Commscope	Commscope
Antenna Model (Attach Spec Sheet)	SBNHH-1D65C	SBNHH-1D65C	SBNHH-1D65C
Antenna Dimensions	L 96" x W 11.9" x D 7.1"	L 96" x W 11.9" x D 7.1"	L 96" x W 11.9" x D 7.1"
Antenna - Upright/Inverted	Mid mount	Mid Mount	Mid Mount
ERP (Watts)	1000 W	1000 W	1000 W
Azimuth	340	100	220
Antenna Mount Type	Sabre 12' V Mount (3' standoff)	Sabre 12' V Mount (3' standoff)	Sabre 12' V Mount (3' standoff)
Remote Radio Head (RRH) Quantity	4	4	4
RRH Manufacturer	ALU	ALU	ALU
RRH Model	ALU-B4-RRH-2X604R-AW5	ALU-B4-RRH-2X604R-AW5	ALU-B4-RRH-2X604R-AW5
RRH Dimensions	L 36.7" x W 10.6" x D 5.75"	L 36.7" x W 10.6" x D 5.75"	L 36.7" x W 10.6" x D 5.75"
Sector Boxes Quantity	1	1	1
Sector Boxes Manufacture	RFS	RFS	RFS
Sector Boxes Model	DB-B1-6C-12AB-02	DB-B1-6C-12AB-02	DB-B1-6C-12AB-02
Sector Boxes Dimensions	L 19.2" X 15.7" X 10.3"	L 19.2" X 15.7" X 10.3"	L 19.2" X 15.7" X 10.3"
Number of Transmission Lines	4	4	4
Diameter of Transmission Lines	1 5/8"	1 5/8"	1 5/8"
Number of Hybrid Lines	1	1	1
Diameter of Hybrid Lines	1 5/8"	1 5/8"	1 5/8"
Satellite/GPS Antennas			
Model:	TBD	Size:	TBD
Mounting:	SHELTER		Mounting Height (if on tower):
GPS:	SHELTER	Mounting Height (if on tower):	NA-SHELTER

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

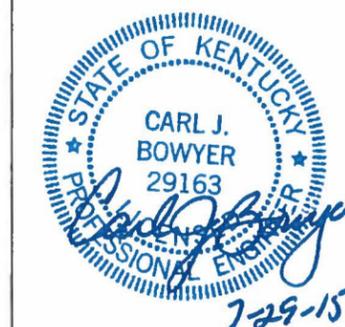
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

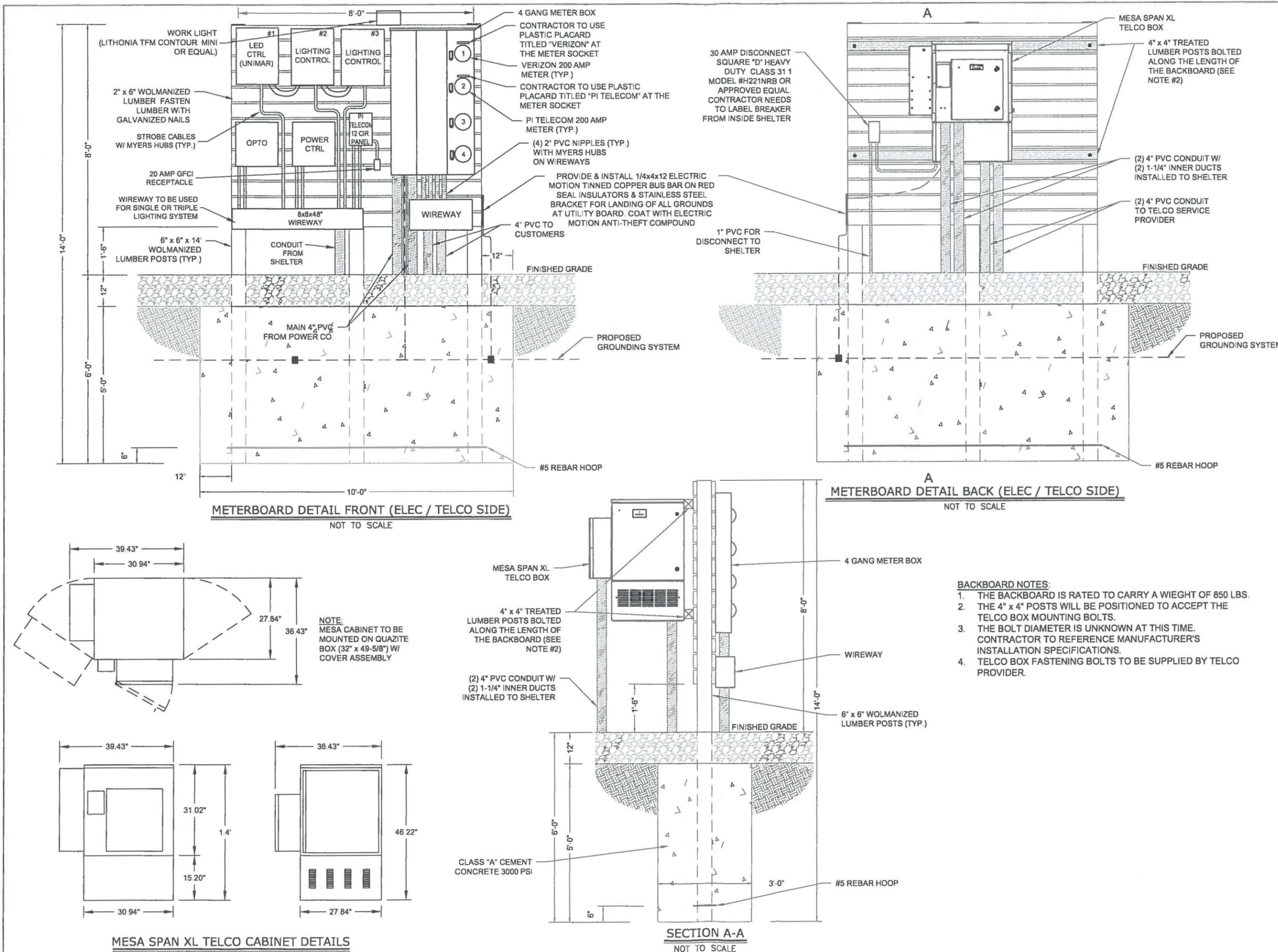
TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15



PROJECT # R4381500-150949.01

MISCELLANEOUS  
DETAILS SHEET  
D-1



**CONSTRUCTION SEQUENCE**

CONSTRUCTION SITE: THE FOLLOWING CONSTRUCTION SEQUENCE HAS BEEN ESTABLISHED. THE CONTRACTOR SHALL MINIMIZE THE AREA OF DISTURBANCE DURING CONSTRUCTION BY FOLLOWING THE CONSTRUCTION SEQUENCE. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING STAGING OF EARTH MOVING ACTIVITIES. EACH STAGE SHALL BE COMPLETED BEFORE SUBSEQUENT STAGES ARE INITIATED. THE CONTRACTOR SHALL UTILIZE THE BEST MANAGEMENT PRACTICES (BMP'S) IN MINIMIZING AND CONTROLLING EROSION GENERATED FROM ALL CONSTRUCTION ACTIVITIES.

**1.0 INSTALL EROSION AND SEDIMENTATION MEASURES**

- 1.1 INSTALL FILTER FENCE DOWNSLOPE OF ALL PROPOSED CONSTRUCTION ACTIVITY.
- 1.2 CLEAR AND GRUB EXISTING VEGETATION, STRIP TOPSOIL FROM CONSTRUCTION ENTRANCE.
- 1.3 ESTABLISH A SOIL STOCKPILE IF REQUIRED AT A SUITABLE LOCATION WITH THE PROJECT.
- 1.4 IMMEDIATELY PLACE FILTER FABRIC AND STONE ENTRANCE MATERIAL AS DETAILED ON PLAN. NOTE: NO CONSTRUCTION EQUIPMENT SHALL BE PERMITTED TO LEAVE THE SITE UNTIL THE CONSTRUCTION ENTRANCE HAS BEEN INSTALLED.
- 1.5 STABILIZE ANY REMAINING DISTURBED AREAS BY SEEDING AND MULCHING ANY AREAS THAT WOULD BE EXPOSED FOR MORE THAN 20 DAYS IN ACCORDANCE WITH THE TEMPORARY SEEDING CHART.

**2.0 CONSTRUCT ACCESS ROAD**

- 2.1 INSTALL E&S CONTROL MEASURES ALONG ACCESS ROAD AT THE TOE OF FILL SLOPE OR AREAS ALONG THE ACCESS ROAD SUBJECT TO EROSION AND CONSTRUCT ACCESS ROAD FROM THE ENTRANCE TO THE LIMITS OF FENCED AREA OF THE TOWER SITE.
- 2.2 CLEAR AND GRUB ANY EXISTING VEGETATION AND STRIP TOPSOIL FROM THE ACCESS ROAD AND UTILITY EASEMENT AREA.
- 2.3 THE CONTRACTOR SHALL BE RESPONSIBLE FOR STOCKPILING ANY AND ALL MATERIAL ON OR OFF THE SITE THAT MAY BE UTILIZED ON THE PROJECT. ANY AND ALL UNSUITABLE SOIL AND WASTE MATERIALS SHALL BE REMOVED FROM THE SITE AND SHALL BE PROPERLY DISPOSED OF. ALL AREAS OF STOCKPILED MATERIAL AND WASTE SITES SHALL BE PROPERLY STABILIZED IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS AND ORDINANCES.
- 2.4 IMMEDIATELY COMPACT SUBGRADE AND PLACE ROAD BASE MATERIAL TO DEPTH AS SHOWN ON TYPICAL SECTION.
- 2.5 TEMPORARILY STABILIZE ANY REMAINING DISTURBED SOIL WITH TEMPORARY SEEDING AND MULCH, AS PER SEEDING CHART. AFTER MARCH 15, AS WEATHER PERMITS, SOIL MAY BE STABILIZED ACCORDING TO EITHER THE TEMPORARY OR FINAL SEEDING CHARTS. ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WILL REMAIN EXPOSED FOR MORE THAN 20 DAYS, MUST BE STABILIZED IMMEDIATELY.

**3.0 GRADE TOWER SITE AND STABILIZE**

- 3.1 INSTALL DOWNSLOPE E&S CONTROL DEVICES (SILT FENCE, ETC.)
  - 3.2 CLEAR AND GRUB VEGETATION, STRIP TOPSOIL AND UNACCEPTABLE MATERIAL FROM AREA TO BE GRADED.
  - 3.3 THE CONTRACTOR SHALL BE RESPONSIBLE FOR STOCKPILING ANY AND ALL MATERIAL ON OR OFF THE SITE THAT MAY BE UTILIZED ON THE PROJECT. ANY AND ALL UNSUITABLE SOIL AND WASTE MATERIALS SHALL BE REMOVED FROM THE SITE AND SHALL BE PROPERLY DISPOSED OF. ALL AREA OF STOCKPILED MATERIAL AND WASTE SITES SHALL BE PROPERLY STABILIZED IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS AND ORDINANCES.
  - 3.4 ROUGH GRADE SITE AS SHOWN ON PLANS. CUT AND FILL SLOPES SHALL BE NO GREATER THAN 2:1 UNLESS OTHERWISE NOTED.
  - 3.5 IMMEDIATELY STABILIZE SIDE SLOPES BY TRACKING AND COMPACTING SOIL USING A DOZER OR SUITABLE EQUIPMENT THEN IMMEDIATELY SEED AND MULCH ALL EXPOSED DISTURBED AREAS.
- 4.0 CONSTRUCT TOWER AND INSTALL EQUIPMENT SHELTER**
- 4.1 EXCAVATE AREAS FOR TOWER FOUNDATION FOOTINGS. THE CONTRACTOR SHALL DISPOSE OF OR REUSE ANY SUITABLE MATERIAL EXTRACTED DURING THE EXCAVATION OPERATIONS. ALL MATERIAL SHALL BE HANDLED IN THE SAME MANNER AS ALL OTHER WASTE OR STOCKPILED MATERIAL, PROPERLY DISPOSED OF OR STOCKPILED AND STABILIZED.
  - 4.2 INSTALL TOWER FOOTINGS TO THE SPECIFICATIONS AND DIMENSION AS PRESCRIBED AND DESIGNED BY OTHERS. IF FOUNDATION TRENCHES REQUIRE DEWATERING, PUMP WATER SHALL BE FILTERED THROUGH A SEDIMENT DEWATERING TRAP BEFORE DISCHARGING.
  - 4.3 BACKFILL AROUND FOUNDATIONS AND COMPLETE FINAL GRADING AROUND BUILDING AND TOWER. STABILIZE WITH STONE BASE (GRAVEL APRON) AS DETAILED ON PLAN.
  - 4.4 ERECT TOWER IN ACCORDANCE WITH THE SPECIFICATIONS AND ERECTION PLANS AND PROCEDURES PREPARED AND SUPPLIED BY OTHERS.
  - 4.5 INSTALL EQUIPMENT SHELTER AND ERECT THE FENCE. STABILIZE ANY REMAINING AREAS THAT MAY BE EXPOSED FOR MORE THAN 20 DAYS IN ACCORDANCE WITH THE TEMPORARY SEEDING CHART.

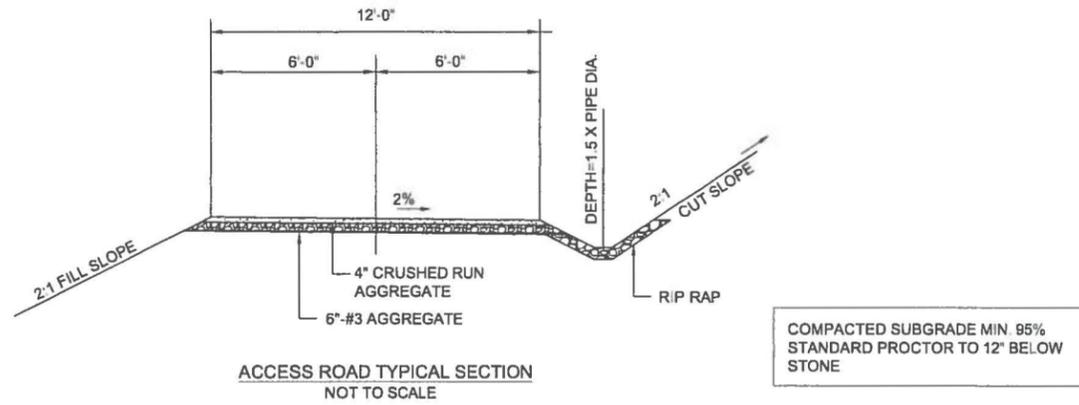
**5.0 DEMOBILIZATION**

- 5.1 COMPLETE PERMANENT STABILIZATION MEASURES (FINAL SEEDING) FOR ENTIRE SITE AND/OR REPAIR DAMAGED CRUSHED STONE AREAS.
- 5.2 AFTER ALL AREAS ARE AT LEAST 75% PERMANENTLY STABILIZED BY VISUAL INSPECTION, TEMPORARY CONTROL MEASURES PLACE DOWN SLOPE (FILTER FENCE, ROCK FILTERS, ETC.) MAY BE REMOVED.

**6.0 EARTH MOVING DURING WINTER CONDITIONS**

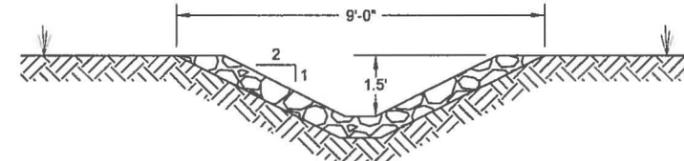
- 6.1 IN ORDER TO MINIMIZE THE POTENTIAL FOR SOIL EROSION AND RESULTING POLLUTION DURING THE WINTER MONTHS, THE FOLLOWING E & S POLLUTION CONTROL MEASURES SHALL BE UTILIZED FOR ALL SOILS LOCATED ON THE SITE.
- 6.2 WHEN FROZEN SOILS ARE ENCOUNTERED, THEY MUST BE STABILIZED WITHIN 3 DAYS OF DISTURBANCE WITH THE MEASURES CALLED OUT IN THE CONSTRUCTION SEQUENCE AND AS SHOWN ON THE PLAN. AREAS THAT ARE NOT TO BE PERMANENTLY STABILIZED WITH STONE SHALL BE STABILIZED WITH MULCH AND JUTE NETTING UNTIL TEMPORARY OR FINAL SEEDING CAN BE ACCOMPLISHED.
- 6.3 ADDITIONAL STONE SHALL BE PLACED ON THE CONSTRUCTION ENTRANCE AND OR ACCESS ROAD IF REQUIRED TO MAINTAIN ITS EFFECTIVENESS.

SITE PREPARATION: A SOIL TEST ANALYSIS IS RECOMMENDED TO DETERMINE THE NECESSARY SOIL AMENDMENTS; HOWEVER, IF THIS IS NOT POSSIBLE, APPLY 6 TONS OF AGRICULTURAL GRADE LIMESTONE PER ACRE PLUS (10-20-20) FERTILIZER AT THE RATE OF 1000 LBS PER ACRE AND WORK IN WHERE POSSIBLE. AFTER SEEDING, MULCH WITH STRAW AT A RATE OF 3 TONS PER ACRE. IF FINAL SEEDING IS NOT ACCOMPLISHED WITHIN THE SAME GROWING SEASON, LIME, FERTILIZER, AND MULCH SHALL BE REAPPLIED AT THE TIME OF FINAL SEEDING AT THE SAME RATES AS INDICATED ABOVE.

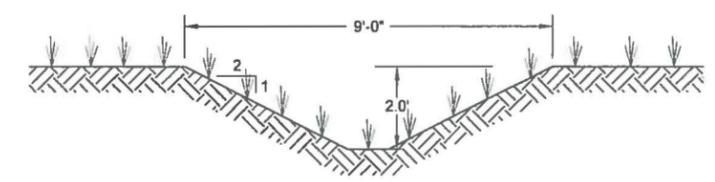


**GENERAL NOTES**

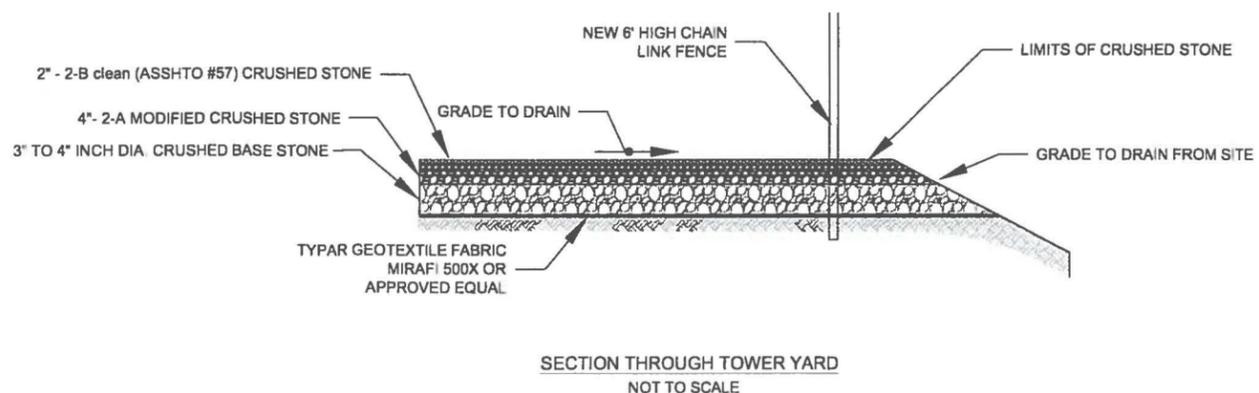
- 1. CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL OF UNSUITABLE MATERIAL THAT WILL NOT COMPACT PROPERLY.
- 2. CONTRACTOR WILL PROVIDE ENOUGH MATERIAL TO INSURE THAT THE FINISHED STONE ELEVATION OF THE ACCESS ROAD IS HIGHER THAN THE SURROUNDING GROUND.
- 3. THE LOCATIONS OF ANY CULVERTS AND/OR DITCHES SHOWN HEREON ARE SHOWN IN THEIR APPROXIMATE PRE-CONSTRUCTION CONFIGURATION. THE FINAL OR AS-BUILT LOCATIONS MAY BE FIELD ADJUSTED BY THE CONSTRUCTION MANAGER TO COMPENSATE FOR MINOR VARIATIONS IN THE ROADWAY LOCATION, SLOPES, DITCHES, ETC.



TYPICAL STONE LINED DRAINAGE DITCH SECTION  
NOT TO SCALE



TYPICAL GRASS LINED DRAINAGE DITCH SECTION  
NOT TO SCALE



4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

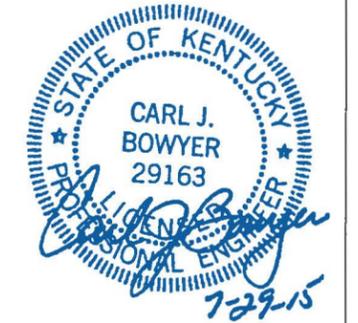
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15



400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

MISCELLANEOUS DETAILS	SHEET D-2
-----------------------	-----------

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: P13WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

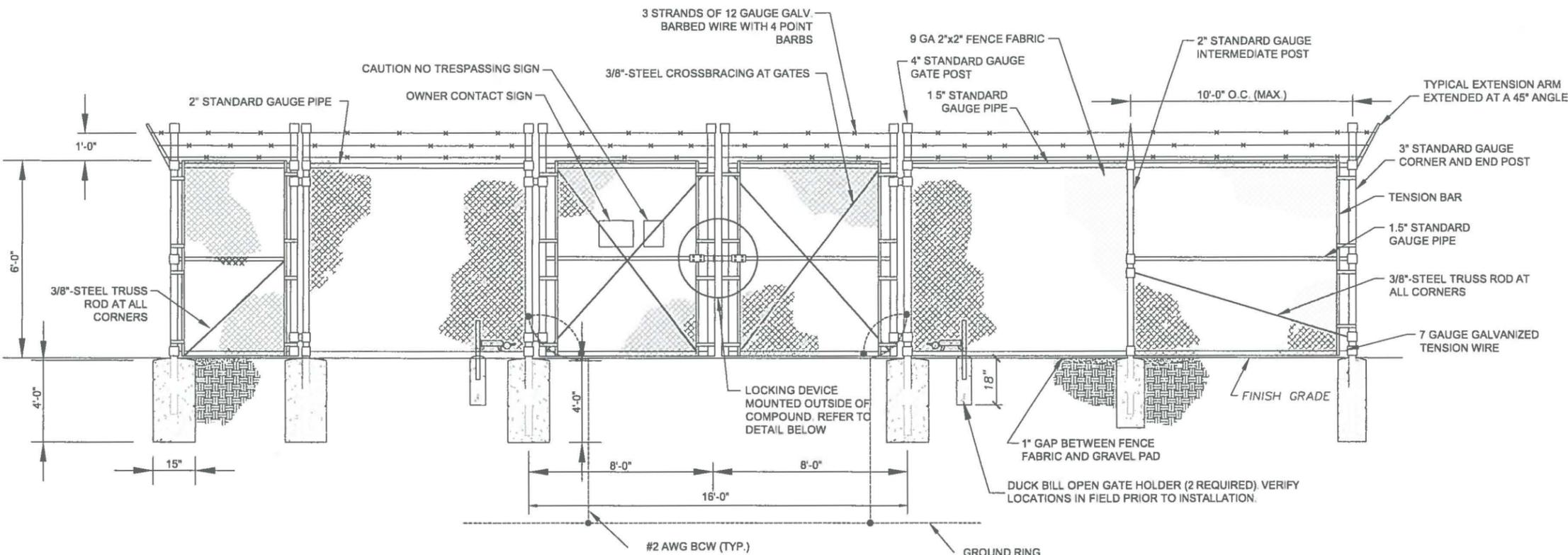
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

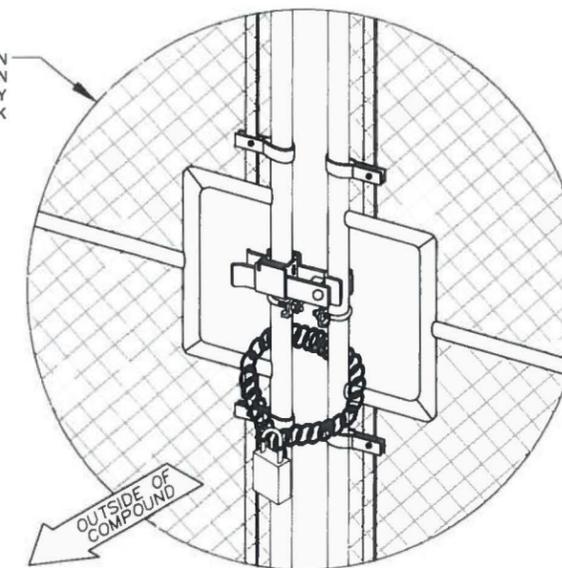
NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15



#### GROUNDING NOTES:

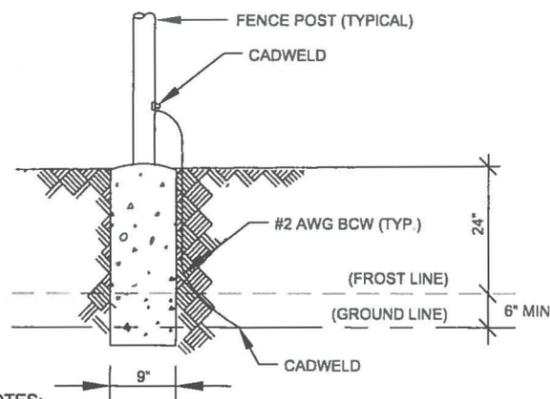
- 4" O.D. GATE POSTS.
- 2" O.D. PERIMETER FRAMING POSTS.
- 1-1/2" O.D. INTERIOR FRAMING.
- GATE JUMPER SHALL BE MIN. #2/0 AWG WELDED CABLE. BURNDY TYPE B WITH SLEEVES ON EACH END DESIGNED FOR EXOTHERMIC WELDING.
- GATE JUMPER SHALL BE INSTALLED SO THAT IT WILL NOT BE SUBJECTED TO STRAIN DAMAGE WHEN GATE IS FULLY OPEN IN EITHER DIRECTION.

CONTRACTOR TO PROVIDE 3/8" NON CORROSIVE GALVANIZED CHAIN 2'-0" IN LENGTH. VERIZON WILL SUPPLY COMBINATION LOCK



72 INCH HIGH CHAIN LINK FENCE/GATE DETAIL  
NOT TO SCALE

STRONG ARM DOUBLE GATE LATCH DETAIL



#### GROUNDING NOTES:

- CAD WELD BCW TO VERTICAL POSTS (ABOVE GROUND) ACCORDING TO GROUNDING PLAN.
- INSTALL GROUND RING MIN. 24" BELOW GRADE OR 6" BELOW FROST LINE.

FENCE GROUNDING DETAIL  
NOT TO SCALE

#### FENCE SPECIFICATIONS

- FENCING MATERIAL SHALL BE CYCLONE TYPE (1) FENCE AS MANUFACTURED BY USS OR EQUAL.
- FABRIC HEIGHT IS TO BE 6 FEET EXCLUDING BARBED WIRE.
- BARBED WIRE SHALL BE 3-STRANDS/CLASS 3 GALVANIZED/INVINCIBLE WITH EXTENSION ARMS EXTENDING UPWARD AND OUTWARD AT A 45° ANGLE.
- FABRIC SHALL BE 2" MESH/9 GAUGE MIN. WITH ZINC COATING.
- GATE SHALL HAVE POSITIVE TYPE LATCHING DEVICES WITH PROVISIONS FOR PADLOCKING.
- ALL POSTS, RAILS AND APPURTENANCES SHALL BE 9 GAUGE HOT-DIPPED ZINC COATED STEEL. FENCE POSTS SHALL HAVE TOPS WHICH EXCLUDE MOISTURE.
- ENDS, CORNERS, PULL AND GATE POSTS ARE TO BE BRACED WITH THE SAME MATERIAL AS THE RAILS. ALL POSTS SHALL BE SET IN A CONCRETE FOUNDATION OF 1:2:4 MIX HAVING A MINIMUM DIAMETER OF 9" TO 15" AND EMBEDDED A MINIMUM OF 36 INCHES INTO THE FOOTER. LINE POSTS SHALL BE EVENLY SPACED 10 FOOT OR LESS APART.
- PERSONNEL EXPERIENCED IN THE FENCING INDUSTRY SHALL INSTALL THE FENCE. THE CONTRACTOR SHALL ENHANCE THE INSTALLATION TO INCREASE THE APPEARANCE OF A SECURE FACILITY TO PROTECT EQUIPMENT AND TO DETOUR AND PREVENT ENTRANCE OF UNAUTHORIZED PERSONNEL AND ANIMALS.



# Mead & Hunt

400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

MISCELLANEOUS  
DETAILS SHEET  
D-3

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

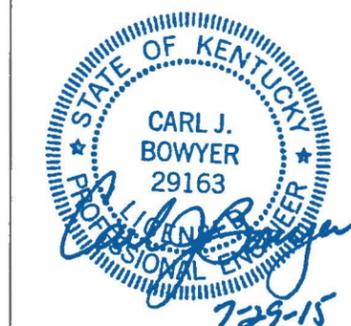
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

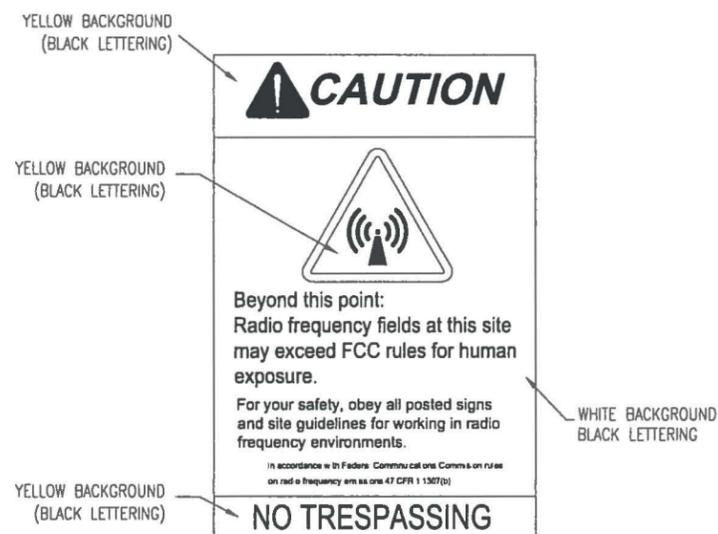
TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15



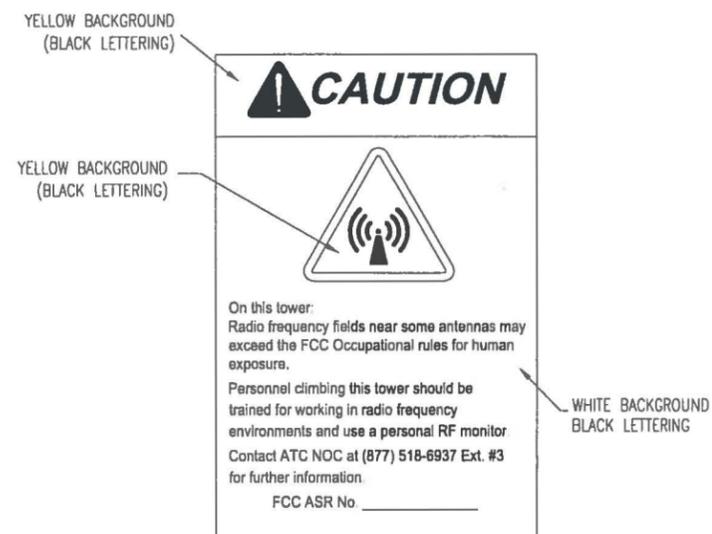
PROJECT # R4381500-150949.01

MISCELLANEOUS DETAILS SHEET D-4



1 **CAUTION-NO TRESPASSING SIGN**  
12" WIDE x 18" HIGH

MOUNTING LOCATION: COMPOUND GATE & SHELTER DOOR  
QUANTITY: 2



2 **CAUTION RADIO FREQUENCY SIGN W/ FCC SIGN**  
12" WIDE x 18" HIGH

MOUNTING LOCATION: AT OR NEAR BASE OF TOWER FACING  
COMPOUND ACCESS GATE  
QUANTITY: 1



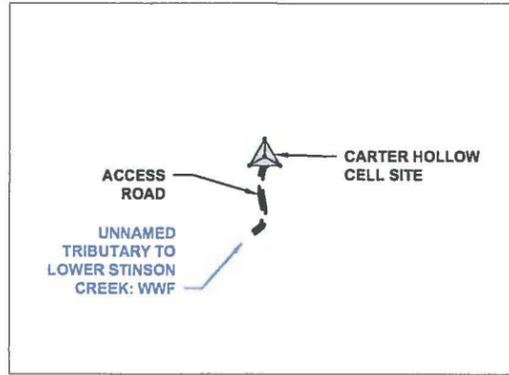
3 **OWNER CONTACT SIGN**  
24" WIDE x 18" HIGH

MOUNTING LOCATION: COMPOUND GATE  
QUANTITY: 1

# EROSION & SEDIMENTATION CONTROL PLAN

GRAYSON MUNICIPALITY  
CARTER COUNTY, KENTUCKY

SITE DRAINS TO AN UNNAMED TRIBUTARY OF LOWER STINSON CREEK (WWF).  
LOWER STINSON CREEK IS 1,794 FEET SOUTH OF THE PROPOSED CELL SITE.



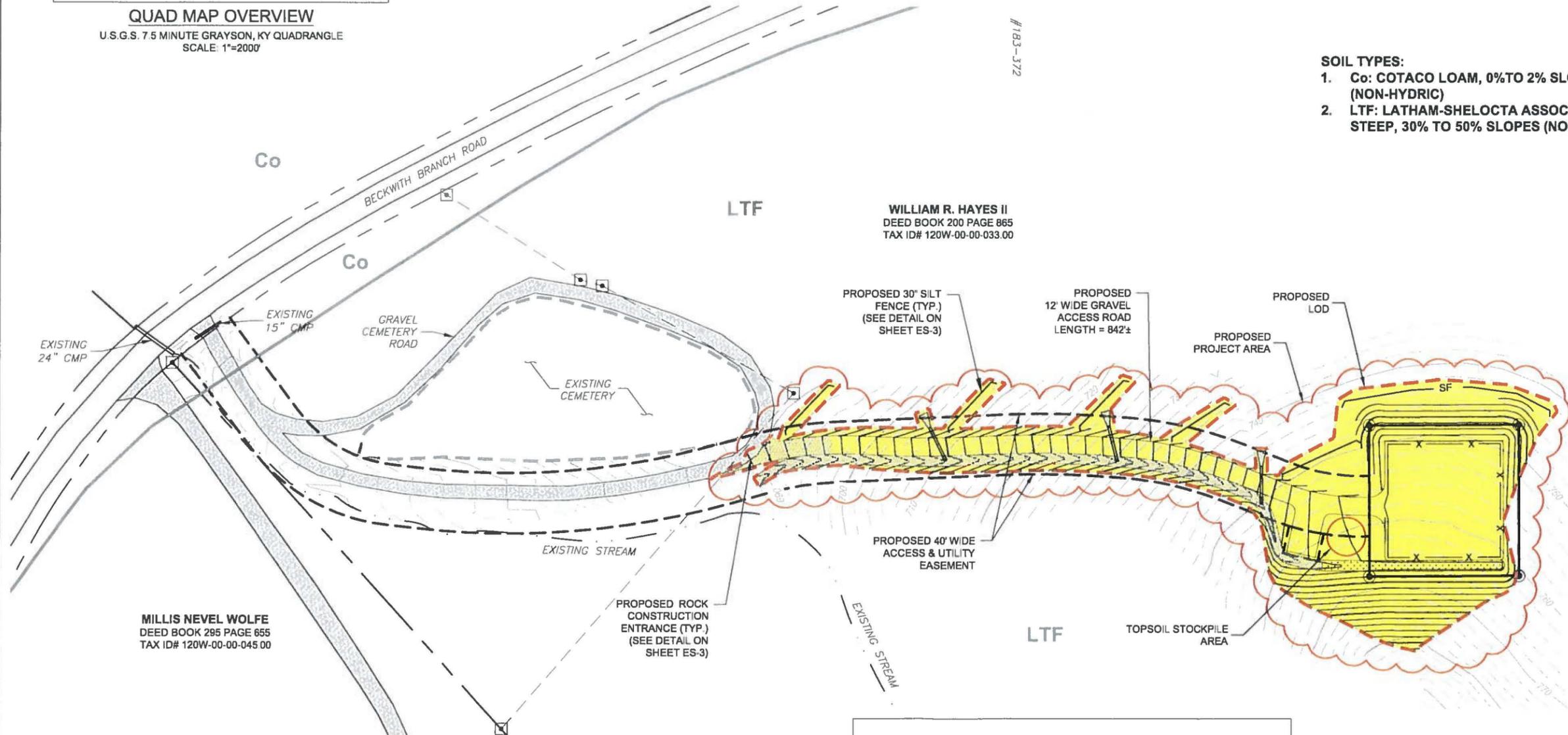
### QUAD MAP OVERVIEW

U.S.G.S. 7.5 MINUTE GRAYSON, KY QUADRANGLE  
SCALE: 1"=2000'

LEGEND	
	PROPERTY LINE
	DRAINAGE AREA
	SOIL CLASSIFICATION LINE
	ROW LINE
	EXISTING FENCE LINE
	TREE LINE
	UNPAVED ROAD
	PAVED ROAD
	STREAM PATH
	LEASE LINE
	PROPOSED FENCE LINE
	PROPOSED SILT FENCE
	LIMITS OF DISTURBANCE

### SOIL TYPES:

- Co: COTACO LOAM, 0% TO 2% SLOPES (NON-HYDRIC)
- LTF: LATHAM-SHELOCTA ASSOCIATION, STEEP, 30% TO 50% SLOPES (NON-HYDRIC)



WILLIAM R. HAYES II  
DEED BOOK 200 PAGE 865  
TAX ID# 120W-00-00-033.00

MILLIS NEVEL WOLFE  
DEED BOOK 285 PAGE 655  
TAX ID# 120W-00-00-045.00

ALL WASTE MATERIALS OR MATERIAL UNCOVERED DURING CONSTRUCTION WHICH MAY CAUSE POLLUTION SHALL BE HAULED OFF-SITE AND DISPOSED OF IN ACCORDANCE WITH KENTUCKY DEP STANDARDS BY THE CONTRACTOR. THESE MATERIALS SHALL NOT BE STORED ON-SITE. ANY OFF-SITE WASTES OR BORROW AREA MUST HAVE E&S PLAN APPROVED BY CONSERVATION DISTRICT AND IS THE CONTRACTOR'S RESPONSIBILITY

PROPER RECYCLING AND/OR DISPOSAL OF CONSTRUCTION WASTE ASSOCIATED WITH THIS PLAN ARE THE CONTRACTOR'S RESPONSIBILITY

CARTER COUNTY CONSERVATION DISTRICT APPROVING OFFICIAL \_\_\_\_\_ DATE \_\_\_\_\_

DISTURBED AREA	0.83	ACRES
PROJECT AREA	1.44	ACRES

**Parallel**  
INFRASTRUCTURE

4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

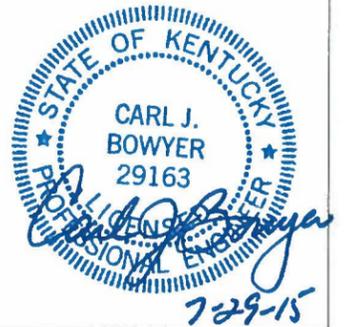
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15



**Mead & Hunt**

400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

E&S CONTROL PLAN SHEET  
ES-1

**GENERAL NOTES**

- ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS, SHALL BE DONE IN ACCORDANCE WITH THE E&S PLAN. A COPY OF THE DRAWINGS MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE ENGINEER MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT HIS DISCRETION.
- AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL NOTIFY ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON SITE PRECONSTRUCTION MEETING.
- THE LOCATION OF EXISTING UTILITIES AND UNDERGROUND STRUCTURES SHOWN ARE APPROXIMATE AND THOSE SHOWN ARE NOT NECESSARILY ALL THE EXISTING UTILITIES AND STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF ALL ABOVE AND BELOW GROUND UTILITIES AND STRUCTURES PRIOR TO INITIATING CONSTRUCTION ACTIVITIES.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.
- AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPs SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
- AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED ON SITE IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED WITH SILT FENCE. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE PADEP.
- ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED OR DISCHARGED AT THE SITE.
- ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
- ALL CHANNELS SHALL BE KEPT FROM OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION, AND CONSTRUCTION MATERIAL/WASTES.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPs SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPs AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPs FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPs, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- A LOG SHOWING DATES THAT E&S BMPs WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- ALL SEDIMENT REMOVED FROM BMPs SHALL BE DISPOSED OF IN THE MANNER DESCRIBED IN THE PADEP E&S MANUAL.
- AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES - 8 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
- ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, AND CONDUITS, ETC SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
- ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDING AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS IN THE PADEP E&S MANUAL.
- PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING OR OTHER MOVEMENTS.
- E&S BMPs SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPs.

- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPs MUST BE REMOVED OR CONVERTED TO PERMANENT. POST CONSTRUCTION STORMWATER MANAGEMENT BMPs AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPs SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
- FAILURE TO CORRECTLY INSTALL E&S BMPs, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPs MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 802 OF THE PENNSYLVANIA CLEAN STREAM LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.
- THE CONTRACTOR SHALL LANDSCAPE OR VEGETATE DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 4 DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, STRAW MULCH SHALL BE APPLIED AT A RATE OF THREE (3) TONS PER ACRE OVERTOP EXPOSED AREAS.
- THE CONTRACTOR SHALL SUBMIT A PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN TO THE OWNER PRIOR TO CONSTRUCTION IF CHEMICALS, SOLVENTS OR OTHER HAZARDOUS WASTES OR MATERIALS WITH THE POTENTIAL TO CAUSE ACCIDENTAL POLLUTION DURING EARTHMOVING OR OTHER CONSTRUCTION ACTIVITIES ARE STORED OR USED ON SITE. THE PPC PLAN SHALL BE PREPARED IN ACCORDANCE WITH "GUIDELINES FOR THE DEVELOPMENT AND IMPLEMENTATION OF PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLANS" PREPARED BY PADEP BUREAU OF SOLID WASTE MANAGEMENT AND PADEP BUREAU OF WATER QUALITY MANAGEMENT.
- THE CONTRACTOR SHALL CONSTRUCT A BERM AROUND AREAS WHERE HYDRAULIC FLUID AND DIESEL FUEL WILL BE STORED DURING CONSTRUCTION TO SERVE AS A CONTAINMENT AREA FOR THE CONTROL OF POSSIBLE SPILLS. ANY SPILL WITHIN THE CONTAINMENT AREA SHALL BE IMMEDIATELY CLEANED. TELEPHONE NUMBERS OF EMERGENCY RESPONSE TEAMS ARE TO BE KEPT ON SITE, AND THEY ARE TO BE NOTIFIED IN THE CASE OF A SPILL.
- THE CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION.
- THE CONTRACTOR SHALL PROVIDE THE LOCATION AND ANY APPLICABLE PERMIT NUMBERS OF ALL THE OFF SITE DISPOSAL AND BORROW SITES THAT WILL BE UTILIZED DURING CONSTRUCTION TO THE PADEP PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL ALSO IDENTIFY THE EROSION AND SEDIMENTATION CONTROL MEASURES, WHICH WILL BE IMPLEMENTED AT THE DISPOSAL AND/OR BORROW SITES. IF THE DISPOSAL AND/OR BORROW SITES ARE NOT PERMITTED, AN EROSION AND SEDIMENTATION PLAN MUST BE APPROVED BY THE PADEP PRIOR TO THEIR USE.
- SEE EROSION, SEDIMENT AND STORMWATER CONTROL PLAN FOR DESCRIPTION OF PROPOSED CONTROLS NOT SHOWN HEREON.
- CHANNELS HAVING RIPRAP, RENO MATTRESS OR GABION LININGS MUST BE SUFFICIENTLY OVER-EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF THE PROTECTIVE LINING.
- EROSION BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.
- DURING LAND DISTURBANCE ACTIVITIES AND DURING CONSTRUCTION, ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT EROSION AND CONTROL OF SEDIMENT BEYOND THOSE SHOWN ON THE APPROVED PLANS SHALL BE INSTALLED AS DIRECTED BY THE OWNER, TOWNSHIP ENGINEER OR AN EMPLOYEE OR THE REGIONAL CONSERVATION DISTRICT.

**CONSTRUCTION SEQUENCE**

THE E&S & PCSM PLANS DEVELOPED FOR THIS CELL SITE SHOULD FOLLOW THE SPECIFIED CONSTRUCTION SEQUENCE IN ORDER FOR THE E&S & PCSM CONTROLS TO BE INSTALLED, REMAIN EFFECTIVE THROUGHOUT THE PROJECT, AND BE REMOVED AT AN APPROPRIATE TIME.

- PRIOR TO COMMENCEMENT OF ANY EARTH DISTURBING ACTIVITIES CONTRACTOR SHALL CLEARLY DELINEATE THE LIMITS OF DISTURBANCE AND ENVIRONMENTALLY SENSITIVE AREAS (INCLUDING STEEP SLOPES, RIPARIAN BUFFERS, WETLANDS, SPRINGS, AND FLOODWAYS).
- CONTRACTOR TO INSTALL ROCK CONSTRUCTION ENTRANCE (RCE) AT THE LOCATION SHOWN ON THE E&S PLANS. AT THIS TIME E&S BMPs TO MINIMIZE EROSION AND SEDIMENTATION RESULTING FROM THE INSTALLATION OF THE ROCK CONSTRUCTION ENTRANCE AND ACCESS DRIVE SHALL BE INSTALLED. DIVERSION CHANNELS AND BERMS, IF ANY, SHALL BE INSTALLED AND STABILIZED AS NOTED IN THE DRAWINGS.
- ONCE THE RCE AND E&S BMPs ASSOCIATED WITH SITE ACCESS ARE INSTALLED, THE CONTRACTOR WILL INSTALL THE GRAVEL ACCESS DRIVE. TOPSOIL FROM ACCESS DRIVE AREA SHALL BE STOCKPILED ON-SITE FOR USE DURING SITE RESTORATION AND TEMPORARILY STABILIZED USING MULCH AND SEEDING AND SILT FENCE. ROADSIDE DITCHES (IF ANY) WILL BE CONSTRUCTED AND STABILIZED, STARTING FROM THE TOP OF THE ACCESS ROAD DOWN TO ANY PROPOSED CULVERT LOCATION. IF PROPOSED EACH CULVERT AND CORRESPONDING OUTLET PROTECTION WILL THEN BE INSTALLED AND STABILIZED BEFORE CONTINUING TO THE NEXT DITCH SECTION.
- UPON COMPLETION OF THE ACCESS DRIVE THE CONTRACTOR WILL INSTALL THE PERIMETER E&S BMPs FOR THE GRAVEL PAD AND TURN OUT CONSTRUCTION AT THE LOCATIONS SHOWN ON THE E&S PLANS.
- CLEARING AND GRADING OF THE PAD AND EQUIPMENT AREAS SHALL BEGIN FOLLOWING THE INSTALLATION OF THE PERIMETER E&S BMPs. TOPSOIL SHALL BE STOCKPILED ON-SITE FOR USE DURING SITE RESTORATION AND TEMPORARILY STABILIZED USING MULCH AND SEED AND FILTER SOCKS. AREAS NOT BEING STABILIZED WITH GRAVEL SHALL BE SCARRED AND VEGETATED WITH SEED AND MULCH.
- UPON CLEARING AND GRADING COMPLETION, CONSTRUCTION AND INSTALLATION OF THE CELL SITE EQUIPMENT, BUILDING AND GRAVEL CELL PAD AREAS SHALL BE COMPLETED AND GRASS PLANTED ON ALL DISTURBED AREAS NOT STABILIZED WITH GRAVEL.
- NO MORE THAN 15,000 SQUARE FEET OF DISTURBED AREA MAY REACH FINAL GRADE BEFORE INITIATING SEEDING AND MULCHING OPERATIONS. ADDITIONALLY, CESSATION OF ACTIVITY FOR 4 DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION MEASURES COMPLETED.
- SEDIMENT REMOVED FROM BASINS OR TRAPS OR ROCK ENTRANCE WILL BE PLACED AT TOPSOIL PILE AREA. SITE RUNOFF FROM ANY COLLECTOR CHANNELS, WATER BARS, BROAD-BASED DIPS, ETC. IF PROPOSED, WILL BE COLLECTED INTO THE WASH WATER PIT AT THE ROCK CONSTRUCTION ENTRANCE TO INFILTRATE THE GROUND. COLLECTED WATER WILL NOT BE ALLOWED TO DISCHARGE TO SURFACE WATERS.
- INSPECTIONS OF BMPs WILL OCCUR ON A WEEKLY BASIS AND FOLLOWING A STORM EVENT WITH INSPECTIONS DOCUMENTED ON DEP FORM 3150-FM-BWE003 DATED 2/20/12. FORMS ARE TO BE MAINTAINED ON SITE.
- MAINTENANCE OF BMPs SHOULD OCCUR IMMEDIATELY, BUT NO MORE THAN 24 HOURS, IF POSSIBLE, AFTER THE DISCOVERY.
- LASTLY, SCARIFY AND APPLY PERMANENT SEEDING, MULCHING AND FINAL STABILIZATION TO ALL DISTURBED AREAS PREVIOUSLY NOT STABILIZED WITH GRAVEL. REMOVE THE TEMPORARY BMPs ONCE A UNIFORM 70% VEGETATION IS OBTAINED AND STABILIZE ANY DISTURBANCES ASSOCIATED WITH THEIR REMOVAL.

**RESOLUTIONS FOR SOIL USE LIMITATIONS**

- ALL CONSTRUCTION WILL TAKE PLACE IN THE SOIL TYPES DELINEATED ON THE PLANS.
- REGARDLESS OF SEASON IN WHICH SITE CONSTRUCTION IS PERFORMED, THE CONTRACTOR SHALL UNDERTAKE PROPER TESTING AND/OR COMPACTION PROCEDURES TO PREVENT AGAINST UNWANTED SETTLEMENT.
- SOILS SUBJECT TO SEASONAL HIGH WATER TABLE. SITE CONSTRUCTION/EARTHMOVING IS RECOMMENDED TO OCCUR IN SUMMER OR FALL. SPRING CONSTRUCTION SHOULD BE AVOIDED WHEN POSSIBLE. CONTRACTOR MAY ALSO INSTALL PERFORATED UNDER DRAIN TO PROTECT BELOW-GRADE INSTALLATIONS AS MAY BE RECOMMENDED BY DESIGN ENGINEER, PADEP, OR COUNTY CONSERVATION DISTRICT.
- SOILS SUBJECT TO SHALLOW BEDROCK. BLASTING MAY BE REQUIRED FOR STORMWATER SEDIMENTATION BASINS, ROADWAY, OR EXCAVATION, AS BEDROCK MAY BE ENCOUNTERED. THE CONTRACTOR SHALL FOLLOW MUNICIPAL GUIDELINES FOR PROPER BLASTING PROCEDURES.
- SOILS SUBJECT TO POOR TOPSOIL. CONTRACTOR SHALL PERFORM SOIL TESTING ON ALL DISTURBED AREAS TO ENSURE SOIL IS PROPERLY AMENDED TO ESTABLISH A QUALITY AND REQUIRED GROWTH OF GROUND COVER. SOIL TEST KITS CAN BE OBTAINED FROM THE COUNTY COOPERATIVE EXTENSION SERVICE. TEST KITS SHOULD BE SUBMITTED TO THE PENN STATE UNIVERSITY TESTING LABORATORY FOR DETERMINING SOIL DEFICIENCIES. THE CONTRACTOR SHALL CONDITION THE SOIL AS RECOMMENDED BY THE TESTING LABORATORY PRIOR TO FINAL SEEDING.
- HIGHLY ERODIBLE SOILS. THESE SOIL TYPES SHALL BE STABILIZED WITH SEED OR STONE IMMEDIATELY AFTER EARTHMOVING ACTIVITIES CEASE. TURF REINFORCEMENT MATTING OR EROSION CONTROL BLANKETS MAY NEED TO BE APPLIED IMMEDIATELY IF DIRECTED BY THE DESIGN ENGINEER, PADEP, OR COUNTY CONSERVATION DISTRICT.
- SOILS SUBJECT TO CUT BANKS & CAVE. THE CONTRACTOR SHALL UTILIZE TRENCH BOXES FOR ALL UTILITY PIPING INSTALLATIONS.
- SOILS CAUSING CORROSION TO CONCRETE & STEEL. THE CONTRACTOR SHALL USE EPOXY COATED STEEL AND REBAR FOR ALL SUBSURFACE INSTALLATIONS. FOR BELOW GRADE CONCRETE INSTALLATIONS, THE CONTRACTOR SHALL, AT MINIMUM, APPLY BITUMINOUS COATING TO ALL SUBSURFACE CONCRETE OR APPLY ADHESIVE BARRIER (I.E. RUBBER MEMBRANE, ETC.) AS WARRANTED BY ACTUAL SOIL CONDITIONS.

**VEGETATIVE STABILIZATION - PASTURE MIX**

Mixture Number	Season	Species	Seeding Rate lb/acre
1	Cool	Tall fescue*, or	78
		Fine fescue, plus	46
		Redtop, or	4
		Perennial ryegrass, plus	19
2	Cool	Birdsfoot trefoil, plus	8
		Tall fescue*	40
		Orchardgrass, or	26
3	Cool	Smooth bromegrass, plus	33
		Birdsfoot trefoil	8
		Flatpea, plus	27
4	Warm	Tall fescue*, or	26
		Perennial ryegrass	25
		Switchgrass, or	15
5	Warm	Deertongue, plus	21
		Birdsfoot trefoil	8
		Switchgrass, or	15
6	Warm	Big Bluestem, plus	15
		Birdsfoot trefoil	8

**VEGETATIVE STABILIZATION - STREAM BANK & WETLAND MIX**

Seed	ERNNX-128 (or equivalent)*	Rate lbs/acre
Carex vulpinoidea	Fox Sedge	20%
Echinochloa crusgalli var. frumentacea	Japanese Millet	20%
Elymus virginicus	Virginia Wild Rye	20%
Polygonum pennsylvanicum	Pennsylvania Smartweed	18.5%
Agrostis scabra	Ticklegrass (Rough Bentgrass)	5%
Panicum virgatum, Shafter	Shelter Switch Grass	5%
Carex stipata	Awl Sedge	3%
Panicum clandestinum	Tioga Deer Tongue	3%
Carex scoparia	Blunt Brom Sedge	2.5%
Bidens cernua Mix	Nodding Bur Marigold Mix	1%
Juncus tenuis	Fath Rush	1%
Mulch: Straw		6,000
*ERNMX-128 = Ernst Conservation Seeds Seasonally Flooded Seed Mix		

**VEGETATIVE STABILIZATION - WILDLIFE MIX**

Soil Amendment	Rate lbs/acre	
Seed: ERNNX-123 (or equivalent)*	15	
Tripsacum dactyloides	Eastern Gamma Grass	15%
Elymus canadensis	Canada Wild Rye	12%
Andropogon gerardii, Niagara	Niagara Big Bluestem	10%
Andropogon scoparius, Campor	Pinged Bome Grass	10%
Panicum virgatum, Shafter	Switch Grass, Shelter	10%
Sorghastrum nutans, Holt	Indian Grass, Holt	8%
Chamaecrista fasciculata	Partridge Pea	6%
Panicum amarum	Atlantic Coastal Panic Grass	5%
Poa palustris	Fowl Bluegrass	5%
Coropis tinctoria	Plains Coropis	4%
Rudbeckia hirta, NC Ecotype	Black Eyed Susan, NC Ecotype	3%
Desmodium canadensis	Showy Tick Trefoil	2%
Fertilizer: 10-10-10 (or equivalent)	600	
Lime: Agricultural lime	4,000	
Mulch: Straw or hay	6,000	
*ERNMX-123 = Ernst Conservation Seeds Native Upland Wildlife Seed Mix		

**VEGETATIVE STABILIZATION - WILDLIFE MIX NO. 2**

Soil Amendment	Rate lbs/acre	
Seed: ERNNX-133 (or equivalent)*	30	
Trifolium repens	White Clover, Ladino	30%
Trifolium repens	White Clover, New Zealand	30%
Medicago sativa	Vernal Alfalfa	20%
Dactylis glomerata	Orchard Grass, Penniale	10%
Lolium perenne	Perennial Ryegrass, Saint	10%
Fertilizer: 10-10-10 (or equivalent)	600	
Lime: Agricultural lime	4,000	
Mulch: Straw or hay	6,000	
*ERNMX-133 = Ernst Conservation Seeds Keystone Deer & Turkey Seed Mix		

**VEGETATIVE STABILIZATION - WILDLIFE MIX NO. 3 (PA Game Lands)**

Soil Amendment	Rate lbs/acre	
Seed: ERNNX-112 (or equivalent)*	25	
Lathyrus sylvestris	Lathco Flat Pea	50%
Lolium multiflorum	Annual Ryegrass	40%
Lathyrus latifolius	Perennial Pea	10%
Fertilizer: 10-10-10 (or equivalent)	600	
Lime: Agricultural lime	4,000	
Mulch: Straw or hay	6,000	
*ERNMX-112 = Ernst Conservation Seeds Flat Pea/Perennial Pea Seed Mix		

TABLE 11.2

Soil Amendment Application Rate Equivalents

Soil Amendment	Permanent Seeding Application Rate			Notes
	Per Acre	Per 1,000 sq. ft.	Per 1,000 sq. yd.	
Agricultural lime	6 tons	240 lb	2,480 lb.	Or as per soil test; may not be required in agricultural fields
10-10-20 fertilizer	1,000 lb.	25 lb	210 lb.	Or as per soil test; may not be required in agricultural fields
Temporary Seeding Application Rate				
Agricultural lime	1 ton	40 lb	410 lb.	Typically not required for topsoil stockpiles
10-10-10 fertilizer	500 lb	12.5 lb	100 lb	Typically not required for topsoil stockpiles

Adapted from Penn State, "Erosion and Conservation Plantings on Noncrop Land"

NOTE: A COMPOST BLANKET WHICH MEETS THE STANDARDS OF THIS CHAPTER MAY BE SUBSTITUTED FOR THE SOIL AMENDMENTS SHOWN IN TABLE 11.2.



4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3W00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

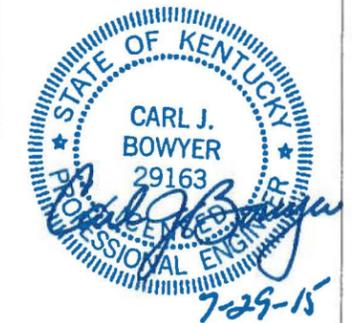
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15



400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

E&S CONTROL NOTES SHEET ES-2

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15

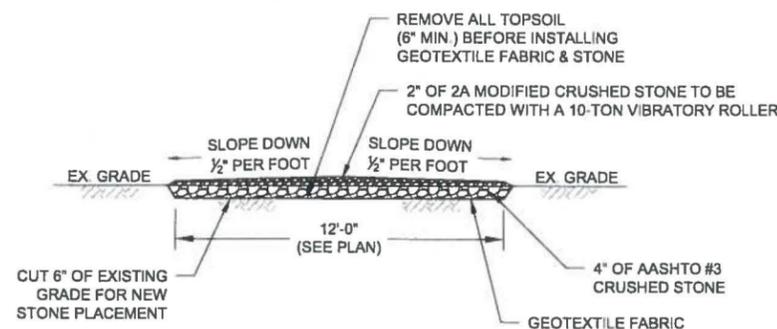


## Mead & Hunt

400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

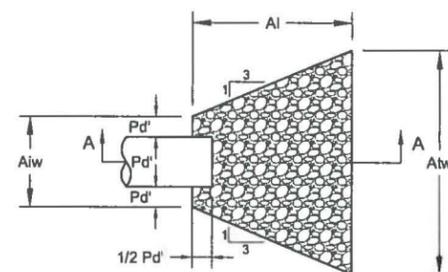
E&S CONTROL DETAILS SHEET  
ES-3



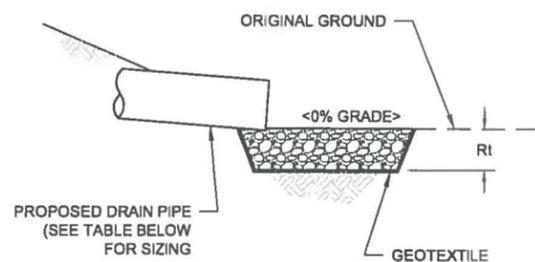
**TYPICAL CROWNED ACCESS ROAD DETAIL**  
NOT TO SCALE

**ACCESS ROAD NOTES**

- NEW ROADWAY SECTIONS SHALL HAVE ALL TOPSOIL (6" MIN.) REMOVED AND SHALL BE CONSTRUCTED TO SLOPE INTO THE HILL SIDE (IF APPLICABLE) AT A RATE OF 1/2" PER FOOT. ON FLAT SECTIONS, CENTER OF ROADWAY SHALL BE CROWNED TO DRAIN TO BOTH SIDES.
- EXISTING AND NEW ROADWAY SECTIONS SHALL BE GRADED AND COMPACTED WITH A MINIMUM TEN (10) TON VIBRATORY ROLLER, PRIOR TO PLACEMENT OF GEOTEXTILE FABRIC.
- ALL FLAT AREAS OF THE ROADWAY AND ALL WET AREAS SHALL HAVE GEOTEXTILE FABRIC INSTALLED THE FULL 12'-0" WIDTH OF THE ROADWAY AFTER THE BASE HAS BEEN COMPACTED.
- AFTER GEOTEXTILE FABRIC HAS BEEN PLACED, INSTALL FOUR INCHES (4") OF #3 CRUSHED STONE. AFTER #3 CRUSHED STONE HAS BEEN PLACED, INSTALL 2" OF 2A MODIFIED CRUSHED STONE THE ENTIRE LENGTH OF THE ROADWAY. AFTER 2A MODIFIED CRUSHED STONE HAS BEEN PLACED, ENTIRE ROADWAY SHALL BE COMPACTED WITH A MINIMUM TEN (10) TON VIBRATORY ROLLER.



PLAN VIEW  
NOT TO SCALE



SECTION A-A  
NOT TO SCALE

**NOTES**

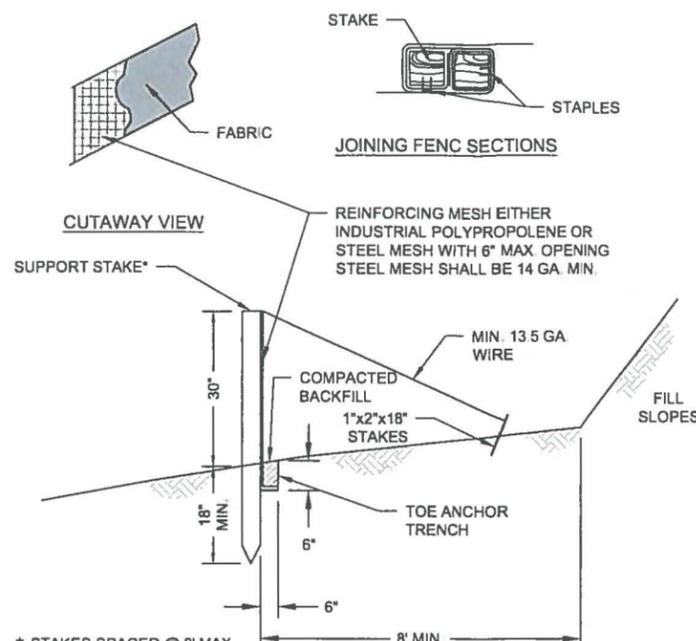
ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/4 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.

**RIPRAP APRON AT PIPE OUTLET (NO FLARED ENDWALL)**  
**STANDARD CONSTRUCTION DETAIL #9-2**

NOT TO SCALE



\* STAKES SPACED @ 8' MAX. USE 2" x 2" x 48" (±3/8") WOOD OR EQUIVALENT STEEL (U OR T) STAKES

**NOTES**

FABRIC SHALL HAVE THE MINIMUM PROPERTIES AS SHOWN IN TABLE 4.3

FABRIC WIDTH SHALL BE 30" MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT (SEE FIGURE 4.1).

SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVEGROUND HEIGHT OF THE FENCE.

ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET (STANDARD CONSTRUCTION DETAIL # 4-6).

FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.

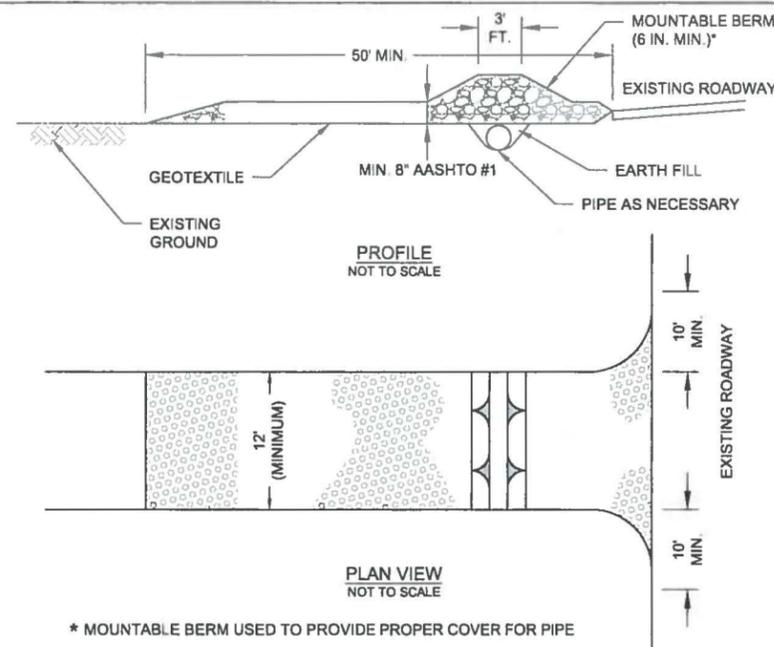
**STANDARD CONSTRUCTION DETAIL #4-8**  
**REINFORCED SILT FENCE (30" HIGH)**

NOT TO SCALE

TABLE 4.3

Fabric Properties for Silt Fence

Fabric Property	Minimum Acceptable Value	Test Method
Grab Tensile Strength (lb)	120	ASTM D1682
Elongation at Failure (%)	20% Max.	ASTM D1682
Mullen Burst Strength (psi)	200	ASTM D 3786
Trapezoidal Tear Strength (lb)	50	
Puncture Strength (lb)	40	ASTM D 751 (modified)
Slurry Flow Rate (gal/min/sf)	0.3	ASTM 5141



\* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

**NOTES**

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

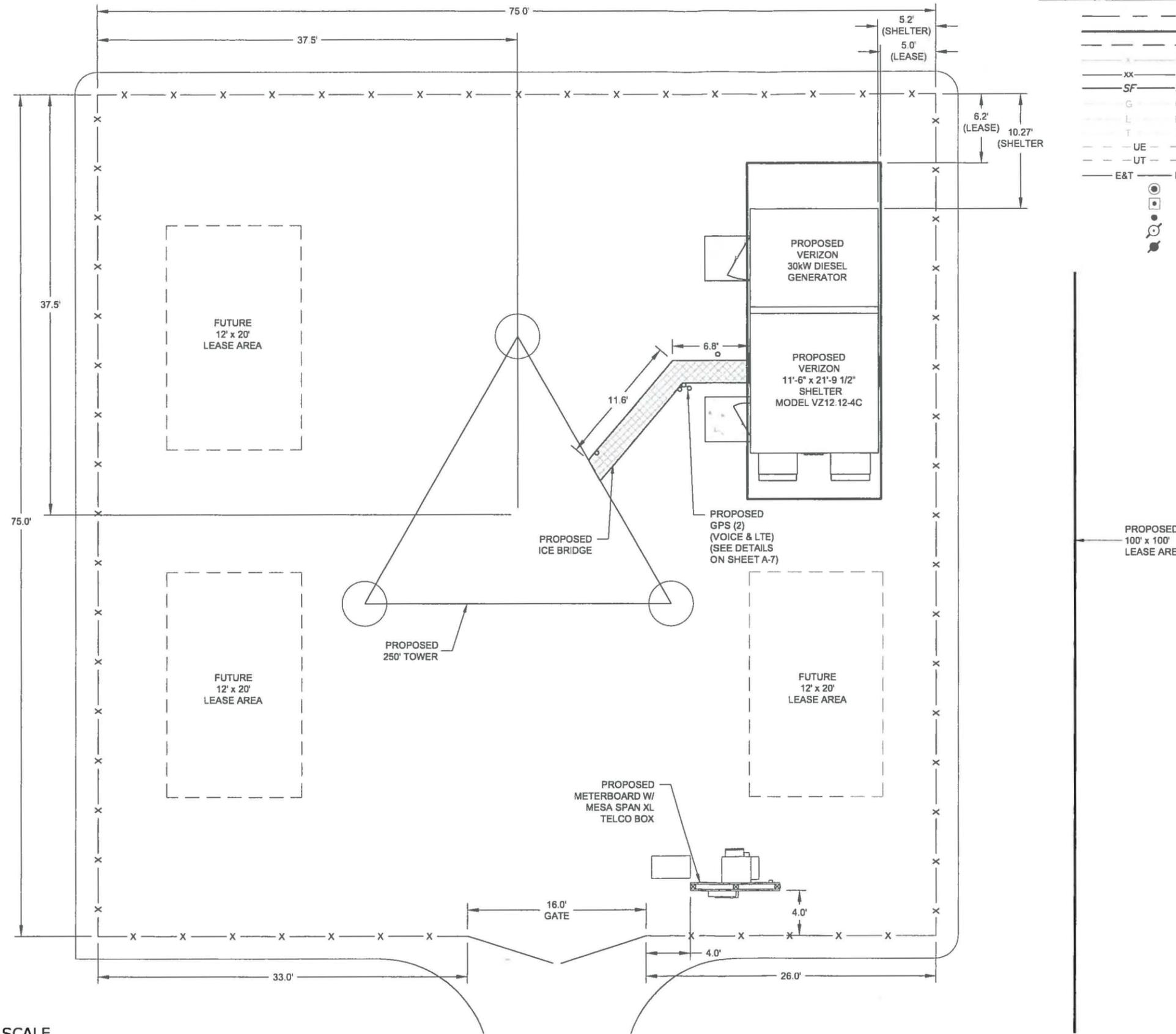
MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

**STANDARD CONSTRUCTION DETAIL #3-1**  
**ROCK CONSTRUCTION ENTRANCE**

NOT TO SCALE

NORTH MERIDIAN REFERENCED TO KY  
STATE PLANE COORDINATE SYSTEM  
SINGLE ZONE (NAD83)



LEGEND

- PROPERTY LINE
- - - LEASE LINE
- - - ROW LINE
- x - x - EXISTING FENCE LINE
- SF - SF - PROPOSED FENCE LINE
- - - PROPOSED SILT FENCE
- G - G - GAS LINE
- L - E - OVERHEAD POWER
- T - I - OVERHEAD TELEPHONE
- - UE - UNDERGROUND POWER
- - UT - UNDERGROUND TELCO.
- E&T - E&T - OVERHEAD POWER/TELEPHONE
- FOUND MONUMENTATION
- CALCULATED POINT
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE

**Parallel**  
INFRASTRUCTURE

4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

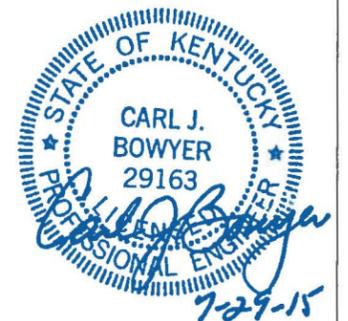
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15



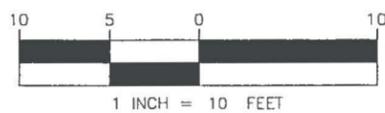
**Mead & Hunt**

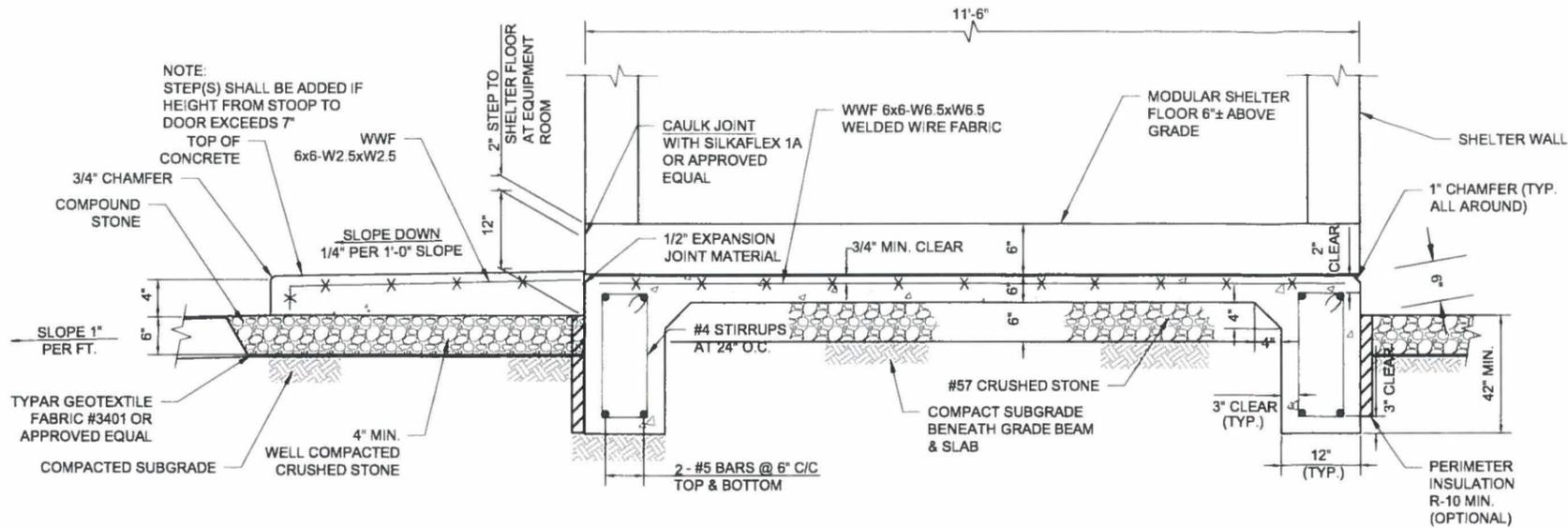
400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

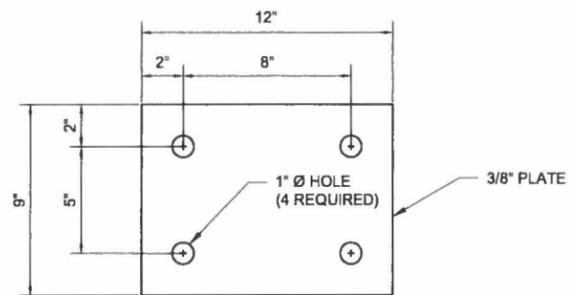
SHELTER LAYOUT (VZW) SHEET A-1

GRAPHIC SCALE

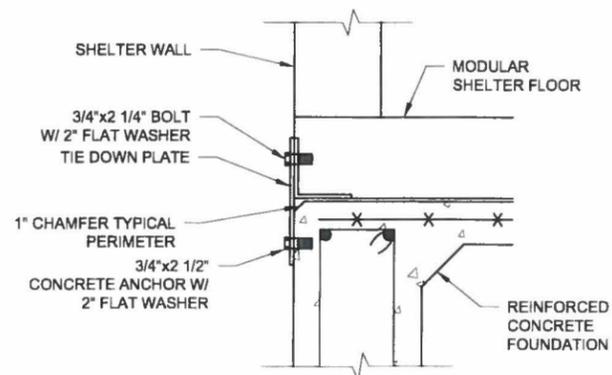




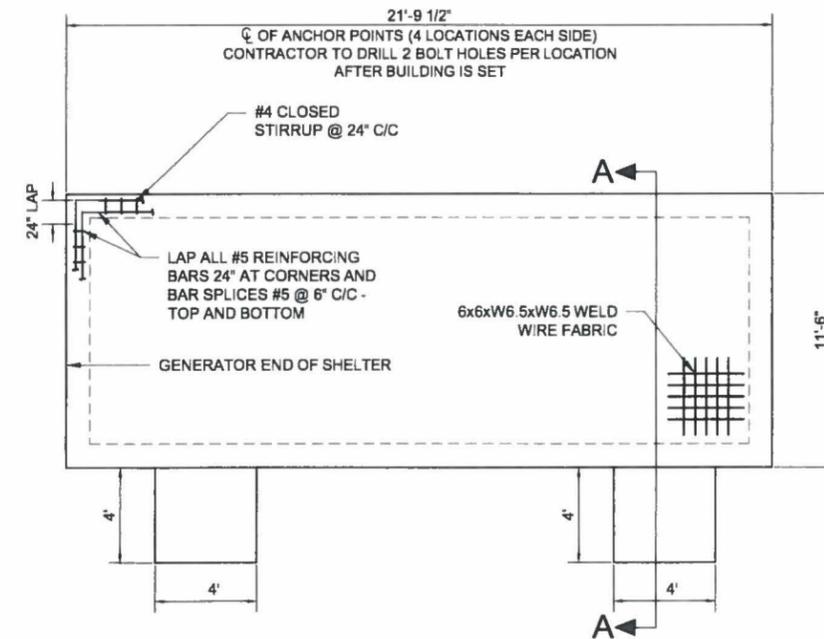
**FOUNDATION DETAIL**  
NO SCALE



**TIE DOWN PLATE**  
(PROVIDED BY SHELTER MANUFACTURER)  
NO SCALE



**TYPICAL SHELTER TIE DOWN DETAIL**  
NO SCALE



**MODULAR SHELTER - FOUNDATION PLAN LAYOUT**  
NO SCALE

THE CONTRACTOR TO VERIFY NOMINAL DIMENSIONS WIDTH AND LENGTH WITH SHELTER MANUFACTURER DRAWINGS AND SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE NUMBER AND LOCATION OF TIE-DOWN PLATES ALONG LONG WALL PRIOR TO CONSTRUCTION OF FOUNDATION WALLS. CONTRACTOR TO DRILL 2 BOLT HOLES PER LOCATION AFTER SHELTER IS SET.

- FOUNDATION NOTES:**
1. BOTTOM OF FOUNDATION TO BE 42" MINIMUM OR 6" BELOW THE LOCAL FROST LINE, WHICH EVER IS GREATER.
  2. FOUNDATION DESIGN ASSUMED ALLOWABLE BEARING CAPACITY OF 2,500 PSF. THE USE OF THIS DESIGN REQUIRES CONTRACTOR TO FIELD VERIFY SOIL BEARING CAPACITY.
  3. SLAB TOLERANCE IS ± 1/4".
  4. SLOPE GRADE AWAY FROM FOUNDATION.
  5. OVERLAP SPLICES ARE ALLOWED FOR REINFORCING BAR, USE 24" MINIMUM LAP.
  6. CONCRETE SHALL HAVE A 28 DAY STRENGTH OF  $F_c = 4000$  PSI.
  7. INTERMEDIATE GRADE DEFORMED BARS OF NEW BILLET STEEL SHALL CONFORM TO ASTM A615, GRADE 60.
  8. SUBGRADE BENEATH THE CRUSHED STONE SHALL BE SCARIFIED AND COMPACTED TO NO VISUAL MOVEMENT OBSERVED OR TO 95% OF ITS PROCTOR AND TO THE SATISFACTION OF THE OWNER'S ENGINEER BEFORE CRUSHED AGGREGATE IS PLACED AND COMPACTED.
  9. USE #57 CRUSHED AGGREGATE STONE COMPACTED IN 6" LIFTS TO 95% OF ITS MAXIMUM DRY DENSITY.
  10. REBAR TO BE GROUNDED W/ SOLID COPPER WIRE #4 MIN. ONE LOCATION MIN. DEFAULT TO BE AT ELECTRICAL SERVICE ENTRY LOCATION. QUANTITY, SIZE, AND LOCATION(S) MAY VARY AS SPECIFIED BY VERIZON WIRELESS. PIGTAIL(S) TO BE MADE ACCESSIBLE FOR BONDING TO SERVICE GROUND.
  11. SLAB INSULATION ONLY TO BE INSTALLED BY SITE CONTRACTOR AS REQUIRED. EXTENDING FROM TOP OF SLAB TO BOTTOM OF FOOTING. INSULATING VALUE, ATTACHMENT METHOD, AND COVERING OBTAINED FROM LOCALITY'S ENERGY CODE.



4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

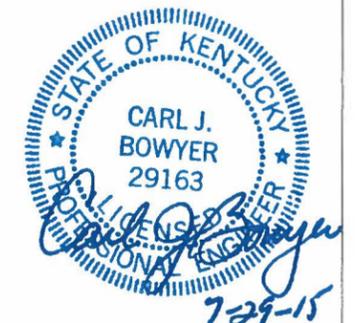
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15



400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

SHELTER FOUNDATION (VERIZON WIRELESS) SHEET A-2

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

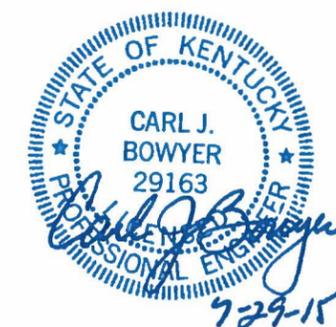
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15

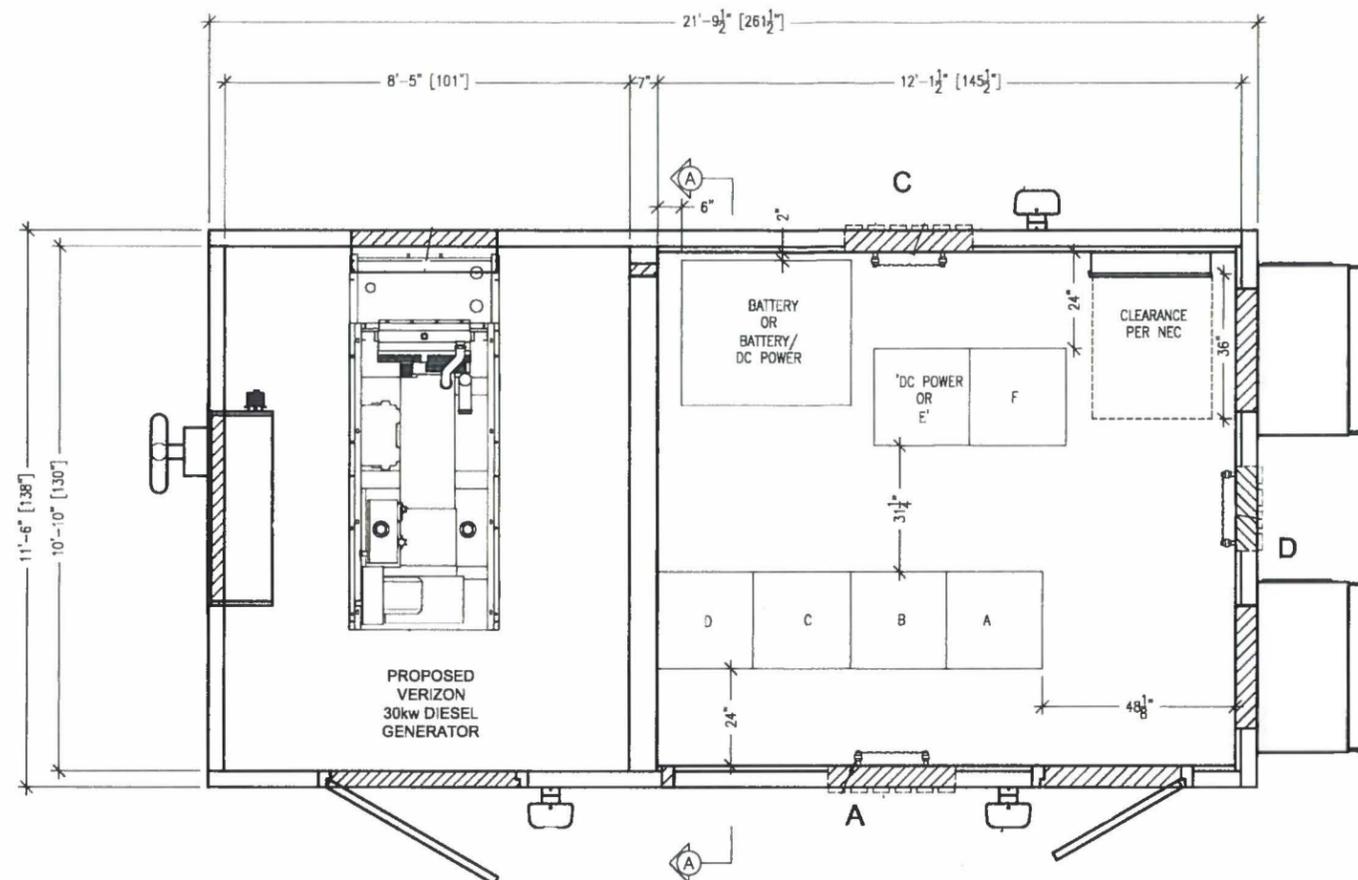


## Mead & Hunt

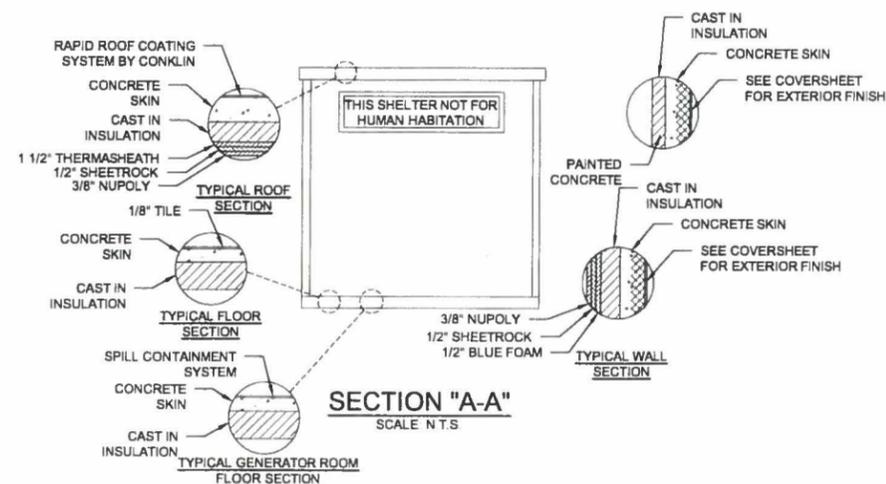
400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

SHELTER DETAILS SHEET  
(VERIZON WIRELESS) A-3



FLOOR PLAN  
342.5 sq. ft.



REFER TO VERIZON WIRELESS SHELTER MODEL VZ12-12-4C (DIESEL OPTION) SEE MANUFACTURER'S APPROVED SHELTER DRAWINGS FOR DETAILS AND SCHEMATICS FOR SHELTER INTERIOR AND OTHER INFORMATION.

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15

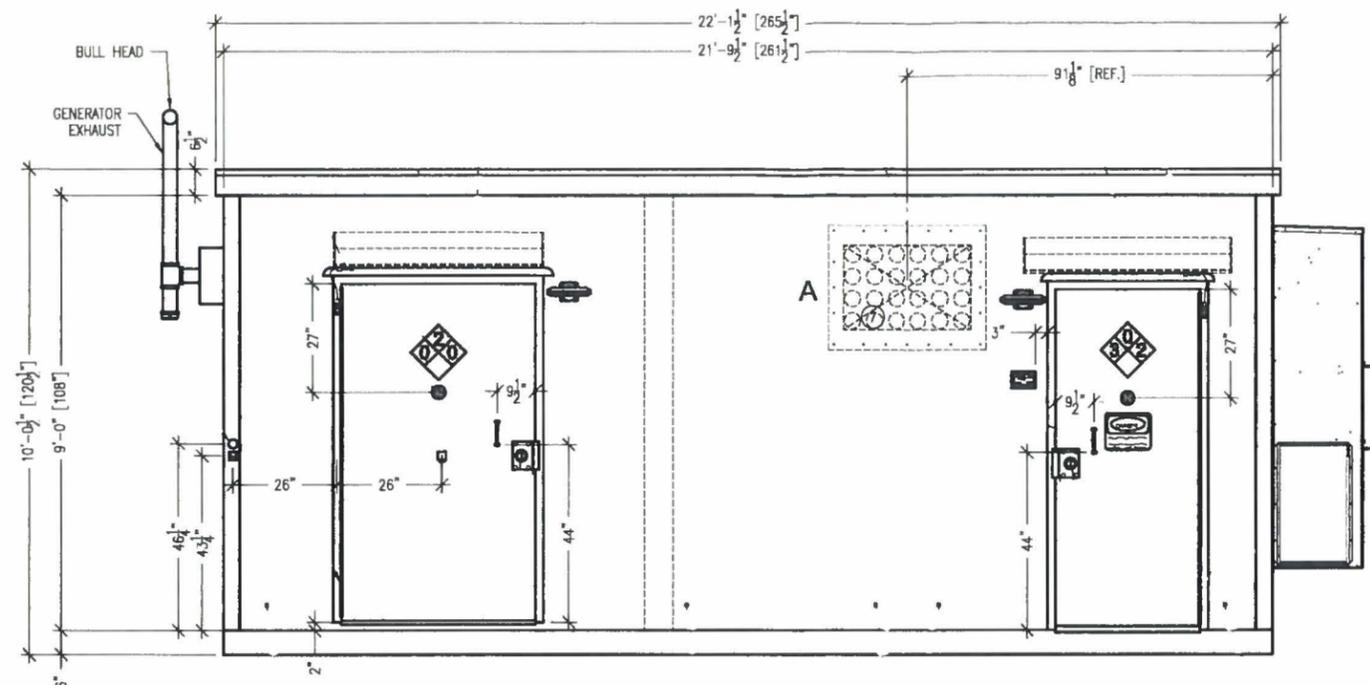


## Mead & Hunt

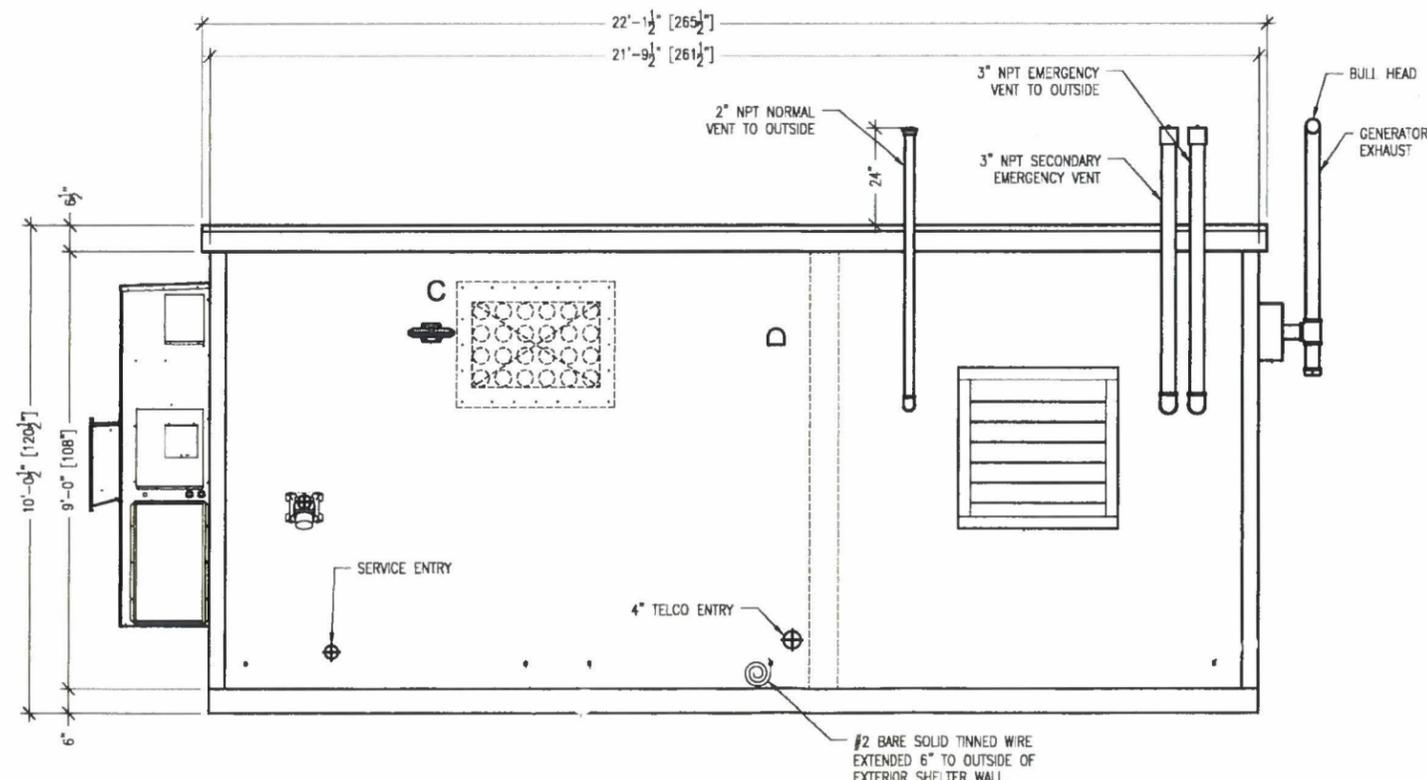
400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

SHELTER DETAILS (VERIZON WIRELESS) SHEET A-4



ELEVATION A



ELEVATION C

**NOTE:**  
ALL EXTERIOR GENERATOR EXHAUST, VENT, AND FUEL PIPES ARE TO BE PAINTED BLACK AND GROUNDED WITH STAINLESS CLAMPS BY CONTRACTOR.

REFER TO VERIZON WIRELESS SHELTER MODEL VZ12.12-4C (DIESEL OPTION) SEE MANUFACTURER'S APPROVED SHELTER DRAWINGS FOR DETAILS AND SCHEMATICS FOR SHELTER INTERIOR AND OTHER INFORMATION.

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15

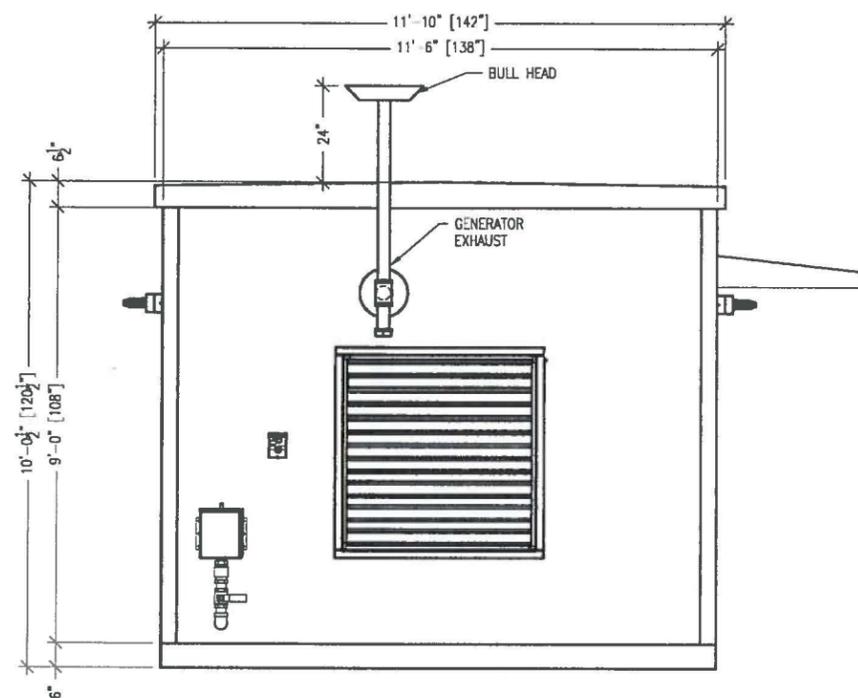


**Mead & Hunt**

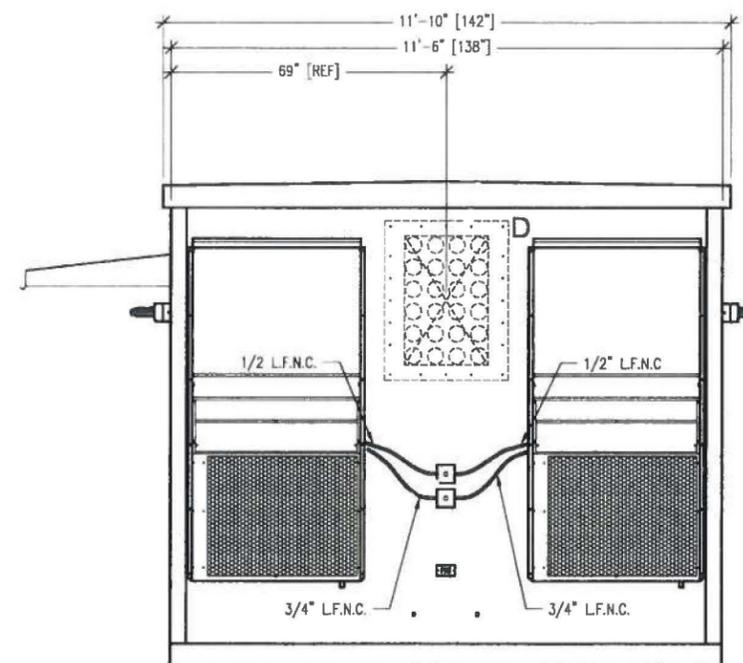
400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

SHELTER DETAILS (VERIZON WIRELESS) SHEET A-5



ELEVATION B



ELEVATION D

NOTE:  
ALL EXTERIOR GENERATOR EXHAUST  
VENTS, AND FUEL PIPES ARE TO BE  
PAINTED BLACK AND GROUNDED  
WITH STAINLESS CLAMPS BY  
CONTRACTOR.

REFER TO VERIZON WIRELESS SHELTER MODEL VZ12-12-4C (DIESEL  
OPTION) SEE MANUFACTURER'S APPROVED SHELTER DRAWINGS FOR  
DETAILS AND SCHEMATICS FOR SHELTER INTERIOR AND OTHER  
INFORMATION

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15

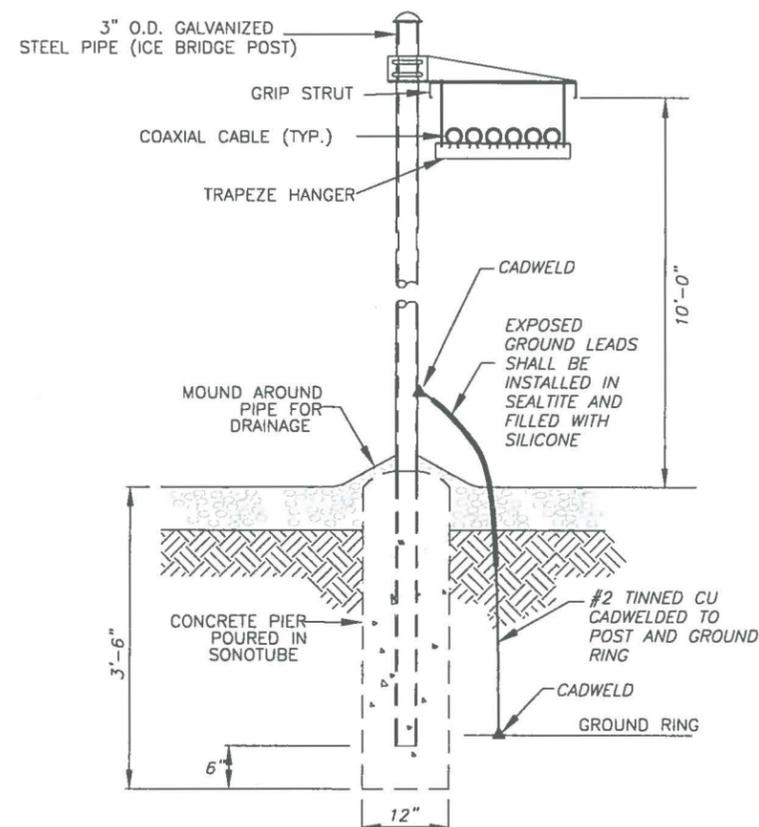


## Mead & Hunt

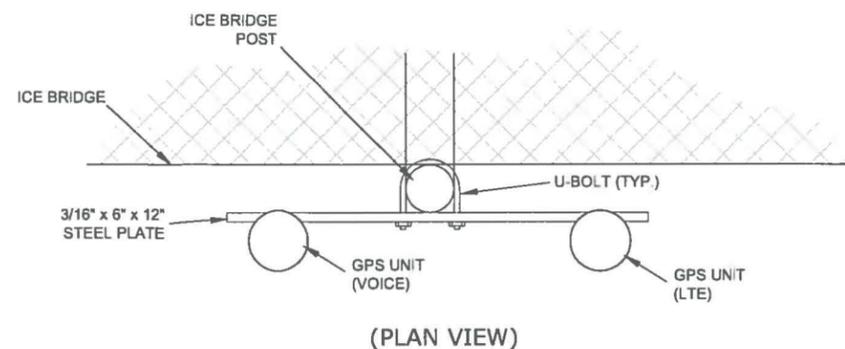
400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

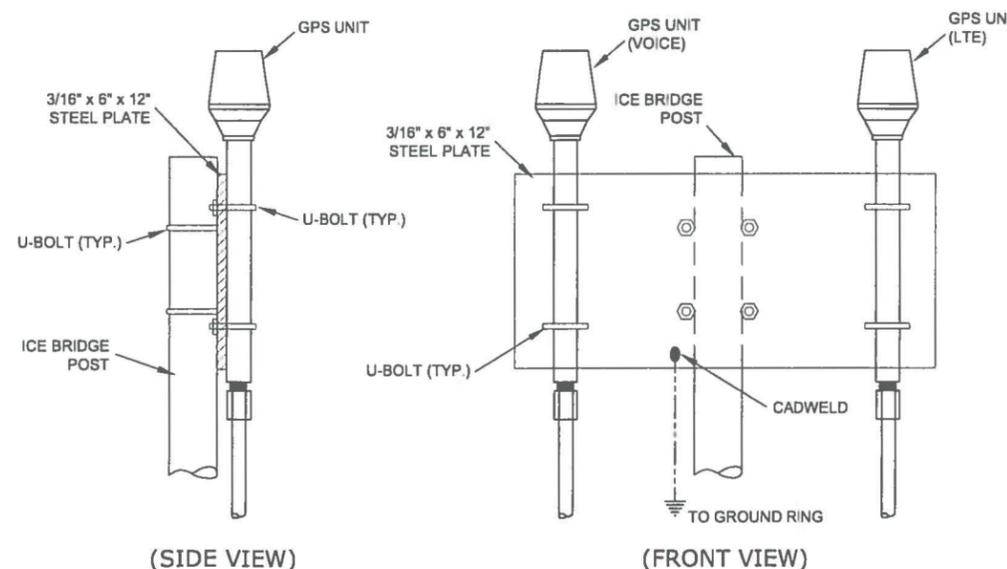
ICE BRIDGE / GPS DETAILS (VERIZON WIRELESS)	SHEET A-6
--	--------------



**ICE BRIDGE DETAIL**  
NO SCALE



(PLAN VIEW)

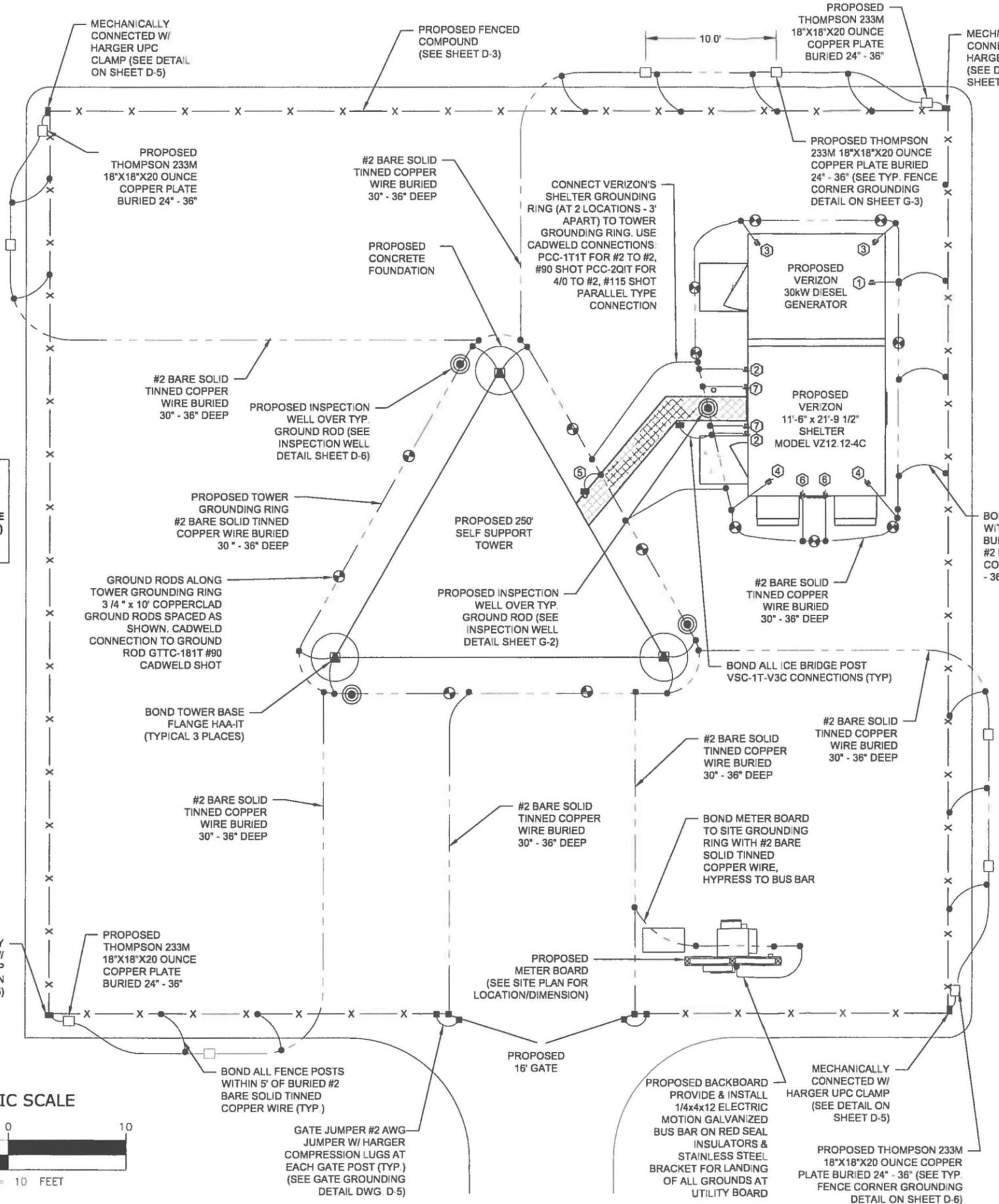


(SIDE VIEW)

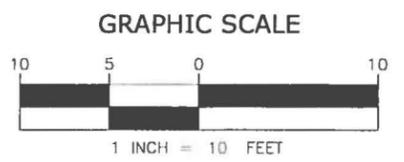
(FRONT VIEW)

**GPS UNIT MOUNTING DETAIL**  
NO SCALE

NORTH MERIDIAN REFERENCED TO KY STATE PLANE COORDINATE SYSTEM SINGLE ZONE (NAD83)



**NOTE:**  
GROUND ALL FENCE POSTS WITHIN 25' OF TOWER GROUNDING RING. #2 BARE SOLID TINNED COPPER WIRE BURIED 30" - 36" DEEP (TYP.) (SEE TYP. FENCE POST DETAIL SHEET D-5)



- LEGEND**
- ⊗ 3/4" x 10' COPPERCLAD GROUND ROD SPACED AT 10' O.C. MIN. CADWELD CONNECTION TO GROUND ROD GTC-181T #90 CADWELD SHOT
  - EMC MECHANICAL COMPRESSION PIPE CLAMP
  - CADWELD CONNECTION: PCC-1T1T FOR #2 TO #2, #90 SHOT OR PCC-2Q1T FOR #4/O TO #2, #115 SHOT PARALLEL TYPE CONNECTION
  - UNDERGROUND ELECTRIC CONDUIT
  - UNDERGROUND TELCO CONDUIT
  - #2 BARE SOLID TINNED COPPER GROUND WIRE
  - ⊞ GROUNDING PIGTAIL, 12 FT LONG. ALL PIGTAILS INTO BLDG. TO BE #2 BARE SOLID TINNED THOMPSON #233M 18"x18"x20 OUNCE COPPER PLATE (BY VITAL TOWERS)
  - ⊙ INSPECTION WELL SEE DETAIL DWG. G-2
  - CADWELD CONNECTION VSC-1T (FLAT CONNECTIONS) #45 CADWELD SHOT
  - CADWELD CONNECTION TO MONOPOLE TOWER HAA-1T (PREFERRED TO HORIZONTAL BOLT PLATE) OR TO VERTICAL (ALTERNATE) -VSC-1T-V8C IF TOWER LEG IS 6" TO 10" DIA. -VSC-1T-V21C FOR PIPE 12" TO 30" DIA. -VSC-1T FOR PIPE LARGER THAN 32" DIA.
  - COMPRESSION LUG CONNECTION
  - SPARE GROUND (TO BE COILED AND HAVE 6" COVER)
  - ⊞ ELECTRIC MOTION MECHANICAL CLAMP (SEE DETAIL DWG. E-2)
  - VSC-1T-V3C - VERTICAL CADWELD MOLD
  - ⊞ "ELECTRIC MOTION" COMPRESSION LUGS - MECHANICAL CLAMP (SEE GATE GROUNDING DETAIL DWG. E-2)
  - THOMPSON #233M 18"x18"x20 OUNCE COPPER PLATE
  - CADWELD CONNECTION TO MONOPOLE TOWER HAA-1T (PREFERRED TO HORIZONTAL BOLT PLATE) OR TO VERTICAL (ALTERNATE) -VSC-1T-V8C IF TOWER LEG IS 6" TO 10" DIA. -VCS-1T-V21C FOR PIPE 12" TO 30" DIA. -VSC-1T FOR PIPE LARGER THAN 32" DIA.

- NOTES**
1. EXACT SIZE AND NUMBER OF POWER CONDUITS BETWEEN UTILITY POLE AND THE SERVICE ENTRANCE RACK SHALL BE DETERMINED IN THE FIELD BY THE POWER CO. AT THE TIME OF CONSTRUCTION.
  2. PROVIDE "ELECTRIC MOTION" TAMPER RESISTANT BUS BARS AT BULKHEAD AND ABOVE THE TURN AT THE ICE BRIDGE. UTILITY BOARD BUS BAR (IF REQUIRED) WILL BE A HARGER TAMPER RESISTANT BUS BAR COATED WITH ELECTRIC MOTION ANTI-THEFT COMPOUND PART #EM-5101.
  3. ALL ENDS OF CONDUIT SHALL BE SEALED WITH A FOAM SEALANT AFTER WIRES AND CABLES ARE INSTALLED.
  4. ALL SHELTER GROUND LEADS, HVAC, CORNER GROUNDS, SHELTER EXTERIOR GROUND BAR, TO BE #2 TINNED SOLID TO GROUNDING RING.
  5. IF EXISTING GROUNDING RING IS ACCIDENTALLY BROKEN DURING CONSTRUCTION IT SHALL BE RECONNECTED VIA CADWELD.

**NOTE:**  
FOR ALL ABOVE GRADE CONNECTIONS TO TOWER, ICE BRIDGE, UTILITY BOARD FENCE POSTS, GATE POSTS, GENERATORS, ETC., ALL OF THESE EXPOSED PIGTAILS SHALL BE WITH EMC MODEL #2223-TMC THEFT RESISTANT CABLE. THESE PIGTAILS SHALL THEN HAVE THE SHIELDS STRIPPED BACK AND CAD-WELDED TO THE TOWER AND BUILDING GROUNDING. ON LONG BELOW GRADE RUNS ONLY, THE ABOVE GROUND PORTIONS (FROM 24" BELOW GRADE UP TO ABOVE GRADE) SHALL BE IN THE EM THEFT RESISTANT CABLE. CADWELD CONNECTIONS FOR IN-LINE BUT SPLICE FROM #2 TO THE EM CABLE SHALL BE WITH SSC-1T.

- GROUNDING CONNECTIONS**
- MAIN DISCONNECT SWITCH GROUND #2 BARE TINNED COPPER GROUND WIRE
  - MICROFLECT PANEL BUS BAR GROUND (EXTERIOR), (2) - #2 BARE SOLID TINNED COPPER GROUND WIRE SEE DWG. G-3
  - GENERATOR ROOM HALO GROUND, #2 BARE SOLID TINNED COPPER GROUND WIRE (TYP. 2 PLACES)
  - EQUIPMENT ROOM HALO GROUND, #2 BARE SOLID TINNED COPPER GROUND WIRE (TYP. 2 PLACES)
  - ICE BRIDGE POST GROUND #2 BARE SOLID TINNED COPPER GROUND WIRE.
  - BUILDING GROUND, #2 BARE SOLID TINNED COPPER GROUND WIRE, CADWELDED TO HVAC GROUND BAR (TYP. 2 PLACES)
  - MAIN GROUND BAR (MGB) (INTERIOR CONNECTION) #2 COATED GROUND WIRE. CONTRACTOR MAY NEED TO DRILL HOLES IN BUILDING TO CONNECT INTERIOR BUS BAR TO BUILDING GROUNDING RING



4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15



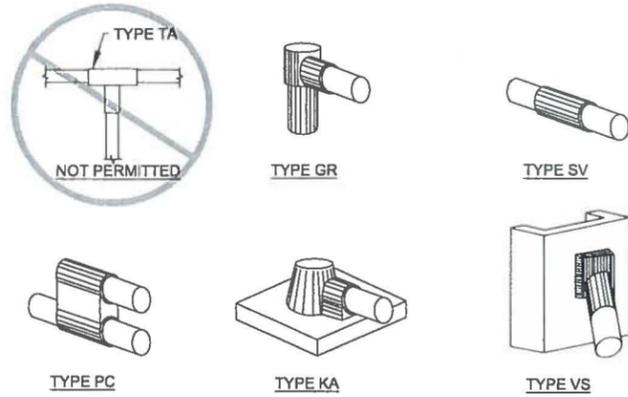
400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

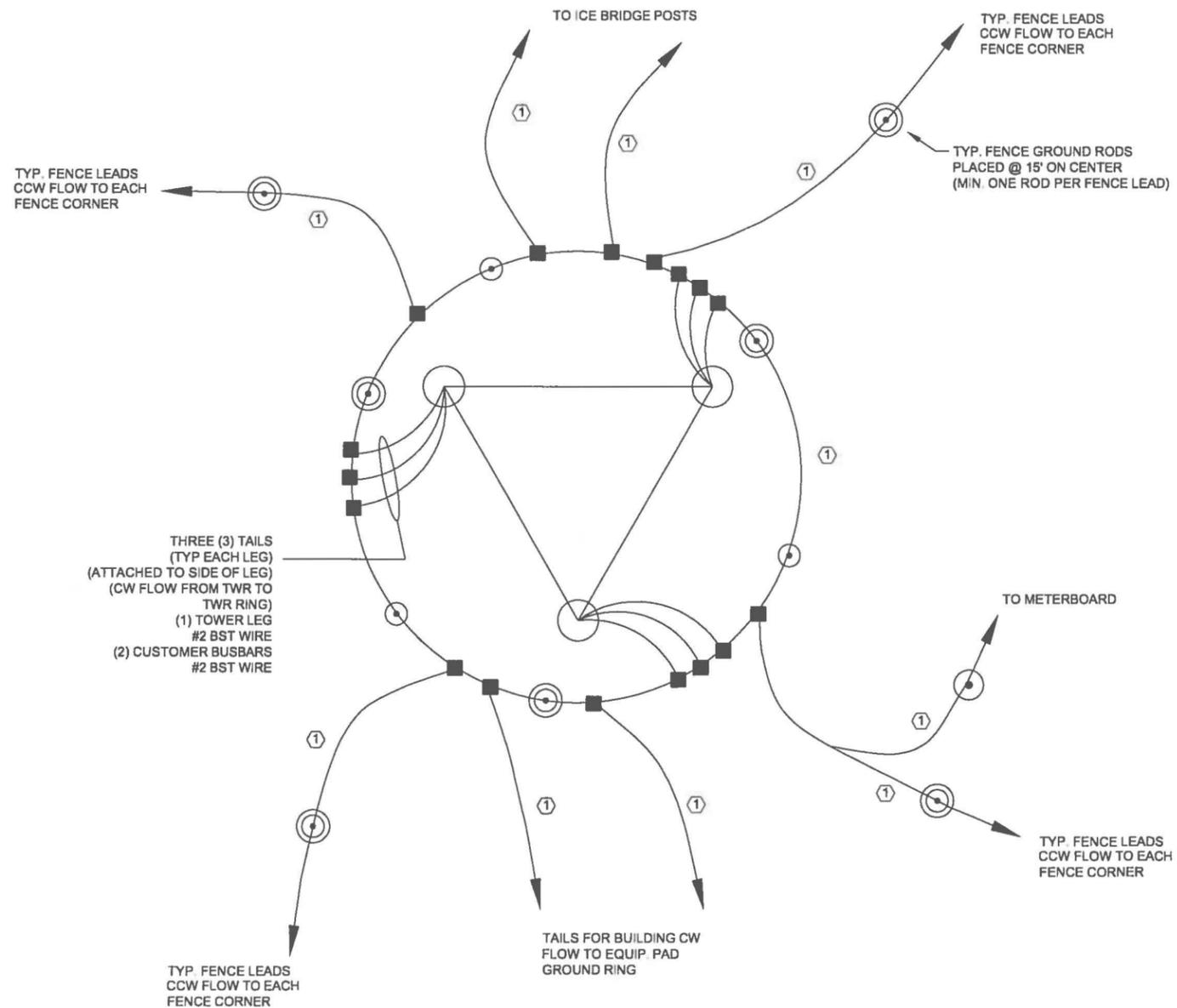
GROUNDING PLAN SHEET G-1

**LEGEND**

- ① 2/0 BARE, TINNED, STRANDED COPPER WIRE  
30" BELOW GRADE OR 6" BELOW FROST LINE,  
WHICHEVER IS DEEPEST
- ⊙ INSPECTION WELL
- ⊙ GROUND ROD - 3/4" x 10' W/ CADWELD GROUND  
CONNECTION
- CADWELD CONNECTION



**CADWELDS (TYPICAL)**  
NO SCALE



**SELF SUPPORT GROUNDING RING DETAIL**  
NO SCALE

**GROUNDING NOTES:**

1. CONTRACTOR SHALL INSTALL THE MINIMUM NUMBER OF GROUND RODS AS INDICATED ON DRAWING. GROUND RODS SHALL BE 5/8"x10 FOOT COPPER GLAD GROUND RODS AND SHALL BE SPACED AT A 15 FOOT APART. SEE GROUNDING PLAN FOR APPROXIMATE LOCATIONS; CONTRACTOR SHALL PLAN FOR INSTALLING ADDITIONAL GROUNDING AS REQUIRED TO ACHIEVE 5- OHMS OR LESS TO GROUND.
2. ALL BURIED GROUND WIRES INTERCONNECTING GROUND RODS, TOWER STEEL, SHELTER, AND EQUIPMENT\_EXTERNAL GROUND RINGS (EGR) SHALL BE #2 BST WIRE
  - ALL FENCE POST LEADS, ICE BRIDGE LEADS AND UTILITY RACK LEADS SHALL BE ROUTED AS TO NOT INTERFERE WITH FUTURE CUSTOMER EQUIPMENT PADS, SHELTERS, OR ICE BRIDGES.
3. ALL GROUNDING WIRE AND LEADS SHALL FLOW (IN A SMOOTH CLOCKWISE (CW) PATH FROM THE TOWER TO THE GROUND RING ALL GROUNDING WIRE AND LEADS SHALL FLOW IN A SMOOTH CLOCKWISE (CW) PATH FROM THE TOWER RING TO THE CUSTOMER RING AND ALL GROUNDING WIRE AND LEADS SHALL FLOW IN A SMOOTH COUNTER CLOCKWISE (CCW) PATH FROM THE TOWER GROUND RING TO THE FENCE POSTS) WITH NO KINKS OR SHARP BENDS. ALL BELOW GRADE CONNECTIONS SHALL BE EXOTHERMIC WELDS (CADWELD). TEE CONNECTORS ARE NOT PERMITTED ABOVE OR BELOW GRADE.
  - FOR SELF SUPPORT TOWERS:  
INSTALL NINE (9) GROUND LEADS, THREE (3)LEADS PER LEG AROUND THE TOWER:  
(1) ONE FOR ATTACHMENT TO THE TOWER BASE  
(2) TWO SPARES FOR FUTURE CUSTOMER'S BUSS BARS
  - ALL SPARE GROUND LEADS FROM THE TOWER GROUND RING SHALL BE CUT OFF AT 12" ABOVE GRADE AND ZIP TIED OR TAPED TO THE ATTACHED TOWER LEAD IN MINIMUM OF TWO (2) PLACES.
4. GROUND LEADS TO HOLLOW LEG TOWERS SHALL ONLY BE CADWELDED TO THE BASEPLATES. "NEVER CADWELD, BRAZE, OR WELD TO THE HOLLOW TOWER STRUCTURE SECTION".
5. ALL EXOTHERMIC WELDS TO ABOVE GRADE STEEL STRUCTURES MUST BE COLD GALVANIZED AND SPRAYED WITH MATCHING RUST INHIBITOR PAINT.

**GROUND TEST PROCEDURES**

- A. CCUSA STANDARD REQUIREMENT FOR RESISTIVITY TO EARTH ON ALL SITES IS 5-OHMS OR LESS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE SUCH REQUIREMENT IS ACHIEVED. REVIEW OF THE SOIL RESISTIVITY TEST PRIOR TO INSTALLATION OF THE SITE GROUNDING SYSTEM WILL GREATLY ASSIST IN DETERMINING THE TYPE OF GROUNDING INSTALLATION, NUMBER AND TYPE OF GROUND ROD(S).
- B. PERFORM THREE POINT FALL OF POTENTIAL GROUNDING (MEGGER) TEST UTILIZING THE 'AEMC 4500' TEST INSTRUMENT FROM A MINIMUM OF TWO SEPARATE POINTS IN TWO SEPARATE DIRECTIONS FROM THE POINT OF CONTACT.
- C. THE CONTRACTOR SHALL DOCUMENT MEGGER TEST RESULTS ON THE CROWNCastle CLOSEOUT REQUIREMENTS DOCUMENT IN THE MEG TEST TAB.
- D. HE CONTRACTOR SHALL DOCUMENT THE LOCATION OF ALL BELOW GRADE GROUNDING COMPONENTS AND PHOTOGRAPH WITH A DIGITAL CAMERA THE ENTIRE NEWLY INSTALLED GROUNDING SYSTEM PRIOR TO BACKFILLING ANY OPEN TRENCHES.
- E. FORWARD THE MEGGER TEST DOCUMENTATION TO THE REGIONAL CCUSA REPRESENTATIVE (JS PART OF THE FINAL SITE CLOSE-OUT PACKAGE DOCUMENTATION).

**Parallel**  
INFRASTRUCTURE

4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

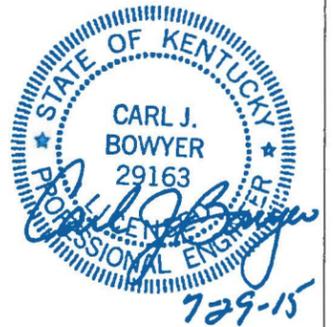
PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15

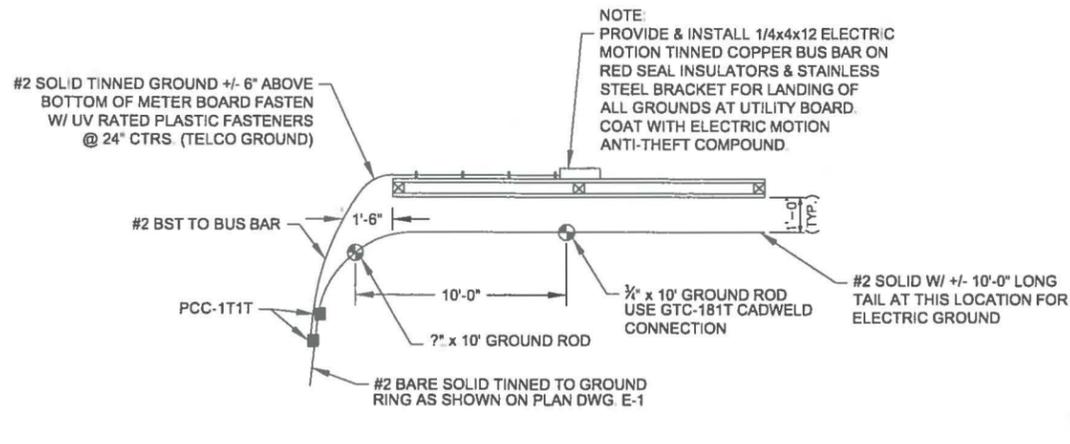


**Mead & Hunt**

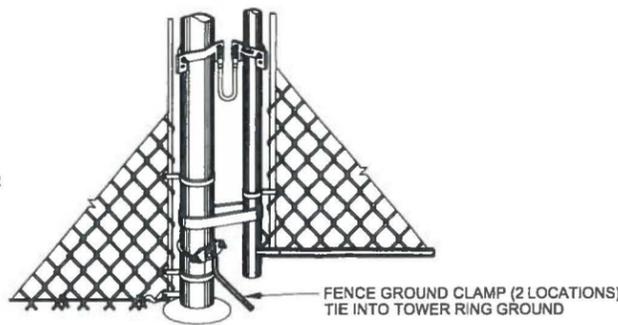
400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

GROUNDING RING  
DETAILS SHEET  
G-2



**METER BOARD UTILITY GROUNDING DETAIL**  
NO SCALE

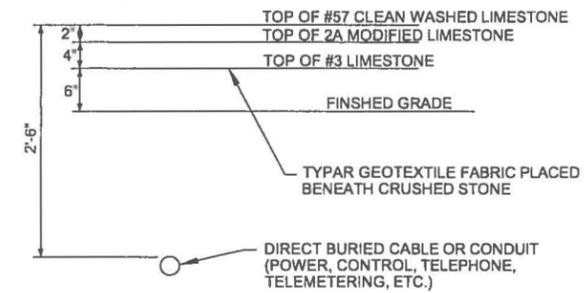


**GATE GROUND ASSEMBLY DETAIL**  
NO SCALE

PART NUMBER	NOMINAL GATE POST SIZE RANGE	NOMINAL FENCE POST SIZE RANGE	JUMPER SIZE (AWG)	JUMPER LENGTH	APPROX. WEIGHT (LBS)
EM GG1.5/2-2.5/3 SP224	1.5"-2"	2.5"-3"	#2	24"	2.5
EM GG1.5/2-3.5/4 SP224	1.5"-2"	3.5"-4"	#2	24"	3
EM GG1.5/2-5/6 SP224	1.5"-2"	5"-6"	#2	24"	3.5

110 groppo drive, ct 06098  
860/379-8515  
www.electriconcompany.com

electric motion company, inc.

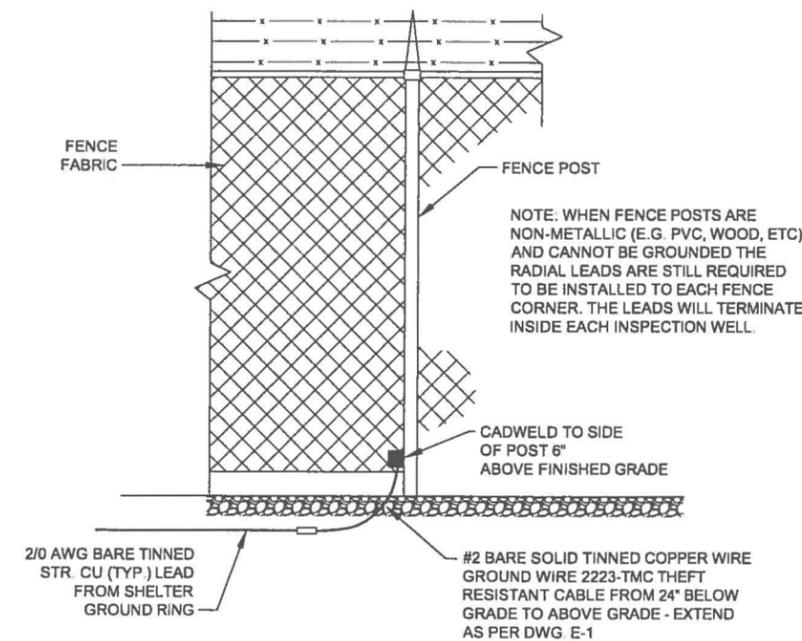


**INSTALLATION**

1. THE TAPE SHALL BE LAID DIRECTLY ABOVE THE CABLE OR CONDUIT UNDER RIGID TYPE AND OIL MAT PAVEMENTS, AND DIRECTLY ON TOP OF THE COMPACTED EARTH SUBGRADE IMMEDIATELY BEFORE RESTORING THE PAVEMENT.
2. IN OPEN AREAS, THE TAPE SHALL BE LAID DURING THE BACKFILLING OPERATION ON SMOOTH, COMPACTED BACKFILL AT A DISTANCE OF 8 INCHES BELOW THE SURFACE OF THE AREA.
3. THE ENDS OF THE TAPE SHALL BE LAPPED APPROXIMATELY SIX (6) INCHES.
4. TAPE SHALL BE THE COLOR AS INDICATED AND HAVE THE FOLLOWING MARKINGS

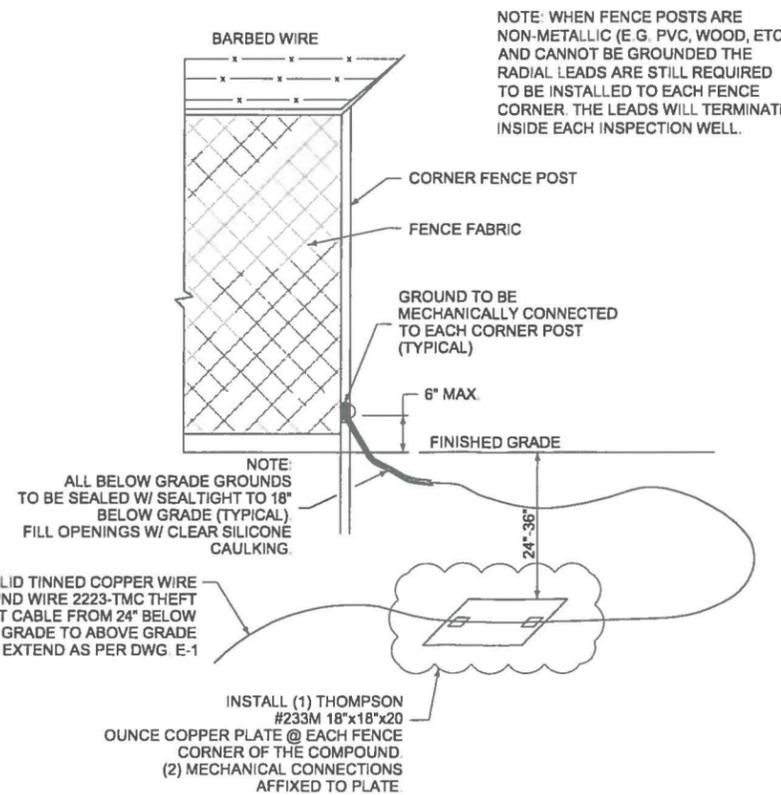
YELLOW	CAUTION	CAUTION	CAUTION
	BURIED ELECTRIC LINE BELOW		
GREEN	CAUTION	CAUTION	CAUTION
	BURIED TELEPHONE LINE BELOW		

**STANDARD MARKER TAPE DETAIL**  
NO SCALE

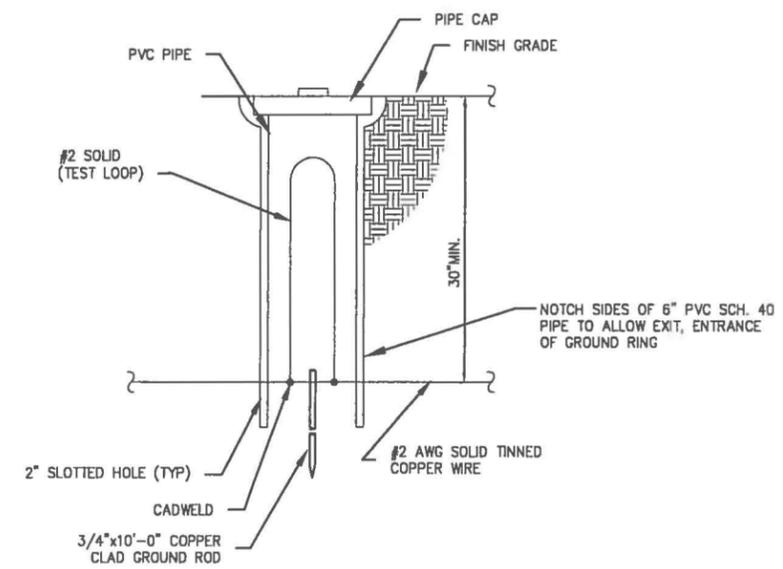


- NOTE:
- ALWAYS CADWELD TO SIDE OF FENCE POST TO PREVENT TRIPPING HAZARD
  - MECHANICAL GROUNDING CONNECTIONS ARE PROHIBITED
  - TOP OF FENCE FABRIC SHALL BE LEVEL, CUT SIDE OF FENCE FABRIC TO BE INSTALLED TOWARD THE GROUND, AND SMOOTH SIDE TO BE INSTALLED TOWARD THE BARBED WIRE.
  - ALL BELOW GRADE GROUNDS TO BE SEALED W/ SEALTIGHT TO 18" BELOW GRADE (TYP). FILL OPENINGS W/ CLEAR SILICONE CAULKING.

**TYPICAL FENCE POST GROUNDING DETAIL**  
NO SCALE



**TYPICAL FENCE CORNER GROUNDING DETAIL**  
NO SCALE



NOTE: GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE (WHICH EVER IS GREATER)

**INSPECTION WELL DETAIL**  
NO SCALE

**Parallel**  
INFRASTRUCTURE

4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15



**Mead & Hunt**

400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949.01

GROUNDING DETAILS SHEET  
G-3

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: PI3WV00008.A  
VZW PROJECT CODE: 20141108697  
VZW LOCATION CODE: 307336

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

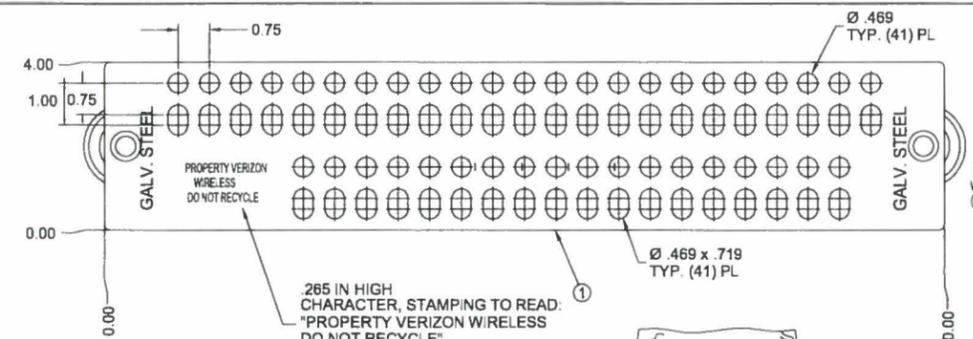
TAX ID#: 120W-00-00-033.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED METERBOARD	05/11/15
4	ISSUE FOR CONSTRUCTION	06/05/15
5	REISSUE FOR CONSTRUCTION	07/24/15
6	REISSUE FOR CONSTRUCTION	07/29/15



PROJECT # R4381500-150949.01

GROUNDING DETAILS SHEET G-4



### FENCE GROUND CLAMPS DETAIL

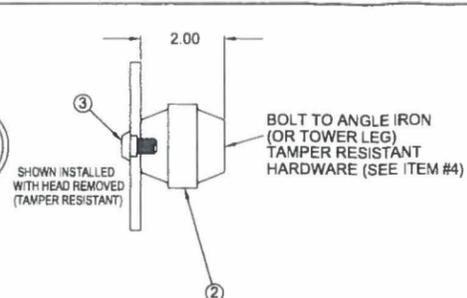
NO SCALE

MECHANICAL CLAMPS TO BE USED AT GATE AND CORNER FENCE POSTS

PART NUMBER	NOMINAL PIPE SIZE RANGE	PIPE OUTSIDE DIAMETER
EM FGC 1.5/2	1.5"-2"	2.5"-3"
EM FGC 2.5/3	2.5"-3"	3.5"-4"

electric motion company, inc.

110 groppo drive, ct 06098  
860/379-8515  
www.electricon.com



### GROUND BAR DETAIL

NO SCALE

ITEM	PART NO.	DESCRIPTION	REQ
4	02-009-0663-000 (SUB-ASSEMBLY)	3/8-16 x 5/8" TORQUE SHEAR HEAD BOLT IN A STANDARD 4 x 6 BAG INCLUDES: (2) 3/8-16 x 5/8" TORQUE SHEAR HEAD BOLT (NON-REMOVABLE) WITH VIBRASEAL, STAINLESS STEEL (303) PIN 02-009-0663-000 (1) STANDARD 4 x 6 BAG PIN 03-009-0209-000	1
3	02-009-0663-000	3/8-16 x 5/8" TORQUE SHEAR HEAD BOLT (NON-REMOVABLE) WITH VIBRASEAL, STAINLESS STEEL (303)	2
2	03-009-0119-000	2" x 2" INSULATOR, FIBERGLASS	2
1	02-009-0672-000	20" GROUND BAR, STEEL, GALVANIZED	1

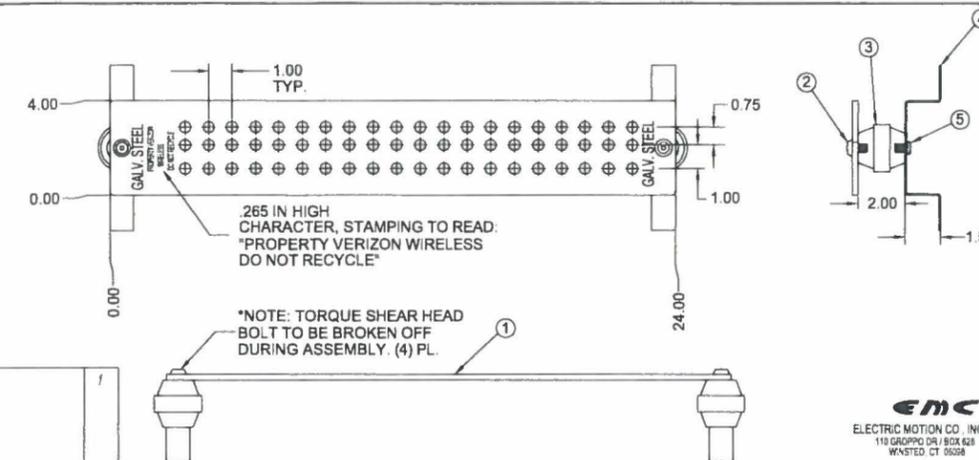


ELECTRIC MOTION CO., INC.  
110 GROPPO DRIVE, SUITE 200  
WASTED, CT 06098  
PART #EM SGM420-BI-NR

### GROUND BAR DETAIL

NO SCALE

- \* USE 1/4" FOR ATTACHMENT TO METAL ENCLOSURES AND 3/8" FOR ATTACHMENT TO GROUND BARS
- \*\* USE DRAGON TOOTH TRANSITION LOCK WASHERS AND BELLVILLE WASHERS ON ALL GALVANIZED AND METAL SURFACES



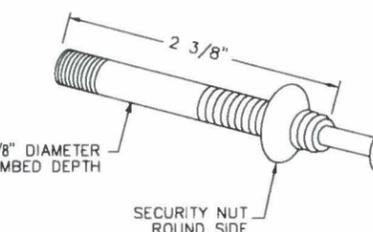
### MICROFLECT PORT BUS BAR

SCALE: NONE

ITEM	PART NO.	DESCRIPTION	REQ
5	02-009-0663-000	3/8-16 x 1/2" TORQUE SHEAR HEAD BOLT (NON-REMOVABLE) WITH VIBRASEAL, STAINLESS STEEL	2
4	02-009-0624-000	MOUNTING BRACKET, STAINLESS STEEL, 16 GA (.080) THICK	2
3	03-009-0119-000	THREADED (3/8-16) INSULATORS, 2" DIA X 2" HEIGHT, FIBERGLASS	2
2	02-009-0663-000	3/8-16 x 5/8" TORQUE SHEAR HEAD BOLT (NON-REMOVABLE) WITH VIBRASEAL, STAINLESS STEEL	2
1	02-009-0662-000	GROUND BAR, GALVANIZED STEEL, 1/4" x 1" x 24"	1



ELECTRIC MOTION CO., INC.  
110 GROPPO DRIVE, SUITE 200  
WASTED, CT 06098  
PART #EM SGC424ALP-BIM-NR

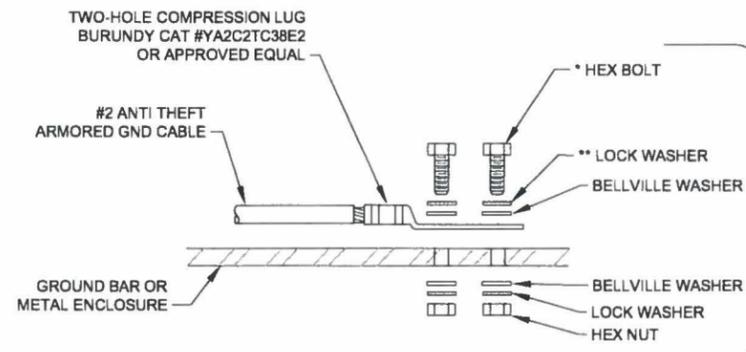


### TYPICAL MASONRY TAMPER RESISTANT ANCHOR

SCALE: NONE

MCMaster-CARR PART #92960A125 OR SIMILAR

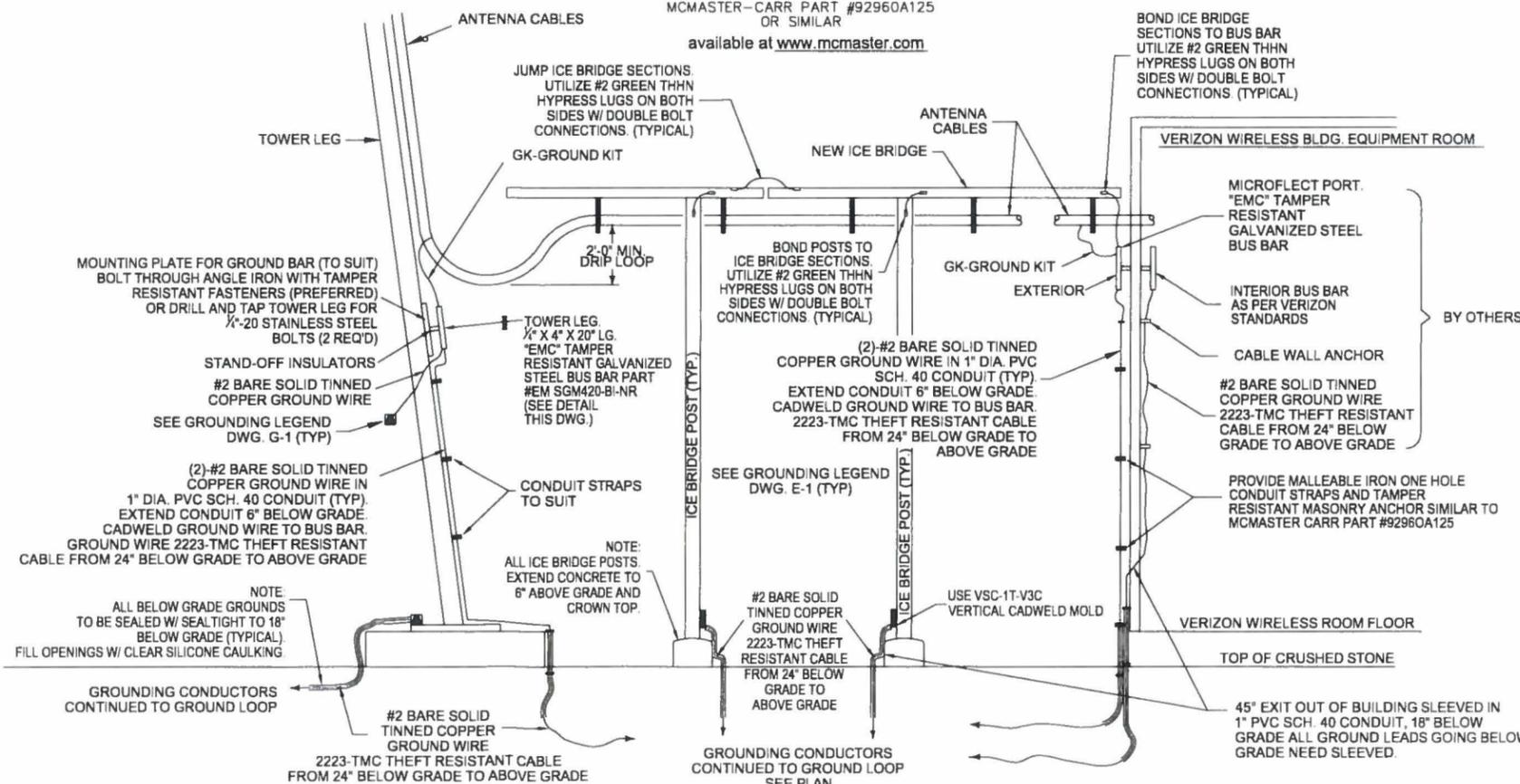
available at [www.mcmaster.com](http://www.mcmaster.com)



### GROUNDING TO FLAT SURFACES (TYP.)

NO SCALE

- ALL NON-LIKE METAL CONNECTIONS SHALL USE DRAGON TOOTH AND BELLVILLE WASHERS. BOLTS, WASHERS, AND NUTS SHALL BE STAINLESS STEEL.
- SELECT BOLT LENGTH TO PROVIDE A MINIMUM OF TWO EXPOSED THREADS.
- BURNISH MOUNTING SURFACE TO REMOVE PAINT IN THE AREA OF LUG CONTACT.
- ALL ICE BRIDGE GROUNDING SHALL USE ANTI THEFT ARMORED CABLES.
- APPLY COPPER SHIELD COMPOUND TO MATING SURFACE OF LUG AND WIPE CLEAN EXCESS COMPOUND.
- ALL GROUNDING CONNECTIONS TO USE VZW ONLY APPROVED NO-OXIDE COMPOUND MADE BY SANCHEM.
- ALL METAL ELECTRICAL EQUIPMENT SHALL BE EXTERNALLY GROUNDED TO THE TOWER EGR. (PAINTED SURFACES MUST HAVE SMALL SECTION OF PAINT REMOVED BEFORE INSTALLATION, AND SHALL BE SPRAYED LIGHTLY WITH CLEAR COAT LACQUER FINISH)



### COAXIAL CABLE GROUNDING AT ICE BRIDGE

NO SCALE

**EXHIBIT C**  
**TOWER AND FOUNDATION DESIGN**

# NEW HORIZON

---

## S I T E S E R V I C E S

www.newhss.com

06/25/2015

RE: Carter Hollow

Dear Commissioners,

My name is Chad Sylvester, and I am the Construction Manager for the proposed tower referenced within this application. I have been involved in the construction of wireless communications facilities for 3 years including the last year as a Construction manager with New Horizon Site Services Inc. Prior to that, I held foreman and superintendent positions at Horizon Construction Group Inc. Also, I am certified and licensed tower climbing and rescue technician. My addition certifications include:

- OHSAA 10 hour
- Trenching and Shoring Competent Person
- RF Hazard Awareness
- First Aid/CPR

I can be reached at 724.838.4033 to discuss this site further.

Sincerely,



Chad Sylvester  
Construction Manager  
NEW HORIZON SITE SERVICES, INC.  
724.383.4033 (o)  
330.219.4172 (m)

<b>tnxTower</b>  <b>Allstate Tower, Inc.</b> 232 Heilman Avenue Henderson, KY 42420 Phone: 270-830-8512 FAX: 270-830-8475	<b>Job</b> AB4209 - 55825FT	<b>Page</b> 1 of 18
	<b>Project</b> Site Name : Grayson / Carter County, KY.	<b>Date</b> 14:59:51 07/06/15
	<b>Client</b> Parallel Infrastructure	<b>Designed by</b> Allstate Tower, Inc.

## Tower Input Data

The main tower is a 3x free standing tower with an overall height of 250.00 ft above the ground line.

The base of the tower is set at an elevation of 0.00 ft above the ground line.

The face width of the tower is 4.00 ft at the top and 21.50 ft at the base.

There is a 3 sided latticed pole with a face width of 4.00 ft.

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

The following design criteria apply:

Tower is located in Carter County, Kentucky.

Basic wind speed of 90 mph.

Structure Class II.

Exposure Category C.

Topographic Category 1.

Crest Height 0.00 ft.

Nominal ice thickness of 0.7500 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

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

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

Tower designed for step bolts..

Tower designed for feedlines to be supported with waveguide ladder(s)..

All bolted legs and/or weld together tower sections have flange connections..

Structural connections use galvanized A325 bolts and/or equivalent with nuts and/or nut locking devices. Installation per TIA/EIA-222 and AISC Specifications..

Tower members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards..

All structural steel welding will be in compliance with AWS D1.1 latest revision and fabricated with ER-70S-6 electrodes..

Structure is designed to arrange feedlines based on using stackable hangers currently available in the communications industry unless specified otherwise by customer. See plan view of sheet E-7 for feedline arrangement used for the design of this structure.

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

Pressures are calculated at each section.

Stress ratio used in latticed pole member design is 1.

Stress ratio used in tower member design is 1.

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



*Keith M. Eaton*  
8-4-2015

## Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Treat Feedline Bundles As Cylinder
Consider Moments - Horizontals	Assume Legs Pinned	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Diagonals	√ Assume Rigid Index Plate	√ Calculate Redundant Bracing Forces
Use Moment Magnification	√ Use Clear Spans For Wind Area	Ignore Redundant Members in FEA
√ Use Code Stress Ratios	√ Use Clear Spans For KL/r	√ SR Leg Bolts Resist Compression
√ Use Code Safety Factors - Guys	√ Retension Guys To Initial Tension	√ All Leg Panels Have Same Allowable
Escalate Ice	Bypass Mast Stability Checks	Offset Girt At Foundation
Always Use Max Kz	√ Use Azimuth Dish Coefficients	√ Consider Feedline Torque
Use Special Wind Profile	√ Project Wind Area of Appurt.	√ Include Angle Block Shear Check
Include Bolts In Member Capacity	√ Autocalc Torque Arm Areas	Poles

ANTENNA INFORMATION

ELEVATION	ANTENNA	LINE
245'	R2V4PX310_	(6) 1 5/8" & (1) HFT1006-36S37
245'	(2) LUCENT 2x40-HW RRH	
245'	R2V4PX310_	
245'	(2) LUCENT 2x40-HW RRH	
245'	R2V4PX310_	
245'	(2) LUCENT 2x40-HW RRH	
245'	RAYCAP DC6-48-60-18-8F	
240'	4' STD. DISH W/ RADOME	(6) 1 5/8"
235'	R2V4PX310_	(6) 1 5/8" & (1) HFT1006-36S37
235'	(2) LUCENT 2x40-HW RRH	
235'	R2V4PX310_	
235'	(2) LUCENT 2x40-HW RRH	
235'	RAYCAP DC6-48-60-18-8F	
230'	4' STD. DISH W/ RADOME	(6) 1 5/8"
225'	(2) LUCENT 2x40-HW RRH	
225'	R2V4PX310_	
225'	(2) LUCENT 2x40-HW RRH	
225'	RAYCAP DC6-48-60-18-8F	
225'	R2V4PX310_	(6) 1 5/8" & (1) HFT1006-36S37
220'	4' STD. DISH W/ RADOME	(6) 1 5/8"
215'	(2) LUCENT 2x40-HW RRH	
215'	R2V4PX310_	
215'	(2) LUCENT 2x40-HW RRH	
215'	RAYCAP DC6-48-60-18-8F	
215'	(2) LUCENT 2x40-HW RRH	
215'	R2V4PX310_	(6) 1 5/8" & (1) HFT1006-36S37
215'	R2V4PX310_	
210'	4' STD. DISH W/ RADOME	(6) 1 5/8"

DESIGN NOTES:

- 1) TOWER LEGS ARE CONSTRUCTED OF SOLID ROUND BAR MATERIAL.
- 2) SOLID ROUND 0.75" AND LARGER ASTM A-572 GRADE : 50 KSI MIN.
- 3) SOLID ROUND 0.625" AND SMALLER IS ASTM A-36 GRADE : 36 KSI MIN.
- 4) ALL ANGLE MATERIAL IS ASTM A-529 : 50 KSI MIN.
- 5) ALL BRACE AND FLANGE BOLTS ARE A325-X
- 6) THIS TOWER IS DESIGNED FOR STEP BOLTS UP ONE LEG FOR CLIMBING WITH SAFETY CLIMB DEVICE.
- 7) (6)  $\phi$  1 1/2" x 6' - 0" LONG (F1554-GR.105) ANCHOR BOLTS PER LEG.
- 8) THIS TOWER IS DESIGNED FOR A 90 M.P.H. WIND SPEED AND A 30 M.P.H. WIND SPEED WITH 0.75" ICE IN ACCORDANCE WITH THE TIA/EIA-222-G STANDARD.
- 9) STRUCTURE CLASS: II - TOPO. CAT.: 1 - EXPOSURE: C

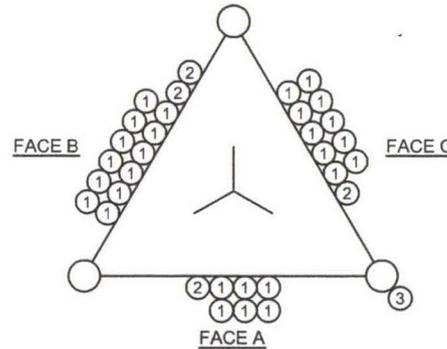
APPROX. WEIGHT  
42.59 KIPS

BASE REACTIONS:(FACTORED)

TOTAL SHEAR = 55 KIPS  
 AXIAL LOAD = 167 KIPS  
 UPLIFT / LEG = 382 KIPS  
 COMP. / LEG = 437 KIPS  
 O.T. MOMENT = 7677 FT-K

MEMBER INFORMATION

SECTION	ELEVATION	FACE SIZE	LEG DIA.	DIAGONALS	GIRTS	# OF BAYS
1	0' - 20'	21' - 6"	$\phi$ 4 1/2"	L 3 1/2" x 1/4"	N/A	3 - X
2	20' - 40'	19' - 9"	$\phi$ 4 1/4"	L 3 1/2" x 1/4"	N/A	3 - X
3	40' - 60'	18' - 0"	$\phi$ 4 1/4"	L 3" x 1/4"	N/A	3 - X
4	60' - 80'	16' - 3"	$\phi$ 4"	L 3" x 3/16"	N/A	3 - X
5	80' - 100'	14' - 6"	$\phi$ 4"	L 3" x 3/16"	N/A	3 - X
6	100' - 120'	12' - 9"	$\phi$ 3 3/4"	L 2 1/2" x 3/16"	N/A	3 - X
7	120' - 140'	11' - 0"	$\phi$ 3 1/2"	L 2" x 3/16"	N/A	4 - X
8	140' - 160'	9' - 3"	$\phi$ 3 1/4"	L 1 3/4" x 3/16"	N/A	4 - X
9	160' - 180'	7' - 6"	$\phi$ 3 1/4"	L 1 3/4" x 3/16"	N/A	4 - X
10	180' - 200'	5' - 9"	$\phi$ 3	L 1 1/2" x 3/16"	N/A	4 - X
11	200' - 220'	4' - 0"	$\phi$ 2 1/2"	$\phi$ 7/8"	$\phi$ 7/8"	6 - X
12	220' - 240'	4' - 0"	$\phi$ 2"	$\phi$ 7/8"	$\phi$ 3/4"	6 - X
13	240' - 250'	4' - 0"	$\phi$ 1 1/2"	$\phi$ 5/8"	$\phi$ 3/4"	3 - X



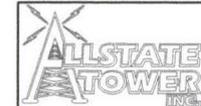
PLAN VIEW REF:

1)	1 5/8" HELIAX
2)	HFT1006-36S37-300
3)	STEP BOLTS

PLAN VIEW

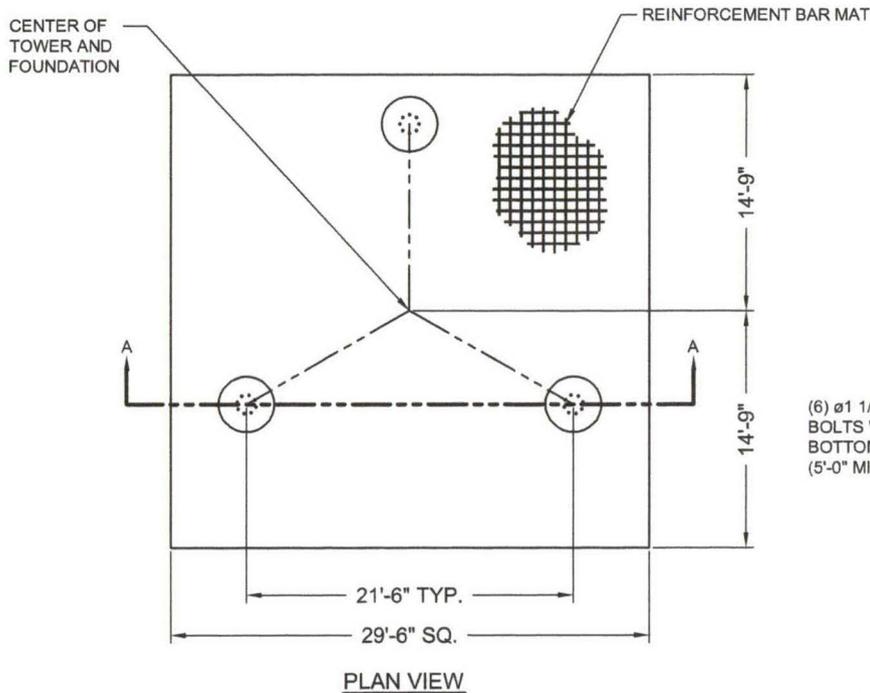


Keith M. Eaton  
8-4-2015



ALLSTATE TOWER INC.  
P.O. BOX 25  
HENDERSON, KY 42419  
PHONE: (270) 830-8512  
FAX: (270) 830-8475  
WWW.ALLSTATETOWER.COM

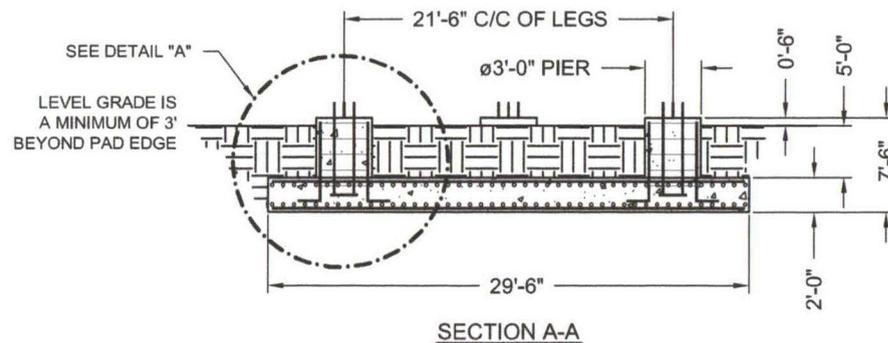
REV #	DESCRIPTION	DATE	BY	UNLESS OTHERWISE NOTED DIMENSIONS ARE IN: INCHES	DESCRIPTION:
				TOLERANCE BANDS: X +3/32"-0 ANGLES +/- 2" .XX +3/32"-0 .XXX +1/16"-0 HOLES +/- 1/16"-0	TOWER OVERVIEW PARALLEL INFRASTRUCTURE 250' SELF SUPPORT TOWER GRAYSON, CARTER CO., KY
SCALE:	NTS	DATE:	07/06/2015	DRAWN BY: C. FELTY	FILE NAME: 55825FT
					SHEET: A



TOTAL VOLUME OF CONCRETE = 68.8 YD<sup>3</sup>

**FOUNDATION INSTALLATION/DESIGN NOTES:**

- THIS FOUNDATION IS DESIGNED TO MEET ALL STANDARDS SET FORTH BY ACI 318: AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ANSI/TIA/EIA 222-G: STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.
- THIS FOUNDATION IS DESIGNED UTILIZING THE GEOTECHNICAL REPORT PERFORMED BY NGE; DATED 06-03-15; # W15086. THE FOUNDATION CONTRACTOR SHALL INSTALL THE FOUNDATIONS IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
- ALL WORK PERFORMED FROM THESE DRAWINGS SHOULD BE BY QUALIFIED CONTRACTORS EXPERIENCED IN TOWER FOUNDATION CONSTRUCTION.
- ALL FOOTING EXCAVATIONS SHALL BE MANUALLY CLEANED PRIOR TO PLACING CONCRETE. COMPACT THE EXPOSED SOIL SURFACE AND ANY GRANULAR FILL UNDER THE FOUNDATION TO 90% OF THE MODIFIED PROCTOR DENSITY.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AFTER 28 DAYS. COPIES OF THE CONCRETE CYLINDER TEST REPORTS SHALL BE SENT TO THE RESIDENT ENGINEER / INSPECTOR.
- MINIMUM CONCRETE COVER FOR REINFORCING BARS SHALL BE 3".
- FIELD BENDING OR WELDING OF REINFORCEMENT BARS IS NOT PERMITTED.
- PROVIDE CHAMFERS AT ALL EXPOSED CORNERS OF CONCRETE.
- BACKFILL NEAR AND AROUND THE FOUNDATIONS SHALL BE A WELL GRADED FILL MATERIAL PLACED IN 8" THICK LAYERS THAT HAS BEEN COMPACTED TO 90% OF THE MODIFIED PROCTOR DENSITY PER ASTM D1557.
- SOME DETAIL HAS BEEN PURPOSELY OMITTED TO CLARIFY ILLUSTRATION.

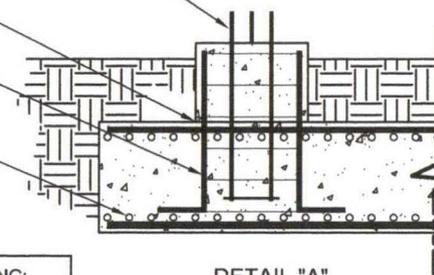


(6) ø1 1/2" X 6'-0" OVERALL LENGTH ANCHOR BOLTS W/ 3/4" THK BEARING PLATE AT THE BOTTOM OF THE ANCHOR BOLT CLUSTER (5'-0" MIN. ANCHOR BOLT EMBEDMENT).

USE EPOXY BONDING AGENT WHEN POURED SEPERATELY

(11) #9 VERTICAL BARS w/ #5 TIES AT 16" ON CENTER

(35) #9 HORIZONTAL BARS X 29'-0" LONG EQUALLY SPACED EACH WAY AT TOP AND BOTTOM OF MAT. (TOTAL=140)



**REINFORCEMENT BAR SPLICING:**

- ALL LAP SPLICES SHALL CONFORM TO ACI 318 REQUIREMENTS.
- REFER TO CHART BELOW WHEN REINFORCEMENT BAR SPLICING IS NECESSARY.

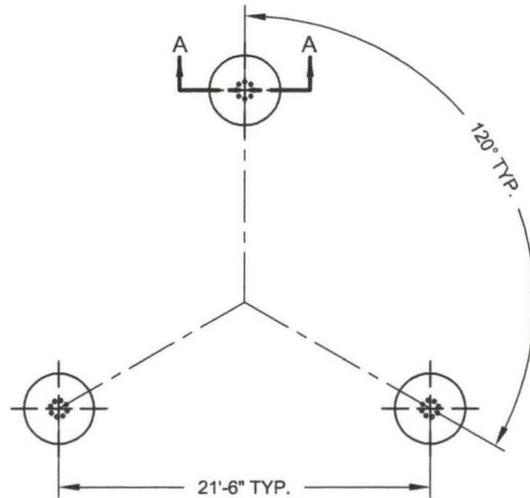
REINFORCING BAR SIZE	LAP SPLICE LENGTH
3	15"
4	17"
5	21"
6	26"
7	30"
8	36"
9	46"
10	58"
11	71"



*Keith M. Eaton*  
8-4-2015



REV #	DESCRIPTION	DATE	BY	UNLESS OTHERWISE NOTED DIMENSIONS ARE IN:	DESCRIPTION:
				INCHES	PAD & PIER FOUNDATION DESIGN PARALLEL INFRASTRUCTURE GRAYSON, CARTER CO., KY
				TOLERANCE BANDS: .X +3/32" / -0 ANGLES +/- 2" .XX +3/32" / -0 .XXX +1/16" / -0 HOLES + Ø1/16" / -0	
SCALE: NTS				DRAWN BY: C. FELTY	FILE NAME:
				DATE: 06/26/2015	55825FT
					SHEET B



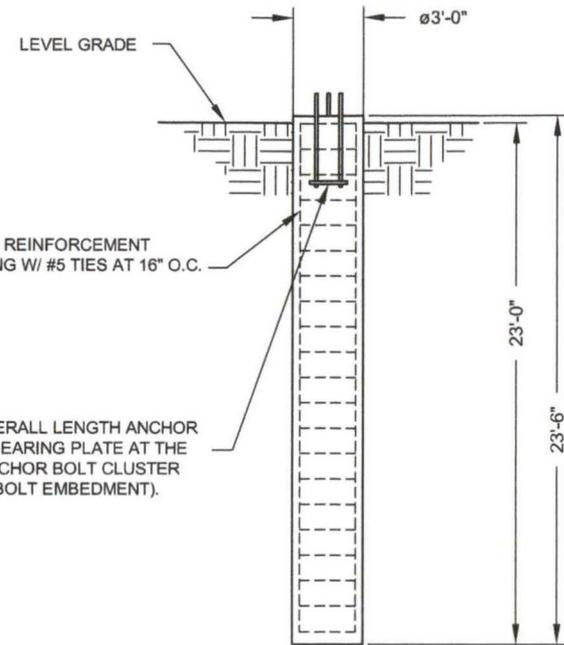
**PLAN VIEW**

TOTAL VOLUME OF CONCRETE PER CAISSON = 6.2 YD<sup>3</sup>

TOTAL VOLUME OF CONCRETE FOR (3) CAISSONS = 18.6 YD<sup>3</sup>

**FOUNDATION INSTALLATION/DESIGN NOTES:**

1. THIS FOUNDATION IS DESIGNED TO MEET ALL STANDARDS SET FORTH BY ACI 318: AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ANSI/TIA/EIA 222-G: STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.
2. THIS FOUNDATION IS DESIGNED UTILIZING THE GEOTECHNICAL REPORT PERFORMED BY NGE; DATED 06-03-15; # W15086. THE FOUNDATION CONTRACTOR SHALL INSTALL THE FOUNDATIONS IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
3. ALL WORK PERFORMED FROM THESE DRAWINGS SHOULD BE BY QUALIFIED CONTRACTORS EXPERIENCED IN TOWER FOUNDATION CONSTRUCTION.
4. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AFTER 28 DAYS. COPIES OF THE CONCRETE CYLINDER TEST REPORTS SHALL BE SENT TO THE RESIDENT ENGINEER / INSPECTOR.
5. MINIMUM CONCRETE COVER FOR REINFORCING BARS SHALL BE 3".
6. FIELD BENDING OR WELDING OF REINFORCEMENT BARS IS NOT PERMITTED.
7. PROVIDE CHAMFERS AT ALL EXPOSED CORNERS OF CONCRETE.
8. SOME DETAIL HAS BEEN PURPOSELY OMITTED TO CLARIFY ILLUSTRATION.



(13) #9 VERTICAL REINFORCEMENT BARS x 23'-0" LONG W/ #5 TIES AT 16" O.C.

(6) 1/2" X 6'-0" OVERALL LENGTH ANCHOR BOLTS W/ 3/4" THK BEARING PLATE AT THE BOTTOM OF THE ANCHOR BOLT CLUSTER (5'-0" MIN. ANCHOR BOLT EMBEDMENT).

**SECTION A-A  
(3 REQUIRED)**

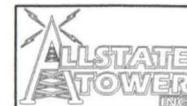
**REINFORCEMENT BAR SPLICING:**

1. ALL LAP SPLICES SHALL CONFORM TO ACI 318 REQUIREMENTS.
2. REFER TO CHART BELOW WHEN REINFORCEMENT BAR SPLICING IS NECESSARY.

REINFORCING BAR SIZE	LAP SPLICE LENGTH
3	15"
4	17"
5	21"
6	26"
7	30"
8	36"
9	46"
10	58"
11	71"



*Keith M. Eaton*  
8-4-2015



ALLSTATE TOWER INC.  
P.O. BOX 25  
HENDERSON, KY 42419  
PHONE: (270) 830-8512  
FAX: (270) 830-8475  
WWW.ALLSTATETOWER.COM

REV #	DESCRIPTION	DATE	BY	UNLESS OTHERWISE NOTED DIMENSIONS ARE IN:	DESCRIPTION:
				INCHES	CAISSON FOUNDATION DESIGN
				TOLERANCE BANDS:	PARALLEL INFRASTRUCTURE
				X +3/32" / -0	GRAYSON, CARTER CO., KY
				XX +3/32" / -0	
				XXX +1/16" / -0	
				Holes + 0.015" / -0	
SCALE: NTS				DRAWN BY: C. FELTY	FILE NAME: 55825FT
				DATE: 06/26/2015	SHEET: C

**EXHIBIT D**  
**COMPETING UTILITIES CORPORATIONS OR PERSONS LIST**

# KY Public Service Commission

## Master Utility Search

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

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

	Utility ID	Utility Name	Utility Type	Class	City	State
<input type="button" value="View"/>	4107900	365 Wireless, LLC	Cellular	D	Atlanta	GA
<input type="button" value="View"/>	4109300	Access Point, Inc.	Cellular	D	Cary	NC
<input type="button" value="View"/>	4108300	Air Voice Wireless, LLC	Cellular	D	Bloomfield Hill	MI
<input type="button" value="View"/>	44451184	Alltel Communications, LLC	Cellular	A	Basking Ridge	NJ
<input type="button" value="View"/>	4107800	American Broadband and Telecommunications Company	Cellular	D	Toledo	OH
<input type="button" value="View"/>	4108650	AmeriMex Communications Corp.	Cellular	B	Roswell	GA
<input type="button" value="View"/>	4105100	AmeriVision Communications, Inc. d/b/a Affinity 4	Cellular	D	Norfolk	VA
<input type="button" value="View"/>	4107400	Bandwidth.com, Inc.	Cellular	B	Raleigh	NC
<input type="button" value="View"/>	4108600	BCN Telecom, Inc.	Cellular	D	Morristown	NJ
<input type="button" value="View"/>	4108750	Blue Jay Wireless, LLC	Cellular	D	Addison	TX
<input type="button" value="View"/>	4202300	Bluegrass Wireless, LLC	Cellular	A	Elizabethtown	KY
<input type="button" value="View"/>	4107600	Boomerang Wireless, LLC	Cellular	D	Hiawatha	IA
<input type="button" value="View"/>	4105600	Budget PrePay, Inc. dba Budget Mobile	Cellular	A	Bossier City	LA
<input type="button" value="View"/>	4105500	BullsEye Telecom, Inc.	Cellular	D	Southfield	MI
<input type="button" value="View"/>	4108950	BYO Wireless, LLC	Cellular	D	Bossier City	LA
<input type="button" value="View"/>	4100700	Cellco Partnership dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
<input type="button" value="View"/>	4106600	Cintex Wireless, LLC	Cellular	D	Rockville	MD

<a href="#">View</a>	4101900	Consumer Cellular, Incorporated	Cellular	A	Portland	OR
<a href="#">View</a>	4104900	Credit Union Wireless, LLC	Cellular	D	Salem	OR
<a href="#">View</a>	4106400	Credo Mobile, Inc.	Cellular	A	San Francisco	CA
<a href="#">View</a>	4201000	Cricket Communications, LLC	Cellular	A	Atlanta	GA
<a href="#">View</a>	4108850	Cricket Wireless, LLC	Cellular	D	Alpharetta	GA
<a href="#">View</a>	4001900	CTC Communications Corp. d/b/a EarthLink Business I	Cellular	D	Marlborough	MA
<a href="#">View</a>	10640	Cumberland Cellular Partnership	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	4109250	Defense Mobile Corporation	Cellular	D	Westport	CT
<a href="#">View</a>	4101000	East Kentucky Network, LLC dba Appalachian Wireless	Cellular	A	Ivel	KY
<a href="#">View</a>	4002300	Easy Telephone Service Company dba Easy Wireless	Cellular	D	Ocala	FL
<a href="#">View</a>	4109500	Enhanced Communications Group, LLC	Cellular	D	Bartlesville	OK
<a href="#">View</a>	4109050	EOS Mobile Holdings, LLC	Cellular	D	Southlake	TX
<a href="#">View</a>	4104700	Ernest Communications, Inc.	Cellular	D	Norcross	GA
<a href="#">View</a>	4105900	Flash Wireless, LLC	Cellular	D	Concord	NC
<a href="#">View</a>	4107100	Flatel Wireless, Inc dba Zing PCS	Cellular	D	Royal Palm Bch	FL
<a href="#">View</a>	4104800	France Telecom Corporate Solutions L.L.C.	Cellular	D	Oak Hill	VA
<a href="#">View</a>	4109350	Global Connection Inc. of America	Cellular	D	Norcross	GA
<a href="#">View</a>	4102200	Globalstar USA, LLC	Cellular	B	Covington	LA
<a href="#">View</a>	4109600	Google North America Inc.	Cellular	C	Mountain View	CA
<a href="#">View</a>	33350363	Granite Telecommunications, LLC	Cellular	D	Quincy	MA
<a href="#">View</a>	4106000	GreatCall, Inc. d/b/a Jitterbug	Cellular	A	San Diego	CA
<a href="#">View</a>	10630	GTE Wireless of the Midwest dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4103100	i-Wireless, LLC	Cellular	A	Newport	KY
<a href="#">View</a>	4109800	IM Telecom, LLC d/b/a Infiniti Mobile	Cellular	C	Tulsa	OK
<a href="#">View</a>	22215360	KDDI America, Inc.	Cellular	C	New York	NY
<a href="#">View</a>	10872	Kentucky RSA #1 Partnership	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	10680	Kentucky RSA #3 Cellular General	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	10681	Kentucky RSA #4 Cellular General	Cellular	A	Elizabethtown	KY
<a href="#">View</a>	4109750	Konatel, Inc. dba telecom.mobi	Cellular	C	Johnstown	PA
<a href="#">View</a>	4107300	Lycamobile USA, Inc.	Cellular	D	Newark	NJ
<a href="#">View</a>	4108100	MCC Telephony of the South, LLC	Cellular	D	Mediacom Park	NY
<a href="#">View</a>	4108800	MetroPCS Michigan, LLC	Cellular	A	Richardson	TX

<a href="#">View</a>	4109650	Mitel Cloud Services, Inc.	Cellular	C	Mesa	AZ
<a href="#">View</a>	4109400	NetZero Wireless, Inc.	Cellular	D	Woodland Hills	CA
<a href="#">View</a>	4202400	New Cingular Wireless PCS, LLC dba AT&T Mobility, PCS	Cellular	A	San Antonio	TX
<a href="#">View</a>	10900	New Par dba Verizon Wireless	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4000800	Nextel West Corporation	Cellular	A	Overland Park	KS
<a href="#">View</a>	4104500	Nexus Communications, Inc.	Cellular	D	Columbus	OH
<a href="#">View</a>	4001300	NPCR, Inc. dba Nextel Partners	Cellular	A	Overland Park	KS
<a href="#">View</a>	4001800	OnStar, LLC	Cellular	A	Detroit	MI
<a href="#">View</a>	4109450	Pix Wireless, LLC	Cellular	D	Boca Raton	FL
<a href="#">View</a>	4109850	PLATINUMTEL COMMUNICATIONS, LLC d/b/a Care Wireless	Cellular	C	Justice	IL
<a href="#">View</a>	33351182	PNG Telecommunications, Inc. dba PowerNet Global Communications	Cellular	D	Cincinnati	OH
<a href="#">View</a>	4202100	Powertel/Memphis, Inc. dba T-Mobile	Cellular	A	Bellevue	WA
<a href="#">View</a>	4107700	Puretalk Holdings, LLC	Cellular	A	Covington	GA
<a href="#">View</a>	4106700	Q Link Wireless, LLC	Cellular	A	Dania	FL
<a href="#">View</a>	4108700	Ready Wireless, LLC	Cellular	C	Hiawatha	IA
<a href="#">View</a>	4106200	Rural Cellular Corporation	Cellular	A	Basking Ridge	NJ
<a href="#">View</a>	4108550	Sage Telecom Communications, LLC	Cellular	D	Dallas	TX
<a href="#">View</a>	4109150	SelecTel, Inc. d/b/a SelecTel Wireless	Cellular	D	Freemont	NE
<a href="#">View</a>	4106300	SI Wireless, LLC	Cellular	A	Carbondale	IL
<a href="#">View</a>	4109100	Solavei, LLC	Cellular	C	Bellevue	WA
<a href="#">View</a>	4200100	Sprint Spectrum, L.P.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4200500	SprintCom, Inc.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4109550	Stream Communications, LLC	Cellular	C	Dallas	TX
<a href="#">View</a>	4202200	T-Mobile Central, LLC dba T-Mobile	Cellular	A	Bellevue	WA
<a href="#">View</a>	4002500	TAG Mobile, LLC	Cellular	D	Carrollton	TX
<a href="#">View</a>	4109700	Telecom Management, Inc. dba Pioneer Telephone	Cellular	C	South Portland	ME
<a href="#">View</a>	4107200	Telefonica USA, Inc.	Cellular	D	Miami	FL
<a href="#">View</a>	4108900	Telrite Corporation dba Life Wireless	Cellular	D	Covington	GA
<a href="#">View</a>	4108450	Tempo Telecom, LLC	Cellular	D	Macon	GA
<a href="#">View</a>	4109000	Ting, Inc.	Cellular	B	Toronto	ON
<a href="#">View</a>	4103900	Total Call Mobile, Inc.	Cellular	A	Gardena	CA
	4103300	Touchtone Communications,	Cellular	D	Whippany	NJ

<a href="#">View</a>		Inc.				
<a href="#">View</a>	4104200	TracFone Wireless, Inc.	Cellular	D	Miami	FL
<a href="#">View</a>	4002000	Truphone, Inc.	Cellular	D	Durham	NC
<a href="#">View</a>	4105700	Virgin Mobile USA, L.P.	Cellular	A	Atlanta	GA
<a href="#">View</a>	4104100	WDT Wireless Telecommunications, Inc.	Cellular	D	Dallas	TX
<a href="#">View</a>	22251693	WDT World Discount Telecommunications Co.	Cellular	D	Dallas	TX
<a href="#">View</a>	4200600	West Virginia PCS Alliance, L.C.	Cellular	A	Waynesboro	VA
<a href="#">View</a>	4106500	WiMacTel, Inc.	Cellular	D	Omaha	NE

**EXHIBIT E**  
**CO-LOCATION REPORT**

7/24/2015

Kentucky Public Service Commission  
c/o: Jeff R. Derouen, Executive Director  
P.O. Box 615  
Frankfort, KY 40602

RE: Alternate Site Analysis Report  
Uniform Application for a Communications Facility  
Applicant: PI Telecom Infrastructure V, LLC  
and Celco Partnership d/b/a Verizon Wireless  
Site Location: Beckwith Branch Road, Grayson KY 41143  
Site Name: Carter Hollow, PI3KY000011.B

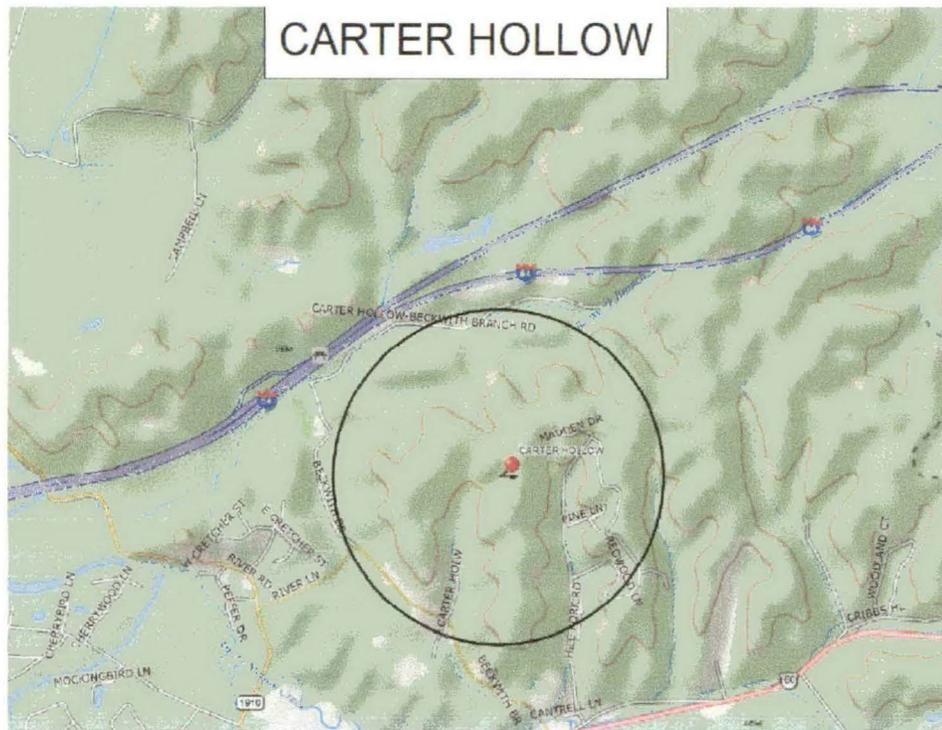
Dear Commissioners:

This report is provided to explain the site development process used by the Applicant to identify the site selected for the new wireless communications facility proposed in the accompanying Uniform Application.

**PI Telecom Infrastructure V, LLC and Celco Partnership d/b/a Verizon  
Wireless Site Development Process**

**Step 1: Problem Identification.** Cellco Partnership d/b/a Verizon Wireless radio frequency engineers first identified a growing coverage and/or capacity gap in Carter County, Kentucky, east of the city of Grayson.

**Step 2: Search Area.** To help guide the site development team's task of identifying a suitable location for a new wireless communications facility site, Cellco Partnership d/b/a Verizon Wireless radio frequency engineers identified the geographic area where the antenna site must be located in order to close the gap and issued a map (called a Search Area) that identified the general area in which a new site must be located. In this instance, the search ring is located on a wooded ridge line just south of Interstate 64, and east of the City of Grayson. A map of the search area is below.



**Step 3: Co-location Review.** The site development team first reviewed the area within the Search Area for a suitable tall structure for co-location. In this case, there are no FCC-registered towers or other tall structures within the search area. Further, there are no suitable co-location structures within a 0.5 mile radius outside of the search area.

**Step 4: Review of the Area's Zoning Classification.** Once the site development team determined that there are no available existing tall structures which are technically feasible and suitable for co-location, the team next reviewed local zoning requirements to identify parcels located within the search area that might be suitable from a land use perspective to host an antenna site. In this case, the proposed site is located in an area outside of the jurisdiction of a Planning Commission and is not subject to a zoning ordinance. In cases where no zoning regulations apply, the Applicants consider generally applicable principles of tower siting when evaluating the suitability of a parcel for tower placement. Specifically, the distance between the tower and adjoining property lines and the distance between the tower and residential structures are considered. In this instance, the search ring was centered in a wooded area and ridge line. The proposed candidate was chosen because it provided ample distance to property lines and to the closest residence. The distance from the tower to the nearest adjoining property line is 297'. The closest residence is 478' to the northwest.

**Step 5: Preliminary Inspection and Assessment of Suitable Parcels.** Once suitable parcels are identified, the site development team visits the parcels and performs a preliminary inspection. The purpose of the preliminary inspection is: (1) to confirm the availability of sufficient land space for the proposed facility; (2) to identify a specific location for the facility on the parcel; (3) to identify any recognized environmental conditions that would disqualify the parcel from consideration; (4) to identify any construction issues that would disqualify the candidate; and, (5) to assess the potential impact of the facility on

neighboring properties. In this case, multiple parcels were ruled out due to the parcel's size and inability to accommodate a tower site with adequate distance from adjoining properties.

**Step 6: Candidate Evaluation and Selection.** After the preliminary site assessments were performed, the site development team ranked the candidates based on the availability of ground space, topography, applicable environmental conditions, construction feasibility and the potential impact of the facility on neighboring properties.

**Step 7: Leasing and Due Diligence.** Once a suitable candidate was selected, lease negotiations were commenced and site due diligence steps were performed, as described below.

Leasehold Due Diligence:

- A Title Report was obtained and reviewed to ensure that there are no limitations on the landowner's capacity to lease and to address any title issues.
- A site survey was obtained to identify the location of parcel features, boundaries, easements and other encumbrances revealed by the title search.
- Review of environmental conditions.

Engineering Due Diligence:

- Utility access identified.
- Grounding plan designed.
- Geotechnical soil analysis performed to determine foundation requirements.
- Foundations designed to meet the Kentucky Building Code lateral and subjacent support requirements.
- Site plan developed.

Federal Regulatory Due Diligence

- Federal Aviation Administration ("FAA")
- Federal Communication Commission ("FCC")

In this case, there were no parcels ruled out for leasing and/or regulatory reasons.

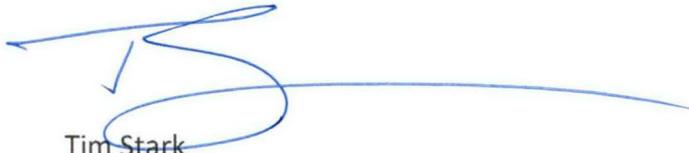
**Step 8: Application.** Once a lease is obtained and all site due diligence is completed, PI Telecom Infrastructure V, LLC and Cellco Partnership d/b/a Verizon Wireless prepared and filed the accompanying uniform application to construct, maintain and operate a communications facility.

**Conclusion**

Applicants' site identification and selection process aims to identify the least intrusive of all the available and technically feasible parcels in a service need area. In this case, there are no tall structures or existing FCC-registered telecommunications towers within 0.5 miles of the search ring area. The new telecommunications tower is proposed for placement on a large parcel with ample setbacks to adjoining property lines and to the

closest residence. The 250' tower with a 5' lightning arrestor is the shortest height necessary to meet Verizon Wireless' coverage objectives in this area. This tower site is designed to provide LTE/4G coverage along Interstate 64 and Highway 60 east of Grayson, Kentucky.

Sincerely,



Tim Stark

Project Manager

Wireless Resources Inc.

PO Box 27740

Las Vegas NV 89126

Phone: 850-232-8777

Fax: 412-436-3711

[tim.stark@wirelessresources.com](mailto:tim.stark@wirelessresources.com)

**EXHIBIT F**  
**FAA**

 U.S. Department of Transportation <b>Federal Aviation Administration</b>	Failure To Provide All Requested Information May Delay Processing of Your Notice <h2 style="margin: 0;">Notice of Proposed Construction or Alteration</h2>	<b>FOR FAA USA ONLY</b> Aeronautical Study Number 2015-ASO-7085-OE																															
<p><b>1. Sponsor (person, company, etc. proposing this action):</b>                  Attn.of: <u>Alejandra Stinson</u>                  Name: <u>PI Telecom Infrastructure, LLC</u>                  Address: <u>4601 Touchton Road East</u>  <u>Bldg 300, Suite 3200</u>                  City: <u>Jacksonville</u> State: <u>FL</u> Zip: <u>32246</u>                  Telephone: <u>(904) 450-4833</u> Fax: _____</p> <p><b>2. Sponsor's Representative (if other than #1):</b>                  Attn.of: <u>Jesus DeJesus</u>                  Name: <u>Wireless Applications Corporation</u>                  Address: <u>111 108th Ave NE</u>  <u>Suite160</u>                  City: <u>Bellevue</u> State: <u>WA</u> Zip: <u>98004</u>                  Telephone: <u>(425) 643-5000</u> Fax: _____</p> <p><b>3. Notice of:</b> <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Alteration <input type="checkbox"/> Existing  <b>4. Duration:</b> <input checked="" type="checkbox"/> Permanent <input type="checkbox"/> Temporary ( ___ months, ___ days)  <b>5. Work Schedule:</b> Beginning <u>05/05/2015</u> End <u>05/04/2016</u>  <b>6. Type:</b> <input checked="" type="checkbox"/> Antenna Tower <input type="checkbox"/> Crane <input type="checkbox"/> Building <input type="checkbox"/> Power Line  <input type="checkbox"/> Landfill <input type="checkbox"/> Water Tank <input type="checkbox"/> Other _____  <b>7. Marking/Painting and/or Lighting Preferred:</b>  <input type="checkbox"/> Red Lights and Paint <input checked="" type="checkbox"/> Dual - Red and Medium Intensity White  <input type="checkbox"/> White - Medium Intensity <input type="checkbox"/> Dual - Red and High Intensity White  <input type="checkbox"/> White - High Intensity <input type="checkbox"/> Other _____  <b>8. FCC Antenna Structure Registration Number (if applicable):</b>                  _____</p>	<p><b>9. Latitude:</b> <u>38</u> ° <u>20</u> ' <u>31.66</u> " "  <b>10. Longitude:</b> <u>082</u> ° <u>53</u> ' <u>57.74</u> " "  <b>11. Datum:</b> <input checked="" type="checkbox"/> NAD 83 <input type="checkbox"/> NAD 27 <input checked="" type="checkbox"/> Other <u>1A Survey</u>  <b>12. Nearest:</b> City: <u>Grayson</u> State: <u>KY</u>  <b>13. Nearest Public-use (not private-use) or Military Airport or Heliport:</b>  <u>KYAH: PROPOSED KYAH</u>  <b>14. Distance from #13. to Structure:</b> <u>14.3878</u> nm to ARP  <b>15. Direction from #13. to Structure:</b> <u>222</u> degrees  <b>16. Site Elevation (AMSL):</b> <u>757</u> ft.  <b>17. Total Structure Height (AGL):</b> <u>255</u> ft.  <b>18. Overall Height (#16. + #17.) (AMSL):</b> <u>1012</u> ft.  <b>19. Previous FAA Aeronautical Study Number (if applicable):</b>                  _____ - OE  <b>20. Description of Location: (Attach a USGS 7.5 minute Quadrangle Map with the precise site marked and any certified survey.)</b>                  The proposed site is located on Carter Hollow North of US Highway 60, in Carter County, Grayson, Kentucky, 41143.</p>																																
<p><b>21. Complete Description of Proposal:</b>                  Tower location for frequencies outlined in the Frequency/Power section.                  Proposed site is a 255 ft AGL Self Support tower, including all antennas and lightning rod.</p>	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Frequency/Power (KW)</th> </tr> </thead> <tbody> <tr><td>806-824</td><td>0.5</td></tr> <tr><td>824-849</td><td>0.5</td></tr> <tr><td>851-866</td><td>0.5</td></tr> <tr><td>869-894</td><td>0.5</td></tr> <tr><td>896-901</td><td>0.5</td></tr> <tr><td>901-902</td><td>0.007</td></tr> <tr><td>930-931</td><td>3.5</td></tr> <tr><td>931-932</td><td>3.5</td></tr> <tr><td>932-932.5</td><td>0.05</td></tr> <tr><td>935-940</td><td>1.0</td></tr> <tr><td>940-941</td><td>3.5</td></tr> <tr><td>1850-1910</td><td>1.64</td></tr> <tr><td>1930-1990</td><td>1.64</td></tr> <tr><td>2305-2360</td><td>2.0</td></tr> <tr><td>2345-2360</td><td>2.0</td></tr> </tbody> </table>	Frequency/Power (KW)		806-824	0.5	824-849	0.5	851-866	0.5	869-894	0.5	896-901	0.5	901-902	0.007	930-931	3.5	931-932	3.5	932-932.5	0.05	935-940	1.0	940-941	3.5	1850-1910	1.64	1930-1990	1.64	2305-2360	2.0	2345-2360	2.0
Frequency/Power (KW)																																	
806-824	0.5																																
824-849	0.5																																
851-866	0.5																																
869-894	0.5																																
896-901	0.5																																
901-902	0.007																																
930-931	3.5																																
931-932	3.5																																
932-932.5	0.05																																
935-940	1.0																																
940-941	3.5																																
1850-1910	1.64																																
1930-1990	1.64																																
2305-2360	2.0																																
2345-2360	2.0																																
Notice is required by 14 Code of Federal Regulations, Part 77 pursuant to 49 U.S.C., Section 44718. Persons who knowingly and willingly violate the notice requirements of part 77 are subject to a civil penalty of \$1,000 per day until the notice is received, pursuant to 49 U.S.C., Section 46301 (a).																																	
I hereby certify that all of the above statements made by me are true, complete, and correct to the best of my knowledge. In addition, I agree to mark and/or light the structure in accordance with established marking & lighting standards as necessary.																																	
Date	Typed or Printed Name and Title, of Person Filing Notice	Signature																															
04-17-2015	Jesus DeJesus																																

**EXHIBIT G**  
**KENTUCKY AIRPORT ZONING COMMISSION**



## KENTUCKY AIRPORT ZONING COMMISSION

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

602 KAR 50:030

Section 1. The commission has zoning jurisdiction over that airspace over and around the public use and military airports within the Commonwealth which lies above the imaginary surface that extends outward and upward at one (1) of the following slopes:

- (1) 100 to one (1) for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each public use airport and military airport with at least one (1) runway 3,200 feet or more in length; or
- (2) fifty (50) to one (1) for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each public use and military airport with its longest runway less than 3,200 feet in length.

Section 2. The commission has zoning jurisdiction over the use of land and structures within public use airports within the state.

Section 3. The commission has jurisdiction from the ground upward within the limits of the primary and approach surfaces of each public use airport and military airport as depicted on airport zoning maps approved by the Kentucky Airport Zoning Commission.

Section 4. The Commission has jurisdiction over the airspace of the Commonwealth that exceeds 200 feet in height above the ground.

Section 5. The owner or person who has control over a structure which penetrates or will penetrate the airspace over which the Commission has Jurisdiction shall apply for a permit from the Commission in accordance with 602 KAR 50:090.

**INSTRUCTIONS**

1. "Alteration" means to increase or decrease the height of a structure or change the obstruction marking and lighting.
2. "Applicant" means the person who will own or have control over the completed structure.
3. "Certification by Applicant" shall be made by the individual who will own or control the completed structure; or a partner in a partnership; or the president or authorized officer of a corporation company, or association; or the authorized official of a body politic; or the legally designated representative of a trustee, receiver, or assignee.
4. Prepare the application and forward to the administrator, Kentucky Airport Zoning Commission, Department of Aviation, 90 Airport Rd., Building 400, Frankfort, KY 40601. For questions, telephone 502-564-4480.
5. The statutes applicable to the Kentucky Airport Commission are KRS 183.861 to 183.990 and the administrative regulations are 602 KAR Chapter 50.
6. When applicable, attach the following appendices to the application:
  - Appendix A. A 7.5 minute quadrangle topographical map prepared by the U.S. Geological Survey and the Kentucky Geological Survey with the exact location of the structure which is the subject of the application indicated thereon. (*The 7.5 minute quadrangle map may be obtained from the Kentucky Geological Survey, Department of Mines and Minerals, Lexington, KY 40506.*)
  - Appendix B. For structures on or very near to property of a public use airport, a copy of the airport layout drawing (ALP) with the exact location of the structure which is the subject of this application indicated thereon. (*The ALP may be obtained from the Chairperson of the local airport board or the Department of Aviation.*)
  - Appendix C. Copies of Federal Aviation Administration Applications (*FFA Form 7460-1*) or any orders issued by the manager, Air Traffic Division, FAA regional office.
  - Appendix D. If the applicant has indicated in item number 7 of the application that the structure will not be marked or lighted in accordance with the regulations of the Commission, the applicant shall attach a written request for a determination by the commission that the marking and lighting are not necessary. The applicant shall specifically state the reasons that the absence of marking and lighting will not impair the safety of air navigation.
  - Appendix E. The overall height in feet of the overhead transmission line or static wire above ground level or mean water level with span length 1,000 feet and over shall be depicted on a blueprint profile map.

**PENALTIES**

1. Persons failing to comply with the Airport Zoning Commission statutes and regulations are liable for a fine or imprisonment as set forth in KRS 183.990(3).
2. Applicants are cautioned: Noncompliance with Federal Aviation Administration Regulations may provide for further penalties.



KENTUCKY AIRPORT ZONING COMMISSION

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

<b>APPLICANT (name)</b> PL Telecom Infrastructure V, LLC		<b>PHONE</b> 904-450-4830	<b>FAX</b>	<b>KY AERONAUTICAL STUDY #</b>	
<b>ADDRESS (street)</b> 4601 Touchton Rd East		<b>CITY</b> Jacksonville		<b>STATE</b> FL	<b>ZIP</b> 32246
<b>APPLICANT'S REPRESENTATIVE (name)</b> Wireless Applications Corp		<b>PHONE</b> 425-643-5000	<b>FAX</b>		
<b>ADDRESS (street)</b> 111 108 <sup>th</sup> Ave NE, Suite 160		<b>CITY</b> Bellevue		<b>STATE</b> WA	<b>ZIP</b> 98004
<b>APPLICATION FOR</b> <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> Alteration <input type="checkbox"/> Existing				<b>WORK SCHEDULE</b>	
<b>DURATION</b> <input type="checkbox"/> Permanent <input type="checkbox"/> Temporary (months days )				Start 05/30/2015 End 05/30/2016	
<b>TYPE</b> <input type="checkbox"/> Crane <input type="checkbox"/> Building		<b>MARKING/PAINTING/LIGHTING PREFERRED</b>			
<input checked="" type="checkbox"/> Antenna Tower		<input type="checkbox"/> Red Lights & Paint <input type="checkbox"/> White- medium intensity <input type="checkbox"/> White- high intensity			
<input type="checkbox"/> Power Line <input type="checkbox"/> Water Tank		<input checked="" type="checkbox"/> Dual- red & medium intensity white <input type="checkbox"/> Dual- red & high intensity white			
<input type="checkbox"/> Landfill <input type="checkbox"/> Other		<input type="checkbox"/> Other None			
<b>LATITUDE</b> 38°20'31.66"		<b>LONGITUDE</b> 082°53'57.74"		<b>DATUM</b> <input checked="" type="checkbox"/> NAD83 <input type="checkbox"/> NAD27	
<input type="checkbox"/> Other					
<b>NEAREST KENTUCKY</b> City Grayson County Carter		<b>NEAREST KENTUCKY PUBLIC USE OR MILITARY AIRPORT</b> DWU: ASHLAND RGNL			
<b>SITE ELEVATION (AMSL, feet)</b> 757		<b>TOTAL STRUCTURE HEIGHT (AGL, feet)</b> 255		<b>CURRENT (FAA aeronautical study #)</b> 2015-ASO-7085-OE	
<b>OVERALL HEIGHT (site elevation plus total structure height, feet)</b> 1012				<b>PREVIOUS (FAA aeronautical study #)</b>	
<b>DISTANCE (from nearest Kentucky public use or Military airport to structure)</b> 14.824 nm				<b>PREVIOUS (KY aeronautical study #)</b>	
<b>DIRECTION (from nearest Kentucky public use or Military airport to structure)</b> 30.81 degrees					
<b>DESCRIPTION OF LOCATION (Attach USGS 7.5 minute quadrangle map or an airport layout drawing with the precise site marked and any certified survey.)</b> Carter Hollow, North of US Highway 60, Carter County, Grayson, KY , 41143					
<b>DESCRIPTION OF PROPOSAL</b> Proposed site is a 255 ft AGL tower, including all antennas and lightning rod.					
<b>FAA Form 7460-1 (Has the "Notice of Construction or Alteration" been filed with the Federal Aviation Administration?)</b> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, when?					
<b>CERTIFICATION (I hereby certify that all the above entries, made by me, are true, complete, and correct to the best of my knowledge and belief.)</b>					
<b>PENALTIES (Persons failing to comply with KRS 183.861 to 183.990 and 602 KAR 050 are liable for fines and/or imprisonment as set forth in KRS 183.990(3). Noncompliance with FAA regulations may result in further penalties.)</b>					
<b>NAME</b> Ronald W. Lageson, Jr	<b>TITLE</b> Manager	<b>SIGNATURE</b>		<b>DATE</b> 05/04/2015	
<b>COMMISSION ACTION</b>		<input type="checkbox"/> Chairperson, KAZC			
		<input type="checkbox"/> Administrator, KAZC			
<input type="checkbox"/> Approved	<b>SIGNATURE</b>			<b>DATE</b>	
<input type="checkbox"/> Disapproved					

**EXHIBIT H  
GEOTECHNICAL REPORT**



**FOUNDATION INVESTIGATION  
CARTER HOLLOW TOWER  
GRAYSON, KENTUCKY**

JUNE 2015

NGE, LLC  
650 MacCorkle Avenue West  
St. Albans, WV 25177

**GEOTECHNICAL INVESTIGATION  
CARTER HOLLOW TOWER  
GRAYSON, KENTUCKY**

**NGE PROJECT NO. W15086**

**SUBMITTED TO:**

**MEAD & HUNT  
CHARLESTON, WEST VIRGINIA**

**SUBMITTED BY:**

**NGE, LLC  
ST. ALBANS, WEST VIRGINIA**

**JUNE 2015**



June 3, 2015

Mr. Curtis Paxton  
Mead & Hunt  
400 Tracy Way Suite 200  
Charleston, WV 25311

Subject: **GEOTECHNICAL INVESTIGATION**  
Carter Hollow Tower  
Grayson, West Virginia  
NGE Project No. W15086

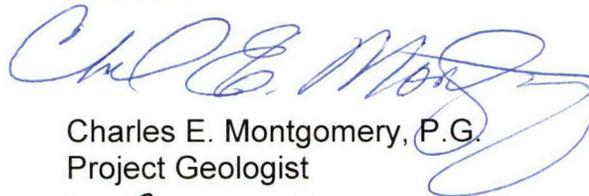
Dear Mr. Paxton:

In accordance with your request, we have performed a foundation investigation for the proposed Carter Hollow tower site located in Grayson, Kentucky. Authorization to proceed with this project was provided verbally by you.

This report presents the results of the field investigation performed to determine the subsurface conditions, as well as our conclusions and recommendations concerning the foundations for the tower structure.

We appreciate the opportunity to assist you on this project and trust this report satisfies your needs at this time. Please feel free to contact us if you have any questions concerning this report, or if we can provide any further assistance.

Respectfully Submitted,  
NGE, LLC

A blue ink signature of Charles E. Montgomery, P.G. The signature is written in a cursive style and is positioned above the printed name and title.

Charles E. Montgomery, P.G.  
Project Geologist

A black ink signature of Larry C. Nottingham, P.E. The signature is written in a cursive style and is positioned above the printed name and title.

Larry C. Nottingham, P.E.  
Senior Engineer

## TABLE OF CONTENTS

1.0 PROJECT DESCRIPTION .....	1
2.0 DRILLING AND SAMPLING PROCEDURES .....	1
3.0 SUBSURFACE CONDITIONS .....	2
3.1 SOIL AND BEDROCK CONDITIONS .....	2
3.2 GROUNDWATER CONDITIONS .....	2
4.0 CONCLUSIONS AND RECOMMENDATIONS .....	2
4.1 SITE PREPARATION RECOMMENDATIONS .....	2
4.2 FILL AND BACKFILL RECOMMENDATIONS .....	3
4.3 EXCAVATION CONSIDERATIONS .....	3
4.4 FOUNDATION RECOMMENDATIONS .....	4
5.0 REPORT LIMITATIONS .....	6

### FIGURES

- Boring Location Plan - Figure 1
- Boring Logs - Figures 2 through 4

APPENDIX A - Resistivity Testing Results

APPENDIX B - Proctor Testing Results

## **1.0 PROJECT DESCRIPTION**

The foundation investigation was performed for a proposed communications tower to be constructed in Grayson, Kentucky. The purpose of the investigation was to determine subsurface conditions and provide foundation design recommendations. The proposed tower site is situated on a moderately sloping wooded hillside. The proposed tower will be a 250 ft. tall, three-legged self-supporting structure located within an enclosed compound. According to site grading plans provided by the client, approximately 10 ft of cut and 8 ft. of fill will be required to develop the site.

## **2.0 DRILLING AND SAMPLING PROCEDURES**

Three test borings were drilled to evaluate subsurface conditions at the site. Boring B-1 was drilled at the tower center, and Borings B-2 and B-3 were drilled on the upslope and downslope sides of the lease area, respectively. The borings extended to depths ranging between 13.4 and 30.3 ft. below the ground surface. The center of the tower, tower legs and the lease corners had been previously staked by the client. The borings locations are shown on Figure No. 1.

The test borings were drilled using a track-mounted rotary drilling rig equipped with 3-1/4 inch I.D. hollow stem augers. Standard penetration testing and sampling was performed at 2.5 ft. intervals from the ground surface. The standard penetration testing and sampling was performed in accordance with ASTM D-1586.

Standard penetration testing is performed by driving a 2.0 inch O.D. split-barrel sampler into the soil with a 140-lb. hammer dropping a distance of 30 inches. The sampler is driven a distance of 18 inches in three 6-inch increments, and the number of blows required to produce the last two 6-inch increments of penetration is termed the Standard Penetration Number or "N" value. These values provide an indication of the consistency or relative density of the soil. A 1-3/8 inch diameter soil/rock sample was obtained from the borings in conjunction with each penetration test. All standard penetration samples were placed in air-tight glass jars.

Upon completion of drilling, all soil samples were delivered to our laboratory where they were examined by a geotechnical engineer. Soil descriptions, standard

penetration numbers, and other pertinent subsurface information are provided on the boring logs included in the back of this report (Figure Nos. 2 through 4).

### **3.0 SUBSURFACE CONDITIONS**

Test boring logs providing detailed information at the boring locations are located in the back of this report (Figure Nos. 2 through 4). A summary of the subsurface conditions encountered in the test borings follows:

#### **3.1 SOIL AND BEDROCK CONDITIONS**

Soil overburden at the site consisted of silty to sandy clay. The clay soil extended to depths ranging from 7.5 to 13.5 feet below the existing ground surface. Standard penetration N-values within the clay ranged from 6 to more than 60 blows per foot of penetration, indicating a medium stiff to hard cohesive soil condition.

Bedrock was encountered at depths ranging from approximately 7.5 to 13.5 feet below the existing ground surface. Bedrock strata encountered in the borings consisted primarily of very soft to soft shale, and soft to medium hard sandstone.

#### **3.2 GROUNDWATER CONDITIONS**

All of the test borings were noted to be dry during drilling operations and at boring completion. It should be noted that groundwater levels typically fluctuate and are generally dependent upon climatic conditions. Groundwater conditions at the time of construction may differ from those observed during our investigation.

### **4.0 CONCLUSIONS AND RECOMMENDATIONS**

#### **4.1 SITE PREPARATION RECOMMENDATIONS**

All topsoil, trees and stumps should be removed prior to site grading. Any underground utility lines located in the structure area should be removed and/or relocated. All voids created by removal of underground items should be properly backfilled in accordance with Section 4.2 of this report.

The development of the site should address surface drainage. Appropriate drainage should be provided both during and after site grading is complete such that surface water does not become ponded or entrapped on the tower pad, around structures, or along the crest or toe of cut and fill slopes. Any groundwater seeps which are encountered during site grading operations should be collected with a ditch or permanent subsurface drain and properly routed to an outlet.

#### **4.2 FILL AND BACKFILL RECOMMENDATIONS**

As was previously discussed approximately 8 feet of fill will be required for site development. Any fill or backfill required should be placed in maximum 9-inch loose lifts and compacted to 95% of the maximum dry density as determined by the standard Proctor laboratory test (ASTM D-698). Each layer of fill or backfill should be tested by a qualified geotechnical engineering firm to determine that adequate compaction has been achieved prior to placement of additional fill lifts. Fill or backfill should consist of non-organic soil/rock material with a maximum particle size of 4 inches in any direction. The moisture content of fill material should be within three percent of the optimum moisture content as determined by a standard Proctor test.

Sidehill fill placement should begin by excavating a toe-key bench with a minimum width of 12 ft. entirely on bedrock at the toe of the fill. The fill placement should begin on the toe-key bench and proceed upward in uniform, level lifts not exceeding 9-inches (loose lift thickness). Each subsequent lift of fill should be keyed into the natural hillside a minimum width of 8 feet as the fill progresses such that a smooth interface between existing ground and new fill will not be present. Underdrains must be provided to collect and drain any groundwater seeps encountered during site development. All finished fill slopes should be seeded and mulched as soon as possible to reduce slope erosion. We recommend fill slopes for this project be sloped no steeper than a 2H:1V ratio.

#### **4.3 EXCAVATION CONSIDERATIONS**

Any excavation in which workers are required to enter must be properly shored or sloped in accordance with OSHA requirements. Any water which collects within excavations should be promptly removed by pumping from a strategically located sump(s).

Up to approximately 10 feet of cut will be required for site development. We recommend permanent cut slopes be graded no steeper than a 2H:1V ratio. If any groundwater seepage occurs from the cut slope face either during or after construction, it must be promptly collected using underdrains and/or the slope angle flattened or the slope could become unstable. If any groundwater seepage becomes evident along cut slopes, NGE should be promptly notified to provide recommendations for appropriate corrective measures. Soil cut slopes should be seeded and mulched immediately following final grading to reduce the occurrence of erosion and minor slips.

#### **4.4 FOUNDATION RECOMMENDATIONS**

Based on subsurface conditions encountered at the site, we recommend the proposed tower be supported on drilled concrete caissons socketed into bedrock. Caissons will have to be socketed into bedrock a considerable depth to provide the necessary resistance to compressive and uplift loads. We recommend the contractor perform whatever investigation is necessary to determine appropriate equipment needs prior to mobilizing to the site.

We recommend the caissons should be socketed a minimum of 15 feet into shale bedrock. This corresponds to a total minimum caisson depth of 23 feet below the existing ground surface. The caissons should be extended deeper if the foundation designer determines longer rock sockets are necessary to resist the design compressive, uplift or lateral loads.

Following completion of the rock socket drilling, the caisson bottom should be thoroughly cleaned such that no excessive amount of sediment, soil, or loose rock is present prior to placement of steel reinforcement and concrete. The bottom of each caisson should be inspected immediately prior to placing concrete by a qualified geotechnical engineer. We recommend concrete be placed within 24 hours of completion of drilling to reduce softening of the rock bearing surface.

Concrete placement under dry conditions can be by a free-fall method with the concrete carefully directed down the center of the caisson without striking the casing, the reinforcing steel, or the sides of the rock socket. Concrete with a slump of 5 to 8 inches is recommended for use in caissons constructed by the dry method. At the time

of concrete placement, the depth of water in the bottom of the rock socket should not exceed two inches.

In addition to providing resistance to compressive forces, the caisson foundation system must also resist uplift forces from overturning wind loads. We recommend the following formulas be used to calculate the allowable compressive load and allowable uplift load resistance of the caisson foundations:

$$Q_{all} = (P_{all} \times A_T) + (F_S \times A_S)$$
$$T_{all} = (F_S \times A_S) + W_F$$

Where:

$Q_{all}$  = Allowable Compressive Load (kips)

$T_{all}$  = Allowable Uplift Load (kips)

$P_{all}$  = Allowable Tip Bearing Pressure (ksf)

$A_T$  = Caisson Tip Bearing Area (sq. ft.) =  $\pi(D/2)^2$ , where D = rock socket diameter (ft).

$F_S$  = Allowable Skin Friction of Bedrock Socket (ksf)

$A_S$  = Caisson Bedrock Socket Surface Area (sq. ft.) =  $\pi DL_s$

Where D = rock socket diameter (ft.),  $L_s$  = Length of rock socket

$W_f$  = Weight of the Caisson Foundation (kips)

Only the portion of the caisson socketed into competent bedrock should be considered when calculating skin friction resistance of the caissons. We recommend the following allowable values for tip bearing pressure and skin friction be used in the above formulas:

$$P_{all} = 15.0 \text{ ksf}$$

$$F_s = 2.0 \text{ ksf}$$

### **Caisson Lateral Load/Bending Resistance & Tolerable Deflection**

The required depth and/or diameter of the caissons may be controlled by the required lateral load or bending resistance and/or tolerable deflection. We recommend an LPILE analysis (or other lateral pile analysis method) be performed to verify that the depth and diameter of the caisson is sufficient to limit lateral deflections and bending moments to a tolerable level. Recommended LPILE analysis parameters for soil and rock strata encountered at this site are provided in the following tables:

Clay Soil At Depth Interval of 0.0 ft. to 8.0 ft.. - Model as Stiff Clay:

Soil Parameter	Design Value
Effective Unit Weight	0.072 lbs./in <sup>3</sup>
Undrained Cohesion	14.0 psi
Strain Factor E <sub>50</sub>	0.005
p-y Modulus, K	500 lb/in <sup>3</sup>

Bedrock Below a Depth of 8.0 ft. - Model as Weak Rock:

Rock Parameter	Design Value
Effective Unit Weight	0.081 lbs./in <sup>3</sup>
Elastic Modulus	30,000 psi
Uniaxial Compressive Strength	500 psi
RQD	25
K <sub>m</sub>	0.0001

### **5.0 REPORT LIMITATIONS**

- This report has been prepared for the exclusive use of Mead & Hunt for specific application to the subject project. All recommendations contained in this report have been made in accordance with generally accepted soil and foundation engineering practices in the area and at the time where the services were performed. No other warranties are implied or expressed.
- The scope of this investigation did not include an investigation or study to assess the potential for damage due to possible mine subsidence or slope instability.

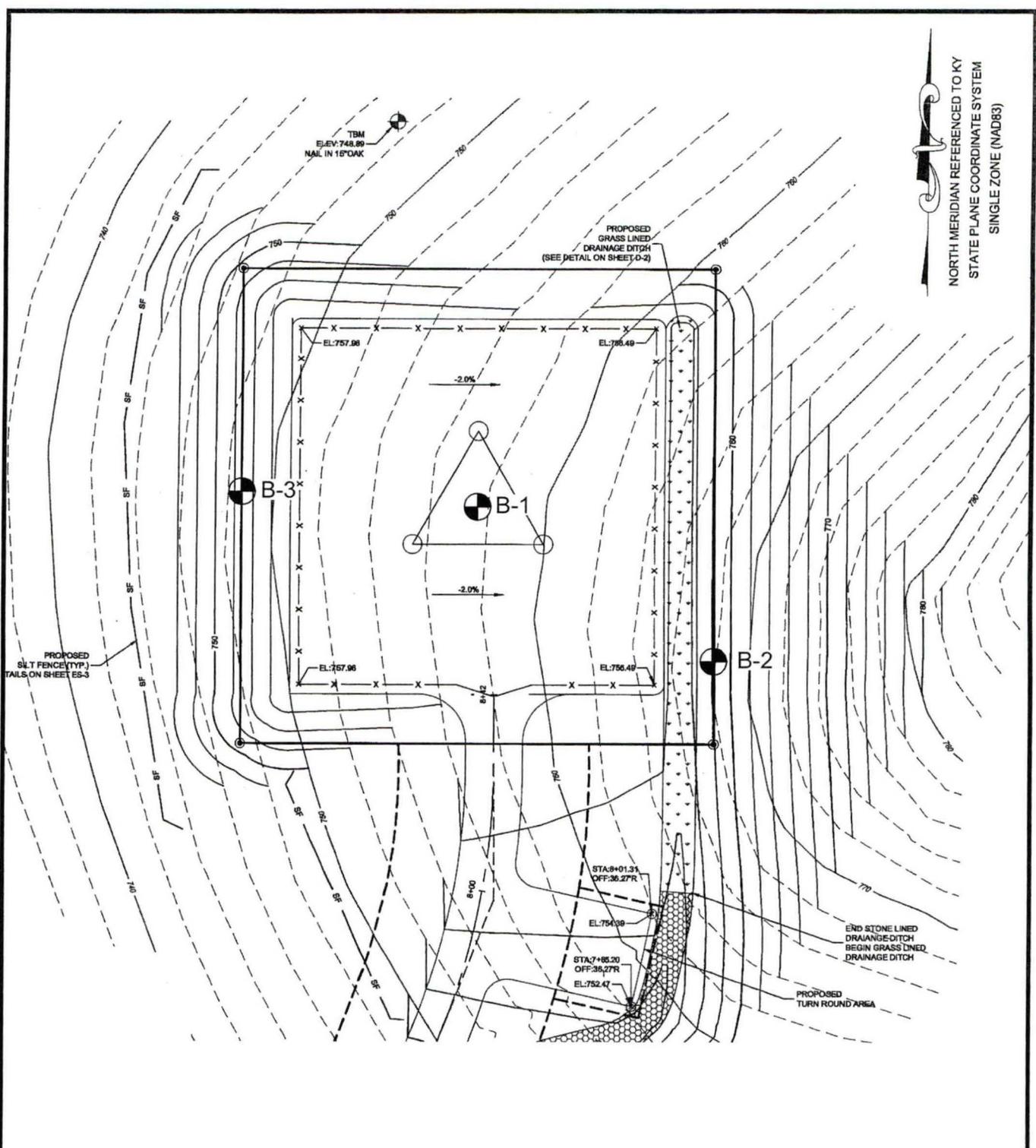
- The analysis and recommendations submitted in this report are based, in part, upon the data obtained from a limited number of soil test borings. The nature and extent of variations in soil conditions between the borings may not become evident until construction. If variations then appear evident, it may be necessary to re-evaluate the recommendations of this report and provide additional recommendations.
- Contractors reviewing this report should acknowledge that the discussions and recommendations contained herein are for design information purposes only and may not be sufficient to prepare accurate bids. Any conclusions drawn by the contractor regarding subsurface conditions, quantities of unsuitable soils, rock, groundwater or methods and means of construction are at their sole risk.
- It is important that the geotechnical engineer be provided the opportunity to review the final geotechnical construction related plans and specifications to verify that the recommendations in this report are properly interpreted and incorporated in the design. It will be the client's responsibility to furnish the final grading and foundation plans to NGE for the necessary review. If the geotechnical engineer is not accorded the privilege of making this recommended review, he can assume no responsibility for misinterpretation of these recommendations.
- On some projects we have noted that civil engineers or other design disciplines have used or represented the geotechnical report as a '*grading/sitework specification*' in lieu of preparing a site specific earthwork specifications with appropriate bid allowances defining the basis of measurement and payment. In no case should this report be utilized as a substitute for a proper and detailed site specific earthwork and foundation specifications.

---

## ***Figures***

---

NORTH MERIDIAN REFERENCED TO KY  
 STATE PLANE COORDINATE SYSTEM  
 SINGLE ZONE (NAD83)



**NOTES**

1. BORING LOCATION PLAN IS FOR ILLUSTRATIVE PURPOSES ONLY; BORING LOCATIONS ARE APPROXIMATE.
2. SITE PLAN IS BASED ON DRAWING PROVIDED BY MEAD AND HUNT.



 650 MacCorkle Avenue West St. Albans, West Virginia 25177 (304) 201-5180 FAX (304) 201-5182	<b>Project</b> BORING LOCATION PLAN CARTER HOLLOW TOWER CARTER COUNTY, KENTUCKY	
	<b>Job No.</b> W15086	<b>Scale</b> 1" = 30' <b>Date</b> 5/28/15



Elevation	Depth, feet	Sample Type	Symbol / USCS	Location: <b>See Figure 1</b> Offset:		Recovery %	RQD	Penetration Blows / 6 inches	HCSI	Moisture %	Silt and Clay %	Sand %	Liquid Limit	Plasticity Index
				Surface El.: ---										
				⊠ Split Spoon    ⊠ Shelby Tube ■ Rock Core    □ Bag Sample										
<b>MATERIAL DESCRIPTION</b>														
				TOPSOIL	0.5			3-5-4						
				Brown <b>SILTY SAND</b> with sandstone fragments damp, loose	2.5									
				Brown <b>SILTY to SANDY CLAY</b> with residual shale, moist, stiff to hard				8-10-10						
	5							12-22-32						
								28-34-38						
	10			- reddish brown, very moist (10.0 - 11.5 ft.)				7-5-4						
					13.5			10-19-26						
	15			Gray <b>CLAYEY SHALE</b> , very soft - w/coal fragments (13.0 - 13.3 ft.)	15.7			15-50/5"						
				Reddish brown <b>SANDSTONE</b> , soft, weathered	15.9									
				Bottom of Test Boring @ 15.9 ft.										
	20													
	25													
	30													

VWDOT LOG W15086 BORING LOGS.GPJ NGELOG.GDT 6/3/15

Completion Depth:	<b>15.9 ft.</b>
Date Boring Started:	<b>5/26/15</b>
Date Boring Completed:	<b>5/26/15</b>
Engineer/Geologist:	<b>GB</b>
Driller:	<b>NGE</b>

Remarks: **Boring was noted to be dry during drilling operations and at boring completion.**

Depth to Water @ 24 hrs.: ---

Elevation	Depth, feet	Sample Type	Symbol / USCS	Location: <b>See Figure 1</b> Offset:		Recovery %	RQD	Penetration Blows / 6 inches	HCSI	Moisture %	Silt and Clay %	Sand %	Liquid Limit	Plasticity Index	
				Surface El.: ---											
				<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>☒ Split Spoon      ☒ Shelby Tube</p> <p>☐ Rock Core        ☐ Bag Sample</p> </div> </div>											
<b>MATERIAL DESCRIPTION</b>															
			☒	<b>TOPSOIL</b>	0.5			2-3-5							
			☒	Brown <b>SILTY to SANDY CLAY</b> , moist, medium stiff to very stiff				6-7-9							
			☒	- w/residual shale from 2.5 ft											
	5		☒	- gray @ 5.0 ft.				4-5-15							
			☒	- black organic layer (6.0 - 6.4 ft.)											
			☒		7.5			50/4"							
			☒	Light brown <b>SANDY to CLAYEY SHALE</b> , very soft to soft				49-50/2"							
	10		☒					50/6"							
			☒		13.0										
				Bottom of Test Boring @ 13.0 ft.											
	15														
	20														
	25														
	30														

WV DOT LOG W15086 BORING LOGS.GPJ\_NGELOG.GDT 6/3/15

Completion Depth:	<b>13.0 ft.</b>
Date Boring Started:	<b>5/26/15</b>
Date Boring Completed:	<b>5/26/15</b>
Engineer/Geologist:	<b>GB</b>
Driller:	<b>NGE</b>

Remarks: **Boring was noted to be dry during drilling operations and at boring completion.**

Depth to Water @ 24 hrs.: ---

---

## ***Appendix A***

---

Project Name: CARTER HOLLOW TOWER  
 Project Number: W15086

650 MacCorkle Avenue W  
 Saint Albans, West Virginia  
 304.201.5180

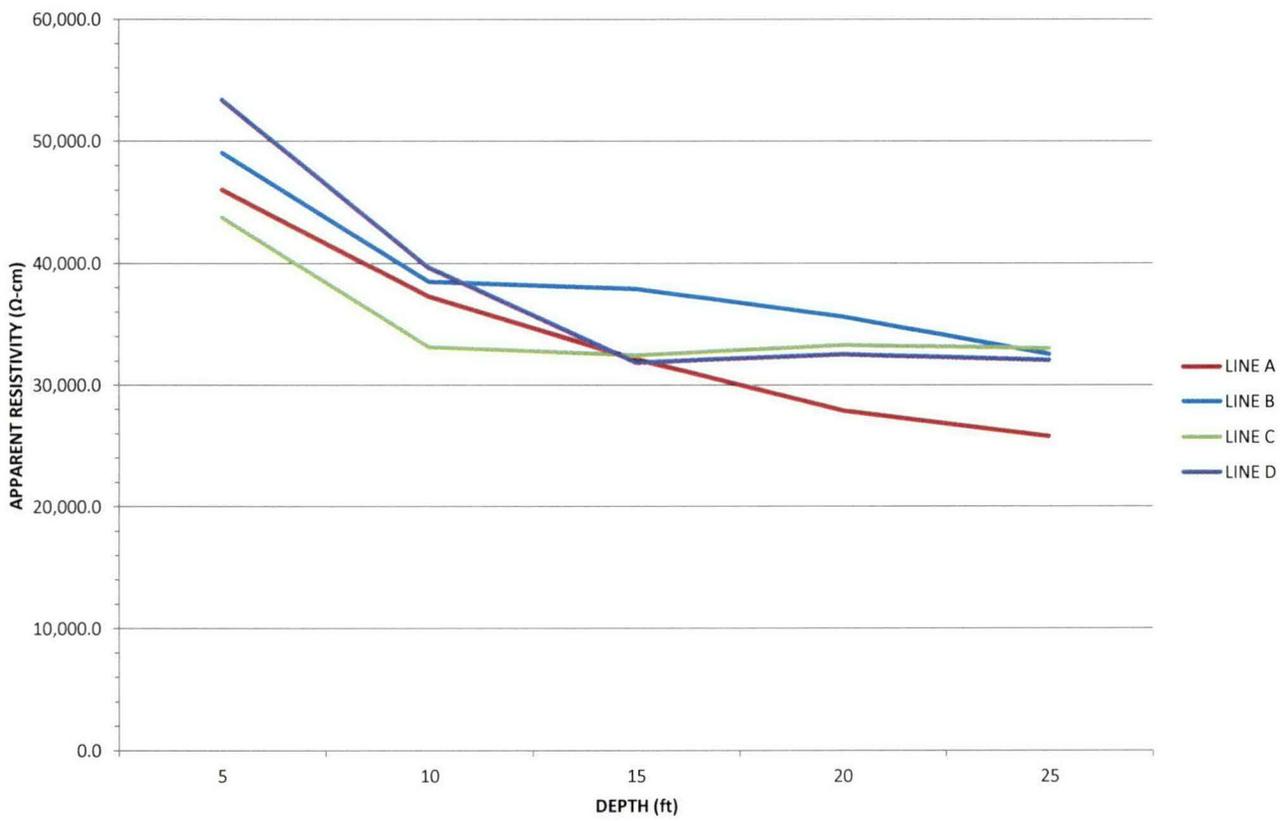


### RESISTIVITY TESTING RESULTS

Electrode Spacing (ft.)		5	10	15	20	25
Electrode Spacing (cm)		152.4	304.8	457.2	609.6	762.0
Line A	Measured Resistance (Ω)	48.1	19.5	11.2	7.3	5.4
North - South	Apparent Resistivity (Ω-cm)	46,058.5	37,344.7	32,173.9	27,960.7	25,854.1
Line B	Measured Resistance (Ω)	51.2	20.1	13.2	9.3	6.8
East - West	Apparent Resistivity (Ω-cm)	49,026.9	38,493.8	37,919.3	35,621.1	32,557.0
Line C	Measured Resistance (Ω)	45.7	17.3	11.3	8.7	6.9
Northwest - Southeast	Apparent Resistivity (Ω-cm)	43,760.4	33,131.5	32,461.2	33,323.0	33,035.7
Line D	Measured Resistance (Ω)	55.8	20.7	11.1	8.5	6.7
Northeast - Southwest	Apparent Resistivity (Ω-cm)	53,431.7	39,642.9	31,886.7	32,557.0	32,078.2

TEST DATA
DATE: 5-26-15
TIME: 11:00 am
TEMPERATURE: 75°
WEATHER: Sunny
SOIL TYPE: Clay
SOIL MOISTURE: Sl. Moist
TEST INSTRUMENT: AEMC 4620
TEST METHOD: WENNER 4 POINT
TESTED BY: Gene Brown

### 4-POINT RESISTIVITY GRAPH CARTER HOLLOW TOWER



---

***Appendix B***

---



**EXHIBIT I**  
**DIRECTIONS TO WCF SITE**

### Driving Directions to Proposed Carter Hollow Tower Site:

1. Beginning at the Carter County Judge Executive's Office, located at 300 W. Main Street, Grayson, KY, head east on Cardinal Road. Travel approximately 0.3 miles.
2. Turn right onto Carol Malone Boulevard and travel approximately 174 feet.
3. Turn left onto US-60E / E. Main Street and travel approximately 3.0 miles.
4. Turn left onto Beckwith Branch Road and travel approximately 0.3 miles to the site's access drive.
5. The site is on the right. Site coordinates are
  - a. 38 deg 20 min 31.661 sec N
  - b. 82 deg 53 min 57.736 sec W



Prepared by:  
Aaron L. Roof  
Pike Legal Group PLLC  
1578 Highway 44 East, Suite 6  
PO Box 369  
Shepherdsville, KY 40165-0369  
Telephone: 502-955-4400 or 800-516-4293

**EXHIBIT J**  
**COPY OF REAL ESTATE AGREEMENT**

Site Name: Carter Hollow RD, Grayson KY  
Site Number: PI3KY00011 B

## GROUND LEASE AGREEMENT

THIS GROUND LEASE AGREEMENT (the "Lease") is made this 1<sup>st</sup> day of June, 2015 (the "Commencement Date"), by and between **William R. Hayes, II**, an individual ("Lessor"), and **PI TELECOM INFRASTRUCTURE V, LLC**, a Delaware limited liability company ("Lessee").

**1. Leased Premises.** Lessor hereby leases to Lessee and Lessee hereby leases from Lessor under the terms and conditions set forth in this Lease [a portion of] that certain parcel of real property, located at 100 Carter Hollow Road, Carter County, Kentucky Parcel # 120W-00-00-033.00 ("Site"), as more particularly described on **Exhibit "A"** and the survey or site plan shown on **Exhibit "A-1"** attached hereto and made a part hereof ("Leased Premises"), together with an easement, or easements, for ingress, egress, utilities, a turn-around area and any other easements required by the local governing authorities, including, without limitation, a landscape buffer or "Fall Zone" (if applicable), for the duration of the lease on the property which is more particularly described on **Exhibit "B"** attached hereto and made a part hereof ("Easement(s)"). The easement rights herein granted include the right and authority of Lessee to grant or assign to third parties all or some of the easement rights granted to Lessee herein. Lessor agrees and acknowledges that Lessee may, at Lessee's sole cost and expense, have a metes and bounds survey prepared of the Leased Premises and the Easement(s), and that the legal description of the Leased Premises and the Easement(s), as shown on the survey, shall thereafter become the legal description of the Leased Premises and the Easement(s). Lessor represents and warrants that Lessor has good and marketable title to the Leased Premises and the Easement(s) free and clear of all liens and encumbrances, other than those liens and encumbrances shown on **Exhibit "C"** attached hereto and made a part hereof. Lessor further represents and warrants that there are no easements, licenses, rights of use or other encumbrances on the Leased Premises or the Easement(s) which will interfere with or constructively prohibit Lessee's Intended Use (as herein defined) of the Leased Premises. Lessor, and subject to Lessee's prior approval, any of Lessor's invitees may use the Easements so long as such use by Lessor or any approved invitees does not interfere with Lessee's use. With at least fifteen (15) days' prior notice to Lessee, Lessor may install gates on any roads to Lessor's satisfaction and provide Lessee the combination and locks as soon as any gates are installed. Further, any damage to the Easements caused by Lessor and/or Lessor's invitees shall be repaired by Lessor, at Lessor's sole cost and expense, upon notice by Lessee.

**2. Lessor's Representations and Warranties.** Lessor represents and warrants that Lessee's intended use of the Leased Premises as a site for the transmission and receipt of wireless communication signals and for the construction and maintenance of towers, antennas or buildings and related facilities ("Intended Use") is not prohibited by any covenants, restrictions, reciprocal easements, servitudes, subdivision rules or regulations. Lessor further represents and warrants that (i) the execution of this Lease by Lessor will not cause a breach or an event of default of any other agreement to which Lessor is a party, (ii) there are no pending or threatened administrative actions, including bankruptcy or insolvency proceedings under the state or federal law, suits, claims or causes of action against Lessor or which may otherwise affect the Leased Premises and the Easement(s), (iii) the Leased Premises and the Easement(s) are not presently subject to an option, lease or other contract which may adversely affect Lessor's ability to fulfill its obligations under this Lease, and (iv) Lessor shall not grant an option or enter any contract which will affect the Leased Premises or the Easement(s) until this Lease expires or is terminated by Lessee. All

representations and warranties set forth in 2(i) through 2(iii) are to the best of Lessors' knowledge and belief.

**3. Lessee's Due Diligence Period.**

(a) Within ten (10) business days following the Commencement Date, Lessee shall pay to Lessor the amount of [REDACTED] (the "Due Diligence Fee"), which Due Diligence Fee shall be nonrefundable to Lessee, except in the event that this Lease is terminated by Lessee prior to the Rent Commencement Date (as herein defined) due to a default by Lessor. Provided that construction of the Tower Facilities (as hereinafter defined) has not commenced, it is understood that Lessee shall have the right to terminate this Lease for any reason or no reason at all, without any further liability or obligation to Lessor except those obligations which specifically survive the expiration or termination of this Lease, by delivery of written notice of termination to Lessor prior to the Rent Commencement Date.

(b) Lessee shall have the right, at its cost and expense, to have the Leased Premises and the Easement(s) surveyed and to obtain a title report or commitment for a leasehold title policy covering the Leased Premises and the Easement(s) from the title insurance company of its choice prior to the Rent Commencement Date. Lessor shall remove any survey or title defects, which will adversely affect Lessee's leasehold title or its ability to mortgage its leasehold interest. In the event Lessor shall fail to cure any such defects, Lessee shall have the right to terminate this Lease upon written notice to Lessor, which shall be its exclusive remedy.

(c) In the event of a termination of the Lease pursuant to subparagraph 3(a) or 3(b) above or Paragraph 8 below, within thirty (30) days of such termination Lessee will file a release or other appropriate instrument with the local recording office to remove the Memorandum of Lease from the title record. If said removal is not performed by Lessee within such thirty (30) day period, Lessee appoints Lessor, as Lessee's agent and at Lessee's cost and expense, to file the necessary release or other instrument to cause the Memorandum of Lease to be released from title.

**4. Attorney-In-Fact and Cooperation.** Lessor hereby irrevocably appoints Lessee or Lessee's agent as Lessor's agent to file such applications on behalf of Lessor with federal, state and local governmental authorities which relate to Lessee's Intended Use of the Leased Premises, including, but not limited to, land use and zoning applications. Lessor agrees to cooperate with Lessee in obtaining, at Lessee's expense, all licenses and permits required for Lessee's use of the Leased Premises (the "Governmental Approval"). Lessee shall indemnify Lessor for all costs, claims, actions, fines and attorney's fees for any governmental actions charged against Lessor arising from Lessee's exercise of authority upon this provision.

**5. Use.** The Leased Premises may be used by Lessee for the transmission and receipt of wireless communication signals in any and all frequencies and the construction and maintenance of a communications tower, antennas, buildings, and related facilities and activities, and all other uses permitted under applicable zoning regulations. Lessee may construct additional improvements, demolish and reconstruct improvements, or restore, replace and reconfigure improvements within the Leased Premises at any time during the Term (as herein defined) of this Lease.

**6. Initial Term.** The initial term of this Lease shall be **five (5) years** commencing on the Commencement Date and terminating on the fifth (5th) anniversary of the Commencement Date ("Initial Term"). The parties agree that a memorandum of lease in the form attached hereto as **Exhibit "D"**, evidencing the Commencement Date and other matters, shall be executed and recorded.

7. **Renewal Terms.** Lessee shall have the right to extend the Initial Term of this Lease for **five (5) additional five (5) year terms** ("Renewal Terms"). Each Renewal Term shall be on the same terms and conditions as set forth in this Lease. This Lease shall automatically be renewed for each successive Renewal Term unless Lessee notifies Lessor of Lessee's intention not to renew the Lease at least thirty (30) days prior to the expiration of the Initial Term or the Renewal Term which is then in effect. The Initial Term and each Renewal Term shall collectively be referred to herein as the "Term".

8. **Rent.** Commencing on the Rent Commencement Date, during the Term of this Lease, Lessee shall pay to Lessor an annual rental amount of [REDACTED] to be paid in equal monthly installments of [REDACTED] ("Rent"), which shall be deemed to include any applicable State, County or local sales or use tax. Rent shall be payable in advance on or before the fifteenth (15th) day of each calendar month, and shall be remitted to the address shown for Lessor in this Lease, or such other address as Lessor may direct by written notice to Lessee. It shall be the sole responsibility of the Lessor to remit payment of any applicable State, County or local sales, rent or use tax to the appropriate taxing authority. If the Rent Commencement Date or the date of termination (the "Termination Date") of this Lease is other than the first (1st) day of a calendar month, Rent shall be prorated. In the event of termination of this Lease for any reason, other than nonpayment of Rent, all Rent paid in advance of the Termination Date for that period shall be refunded to Lessee. The "Rent Commencement Date" shall mean the date the Lessee commences construction of the Tower Facilities; provided, however, in the event that Lessee has not commenced construction of the Tower Facilities within two (2) years following the Commencement Date, this Lease shall automatically terminate and the parties shall be released from further liability or obligation hereunder except those obligations which specifically survive the expiration or termination of this Lease. The Rent shall increase by [REDACTED] upon commencement of each Renewal Term. Rent shall be paid until Lessee complies with the post-termination obligations set forth in Paragraph 11, unless waived by Lessor in writing.

9. **Conditions Subsequent.** In the event that Lessee's Intended Use of the Leased Premises is actually or constructively prohibited through no fault of Lessee or the Leased Premises or the Easement(s) are, in Lessee's opinion, unacceptable to Lessee, then upon notice from Lessee, this Lease shall terminate and be of no further force or effect and Lessor shall be entitled to retain any deposits or Rent paid in advance to Lessor.

10. **Interference.** Lessor shall not use, nor shall Lessor permit its lessees, licensees, invitees or agents to use, any portion of adjacent real property owned by Lessor in any way which interferes with the wireless communications operation of Lessee. Such interference shall be deemed a material breach of this Lease by Lessor and Lessor shall have the responsibility to terminate said interference at its sole cost and expense. In the event any such interference does not cease or is not promptly rectified, Lessor acknowledges that continuing interference will cause irreparable injury to Lessee, and Lessee shall have the right, in addition to any other rights that it may have at law or in equity, to bring action to enjoin such interference or to terminate this Lease immediately upon notice to Lessor.

11. **Improvements; Utilities, Access and Other Easements.**

(a) Lessee shall have the right at Lessee's sole cost and expense, to erect and maintain on the Leased Premises improvements, personal property and facilities, including without limitation, a communications tower, a structural tower base, radio transmitting and receiving antennas, communications equipment, equipment cabinet and/or shelters, and related facilities (collectively the "Tower Facilities"). The Tower Facilities shall remain the exclusive property of the Lessee throughout the Term and upon termination of this Lease. All or any portion of the Tower Facilities may be removed by the Lessee from the Leased Premises at any time during the Term. Lessee shall, upon expiration of the Term, or within ninety (90) days after any earlier termination of the Lease, remove its building(s), antenna structure(s)

(except footings), equipment, conduits, fixtures and all personal property placed thereon by or through Lessee and restore the Leased Premises to their original condition, reasonable wear and tear and excepted. Lessor grants Lessee the right to clear all trees, undergrowth, or other obstructions and to trim, cut, and keep trimmed and cut all tree limbs which may interfere with or fall upon Lessee's tower or Lessee's other improvements, communications equipment, or Easement rights. Lessor grants Lessee a non-exclusive easement in, over, across and through other real property currently owned by Lessor as reasonably required for construction, installation, maintenance, and operation of the Tower Facilities.

(b) Lessee shall have the right to install utilities, at Lessee's expense, and to improve present utilities on the Leased Premises (including but not limited to the installation of emergency power generators). Lessee shall have the right to permanently place utilities on (or to bring utilities across or under) the Easement(s) to service the Leased Premises and the Tower Facilities. In the event that utilities necessary to serve the equipment of Lessee or the equipment of Lessee's licensee(s) or sublessee(s) cannot be located within the Easement(s) for ingress and egress, Lessor agrees to cooperate with Lessee and to act reasonably in allowing the location of utilities on other real property owned by Lessor without requiring additional compensation from Lessee or Lessee's licensee(s) or sublessee(s). Lessor shall, upon Lessee's request, execute a separate written easement to the utility company providing the service for Lessee in a form which may be filed of record evidencing this right.

(c) Lessor represents and warrants to Lessee that Lessee shall, at all times during this Lease, enjoy ingress, egress, and access from the Leased Premises to an open and improved public road which presently exists, and which Easement(s) shall be adequate to service the Leased Premises and the Tower Facilities. If no such public road exists, or ceases to exist in the future, Lessor will grant an appropriate easement to Lessee and its sublessees and assigns so that Lessee may, at its own expense, construct a suitable private access drive to the Leased Premises and the Tower Facilities. Lessor acknowledges and agrees that any new private access drive constructed by Lessee will be used exclusively by Lessee and its sublessees, sublicensees and assigns. Any use thereof by Lessor, its tenants, licensees, or lessees or other occupants on the Site shall be subject to Lessee's prior written consent to use such private access drive. Any attempted use thereof by Lessor, its tenants, licensees or lessees or other occupants of the Site without Lessee's prior written consent shall be considered a material breach of this Lease. To the extent such access is across other property owned by Lessor, Lessor shall execute an easement evidencing this right and Lessor shall maintain access to the Easement(s) in a free and open condition so that no interference is caused by Lessor or by other lessees, licensees, invitees or agents of the Lessor which may utilize the Easement(s). Lessor shall provide such access to the Leased Premises across Lessor's adjacent property, and over all paved or unpaved roads owned or controlled by Lessor, to allow Lessee, or its sublessees, to use, maintain and repair the improvements located on the Leased Premises. Such access shall be provided twenty-four (24) hours per day, seven (7) days per week.

(d) If governmental authorities require a landscape buffer easement or any other type of easement to grant approval for the construction of the Tower Facilities ("Additional Easement(s)"), and if such Additional Easements cannot be located within the Leased Premises or the Easement(s) for ingress and egress, Lessor agrees to cooperate with Lessee and to act reasonably in allowing the location of such Additional Easement(s) on other real property owned by Lessor without requiring additional compensation from Lessee or Lessee's licensee(s) or sublessee(s). Lessor shall, upon Lessee's request, execute a separate written easement for such Additional Easement(s) in a form which may be filed of record evidencing this right.

**12. Termination.** Except as otherwise provided herein, this Lease may be terminated without any penalty or further liability upon written notice as follows:

(a) By either party upon a default of any covenant or term hereof by the other party,

which default is not cured within sixty (60) days of receipt of written notice of default (without however, limiting any other rights available to the parties pursuant to any other provisions hereof); provided, that if the defaulting party commences efforts to cure the default within such period and diligently pursues curing of the default to completion within a reasonable time period, the non-defaulting party shall no longer be entitled to declare a default;

(b) Upon thirty (30) days' written notice by Lessee to Lessor, if Lessee is unable to obtain or maintain through no fault of Lessee, any license, permit or other Governmental Approval necessary for the construction and operation of the Tower Facilities or Lessee's business; or

(c) By Lessee for any reason upon one (1) year's advance written notice from Lessee to Lessor; or

(d) By Lessee pursuant to Paragraph 3 of this Lease.

**13. Sublessee's Improvements.** Lessee's licensee(s) and sublessee(s) shall be entitled to modify the Tower Facilities and to erect additional improvements on the Leased Premises, including, but not limited to antennas, dishes, cabling, additional storage buildings or equipment shelters as are reasonably required for the operation and maintenance of the communications equipment, together with rights of ingress and egress to the Leased Premises and the right to install utilities to and on the Leased Premises and Easement(s) as if said licensee or sublessee were the Lessee under this Lease.

**14. Taxes.** Lessee shall pay any personal property taxes assessed on, or any portion of such taxes attributable to, the Tower Facilities. Lessee shall pay, as additional Rent, any increase in real property taxes levied against the Leased Premises which are directly attributable to Lessee's use of the Leased Premises (the "Telecom Increase") within thirty (30) days of receipt of Lessor's written request provided that Lessor agrees to furnish proof of the Telecom Increase to Lessee within ninety (90) days from the issuance of the tax bill from the local taxing authority. If the Lessor fails to provide Lessee with such proof of the Telecom Increase within ninety (90) days of the issuance of the tax bill from the local taxing authority, then Lessee shall have no obligation to reimburse Lessor for, or to pay such Telecom Increase. In the event that Lessor fails to pay, when due, any taxes affecting the Leased Premises or the Easement(s), Lessee shall have the right, but not the obligation, to pay such taxes and deduct the full amount of the taxes paid by Lessee on Lessor's behalf from future installments of Rent. Lessor hereby represents and warrants that Lessor's property on which the Leased Premises and Easement(s) are located is not subject to any "Conservation Use Covenant", "Greenbelt Covenant", agricultural or timberland covenant, or any other conservation use program which restricts or limits development of Lessor's property. Lessor agrees to be solely responsible for payment of any penalties, roll-back or additional taxes, special assessments or other monetary amounts now or hereafter payable to any county, city, state or other party as a result of the breach of any conservation use tax program affecting the property on which the Leased Premises and Easement(s) are located or resulting from the change in the nature or character of the use of the property from its present use to a communications tower facility. Lessor does hereby covenant and agree to indemnify, defend and hold Lessee forever harmless from any and all liabilities, claims, demands, actions or causes of action arising from or relating to a breach of any such covenants, whether such breach occurs because of the erection of the Tower Facilities on the Leased Premises or otherwise.

**15. Destruction of Premises.** If the Leased Premises or the Tower Facilities are destroyed or damaged, so as to hinder the effective use of the Tower Facilities in Lessee's judgment, Lessee may elect to terminate this Lease as of the date of the damage or destruction by so notifying the Lessor. In such event, all rights and obligations of Lessee to Lessor shall cease as of the date of the damage or destruction, and Lessee shall be entitled to the reimbursement of any Rent prepaid by the Lessee.

**16. Condemnation.** If a condemning authority takes all of the Leased Premises or

Easement(s), or a portion sufficient in Lessee's determination to render the Leased Premises or the Easement(s), in the opinion of Lessee, unsuitable for the use which Lessee was then making of the Leased Premises and Easement(s), this Lease shall terminate as of the date the title vests in the condemning authority. Lessee shall be entitled to file its own claims against the condemning authority for the value of its Tower Facilities, moving expenses, prepaid rent and business dislocation expenses. A sale of all or part of the Leased Premises and/or Easement(s) to a purchaser with the power of eminent domain, in the face of the exercise of eminent domain power, shall be treated as taking by condemnation for the purpose of this paragraph.

17. **Insurance.** Lessee shall purchase and maintain in full force and effect throughout the Term, public liability and property damage policies. The policy of general liability insurance shall provide a combined single limit of \$3,000,000.00 and shall name Lessor as an additional insured. Lessee shall provide thirty (30) days advance written notice of cancellation or non-renewal. Lessee shall provide Lessor a certificate of insurance evidencing same within thirty (30) days of execution of this Lease but prior to entering the Site for any testing or investigation.

18. **Lessee's Environmental Covenants and Indemnity.** As used in this Lease, the term "Hazardous Materials" shall mean any hazardous or toxic substance, material or waste which is, or becomes designated as such in the future or is regulated by any agency of the United States Government or by any local governmental authority having jurisdiction, including, without limitation, any substance, material or waste that is defined or designated as a hazardous substance pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, the Resource Conservation and Recovery Act or the Clean Water Act. During the Term of this Lease, Lessee shall cause the presence, use, storage and/or disposal of any Hazardous Material, on or under the Leased Premises by Lessee, its agents, employees, business invitees, contractors or sublessees to be in compliance with all applicable laws, rules, regulations and orders. Lessee shall not install or permit the installation of any underground storage tanks on the Leased Premises. Lessee shall defend, indemnify, protect and hold Lessor harmless from and against all claims, costs, fines, judgments and liabilities, including, without limitation, reasonable attorney's fees and costs, arising out of or in connection with the presence, storage, use or disposal of Hazardous Materials on or under the Leased Premises to the extent caused by the acts, omissions or negligence of Lessee, its employees, business invitees, contractors or sublessees. The foregoing indemnity shall survive the expiration or earlier termination of this Lease.

19. **Lessor's Environmental Representation and Indemnity.** Lessor represents and warrants that no Hazardous Materials have been generated, stored, disposed of or are present on or under the Leased Premises and the Easement(s) prior to the Commencement Date of this Lease. Lessor shall indemnify, defend, protect and hold Lessee harmless from and against any and all claims, costs, fines, judgments, liability, actions, causes of action, liens and expenses, including, without limitation, penalties and reasonable attorneys fees, incurred or suffered by or asserted against Lessee, to the extent arising out of or in any way relating to any one or more of the following which are not caused by Lessee: (a) the presence of any Hazardous Materials in, on, or under the Leased Premises; (b) any past, present or threatened release of Hazardous Materials in, on, under or from the Leased Premises; (c) any activity by Lessor in connection with any actual, proposed or threatened use, treatment, storage, existence, disposition or other release, production, manufacturing, management, abatement, removal, handling, transfer or transportation to or from the Leased Premises of any Hazardous Materials at any time located in, under or on the Leased Premises; (d) any testing and/or remediation costs in connection with any Hazardous Materials alleged to be located in, under, on or above the Leased Premises; (e) any past or present non-compliance with or violations of any environmental laws in connection with the Leased Premises or operations thereon, including but not limited to, any failure by Lessor to comply with any order of any governmental authority in connection with any environmental laws; and (f) the imposition, recording or filing or the threatened imposition, recording or filing of any environmental lien encumbering the Leased

Premises. The foregoing representations and indemnities shall survive the expiration or earlier termination of this Lease.

**20. Mutual Indemnification.** Lessor shall indemnify and hold harmless Lessee from and against any and all claims, liabilities, loss or damage, penalties or judgments to the extent arising from injury to person or property sustained by anyone in and about the Leased Premises and Easement(s) resulting from any act(s) or omissions(s) of Lessor, or Lessor's officers, agents, servants, employees, contractors, or sublessees. Further, Lessor shall, at its own cost and expense, defend any and all suits or actions (just or unjust) which may be brought against Lessee or in which Lessee may be impleaded with others upon any such matter, claim or claims, except as may result from the acts described in the following paragraph. This indemnification obligation shall survive the expiration or earlier termination of the Lease.

Lessee shall indemnify and hold harmless Lessor from and against any and all claims, liabilities, loss or damage, penalties or judgments to the extent arising from injury to person or property sustained by anyone in and about the Leased Premises and Easement(s) resulting from any act(s) or omissions(s) of Lessee, or Lessee's officers, agents, servants, employees, contractors, or sublessees. Further, Lessee shall, at its own cost and expense, defend any and all suits or actions (just or unjust) which may be brought against Lessor or in which Lessor may be impleaded with others upon any such matter, claim or claims, except as may result from the acts described in the preceding paragraph. This indemnification obligation shall survive the expiration or earlier termination of the Lease.

**21. Notices.** All notices required or permitted under this Agreement shall be in writing and shall be deemed effective upon personal delivery, or three (3) days after being deposited in the U.S. Mail, registered or certified, and postage prepaid, or one (1) day after being deposited with a recognized overnight delivery service. Such notices shall be addressed to the applicable party at its address shown below, or at such other address or addresses as either party shall designate to the other in writing in accordance with this paragraph:

As to Lessor:                    William R. Hayes, II  
    7 Carter Lane  
    Grayson, KY 41143  
    Phone: 606-474-8463  
    E-mail address: wrhayes@windstream.net  
    Federal ID / SS No.: 402-98-5770

As to Lessee:                    PI Telecom Infrastructure V, LLC  
    4601 Touchton Road  
    Bldg. 300, Suite 3200  
    Jacksonville, Florida 32246  
    Attention: Contracts Administrator

With a copy to:                PI Telecom Infrastructure V, LLC  
    2855 LeJeune Road  
    4<sup>th</sup> Floor  
    Miami, Florida 33134  
    Attention: Legal Department

22. **Title and Quiet Enjoyment.** Lessor warrants and represents that (i) it has the full right, power, and authority to execute this Lease; (ii) it has good and marketable fee simple title to the Leased Premises and the Easement(s); and (iii) the Leased Premises constitute a legal lot that may be leased without the need for any subdivision or platting approval. Lessor covenants that Lessee shall have the quiet enjoyment of the Leased Premises during the Term of the Lease. Lessor shall indemnify, defend and hold harmless Lessee from and against any loss, cost, expense or damage, including attorneys fees associated with a breach of the foregoing covenant of quiet enjoyment. This Lease shall be an estate for years and not a usufruct. Lessor shall not use, nor shall Lessor permit its lessees, licensees, invitees, or agents to use any portion of any property owned or controlled by Lessor in any way which interferes with the operations of Lessee. Such interference shall be deemed a material breach by Lessor, and Lessee shall have the right, in addition to any other rights that it may have in law or equity, to enjoin such interference or to terminate this Lease.

23. **Subordination and Non-Disturbance.** This Lease shall be subject to and subordinate to any mortgage or deed to secure debt (collectively referred to as a "Mortgage") made by Landlord which may now or hereafter encumber the Leased Premises and Easement(s), provided that no such subordination shall be effective unless the holder of every such Mortgage shall in a separate agreement with Lessee agree that in the event of a foreclosure, or conveyance in lieu of foreclosure of Lessor's interest in the Leased Premises and Easement(s), such holder shall recognize and confirm the validity and existence of this Lease and that Lessee shall have the right to continue its use and occupancy of the Leased Premises and Easement(s) in accordance with the provisions of this Lease as long as Lessee is not in default of this Lease beyond applicable notice and cure periods. Lessee shall execute in timely fashion such instruments as may reasonably be requested to evidence the provisions of this paragraph. In the event the Leased Premises and/or Easement(s) are encumbered by a Mortgage on the Commencement Date, Lessor, no later than ten (10) days after the Commencement Date, shall obtain and furnish Lessee with a non-disturbance agreement in recordable form from the holder of each Mortgage.

24. **Assignments and Subleases.**

(a) Lessee may, upon notice to Lessor, mortgage or grant a security interest in Lessee's leasehold estate and the Tower Facilities, and may make a conditional assignment of this Lease and the Tower Facilities to any such mortgagees or holders of security interests, including their successors and assigns (hereinafter, collectively referred to as "Secured Parties"). In such event, Lessor shall execute such consent to leasehold financing as may reasonably be required by any Secured Party. Lessor agrees to notify Lessee and Lessee's Secured Parties simultaneously of any default by Lessee, and to give to the Secured Parties the same right to cure any default as Lessee except that the cure period for any Secured Party shall not be less than ten (10) days after the receipt of the default notice. If a termination, disaffirmation or rejection of the Lease, pursuant to any laws (including any bankruptcy or insolvency laws), by Lessee shall occur, or if Lessor shall terminate this Lease for any reason as provided for in Paragraph 12, herein, Lessor will give the Secured Parties prompt notice thereof and Lessor will give each Secured Party the right to enter upon the Leased Premises during a thirty (30) day period commencing upon such Secured Party's receipt of such notice for the purpose of removing any Tower Facilities. Lessor acknowledges that the Secured Parties shall be third-party beneficiaries of this Lease.

(b) Lessee shall have the right to license, sublease or assign its rights under this Lease, without the consent of Lessor, upon any of the following conditions:

- i. any conditional assignment of this Lease to a Secured Party as described in

subparagraph (a) above;

- ii. any license or sublease of a portion of the Tower Facilities in the ordinary course of Lessee's business;
- iii. an assignment or sublease to an affiliate entity of Lessee; or
- iv. an assignment to an entity in the business of developing or owning telecommunication towers, provided that any such assignee shall have a net worth equal to or greater than Lessee's.

Any license, sublease or assignment by Lessee of its rights under this Lease which is not set forth in (i) – (iv) above shall require the consent of the Lessor, which shall not be unreasonably withheld, delayed and/or conditioned. Any license, sublease or assignment pursuant to this subparagraph (b) shall be subject to all terms and conditions of this Lease. Upon assignment of all of its rights pursuant to this Lease, and the execution of a written assumption of all of the terms and conditions of the Lease by the assignee, Lessee shall be released from any further liability under this Lease.

**25. Successors and Assigns.** This Lease shall run with the Leased Premises described on Exhibit "A" and shall be binding upon and inure to the benefit of the parties, their respective heirs, successors, personal representatives and assigns.

**26. Waiver of Lessor's Lien.** Lessor hereby waives any and all lien rights it may have, statutory or otherwise, in and to the Tower Facilities or any portion thereof, regardless of whether or not same is deemed real or personal property under applicable laws.

**27. Waiver of Incidental and Consequential Damages.** Lessor will not assert any claim whatsoever against Lessee for loss of anticipatory profits or any other indirect, special, incidental or consequential damages incurred by Lessor as a result of the construction, maintenance, operation or use of the Leased Premises or the Easement(s) by Lessee.

**28. Lessee's Exclusivity.** Lessor agrees not to lease any of Lessor's property ("Lessor's Property") for construction of a tower, for the construction or for use as a communications facility or for the operation of an antenna site leasing business which competes directly or indirectly with Lessee. As used in this Section 28, "Lessor's Property" shall be limited to only that real property as set forth in that General Warranty Deed dated May 9, 1989 and of record at the Carter County Clerk's office in Deed Book 200, Page 865-866.

**29. Right of First Refusal.** In the event that the Lessor receives and desires to accept a bona fide offer to sell and convey the Leased Premises to a third party not related to the Lessor by at least 51% common ownership, then the Lessor shall first provide the Lessee with a written offer to sell and convey the Leased Premises to Lessee upon the same terms and conditions as the offer made by the third party. The notice to Lessee shall include a copy of the third party's offer. If the third party offer is to purchase assets in addition to the Leased Premises, the right of first refusal hereunder shall apply only to the Leased Premises and the Lessor shall provide to Lessee the only the terms of the third party's offer which are applicable thereto. Lessee shall have twenty (20) business days from the receipt from the Lessor's notice to accept the offer to purchase the Leased Premises. If Lessee desires to accept the offer, it shall notify the Lessor in writing within the said twenty (20) business day period and closing thereon shall occur within ninety (90) days of the date of Lessee's written acceptance of the offer. Transfer of title shall be by Special Warranty Deed and a Bill of Sale that warrants title to the Leased Premises without exception or encumbrance. If Lessee does not elect to accept the offer to purchase the Leased Premises, then the Lessor

may proceed with selling the Leased Premises to the third party upon the same terms and conditions as offered to Lessee, which sale shall be made subject to the terms of this Lease. Should the third party not complete the purchase transaction, then this Right of First Refusal shall continue in effect for any future offers received by the Lessor

**30. Certifications.** Either party may request, in writing, that the other party certify information to a prospective mortgagee or purchaser. Such certification shall be transmitted within ten (10) days after receipt of written request and may be relied upon by the party who requested it, and the contents of the certificate shall be binding upon the party executing it. The certificate may include (i) the validity, force and effect of this Lease; (ii) the extent to which this Lease has been supplemented or amended; (iii) the existence of any default; (iv) the existence of any offsets, counter-claims or defenses on the part of the other party; (v) the commencement and expiration dates of the Term, (vi) the amount of any prepaid rent; and (vii) any other matter as may reasonably be requested.

**31. Self Help.** Without limiting Lessee's to terminate this Lease pursuant to Paragraph 12(a) hereof, in case of a breach of any covenant or term hereof by the Lessor, the Lessee may, in its sole discretion, elect to remedy the Lessor's breach, which remedy shall not operate or be construed as a waiver of the Lessee's rights herein to recover the cost of such remedy from the Lessor by setoff or otherwise, and the Lessor shall indemnify the Lessee from any and all costs, expenses, reasonable attorney fees and litigation expenses as may be incurred by the Lessee in performing the Lessor's obligations hereunder.

**32. Miscellaneous.**

(a) The substantially prevailing party in any litigation arising hereunder shall be entitled to its reasonable attorney's fees and court costs, including appeals and post-judgment proceedings, if any.

(b) Each party agrees to furnish to the other, within ten (10) days after request, such truthful estoppel information as the other may reasonably request.

(c) This Lease constitutes the entire agreement and understanding of Lessor and Lessee with respect to the subject matter of this Lease, and supersedes all offers, negotiations and other agreements. There are no representations or understandings of any kind not set forth herein. Any amendments to this Lease must be in writing and executed by Lessor and Lessee.

(d) If either Lessor or Lessee is represented by a broker in this transaction, that party shall be fully responsible for any fees due such broker and shall hold the other party harmless from any claims for commission by such broker.

(e) This Lease shall be construed in accordance with the laws of the state in which the Leased Premises is situated.

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

(g) Lessor shall cooperate with Lessee in executing any documents necessary to protect Lessee's rights under this Lease or Lessee's use of the Leased Premises and the Easement(s), and to take such action as Lessee may reasonably require to effect the intent of this Lease.

(h) This Lease may be executed in two or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have

been signed by each of the parties, it being understood that all parties need not sign the same counterpart. The parties agree that a scanned or electronically reproduced copy or image of this Lease shall be deemed an original.

(i) Lessor agrees that the terms of this Lease shall be strictly confidential and that Lessor shall not disclose any of the terms hereof to any third party, except with Lessee's prior written consent. Notwithstanding the foregoing, Lessor is permitted to disclose the terms of this Lease to its attorneys, financial consultants, accountants and lenders.

(j) Lessee warrants and agrees that it shall comply with all existing or future laws and regulations affecting the Leased Premises which have been or which may be adopted, passed, or issued by any governmental agency.

(k) Any timber harvested by Lessee shall belong to Lessor.

(SIGNATURE PAGES FOLLOWING)

IN WITNESS WHEREOF, the parties hereto have executed this Lease as of the date first written above.

LESSOR:

WITNESS:

X Gary Wells  
Gary Wells  
Print Name

Wm. R. Hayes II  
Print Name: William R. Hayes, II  
Date: 5-17-15

LESSEE:

WITNESS:

PI TELECOM INFRASTRUCTURE V, LLC, a Delaware limited liability company

Sara  
Sara Custons  
Print Name  
Jeanette Selger  
Print Name

By: RE Bitner  
Print Name: Ron E. Bitner  
Title: VP Tower Operations  
Date: 6.1.15

**EXHIBIT "A"**

Description of Real Property (Leased Premises)

A **100' by 100'** parcel of land for the tower compound being located around the base of the tower, all being a portion of the parent tract (see attached warranty deed for legal description of parent tract). The legal description of the Leased Premises shall be determined by survey and shall thereafter replace this **Exhibit "A"**.

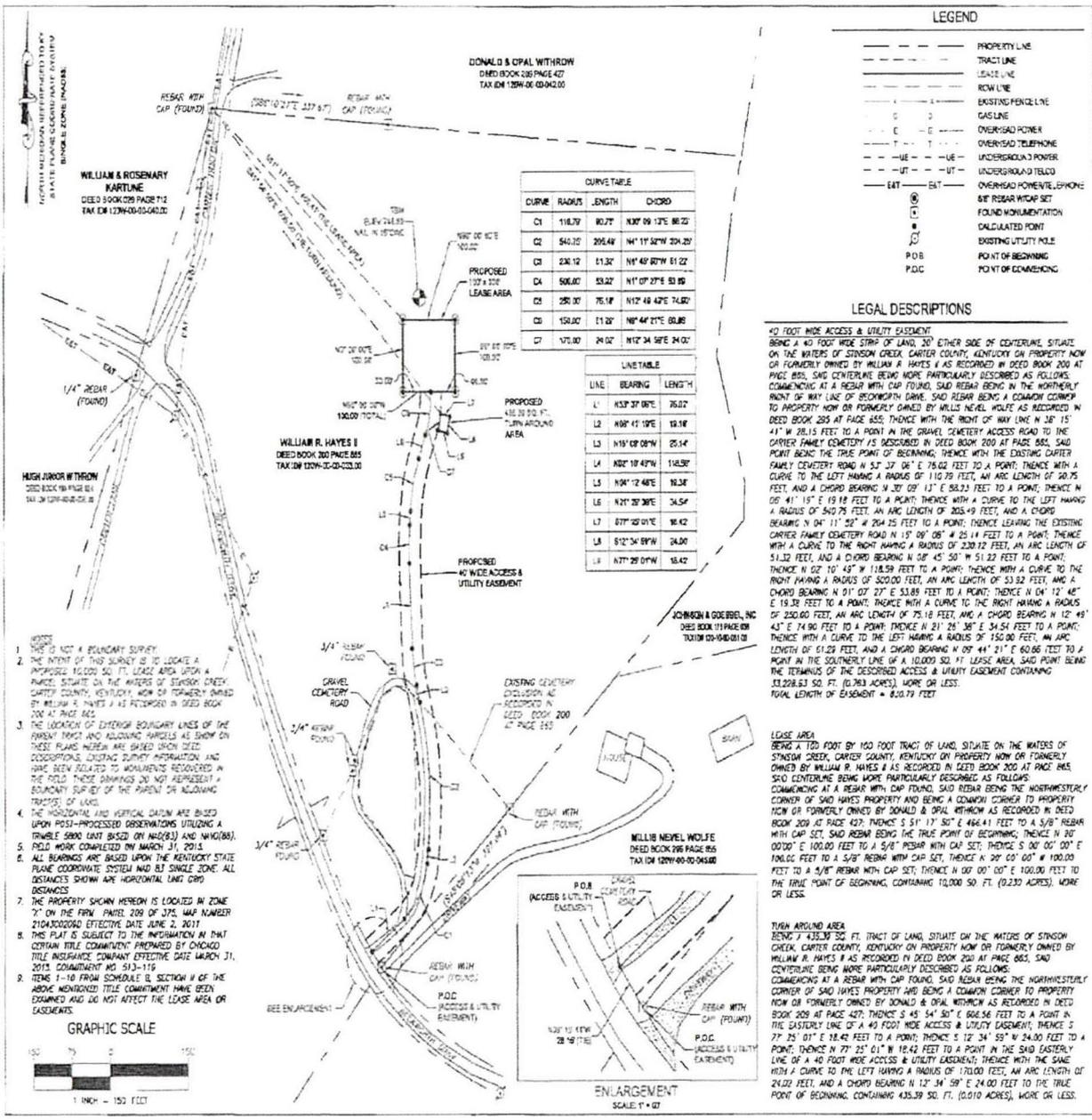
Tax Parcel I.D. # of parent tract: Carter County Kentucky Parcel # 120W-00-00-033.00

Physical Address of parent tract: 100 Carter Hollow Road  
Grayson, KY

**EXHIBIT "A-1"**

Survey or Site Plan

Location of the Leased Premises shall be determined by survey, and upon completion shall replace this **Exhibit "A-1"**.



DONALD & OPAL WITHROW  
DEED BOOK 208 PAGE 427  
TAX ID# 129W-06-03-02.00

WILLIAM & ROSEMARY  
KARTLINE  
DEED BOOK 208 PAGE 712  
TAX ID# 129W-06-03-02.02

WILLIAM R. HAYES II  
DEED BOOK 200 PAGE 885  
TAX ID# 129W-02-02-02.00

**CURVE TABLE**

CURVE	RADIUS	LENGTH	CHORD
C1	118.79	80.77	N37°09'12" E 80.77
C2	540.20	295.48	N4°17'52" W 294.28
C3	230.12	151.32	N1°42'07" W 151.02
C4	506.00	53.22	N1°07'27" E 53.19
C5	250.00	76.18	N12°48'42" E 74.82
C6	158.00	11.02	N6°44'21" E 10.81
C7	170.00	24.02	N12°34'56" E 24.02

**LINE TABLE**

LINE	BEARING	LENGTH
L1	N57°37'06" E	35.02
L2	N06°41'10" E	19.18
L3	N19°07'09" W	25.14
L4	N02°10'47" W	118.59
L5	N04°12'40" E	19.38
L6	N21°20'30" E	34.54
L7	S77°20'04" E	16.42
L8	S12°34'59" W	24.00
L9	N77°20'04" W	16.42

**LEGEND**

- PROPERTY LINE
- TRACT LINE
- LEASE LINE
- ROW LINE
- - - EXISTING FENCE LINE
- GAS LINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- UNDERGROUND POWER
- UNDERGROUND TELECOM
- OVERHEAD POWER/TELEPHONE
- ⊙ REBAR WITH CAP SET
- ⊠ FOUND MONUMENTATION
- ⊡ CALCULATED POINT
- ⊞ EXISTING UTILITY POLE
- ⊙ POINT OF BEGINNING
- ⊞ POINT OF BEGINNING

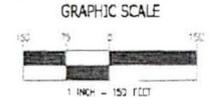
**LEGAL DESCRIPTIONS**

**40 FOOT WIDE ACCESS & UTILITY EASEMENT**  
BEING A 40 FOOT WIDE STRIP OF LAND, 20' EITHER SIDE OF CENTERLINE, SITUATE ON THE WATERS OF STINSON CREEK, CARTER COUNTY, KENTUCKY ON PROPERTY NOW OR FORMERLY OWNED BY WILLIAM R. HAYES II AS RECORDED IN DEED BOOK 200 AT PAGE 885, SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A REBAR WITH CAP FOUND, SAID REBAR BEING IN THE NORTHERLY CORNER OF WAY LINE OF BROWNTHORP DRIVE, SAID REBAR BEING A COMMON CORNER TO PROPERTY NOW OR FORMERLY OWNED BY WILLES NEVEL WOLFE AS RECORDED IN DEED BOOK 208 AT PAGE 855; THENCE WITH THE RIGHT OF WAY LINE N 38° 15' 41" W 28.15 FEET TO A POINT IN THE GRAVEL CEMETERY ACCESS ROAD TO THE CARTER FAMILY CEMETERY AS DESCRIBED IN DEED BOOK 200 AT PAGE 885, SAID POINT BEING THE TRUE POINT OF BEGINNING; THENCE WITH THE EXISTING CARTER FAMILY CEMETERY ROAD N 57° 37' 06" E 76.02 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 118.79 FEET, AN ARC LENGTH OF 80.75 FEET, AND A CHORD BEARING N 37° 09' 12" E 80.77 FEET TO A POINT; THENCE IN D6° 41' 15" E 19.18 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 540.20 FEET, AN ARC LENGTH OF 295.49 FEET, AND A CHORD BEARING N 04° 17' 52" W 294.25 FEET TO A POINT; THENCE LEAVING THE EXISTING CARTER FAMILY CEMETERY ROAD N 19° 07' 09" W 25.14 FEET TO A POINT; THENCE WITH A CURVE TO THE RIGHT HAVING A RADIUS OF 118.79 FEET, AN ARC LENGTH OF 80.75 FEET, AND A CHORD BEARING N 37° 07' 12" E 80.23 FEET TO A POINT; THENCE IN D6° 41' 15" E 19.18 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 540.20 FEET, AN ARC LENGTH OF 295.49 FEET, AND A CHORD BEARING N 04° 17' 52" W 294.25 FEET TO A POINT; THENCE LEAVING THE EXISTING CARTER FAMILY CEMETERY ROAD N 19° 07' 09" W 25.14 FEET TO A POINT; THENCE WITH A CURVE TO THE RIGHT HAVING A RADIUS OF 230.12 FEET, AN ARC LENGTH OF 151.32 FEET, AND A CHORD BEARING N 08° 45' 50" W 51.22 FEET TO A POINT; THENCE IN D2° 10' 47" W 118.59 FEET TO A POINT; THENCE WITH A CURVE TO THE RIGHT HAVING A RADIUS OF 300.00 FEET, AN ARC LENGTH OF 53.32 FEET, AND A CHORD BEARING N 01° 07' 27" E 53.88 FEET TO A POINT; THENCE IN D4° 12' 40" E 19.38 FEET TO A POINT; THENCE WITH A CURVE TO THE RIGHT HAVING A RADIUS OF 250.00 FEET, AN ARC LENGTH OF 76.18 FEET, AND A CHORD BEARING N 12° 48' 42" E 74.82 FEET TO A POINT; THENCE IN D2° 10' 47" W 118.59 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 158.00 FEET, AN ARC LENGTH OF 11.02 FEET, AND A CHORD BEARING N 06° 44' 21" E 10.81 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 170.00 FEET, AN ARC LENGTH OF 24.02 FEET, AND A CHORD BEARING N 12° 34' 59" W 24.00 FEET TO A POINT; THENCE WITH A CURVE TO THE RIGHT HAVING A RADIUS OF 170.00 FEET, AN ARC LENGTH OF 24.02 FEET, AND A CHORD BEARING N 12° 34' 59" W 24.00 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 158.00 FEET, AN ARC LENGTH OF 11.02 FEET, AND A CHORD BEARING N 06° 44' 21" E 10.81 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 506.00 FEET, AN ARC LENGTH OF 53.22 FEET, AND A CHORD BEARING N 01° 07' 27" E 53.19 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 230.12 FEET, AN ARC LENGTH OF 151.32 FEET, AND A CHORD BEARING N 01° 42' 07" W 151.02 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 540.20 FEET, AN ARC LENGTH OF 295.48 FEET, AND A CHORD BEARING N 04° 17' 52" W 294.28 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 118.79 FEET, AN ARC LENGTH OF 80.77 FEET, AND A CHORD BEARING N 37° 09' 12" E 80.77 FEET TO THE TRUE POINT OF BEGINNING, CONTAINING 10.000 SQ. FT. (0.230 ACRES), MORE OR LESS.

**LEASE AREA**  
BEING A 100 FOOT BY 100 FOOT TRACT OF LAND, SITUATE ON THE WATERS OF STINSON CREEK, CARTER COUNTY, KENTUCKY ON PROPERTY NOW OR FORMERLY OWNED BY WILLIAM R. HAYES II AS RECORDED IN DEED BOOK 200 AT PAGE 885, SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A REBAR WITH CAP FOUND, SAID REBAR BEING IN THE NORTHWESTERLY CORNER OF SAID HAYES PROPERTY AND BEING A COMMON CORNER TO PROPERTY NOW OR FORMERLY OWNED BY DONALD & OPAL WITHROW AS RECORDED IN DEED BOOK 208 AT PAGE 427; THENCE S 51° 17' 50" E 486.41 FEET TO A 3/8" REBAR WITH CAP SET, SAID REBAR BEING THE TRUE POINT OF BEGINNING; THENCE IN D0° 00' 00" E 100.00 FEET TO A 3/8" REBAR WITH CAP SET; THENCE S 00° 00' 00" E 100.00 FEET TO A 3/8" REBAR WITH CAP SET; THENCE N 09° 44' 21" E 60.06 FEET TO A POINT IN THE SOUTHERLY LINE OF A 10.000 SQ. FT. LEASE AREA, SAID POINT BEING THE TERNARY OF THE DESCRIBED ACCESS & UTILITY EASEMENT CONTAINING 33.228 SQ. FT. (0.763 ACRES), MORE OR LESS.

**TURN AROUND AREA**  
BEING A 435.39 SQ. FT. TRACT OF LAND, SITUATE ON THE WATERS OF STINSON CREEK, CARTER COUNTY, KENTUCKY ON PROPERTY NOW OR FORMERLY OWNED BY WILLIAM R. HAYES II AS RECORDED IN DEED BOOK 208 AT PAGE 885, SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A REBAR WITH CAP FOUND, SAID REBAR BEING IN THE NORTHWESTERLY CORNER OF SAID HAYES PROPERTY AND BEING A COMMON CORNER TO PROPERTY NOW OR FORMERLY OWNED BY DONALD & OPAL WITHROW AS RECORDED IN DEED BOOK 208 AT PAGE 427; THENCE S 45° 54' 50" E 606.36 FEET TO A POINT IN THE EASTERLY LINE OF A 40 FOOT WIDE ACCESS & UTILITY EASEMENT; THENCE S 77° 25' 01" W 18.42 FEET TO A POINT; THENCE S 12° 34' 59" W 24.00 FEET TO A POINT; THENCE IN D2° 10' 47" W 118.59 FEET TO A POINT IN THE SAID EASTERLY LINE OF A 40 FOOT WIDE ACCESS & UTILITY EASEMENT; THENCE WITH THE SAID TURN AROUND AREA WITH A CURVE TO THE LEFT HAVING A RADIUS OF 170.00 FEET, AN ARC LENGTH OF 24.02 FEET, AND A CHORD BEARING N 12° 34' 59" E 24.00 FEET TO THE TRUE POINT OF BEGINNING, CONTAINING 435.39 SQ. FT. (0.010 ACRES), MORE OR LESS.

- THIS IS NOT A BOUNDARY SURVEY.
- THE INTENT OF THIS SURVEY IS TO LOCATE A PROPOSED 100.00 SQ. FT. LEASE AREA UPON A PAVED STRIPE ON THE WATERS OF STINSON CREEK, CARTER COUNTY, KENTUCKY, NOW OR FORMERLY OWNED BY WILLIAM R. HAYES II AS RECORDED IN DEED BOOK 200 AT PAGE 885.
- THE LOCATION OF EXTERIOR BOUNDARY LINES OF THE FOREMAN TRACT AND ADJOINING PARCELS AS SHOWN ON THESE PLATS HEREIN ARE BASED UPON DEED DESCRIPTIONS, EXISTING SURVEY INFORMATION AND HAVE BEEN RELATED TO MONUMENTS RECOVERED IN THE FIELD. THESE MONUMENTS DO NOT REPRESENT A BOUNDARY SURVEY OF THE FOREMAN TRACT OR ADJOINING TRACTS OF LAND.
- THE HORIZONTAL AND VERTICAL DATA ARE BASED UPON POST-PROCESSED OBSERVATIONS UTILIZING A TRIMBLE 5800 (GAT) BASED ON NAD(83) AND NAD(1183).
- FIELD WORK COMPLETED ON MARCH 31, 2015.
- ALL BEARINGS ARE BASED UPON THE KENTUCKY STATE PLANE COORDINATE SYSTEM AND BL SINGLE ZONE. ALL DISTANCES SHOWN ARE HORIZONTAL UNITS ONLY.
- THE PROPERTY SHOWN HEREON IS LOCATED IN ZONE 2' ON THE FIRM, PARCEL 209 OF 375, MAP NUMBER 2104000000 EFFECTIVE DATE JUNE 2, 2011.
- THIS PLAT IS SUBJECT TO THE INFORMATION IN THAT CERTAIN TITLE COMMITMENT PREPARED BY CHENGO TITLE INSURANCE COMPANY EFFECTIVE DATE MARCH 31, 2015, COMMITMENT NO. 513-119.
- ITEMS 1-10 FROM SCHEDULE B, SECTION II OF THE ABOVE MENTIONED TITLE COMMITMENT HAVE BEEN ASSUMED AND DO NOT AFFECT THE LEASE AREA OR EASEMENTS.



**Parallel**  
INFRASTRUCTURE

**NEW HORIZON**  
SITE SERVICES

92 EAST ECHOLS STREET  
SHARPSVILLE, PA 16150  
(724) 383-6033  
www.nhps.com

SITE NAME: CARTER HOLLOW

SITE NUMBER: PROJECT CODE: 201-1108897 LOCATION CODE: 307336

SITE ADDRESS: BECOWITH BRANCH ROAD GRAYSON KY

AREA: LEASE AREA = 10.000 SQ. FT.

PROPERTY OWNER: WILLIAM R. HAYES II 7 CARTER LANE GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID# 129W-06-03-03.00

NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15

**Mead & Hunt**

400 TRACY WAY, SUITE 200  
CHARLESTON, WV 25311  
(304) 345-6712 PHONE  
(304) 345-6714 FAX

PROJECT # R4381500-150949 01

SHEET L-1

**EXHIBIT "B"**

Easement(s)

(i) An easement from the Leased Premises to an open and improved public road in a minimum width of either 40 feet or the minimum width necessary to comply with any applicable governmental requirements, whichever is greater, to allow for ingress to and egress from the Leased Premises by vehicle;

(ii) An easement as may be required to provide utilities to the Leased Premises from the utility providers' preferred connection point;

(iii) if required by governmental authorities, an easement for a "Fall Zone" centered on the location of the Lessee's tower and extending outward in a circle for the number of feet as may be required by local zoning authorities (typically equal to the height of the Lessee's tower but could be more); and

(iv) if required by governmental authorities, an easement for a landscape buffer zone or any such additional easement(s) as may be required by local zoning authorities,

each to be determined by survey, and upon completion of survey, shall replace this **Exhibit "B"**.

**EXHIBIT "C"**

Liens and Encumbrances

Holder of 1<sup>st</sup> Mortgage: \_\_\_\_\_

Address: \_\_\_\_\_

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

Phone Number: \_\_\_\_\_

Loan Number: \_\_\_\_\_

Holder of 2<sup>nd</sup> Mortgage: \_\_\_\_\_

Address: \_\_\_\_\_

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

Phone Number: \_\_\_\_\_

Loan Number: \_\_\_\_\_

**Other Liens/Encumbrances**

(Please Describe): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*If No Mortgage(s), check here:* \_\_\_\_\_

**EXHIBIT "D"**

**MEMORANDUM OF GROUND LEASE AGREEMENT**

See Attached

Upon recording return to:  
PI Telecom Infrastructure V, LLC  
4601 Touchton Road  
Bldg. 300, Suite 3200  
Jacksonville, Florida 32246  
Attention: Contracts Administrator

Site Name: Carter Hollow Road, KY  
Site Number: PI3KY00011.B

### MEMORANDUM OF GROUND LEASE AGREEMENT

This Memorandum of Ground Lease Agreement is made on June 1<sup>st</sup>, 2015, by and between **William R. Hayes, II**, an individual, as Lessor, whose mailing address is 7 Carter Lane, Grayson, KY 41143 and **PI TELECOM INFRASTRUCTURE V, LLC**, a Delaware limited liability company, as Lessee, whose address is 4601 Touchton Road, Building 300, Suite 3200, Jacksonville, Florida 32246.

1. Lessor and Lessee are parties to a Ground Lease Agreement dated as of June 1<sup>st</sup>, 2015 (the "Lease"), the terms and provisions of which are incorporated herein by this reference. The premises covered by the Lease are located in **Carter County, Kentucky**, as more fully described in the legal description attached hereto as **Exhibit "A"** ("Leased Premises").

2. Pursuant to the Lease, the Lessor has granted, and by these presents does grant, to the Lessee easements for ingress, egress, utilities, "Fall Zone" (if applicable), turn-around area and any other easements required by Lessee or governmental authorities for the duration of the Lease Agreement a more particularly described on **Exhibit "A"** hereto. The easement rights herein granted include the right and authority of Lessee to grant or assign to third parties all or some of the easement rights granted to Lessee herein.

3. The Lease provides for an initial term of five (5) years (the "Initial Term") which commenced on June 1<sup>st</sup>, 2015. The Lease also provides for five (5) additional five (5) year renewal terms (each, a "Renewal Term"). The Lease shall automatically renew for each such Renewal Term unless Lessee delivers written notice of intent not to renew to Lessor at least thirty (30) days prior to the expiration of the Initial Term, or the Renewal Term then in effect.

4. The Lease provides that during the term of the Lease Lessor shall not be allowed to install or operate a communications facility, including a telecommunications transmission tower, or operate an antenna site leasing business which competes directly or indirectly with Lessee on Lessor's property as set forth in in that General Warranty Deed dated May 9, 1989 and of record at the Carter County Clerk's office in Deed Book 200, Page 865-866.

5. The Lease provides that during the term of the Lease, in the event that the Lessor receives and desires to accept a bona fide offer to sell and convey the Leased Premises to a third party not related to the Lessor by at least 51% common ownership, then the Lessor shall first provide the Lessee with a written offer to sell and convey the Leased Premises to Lessee upon the same terms and conditions as the offer made by the third party, and Lessee shall have twenty (20) business days in which to accept the offer.

6. All of the terms and conditions of the Lease are incorporated herein by reference. In the event of a conflict between the terms hereof and the terms of the Lease, the terms of the Lease shall govern.

IN WITNESS WHEREOF, the parties hereto have executed this Memorandum of Lease as of the date first written above.

LESSOR:

Wm. R. Hayes II

Print Name: William R. Hayes, II

Witness:

x Mary Wells  
Print Name: GARY Wells

STATE OF Kentucky

COUNTY OF Boyd

I, Cynthia Sutton Rayburn a Notary Public of the County and State aforesaid, certify that William R. Hayes, II personally came before me this day and acknowledged that (s)he executed the foregoing instrument. He is personally known to me or produced \_\_\_\_\_ as identification.

WITNESS my hand and notarial seal, this 17 day of May, 2015.

Notary Public: Cynthia Sutton Rayburn  
Print Name: Cynthia Sutton Rayburn  
My Commission Expires: 4/30/16



LESSEE:

PI TELECOM INFRASTRUCTURE V, LLC,  
a Delaware limited liability company

Witness:

[Signature]  
Print Name: Bama Carstens

[Signature]  
Print Name: Jeanette Jerger

By: [Signature]  
Print Name: Ron E. Bittner  
Title: VP Tower Operations

STATE OF FLORIDA

COUNTY OF Duval

I, Jeanette Jerger the undersigned Notary Public for said County and State, do hereby certify that Ron E. Bittner, as VP Tower Op of PI Telecom Infrastructure V, LLC, a Delaware limited liability company, personally appeared before me this day, and acknowledged the due execution of the foregoing instrument on behalf of said company. He/She is personally known to me or produced \_\_\_\_\_ as identification.

WITNESS my hand and notarial seal, this 1<sup>st</sup> day of June, 2015.

Notary Public: [Signature]

Print Name: Jeanette Jerger

My Commission Expires: 4-9-2017



## EXHIBIT "A"

### Legal Description of Leased Premises and Easement(s)

#### 40 FOOT WIDE ACCESS & UTILITY EASEMENT

BEING A 40 FOOT WIDE STRIP OF LAND, 20' EITHER SIDE OF CENTERLINE, SITUATE ON THE WATERS OF STINSON CREEK, CARTER COUNTY, KENTUCKY ON PROPERTY NOW OR FORMERLY OWNED BY WILLIAM R. HAYES II AS RECORDED IN DEED BOOK 200 AT PAGE 865, SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A REBAR WITH CAP FOUND, SAID REBAR BEING IN THE NORTHERLY RIGHT OF WAY LINE OF BECKWORTH DRIVE, SAID REBAR BEING A COMMON CORNER TO PROPERTY NOW OR FORMERLY OWNED BY MILLIS NEVEL WOLFE AS RECORDED IN DEED BOOK 295 AT PAGE 655; THENCE WITH THE RIGHT OF WAY LINE N 38° 15' 41" W 28.15 FEET TO A POINT IN THE GRAVEL CEMETERY ACCESS ROAD TO THE CARTER FAMILY CEMETERY AS DESCRIBED IN DEED BOOK 200 AT PAGE 865, SAID POINT BEING THE TRUE POINT OF BEGINNING; THENCE WITH THE EXISTING CARTER FAMILY CEMETERY ROAD N 53° 37' 06" E 76.02 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 110.79 FEET, AN ARC LENGTH OF 90.75 FEET, AND A CHORD BEARING N 30° 09' 13" E 88.23 FEET TO A POINT; THENCE N 06° 41' 19" E 19.18 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 540.75 FEET, AN ARC LENGTH OF 205.49 FEET, AND A CHORD BEARING N 04° 11' 52" W 204.25 FEET TO A POINT; THENCE LEAVING THE EXISTING CARTER FAMILY CEMETERY ROAD N 15° 09' 08" W 25.14 FEET TO A POINT; THENCE WITH A CURVE TO THE RIGHT HAVING A RADIUS OF 230.12 FEET, AN ARC LENGTH OF 51.32 FEET, AND A CHORD BEARING N 08° 45' 50" W 51.22 FEET TO A POINT; THENCE N 02° 10' 49" W 118.59 FEET TO A POINT; THENCE WITH A CURVE TO THE RIGHT HAVING A RADIUS OF 500.00 FEET, AN ARC LENGTH OF 53.92 FEET, AND A CHORD BEARING N 01° 07' 27" E 53.89 FEET TO A POINT; THENCE N 04° 12' 48" E 19.38 FEET TO A POINT; THENCE WITH A CURVE TO THE RIGHT HAVING A RADIUS OF 250.00 FEET, AN ARC LENGTH OF 75.18 FEET, AND A CHORD BEARING N 12° 49' 43" E 74.90 FEET TO A POINT; THENCE N 21° 26' 38" E 34.54 FEET TO A POINT; THENCE WITH A CURVE TO THE LEFT HAVING A RADIUS OF 150.00 FEET, AN ARC LENGTH OF 61.29 FEET, AND A CHORD BEARING N 09° 44' 21" E 60.86 FEET TO A POINT IN THE SOUTHERLY LINE OF A 10,000 SQ. FT. LEASE AREA, SAID POINT BEING THE TERMINUS OF THE DESCRIBED ACCESS & UTILITY EASEMENT CONTAINING 33,228.63 SQ. FT. (0.763 ACRES), MORE OR LESS.  
TOTAL LENGTH OF EASEMENT = 830.79 FEET.

#### LEASE AREA

BEING A 100 FOOT BY 100 FOOT TRACT OF LAND, SITUATE ON THE WATERS OF STINSON CREEK, CARTER COUNTY, KENTUCKY ON PROPERTY NOW OR FORMERLY OWNED BY WILLIAM R. HAYES II AS RECORDED IN DEED BOOK 200 AT PAGE 865, SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A REBAR WITH CAP FOUND, SAID REBAR BEING THE NORTHWESTERLY CORNER OF SAID HAYES PROPERTY AND BEING A COMMON CORNER TO PROPERTY NOW OR FORMERLY OWNED BY DONALD & OPAL WITHROW AS RECORDED IN DEED BOOK 209 AT PAGE 427; THENCE S 51° 17' 50" E 466.41 FEET TO A 5/8" REBAR WITH CAP SET, SAID REBAR BEING THE TRUE POINT OF BEGINNING; THENCE N 90° 00' 00" E 100.00 FEET TO A 5/8" REBAR WITH CAP SET; THENCE S 00° 00' 00" E 100.00 FEET TO A 5/8" REBAR WITH CAP SET; THENCE N 90° 00' 00" W 100.00 FEET TO A 5/8" REBAR WITH CAP SET; THENCE N 00° 00' 00" E 100.00 FEET TO THE TRUE POINT OF BEGINNING, CONTAINING 10,000 SQ. FT. (0.230 ACRES), MORE OR LESS.

#### TURN AROUND AREA

BEING A 435.39 SQ. FT. TRACT OF LAND, SITUATE ON THE WATERS OF STINSON CREEK, CARTER COUNTY, KENTUCKY ON PROPERTY NOW OR FORMERLY OWNED BY WILLIAM R. HAYES II AS RECORDED IN DEED BOOK 200 AT PAGE 865, SAID CENTERLINE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT A REBAR WITH CAP FOUND, SAID REBAR BEING THE NORTHWESTERLY CORNER OF SAID HAYES PROPERTY AND BEING A COMMON CORNER TO PROPERTY NOW OR FORMERLY OWNED BY DONALD & OPAL WITHROW AS RECORDED IN DEED BOOK 209 AT PAGE 427; THENCE S 45° 54' 50" E 606.56 FEET TO A POINT IN THE EASTERLY LINE OF A 40 FOOT WIDE ACCESS & UTILITY EASEMENT; THENCE S 77° 25' 01" E 18.42 FEET TO A POINT; THENCE S 12° 34' 59" W 24.00 FEET TO A POINT; THENCE N 77° 25' 01" W 18.42 FEET TO A POINT IN THE SAID EASTERLY LINE OF A 40 FOOT WIDE ACCESS & UTILITY EASEMENT; THENCE WITH THE SAME WITH A CURVE TO THE LEFT HAVING A RADIUS OF 170.00 FEET, AN ARC LENGTH OF 24.02 FEET, AND A CHORD BEARING N 12° 34' 59" E 24.00 FEET TO THE TRUE POINT OF BEGINNING, CONTAINING 435.39 SQ. FT. (0.010 ACRES), MORE OR LESS.

**EXHIBIT K  
NOTIFICATION LISTING**

Carter Hollow – Notice List

Billy & Sonnie Hayes  
7 Carter Ln  
Grayson, KY 41143

Timothy & Debra Hall  
1865 E. Midland Trl  
Grayson, KY 41143

Johnson & Goebel Inc  
310 S Carol Malone Blvd  
Grayson, KY 41143

William & Rosemary Kartune  
604 Beckwith Br  
Grayson, KY 41143

Gina Kitchen  
295 Pine Ridge Dr  
Grayson, KY 41143

Paul D. & Carol G. Miles  
321 Beckwith Br  
Grayson, KY 41143

Donald & Opal Withrow  
84 Carter Holw  
Grayson, KY 41143

Hugh Junior Withrow  
48 Carter Ln  
Grayson, KY 41143

Millis Nevel Wolfe  
PO Box 1002  
Grayson, KY 41143

**EXHIBIT L**  
**COPY OF PROPERTY OWNER NOTIFICATION**



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

**Notice of Proposed Construction of  
Wireless Communications Facility  
Site Name: Carter Hollow**

Dear Landowner:

PI Telecom Infrastructure V, LLC and Cellco Partnership d/b/a Verizon Wireless have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located on Beckwith Branch Road, Grayson, KY (38°20'31.661" North latitude, 82°53'57.736" West longitude). The proposed facility will include a 250-foot tall antenna tower, plus a 5-foot lightning arrester and related ground facilities. This facility is needed to provide improved coverage for wireless communications in the area.

This notice is being sent to you because the Carter County Property Valuation Administrator's records indicate that you may own property that is within a 500' radius of the proposed tower site or contiguous to the property on which the tower is to be constructed. You have a right to submit testimony to the Kentucky Public Service Commission ("PSC"), either in writing or to request intervention in the PSC's proceedings on the application. You may contact the PSC for additional information concerning this matter at: Kentucky Public Service Commission, Executive Director, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2015-00273 in any correspondence sent in connection with this matter.

We have attached a map showing the site location for the proposed tower. Verizon Wireless' radio frequency engineers assisted in selecting the proposed site for the facility, and they have determined it is the proper location and elevation needed to provide quality service to wireless customers in the area. Please feel free to contact us toll free at (800) 516-4293 if you have any comments or questions about this proposal.

Sincerely,  
David A. Pike  
Attorney for Applicants

enclosure

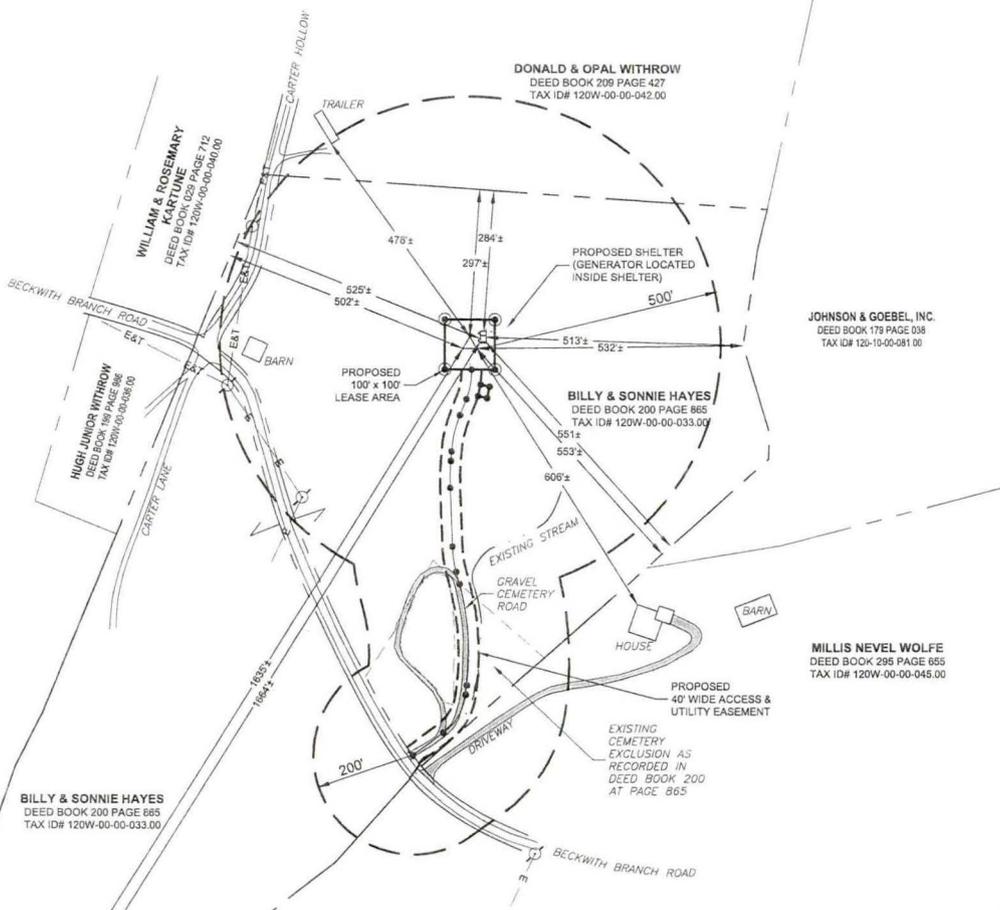
### Driving Directions to Proposed Carter Hollow Tower Site:

1. Beginning at the Carter County Judge Executive's Office, located at 300 W. Main Street, Grayson, KY, head east on Cardinal Road. Travel approximately 0.3 miles.
2. Turn right onto Carol Malone Boulevard and travel approximately 174 feet.
3. Turn left onto US-60E / E. Main Street and travel approximately 3.0 miles.
4. Turn left onto Beckwith Branch Road and travel approximately 0.3 miles to the site's access drive.
5. The site is on the right. Site coordinates are
  - a. 38 deg 20 min 31.661 sec N
  - b. 82 deg 53 min 57.736 sec W



Prepared by:  
Aaron L. Roof  
Pike Legal Group PLLC  
1578 Highway 44 East, Suite 6  
PO Box 369  
Shepherdsville, KY 40165-0369  
Telephone: 502-955-4400 or 800-516-4293

NORTH MERIDIAN REFERENCED TO KY  
STATE PLANE COORDINATE SYSTEM  
SINGLE ZONE (NAD83)



**LEGEND**

- PROPERTY LINE
- TRACT LINE
- LEASE LINE
- ROW LINE
- EXISTING FENCE LINE
- GAS LINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- UNDERGROUND POWER
- UNDERGROUND TELCO
- OVERHEAD POWER/TELEPHONE
- 5/8" REBAR W/ CAP SET
- FOUND MONUMENTATION
- CALCULATED POINT
- EXISTING UTILITY POLE
- POINT OF BEGINNING
- POINT OF COMMENCING

**Parallel  
INFRASTRUCTURE**

4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32246

SITE NAME: CARTER HOLLOW

SITE NUMBER:  
PARALLEL INFRASTRUCTURE: P3W00W08.A  
VZW PROJECT CODE: 20141135897  
VZW LOCATION CODE: 3073356

SITE ADDRESS:  
BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA:  
LEASE AREA = 10,000 SQ. FT.

PROPERTY OWNER:  
WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

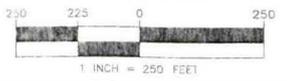
NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/08/15
2	REVISED PER CHECKLIST	05/06/15
3	REVISED PER CHECKLIST	05/04/15
4	FINAL	06/05/15
5	REVISED PER PI TELECOM RL	07/24/15



**OWNER INDEX**

TAX ID	OWNER	ADDRESS
120W-00-00-018.00	TIMOTHY & DEBRA HALL	1865 E. MIDLAND TRL., GRAYSON, KY 41143
120W-00-00-032.00	PAUL D. & CAROL G. MILES	321 BECKWITH BR., GRAYSON, KY 41143
120W-00-00-033.00	BILLY & SONNIE HAYES	7 CARTER LN., GRAYSON, KY 41143
120W-00-00-035.00	GINA KITCHEN	295 PINE RIDGE DR., GRAYSON, KY 41143
120W-00-00-036.00	HUGH JUNIOR WITHROW	48 CARTER LN., GRAYSON, KY 41143
120W-00-00-040.00	WILLIAM & ROSEMARY KARTUNE	604 BECKWITH BR., GRAYSON, KY 41143
120W-00-00-042.00	DONALD & OPAL WITHROW	84 CARTER HOLLOW, GRAYSON, KY 41143
120W-00-00-045.00	MILLIS NEVEL WOLFE	PO BOX 1002, GRAYSON, KY 41143
120-10-00-081.00	JOHNSON & GOEBEL, INC.	310 S CAROL MALONE BLVD., GRAYSON, KY 41143

**GRAPHIC SCALE**



**TIMOTHY & DEBRA HALL**  
DEED BOOK 256 PAGE 088  
TAX ID# 120W-00-00-018.00

**encompass**

1370 WASHINGTON PIKE  
SUITE 308  
BRIDGEVILLE, PA 15017  
(412) 564-5215 PHONE

PROJECT # R4381500-150949.01

RADIUS MAP  
SHEET  
R-1

**EXHIBIT M**  
**COPY OF COUNTY JUDGE/EXECUTIVE NOTICE**



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

**VIA CERTIFIED MAIL**

Hon. Mike Malone  
300 West Main Street  
Room 227  
Grayson, KY 41143

RE: Notice of Proposal to Construct Wireless Communications Facility  
Kentucky Public Service Commission Docket No. 2015-00273  
Site Name: Carter Hollow

Dear Judge Malone:

PI Telecom Infrastructure V, LLC and Cellco Partnership d/b/a Verizon Wireless have filed an application with the Kentucky Public Service Commission ("PSC") to construct a new wireless communications facility on a site located on Beckwith Branch Road, Grayson, KY (38°20'31.661" North latitude, 82°53'57.736" West longitude). The proposed facility will include a 250-foot tall antenna tower, plus a 5-foot lightning arrester and related ground facilities. This facility is needed to provide improved coverage for wireless communications in the area.

You have a right to submit comments to the PSC or to request intervention in the PSC's proceedings on the application. You may contact the PSC at: Executive Director, Public Service Commission, 211 Sower Boulevard, P.O. Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2015-00273 in any correspondence sent in connection with this matter.

We have attached a map showing the site location for the proposed tower. Verizon Wireless' radio frequency engineers assisted in selecting the proposed site for the facility, and they have determined it is the proper location and elevation needed to provide quality service to wireless customers in the area. Please feel free to contact us with any comments or questions you may have.

Sincerely,  
David A. Pike  
Attorney for Applicants  
enclosure

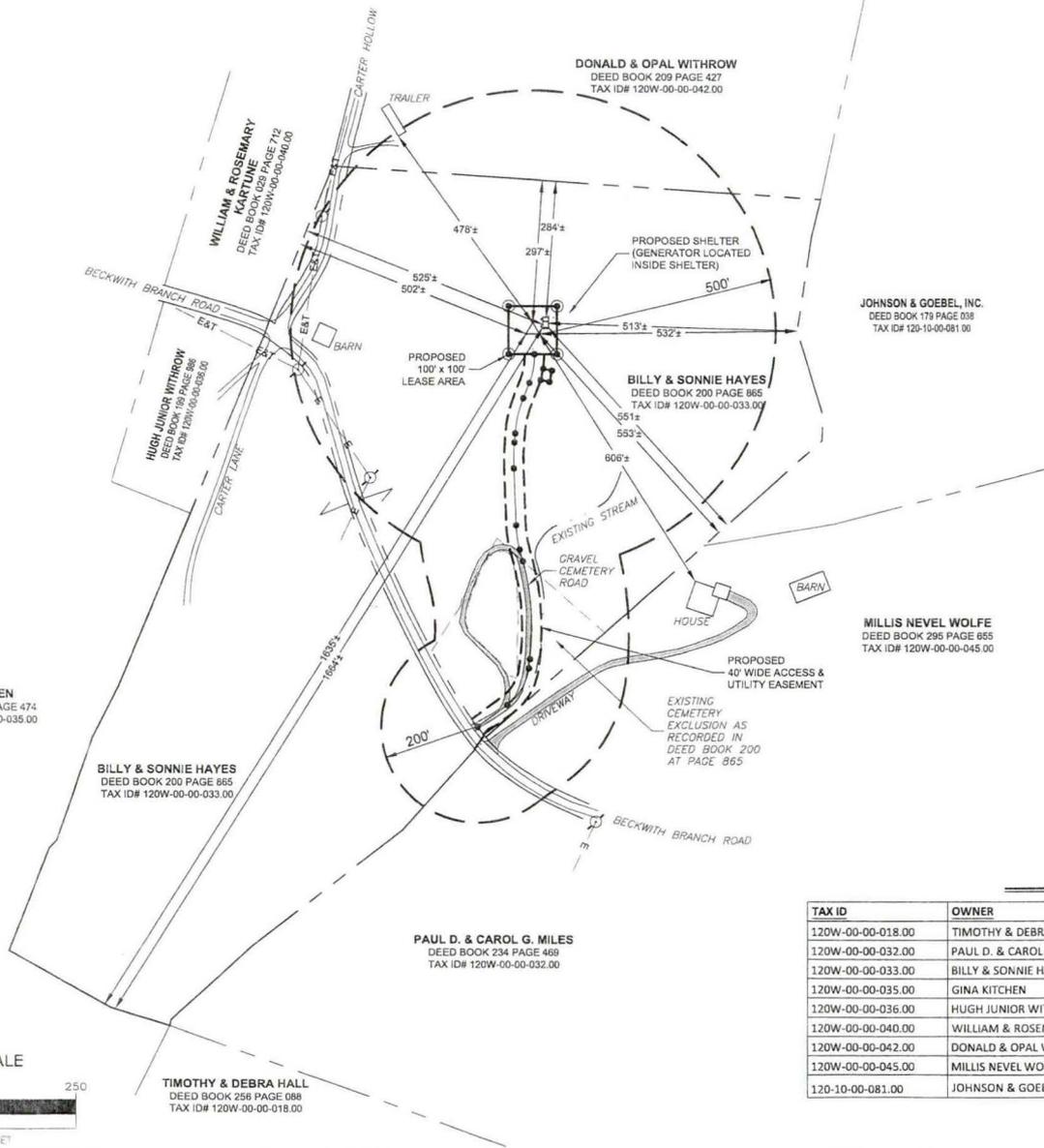
### Driving Directions to Proposed Carter Hollow Tower Site:

1. Beginning at the Carter County Judge Executive's Office, located at 300 W. Main Street, Grayson, KY, head east on Cardinal Road. Travel approximately 0.3 miles.
2. Turn right onto Carol Malone Boulevard and travel approximately 174 feet.
3. Turn left onto US-60E / E. Main Street and travel approximately 3.0 miles.
4. Turn left onto Beckwith Branch Road and travel approximately 0.3 miles to the site's access drive.
5. The site is on the right. Site coordinates are
  - a. 38 deg 20 min 31.661 sec N
  - b. 82 deg 53 min 57.736 sec W



Prepared by:  
Aaron L. Roof  
Pike Legal Group PLLC  
1578 Highway 44 East, Suite 6  
PO Box 369  
Shepherdsville, KY 40165-0369  
Telephone: 502-955-4400 or 800-516-4293

NORTH MERIDIAN REFERENCED TO KY  
STATE PLANE COORDINATE SYSTEM  
SINGLE ZONE (NAD83)



**LEGEND**

- PROPERTY LINE
- TRACT LINE
- LEASE LINE
- ROW LINE
- EXISTING FENCE LINE
- GAS LINE
- OVERHEAD POWER
- OVERHEAD TELEPHONE
- UNDERGROUND POWER
- UNDERGROUND TELCO
- OVERHEAD POWER/TELEPHONE
- UE --- UE
- UT --- UT
- E&T --- E&T
- P.O.B.
- P.O.C.
- FOUND MONUMENTATION
- CALCULATED POINT
- EXISTING UTILITY POLE
- POINT OF BEGINNING
- POINT OF COMMENCING

**Parallel INFRASTRUCTURE**  
4601 TOUCHTON ROAD EAST  
BUILDING 300, SUITE 3200  
JACKSONVILLE, FL 32248

SITE NAME: CARTER HOLLOW

SITE NUMBER: PARALLEL INFRASTRUCTURE: P15W00008.A  
VZW PROJECT CODE: 20141 08697  
VZW LOCATION CODE: 307236

SITE ADDRESS: BECKWITH BRANCH ROAD  
GRAYSON, KY

AREA: LEASE AREA = 12,000 SQ. FT.

PROPERTY OWNER: WILLIAM R. HAYES II  
7 CARTER LANE  
GRAYSON, KY 41143

COUNTY: CARTER

MUNICIPALITY: GRAYSON

TAX ID#: 120W-00-00-033.00

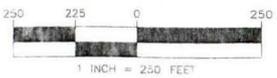
NO.	REVISION/ISSUE	DATE
1	PRELIMINARY	04/09/15
2	REVISED PER CHECKLIST	05/05/15
3	REVISED PER CHECKLIST	06/04/15
4	FINAL	06/05/15
5	REVISED PER PI TELECOM RL	07/24/15

STATE OF KENTUCKY  
WILLIAM J. WHITMAN II  
3566  
LICENSED PROFESSIONAL LAND SURVEYOR

**OWNER INDEX**

TAX ID	OWNER	ADDRESS
120W-00-00-018.00	TIMOTHY & DEBRA HALL	1865 E. MIDLAND TRL., GRAYSON, KY 41143
120W-00-00-032.00	PAUL D. & CAROL G. MILES	321 BECKWITH BR., GRAYSON, KY 41143
120W-00-00-033.00	BILLY & SONNIE HAYES	7 CARTER LN., GRAYSON, KY 41143
120W-00-00-035.00	GINA KITCHEN	295 PINE RIDGE DR., GRAYSON, KY 41143
120W-00-00-036.00	HUGH JUNIOR WITHROW	48 CARTER LN., GRAYSON, KY 41143
120W-00-00-040.00	WILLIAM & ROSEMARY KARTUNE	604 BECKWITH BR., GRAYSON, KY 41143
120W-00-00-042.00	DONALD & OPAL WITHROW	84 CARTER HOLLOW, GRAYSON, KY 41143
120W-00-00-045.00	MILLIS NEVEL WOLFE	PO BOX 1002, GRAYSON, KY 41143
120-10-00-081.00	JOHNSON & GOEBEL, INC.	310 S CAROL MALONE BLVD., GRAYSON, KY 41143

**GRAPHIC SCALE**



**encompass**

1370 WASHINGTON PIKE  
SUITE 308  
BRIDGEVILLE, PA 15017  
(412) 564-5215 PHONE

PROJECT # R4381500-150949.01

RADIUS MAP SHEET R-1

**EXHIBIT N**  
**COPY OF POSTED NOTICES**

**SITE NAME: CARTER HOLLOW**  
**NOTICE SIGNS**

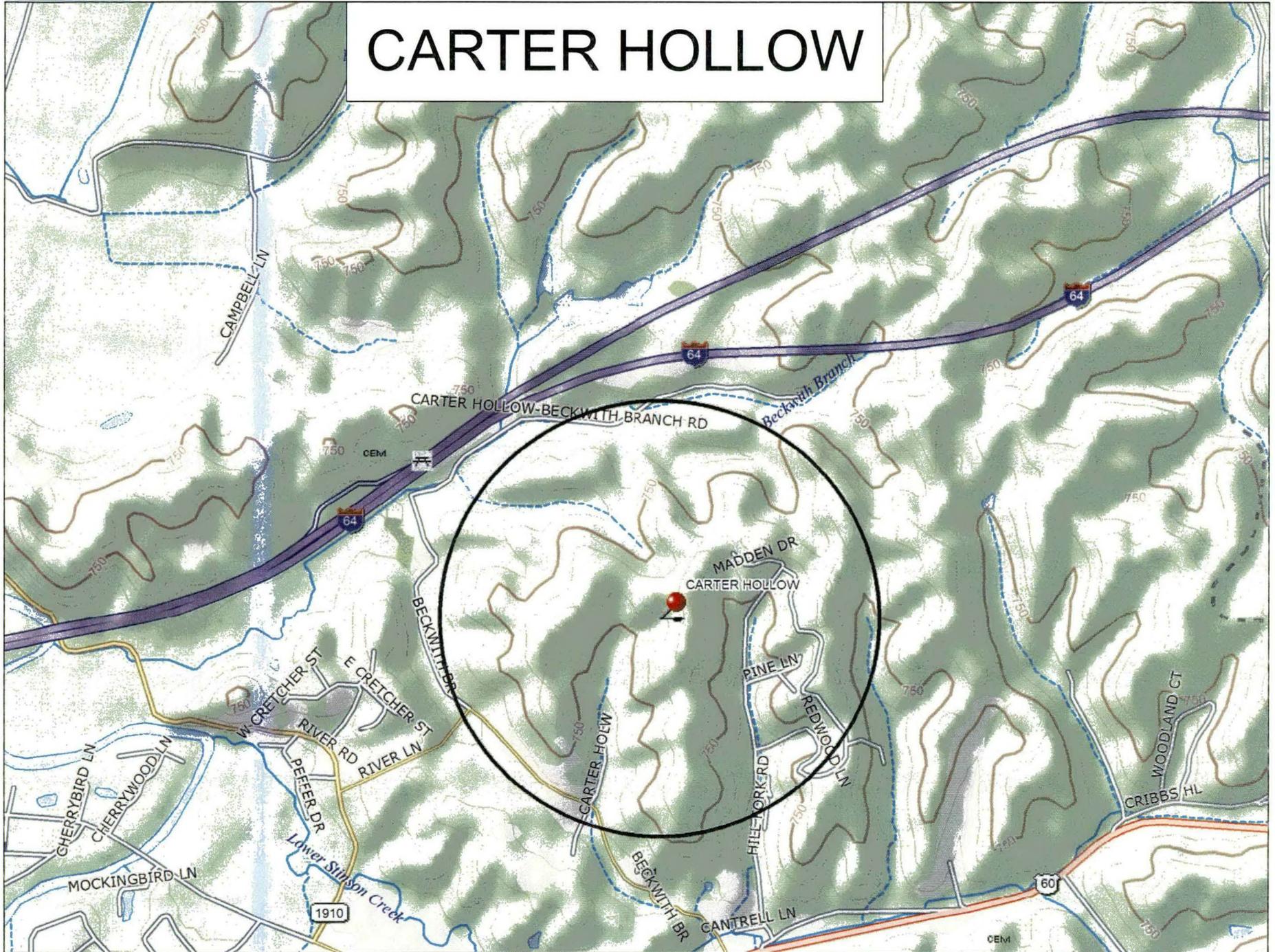
The signs are at least (2) feet by four (4) feet in size, of durable material, with the text printed in black letters at least one (1) inch in height against a white background, except for the word "**tower**," which is at least four (4) inches in height.

PI Telecom Infrastructure V, LLC and Cellco Partnership d/b/a Verizon Wireless propose to construct a telecommunications **tower** on this site. If you have questions, please contact Pike Legal Group, PLLC, P.O. Box 369, Shepherdsville, KY 40165 (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2015-00273 in your correspondence.

PI Telecom Infrastructure V, LLC and Cellco Partnership d/b/a Verizon Wireless propose to construct a telecommunications **tower** near this site. If you have questions, please contact Pike Legal Group, PLLC, P.O. Box 369, Shepherdsville, KY 40165 (800) 516-4293, or the Executive Director, Public Service Commission, 211 Sower Boulevard, PO Box 615, Frankfort, Kentucky 40602. Please refer to docket number 2015-00273 in your correspondence.

**EXHIBIT O**  
**COPY OF RADIO FREQUENCY DESIGN SEARCH AREA**

# CARTER HOLLOW



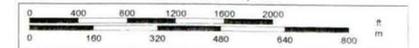
Data use subject to license.

© DeLorme, Topo North America™ 10.

www.delorme.com



Scale 1 : 19,200



1" = 1,600.0 ft

Data Zoom 13-0

**EXHIBIT P**  
**RADIO FREQUENCY REPORT**



July 10, 2015

RE: Proposed Verizon Wireless Communications Facility Site Name : Carter Hollow

To Whom It May Concern :

As a radio frequency engineer for Verizon Wireless, I am providing this letter to state the need for the Verizon Wireless site called Carter Hollow and its compliance to RF emission standards as set by FCC. The Carter Hollow cell site is necessary to achieve coverage and capacity needs in the area east of Grayson, along I-64 and the surrounding area. This site is necessary to provide this coverage and capacity that cannot be established in any other manner. Carter Hollow will provide new coverage to area allowing customers to use Verizon's network in a reliable and consistent manner. This new tower is required as there is no other means of providing this service in this area.

Whenever possible, Verizon Wireless seeks out colocation opportunities. Colocation allows Verizon Wireless to increase capacity, coverage and services in a targeted area in a timely manner and at less cost than building a new raw land site. In this search area no colocation possibilities were available.

The site will provide the quality coverage our customers expect and rely on; Customers will experience access to mobile voice and wireless data services previously unavailable, and support Homeland Security through enhanced 911 services.

This cell site has been designed and will be constructed and operated in a manner that satisfies regulations and requirements of all applicable governmental agencies that have been charged with regulating tower specifications, operation, construction, and placement, including the FAA and FCC.

RF emission readings at this site in the accessible areas would be well below the applicable limits for FCC Uncontrolled/General Population and FCC Controlled/Occupational environments as outlined in 47 CFR 1.1301 through 1.1319. The site would carry appropriate RF emission signage to the public entering the site area.

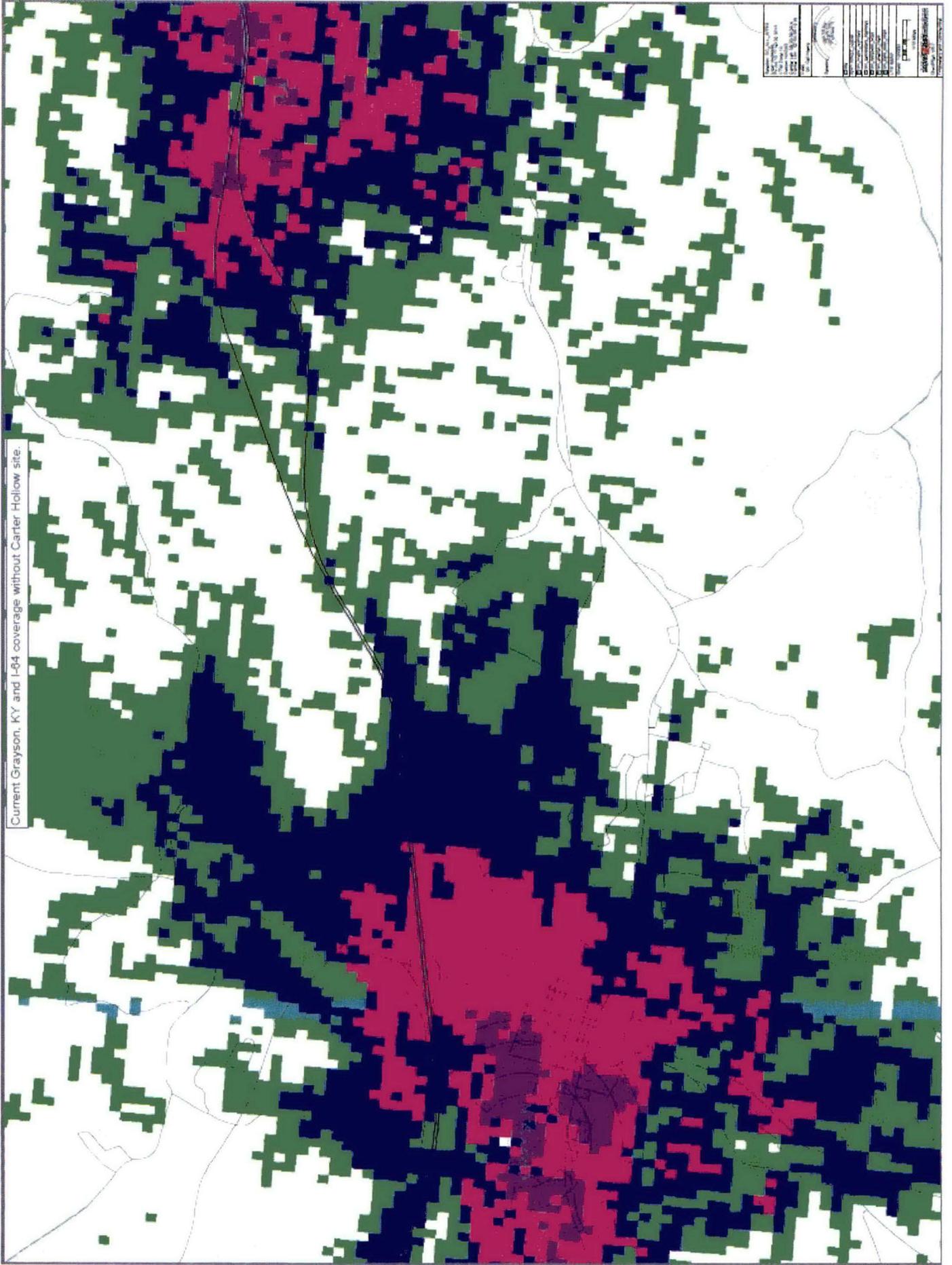
This site would transit frequencies within the licensed frequency bands and the power limitations set by FCC regulatory authority. The site would go through the complete rigorous regulatory process before it comes on-air to provide service to our customers.

Sincerely,

*Doug Crump*  
Doug Crump

RF Engineer, Verizon Wireless

Current Grayson, KY and I-64 coverage without Carter Hollow site.



Proposed Grayson, KY and I-64 coverage with Carter Hollow site.

